



PREEvision

Release Notes

Imprint

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1 PREEvision 10.20

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1.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.20.0
PREEvision license server	3.0.4
PREEvision database server	10.20.0.05
PREEvision application server	10.20.0

Documentation

Manual	Version number
PREEvision manual	10.20.0
PREEvision configuration manual	10.20.0
PREEvision operating manual	10.20.0
PREEvision system requirements	10.20.0
PREEvision server API	10.20.0

1.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.20 and the migration to PREEvision 10.20, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.20, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > VisualSVN Server 5.4.4 is recommended for the PREEvision Subversion server.
- > The recommended version of Apache Tomcat has been changed to 9.0.107.

Server configuration - connector timeouts

In the `server.xml` of the PREEvision application server and the PREEvision administration server, the following timeout parameters must be set for the HTTP/HTTPS connector:

```
disableUploadTimeout="false"
connectionTimeout="1200000"
connectionUploadTimeout="86400000"
keepAliveTimeout="900000"
```

These parameters are especially required for long-running actions like the direct migration.

Backup options

In the administration panel, the following options have been removed from the **Backup Configuration**:

- > **Only the model versions with new artifact versions (Check-in versions)**
- > **Include last model version**
- > **Reuse svn repository**

The backup option **Omit change logs and referenced model versions** now also includes referenced model versions of suspect links.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14

Client version	Server version	Database server script version	Metamodel change ID
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29
10.16.0	10.16.0	10.16.0.04	2024-11-08
10.17.0	10.17.0	10.17.0.03	2025-01-07
10.18.0	10.18.0	10.18.0.01	2025-02-24
10.19.0	10.19.0	10.18.0.01	2025-02-24
10.20.0	10.20.0	10.20.0.05	2025-07-24

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.20.



Migrating to PREEvision 10.20 is only possible from PREEvision 10.0 SP17 or later. All remote operations (backup and direct migration) available in the PREEvision 10.20 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later. If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.20, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.20 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.20, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



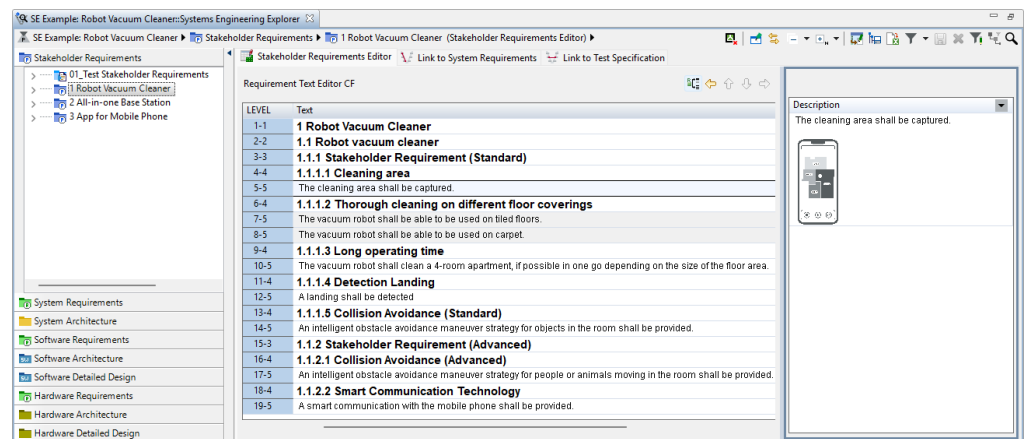
For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

1.3 New features in PREEvision 10.20

Systems engineering explorer

With the Systems Engineering Explorer, PREEvision provides a complete solution for systems engineering in one tool for:

- > requirements
- > system specifications
- > test specifications
- > software architecture
- > hardware architecture



The **Systems Engineering Explorer** offers built-in bidirectional vertical and horizontal traceability tables with an identical user interface.



The PREEvision demo model contains a **Systems Engineering Explorer** example of a robot vacuum cleaner.

Demo model path: "DesignModel" | "Systems Engineering" | "SE Example: Robot Vacuum Cleaner"

Sequence diagram improvements

For sequence diagrams, the following improvements have been implemented:

- > You can move *Interaction Operands* with all contained artifacts within a *Simple Combined Fragment* or *Loop Fragment*.
- > You can change the distance between *Lifelines* via the toolbar of the diagram.
- > The width of the *Lifeline* is automatically adjusted to the length of the name of the *Lifeline* (maximum width 500 pixels).
- > Changing the runnable of an *Execution Specification* no longer dereferences related message representatives.
- > You can navigate from the representative of a *Lifeline*, a message, an *Action Execution Specification* or an *Activity Execution Specification* in the diagram to the corresponding representative in the **Model View** via the shortcut <Alt> + left click.
- > *Execution Specifications* can be assigned to artifacts of the *Logical Function Architecture*.
- > Messages of an *Interaction* in the *Logical Function Architecture* can be assigned to all relevant logical port prototypes and their Interface-specific data.
- > Messages of an *Interaction* in the *Hardware Architecture* can be assigned to *Bus Connectors* and *Conventional Connectors* and their associated *Signal Transmissions*.

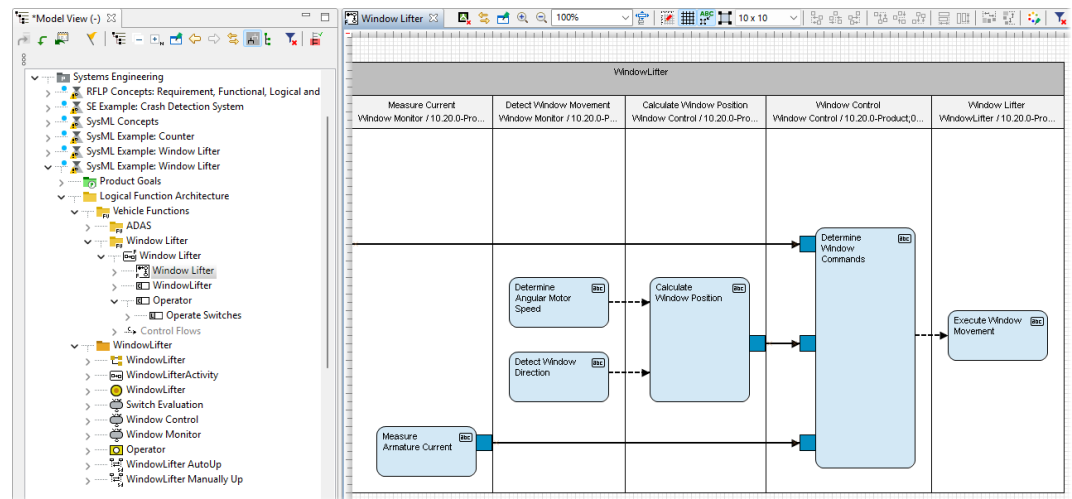
- > Further interaction operators are available on a combined fragment including "Parallel".
- > The "Systems Engineering" *Product Line Package* in the PREEvision demo model is enhanced:
 - > SysML Concepts: extensions in the *Logical Function Architecture* demonstrating the supported logical representatives for *Execution Specifications* and messages.
 - > Window Lifter Example: *Interaction* extensions under *Logical Function Architecture* and *Hardware Architecture*.

Functional activity diagram

The Functional Activity Diagram is structurally identical to the *Activity Diagram* but differs semantically regarding the **Functional Viewpoint**.

In the **Functional Viewpoint**, you can describe in a creative step what a system shall do, with focus on the control flow and data flow of the individual subsystems. It offers an isolated perspective for every system, from sensors to actuators and from inputs to outputs.

In the **Logical Viewpoint**, you can describe how subsystems (partitions) shall be integrated and define their interfaces. It offers an integrated perspective of all systems for shared sensors, shared actuators, and system interfaces.



In addition, the following differences apply to the *Functional Activity Diagram*:

- > Within one owner, one or more *Functional Activities* can be created in dedicated *Functional View Packages*.
- > Only logical blocks in the logical architecture of the local *Product Line* can be assigned as partition provider.
- > A logical block can be assigned to multiple partitions within the same *Functional Activity*.
- > *Input Activity Data Instances* and *Output Activity Data Instances* are not available.

The Window Lifter Example in the "Systems Engineering" *Product Line Package* in the PREEvision demo model is enhanced by a *Functional Activity Diagram* example.

Class diagram

In Class Diagrams, all atomic software component types can now be connected to *UML Packages* as implementation content.

The Window Lifter Example in the "Systems Engineering" *Product Line Package* in the PREEvision demo model is enhanced by implementation content of software component types in a *Class Diagram*.

Importing test scripts into a model subtree

During the import of test scripts from vTESTstudio or CANoe.DiVa, you can now restrict *Test Item* linking to a model subtree. The model subtree can be selected in the **Import Test Script from Test Design Tool** dialog. As model subtree, you can select the following artifacts:

- > *Product Line*
- > *Test*
- > *Test Data*
- > *Test Data Package*

Franca

The Franca interface has been extended. Besides the exchange of service interfaces and data types as FIDL files, you can now export Franca deployment (FDEPL) files for SOME/IP deployments.

IPC binding

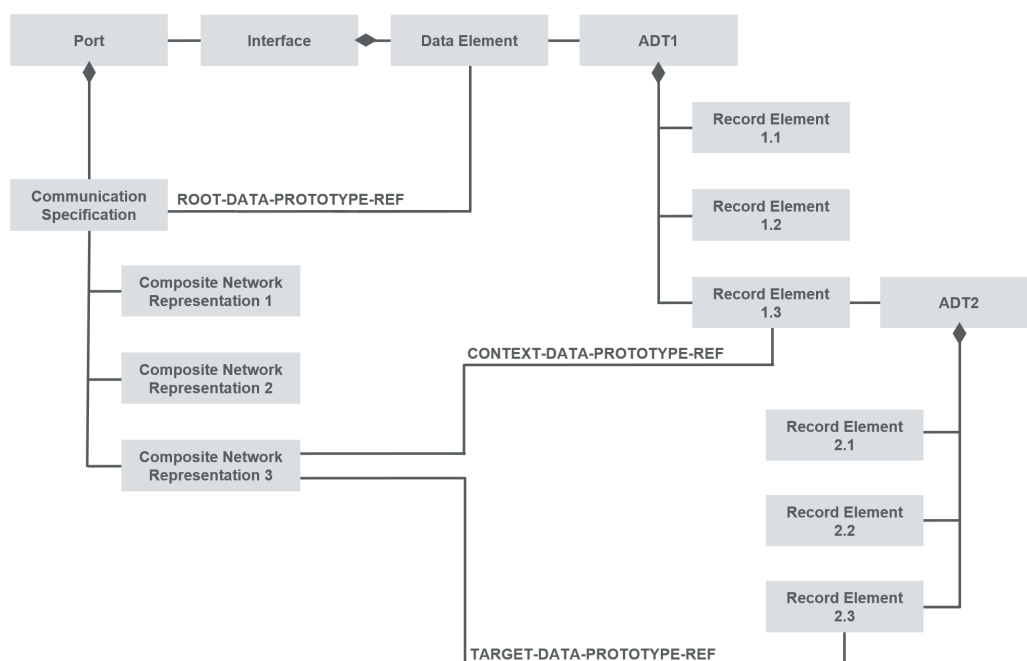
For high-performance computers and complex ECUs, the modeling of inter-process communication (IPC) has been simplified. New tables support the modeling of IPC bindings. The attributes needed are defined as AUTOSAR ADMIN-DATA extended by the usage of DaVinci Developer Adaptive Model Extension (DvMx) revision 11.

*Service Instance Package:IPC Binding Consumed Service Instance Editor			
Required IPC Binding Service Instance Extension			
Required Service Instance	Service Instance ID	Minor Version	Expected Server Integrity Level
 CUD_trafficInformation	ALL	ANY	QM

PREEvision supports the creation of the needed artifacts and the definition of the relevant attributes. Users get an example demo configuration and demo data to integrate DaVinci model extension in their model.

Support for composite network representation

PREEvision 10.20 supports the specification of network representation for leaf elements of application composite data types such as application records and application arrays.



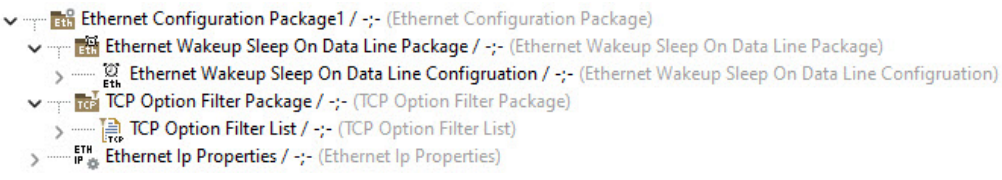
Enhancements for communication design

For communication design, the following improvements have been implemented:

- > The **Label** of *Partial Network Clusters* is considered for AUTOSAR import and export as `ShortLabel`.
- > Tp addresses can be named by the attribute *Tp Address Name* at Tp nodes.
- > Multiple *Socket Connections* can be assigned to one *Socket Connection IPDU Identifier*.
- > *Service Instance Packages* can be nested and are exported or imported as `ServiceInstanceCollectionSets`.
- > LIN Controller Configuration provides additional attributes for AUTOSAR imports and exports.

Enhancements for Ethernet communication design

For Ethernet communication design in particular, the following improvements have been implemented:

- > Ethernet properties can be configured at an *Ethernet Configuration Package*.
 - > PREEvision supports the *Ethernet Wakeup Sleep On Data Line Configuration* and provides additional *Ethernet Ip Properties*.
 - > TCP option filters can be defined in a *TCP Option Filter Package*.
- 
- > For *Global Time Ethernet Masters*, sub-tag length values (Sub-TLV) can be defined.
 - > You can set a preferred *VLAN* for *Port Communication Requirements*.

System version

Two new artifacts for version information of software have been introduced. With the *System Version Information* artifact, you can define the version of a *Root Composition*. And with the *ECU Version Information* you can define the version of an ECU extract. With the *ECU Version Information* you can also define a name of *Root Composition Prototypes* and *Root Composition Types* that will be used in the ECU extract.

AUTOSAR consistency checks

For valid models and seamless interaction with downstream tools, PREEvision provides improved AUTOSAR consistency checks that can be applied to the model more easily.

PVCDI export of units and invalid values for primitive data types

The data exchange with CANdelaStudio has been improved: Units and invalid values that are directly referenced from a primitive data type can now be exported via PVCDI data exchange.

Therefore, no *Computation Method* is required to export units or invalid values of data types anymore. Invalid value and unit of an existing *Computation Method* are prioritized by the export framework.

Support of J1939 properties for DTCs

Diagnostic Trouble Codes provide additional attributes. In case the **DTC Format** of the *Fault Memory Diagnostic Instance* is set to "J1939":

- > Failure mode identifier (**FMI**) can be set.
- > A *System Signal* with a suspect parameter number (**SPN**) can be assigned to the *Diagnostic Trouble Code*.
- > The attribute **Code** needs to be synchronized with **FMI** and **SPN** manually or via a metric.

Wiring harness explorer enhancements

The **Wiring Harness Explorer** has been enhanced with a new category for the *Geometry*.

The **Geometry Overview** category of the **Wiring Harness Explorer** contains three tables:

- > The **Installation Location to Component Overview** table displays the mappings between the *Installation Locations* and the corresponding hardware including connectors.
- > The **Topology Inline Connector to WH Inline Connector Overview** table displays the mappings between the *Topology Inline Connectors* and the wiring harness inline connectors including *Connector Locations* and *Wiring Connectors*.
- > The **Topology Segment Overview** table displays the *Topology Segments*, which realize the wires of the *Wiring Harness*. The path mappings between the individual wires and the segments are displayed as well as specific characteristics of the *Topology Segments*.

Additionally, traceability tables have been implemented for the Component Overview category and the Inline Connector Design category. The tables display the mappings of components and wiring harness inline connectors to their corresponding topology artifacts in the *Geometry*.

Diagram-based KBL export with propagation and consistency check

PREEvision offers the possibility to execute a complete and valid KBL export based on diagrams.

The KBL export process comprises different steps, which are supported by individual metrics:

- > KBL export preparation including a check of the diagrams and a conversion of the diagram content into a KBL export variant structure
- > KBL export consistency checks for checking diagram content for KBL consistency
- > KBL export with propagation and KBL export with propagation including consistency checks

The diagram content is checked for relevant artifacts and converted into a KBL export variant structure. The necessary artifacts for the export are propagated automatically based on the extracted diagram content and can be checked for KBL consistency before the final KBL export is executed and the KBL file is generated.

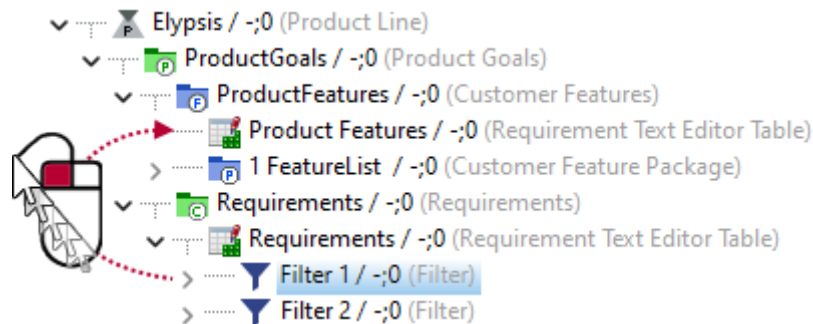
Asset update improvements

Updating *Assets* from upstream *Product Lines* will not result in checkouts of locally built *Assets*, which were previously caused by relations between artifacts of the used and the locally built *Assets*. This measure significantly improved the performance of *Asset* updates.

Additionally, when *Assets* are updated, the relations of their artifacts to artifacts outside the source and target *Product Lines* are taken over.

Moving and copying table filters

Filters that have been saved for a table proxy or a table instance can be moved or copied to another table proxy or table instance via drag and drop, via the context menu, or via shortcuts. As a precondition, the source and the target table must be based on the same table template. You can also move or copy a filter from a table proxy or a table instance to the associated table template.



Suspect links

If the **Description** of an artifact that is related to another artifact is changed, the related artifact is automatically marked for review with the suspect links indicator (⚡). The suspect links indicator is displayed in the **Property View** and in tables.

The **Suspect Links** property page displays detailed information about the changes that have triggered the suspect links indicator. After reviewing the changes and making necessary adaptations, you can remove the suspect links indicator.

Suspect Links

⚡ InsideLightFadeOut -;- (Test Item)

Remove Indicator

Sources for Suspect Links

Potential Triggers: 2 of 2 artifacts are shown

Artifact	Attribute	Link
InsideLight -;- (Customer Feature)	Description	Test Items
InsideLightFadeOut -;- (Requirement (shall))	Description	Test Items

Show Changes

Triggering Changes:

Link	Artifact	Reason	Attribute	Old Value	Current Value
Test Items	InsideLightFadeOut -;- (Requirement (shall))	Attribute Changed	Description	Fade out inside light	Fade out inside light
				Inside light starts to fade out 30 sec. after the last passenger door has been closed.	Inside light starts to fade out 25 sec. after the last passenger door has been closed.

The suspect links feature is available for the following relations:

Source artifact	Relation	Target artifact
Requirement Customer Feature	Assigned Test Item	Test Item
Requirement Customer Feature	Product Goal Link	Requirement
Requirement	REQ-LA:Mapping REQ-HW/LA:Mapping	Artifacts of the Logical Function Architecture
Requirement	REQ-HW/LA:Mapping	Artifacts of the Hardware Architecture
Requirement	REQ-SW:Mapping REQ-SW:Port Mapping	Artifacts of the System Software Architecture



The suspect links feature is deactivated by default. To use this feature, contact the Vector support.

Grouping consistency check results

Consistency check results can now be displayed in groups in the **Consistency Check Results** view, allowing you to cluster them by subject.

To display groups in the **Consistency Check Results** view, activate the **Use as grouping for consistency-check-results** option on the Consistency Rule Groups. *Consistency Rules* that are contained in a *Consistency Rule Group* with activated grouping are displayed in this group. *Consistency Rules* that are contained in a *Consistency Rule Group* with deactivated grouping are displayed in the "Other Inconsistencies" group.

Element	Rule Group	Rule Name
Result from 7/28/25, 12:02 PM, Mathew.Miller, 232 checks executed, 4,064 affected artifacts		
- Inconsistencies detected for Wiring Harness KBL Completeness - The Wire Pin is not assigned to a Pin Contact: 1,108 affected artifacts - End at inliner: 3 affected artifacts - The Wire Pin is not assigned to a Pin Contact: 3 affected artifacts	Wiring Harness KBL Completeness	C8033_WirePin_withoutAbstractWire_withoutPinContact
	Wiring Harness KBL Completeness	C8019_endliner
	Wiring Harness KBL Completeness	C8019_endliner
- Inconsistencies detected for Geometric Topology KBL Completeness - The Installation Location has two or more Mapping in an active Variant: 30 affected artifacts - The artifact has no 3D coordinates: 24 affected artifacts - The Topology Segment has no assigned Data Type Unit: 150 affected artifacts	Geometric Topology KBL Completeness	C9007_InstallationLocation_with2orMoreMappings
	Geometric Topology KBL Completeness	C9028_Artifact_without3dCoordinates
	Geometric Topology KBL Completeness	C9021_TopologySegment_withoutLengthUnit
- Other Inconsistencies - Schematic pin without type: 1,051 affected artifacts - Schematic pin with several schematic connections: 1 affected artifacts	C6_NET	C7019_SchematicPin_without_SchematicPinType
	C7_ElectricCircuit_logicalConsistency	C7002_SchematicPin_with_multiple_SchematicConne...

If grouping is deactivated for all executed *Consistency Rule Groups*, no groups are displayed in the **Consistency Check Results** view.

API server extensions

The commit REST call (POST `http://<host>:<port>/vCollabAPI/<model>/transactions/current`) responds with a conflict and error code 409 if the changed artifacts are locked by another user. The response now also contains the user name of the user who has locked the artifacts.

Example response:

```
{
  "errorCode": "MDF0008",
  "errorMessage": "Could not lock artifacts",
  "details": {
    "notLockedXmiids": [
      210135,
      210134
    ],
    "reserved": [],
    "lockOwners": {
      "210135": [
        "Mathew.Miller"
      ],
      "210134": [
        "Mathew.Miller"
      ]
    }
  }
}
```

The server information REST call (GET `http://<host>:<port>/vCollabAPI/serverinformation`) now additionally returns the product version of the API server.

Example response:

```
{
  "buildInfo": {
    "productVersion": "10.20.0"
  },
}
```

Meta model help

The **PREEvision** Metamodel Reference has been revised and now provides:

- > a compact and visually clear layout
- > a modern representation
- > descriptions of packages
- > meta class names in English and German
- > diagrams in high resolution

The screenshot shows the 'PREEvision Metamodel Reference' help window. The left sidebar contains a tree view of the metamodel structure, with 'AgreementTask' selected under the 'planningmm' package. The main content area displays the details for the 'Class AgreementTask'.

Class AgreementTask
not abstract, not versionable, root, copyable, not movable
en: Agreement Task, de: Vereinbarungsaufgabe

Supertypes
[AbstractAgreementArtefact](#), [AbstractAgreementTask](#), [AbstractAssociatesTypeDefinitionPoint](#), [AbstractGenericTableOwner](#), [AbstractPlanableArtefact](#), [ContextNamedArtefact](#), [HasDoneFlag](#), [HasEndDate](#), [HasResponsible](#)

Subtypes

Attributes

Attribute	Type	Kind	Initial Value
UUID	String	version	
XMIID	String	version	
aliasName	String	context	

Associations

Parent Reference	Associated Child Reference
1..1 agreement	→ agreementTasks (Agreement) 0..*
0..1 boundaryIntegration	→ boundaryToIntegrate (BoundaryIntegration) 0..*
0..1 coreIntegration	→ coreToIntegrate (CoreIntegration) 0..*
0..1 genericPackage	→ genericContent (CoreArtefactOwner) 0..*

Related Diagrams

[Concept: AgreementTask](#)>

[Concept: Counting and Cast Vote Type](#)

Concept: AgreementTask

The diagram shows the 'AgreementTask' class and its relationships. It is a concrete class that inherits from 'AbstractAgreementTask'. It has associations with 'Agreement' (1 to 0..*), 'BoundaryIntegration' (0..1 to 0..*), 'CoreIntegration' (0..1 to 0..*), and 'GenericPackage' (0..1 to 0..*). It also has a self-association 'agreementTasks' (0..* to 0..*). The diagram uses standard UML notation with classes in rectangles, associations in lines with open arrows, and multiplicity values at the ends of the association lines.

1.4 Configuration information

ECU version information

In previous PREEvision versions, the following attributes can be set on the *System Information*:

- > **Export Name of Root Composition Prototype**
- > **Export Name of Root Composition Type**

In PREEvision 10.20, both attributes have been moved to the *ECU Version Information*.

The *ECU Version Information* can be assigned to an *ECU* and thus can be considered for the AUTOSAR and PVCDI import and export.

There is no automatic migration that moves existing attribute values of the *System Information* to the *ECU Version Information*. For migration, manual customization is necessary, if required.

Size limitation for loading and changing the version of an artifact

When loading or changing the version of an artifact, the transfer of the artifact's subtree uses a serialization format that is limited to a size of 2 GB. This corresponds to 9.4 million artifacts or relations. The maximum size refers to the selected artifact and its subtree, as well as additionally required external types and their relations.

Take this limitation into account when you structure the model, so that the affected actions run successfully for your use cases.



In PREEvision 10.0 versions prior to 10.0 SP17 and in PREEvision 10.x versions prior to 10.11, the size of the artifact's subtree is limited to 3.1 million artifacts or relations.

The following actions are affected by the size limitation:

- > *Asset* update
- > replace with version
- > replace with selected version
- > restore selected version
- > reuse historical version
- > update *Asset* to historical version in checked-in *Product Line* (customer-specific action)
- > load *Product Line* in read-only mode (customer-specific action)
- > compare against historical version
- > compare for reuse inconsistencies

Other actions are not affected, for example:

- > loading the (full) model and updating the model
- > loading the scope
- > backup and restore
- > migrating models
- > using *Assets*

PREEvision 10.20 provides the following performance monitoring measurement point to observe the utilization if the serialization format is used:

- > ID: M0.21
- > Name: Create Binary Transfer Model Data

- > **Information:**
Utilization of the artifact storage in percent. Rounded integer value between 0 and 100.
Utilization of the relation storage in percent. Rounded integer value between 0 and 100.

Example based on the restore of a version of a *Product Line*:

```
[PMON;781b3e460e3a324d0d1214a3c8e350dc;Create Binary Transfer
Model Data;202;M0.21]{2025-06-23 13:06:50.4}{2025-06-23
13:06:50.5}{62 ms}{Utilization Artifact Storage [%]: 0.0}{User:
c9691a4bfd47a177b35e0ca55cb2dc8e}{Free Memory [%]:
75.42391427689128}{OperationID: M0.21}{Model: LATEST}{Utilization
Relation Storage [%]: 0.0}
```

Note that an *Asset* update uses the serialization format twice and provides two measurements for each update.

Grouping consistency check results

Consistency check results can now be displayed in groups in the **Consistency Check Results** view, allowing you to cluster them by subject.

To display groups in the **Consistency Check Results** view, activate the **Use for grouping** option on the *Consistency Rule Groups*. *Consistency Rules* that are contained in a *Consistency Rule Group* with activated grouping are displayed in this group. *Consistency Rules* that are contained in a *Consistency Rule Group* with deactivated grouping are displayed in the "Other Inconsistencies" group.

Element	Rule Group	Rule Name
Result from 7/28/25, 12:02 PM, Mathew.Miller, 232 checks executed, 4,064 affected artifacts		
Inconsistencies detected for Wiring Harness KBL Completeness	Wiring Harness KBL Completeness	
The Wire Pin is not assigned to a Pin Contact: 1,108 affected artifacts	Wiring Harness KBL Completeness	C8033_WirePin_withAbstractWire_withoutPinContact
End at inliner: 3 affected artifacts	Wiring Harness KBL Completeness	C8019_endliner
The Wire Pin is not assigned to a Wiring Connector, either direct or through a Pin Contact	Wiring Harness KBL Completeness	C8102_unboundWirePin
Inconsistencies detected for Geometric Topology KBL Completeness	Geometric Topology KBL Completeness	
The Installation Location has two or more Mapping in an active Variant: 30 affected artifacts	Geometric Topology KBL Completeness	C9007_InstallationLocation_with2orMoreMappings
The artifact has no 3D coordinates: 24 affected artifacts	Geometric Topology KBL Completeness	C9028_Artifact_without3dCoordinates
The Topology Segment has no assigned Data Type Unit: 150 affected artifacts	Geometric Topology KBL Completeness	C9021_TopologySegment_withoutLengthUnit
Other Inconsistencies		
Schematic pin without type: 1,051 affected artifacts	C6_NET	C7019_SchematicPin_without_SchematicPinType
Schematic pin with several schematic connections: 1 affected artifacts	C7_ElectricCircuit_logicalConsistency	C7002_SchematicPin_with_multiple_SchematicConne...

If grouping is deactivated for all executed *Consistency Rule Groups*, no groups are displayed in the **Consistency Check Results** view.

Table configuration: Edit event queries

When you configure a table column, you can now assign an **Edit Event Query**. An **Edit Event Query** can be used to trigger a metric each time you manually change the data within the table column. You can use this, for example, to automatically synchronize names. The **Edit Event Query** is only applied when you change data within the table. It is not applied when you change data, for example, in the **Property View**.

The **Edit Event Query** works with:

- > custom attributes
- > columns that are configured via **Object Configuration**
- > copy and paste
- > copy and paste via fill handle like in Excel
- > copy and paste with multi-selection
- > formatted text editors which are opened from a table

The **Edit Event Query** is not executed through **Creation Query**, **Action Query**, or **Deletion Query**.

Undo and redo are supported together with the original manual change.

Changed metric blocks: The *AUTOSAR Export* metric block has a new optional input port "unmodifiableCompositionTypes" (data type: `Collection<MCompositionType>`, default: `NULL`). The input is relevant for classic AUTOSAR exports if "delegatePortsAndCreateConnections" is activated. As input, provide a collection of *Composition Types* that shall not get synthesized delegation ports.

AUTOSAR export

1.5 Fixed issues

Fixed issues in PREEvision 10.20

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Systems engineering](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Change and release management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [Server API](#)

1.5.1 Common

ID	Resolution
9082949059433402051	When you compare several artifacts in the Property View , and these artifacts reference the same artifact, for example the same <i>Computation Method</i> , the attribute values of the referenced artifact are displayed as identical.

1.5.2 Diagrams

ID	Resolution
9082949059865002112	For use cases or actions which cause diagrams to switch to read-only mode, additional log entries have been added to be able to better trace the cause if the error occurs again.

ID	Resolution
9082949059599843042	When opening a diagram containing a <i>Sheet Connector</i> with a label, the label is now displayed at the correct position of the <i>Sheet Connector</i> . No refresh via <F5> is necessary anymore.

1.5.3 Tables

ID	Resolution
9082949058188121799	An error with table filters using prototype columns has been resolved. Using an AND combination of two column filters if one of the filtered columns is a prototype column works properly.
9082949059105392105	You can use the Show Parents button in the table toolbar to display parent artifacts in a filtered table.
9082949059405192105	Tables in the Property View can be filtered with a predefined filter. Selecting (All) in the drop-down list of the column header resets an active filter.
8682711686253683042	Configured actions in a table toolbar are reactivated after use.
9082949059152801995	Metric-based column filters work properly in combined tables.
9082949059154451995	The table performance has been improved via a configuration adjustment that prevents table updates for specific relations. Additionally, a table in a Portlet View will no longer be updated unnecessarily when it is in the background.
9082947084846791995	Opening an explorer that directly displays a combined table no longer causes a <code>NullPointerException</code> .
9082949059233872101	The rendering of formatted texts during the full refresh of a table is done asynchronously. This prevents the client from being sporadically unresponsive.

1.5.4 Systems engineering

ID	Resolution
9082949058540873108	Sequence diagrams support combined fragments with more interaction operators to define their semantics including "parallel". A "parallel" combined fragment enables the modeling of concurrent execution between the behaviors of the <i>Interaction Operands</i> of the combined fragment.
9082949059768742196	The following Object Configuration of a <i>Composite State</i> and an <i>Orthogonal State</i> in a <i>State Machine Diagram</i> are correctly applied: > Composite State Color > Orthogonal State Color

ID	Resolution
	In addition, <i>Composite States</i> and <i>Orthogonal States</i> in a printed or image exported diagram now looks closer to the diagram itself.

1.5.5 Requirements

ID	Resolution
8682711687572062012	The shortcut to open the editor of an artifact shown in a placeholder has been changed from <Ctrl> + click to <Ctrl> + <Shift> + click. This also prevents unwanted opening of editors during cut or copy and paste of placeholders.
8682711553269751995	ReqIF export: <i>Test Specifications</i> are shown as exported artifacts in the ReqIF Export dialog.
9082949059433632105	ReqIF export: The caching mechanism for text styles in the ReqIF and Excel export has been improved to prevent loss of styles in rare cases.
8682711687649632049	ReqIF export: The messages in the Information View after executing a ReqIF export are displayed with consistent text styles.
9082949059619392105	ReqIF import: The performance of the model analysis step during the ReqIF import has been improved.
8682711554502771992	ReqIF import: The ReqIF import of formatted texts containing nested text tables no longer leads to tables that are missing a part of the border.
9082949059397552049	ReqIF import: When canceling the ReqIF import via [Cancel] , the import is aborted.

1.5.6 Logical function architecture

ID	Resolution
9082949058624652042	In the Create Logical Architecture System Diagram dialog, the Create System Section option has been removed. The option is only present if the diagram is created in a <i>System</i> .
9082949059534571030	The synchronization of logical ports of a <i>Building Block</i> or <i>Logical Domain</i> from a <i>Logical Architecture (System) Diagram</i> into their contained <i>Logical Architecture Diagram</i> and vice versa has been removed. Therefore, a checked-in <i>Logical Architecture Diagram</i> of a <i>Building Block</i> or <i>Logical Domain</i> will no longer be checked-out if ports will be added or removed to them in other diagrams.

1.5.7 AUTOSAR

ID	Resolution
9082949059106572159	ECU extract: When exporting empty compositions with flattening active, signal ports are exported correctly.
9082947086053982052	AUTOSAR export: All valid values for the artifact <i>Tag With Optional Value</i> are exported.
9082949059866792108	AUTOSAR export: Data type mappings are sorted deterministically in the AUTOSAR export. The sorting is determined by the linked application data types and implementation data types.
9082949058960012052	AUTOSAR export: The system version can be set for AUTOSAR exports.
9082949059684152108	AUTOSAR export: A performance problem that occurred after the execution of consistency checks has been resolved.
9082949059561501024	AUTOSAR software cluster design description: <code><REQUIRED-FIBEX-ELEMENT-REFS></code> are no longer exported for an Adaptive <i>Software Cluster Design</i> .
9082947086163512052	AUTOSAR import: Boolean initial values are correctly imported.
8682711687400921917	AUTOSAR import: As PREEvision does not support more than one <code>MixedTextItem</code> within a list, it will not be imported.
9082949059829693089	AUTOSAR import: <code>E2EProfileCompatibilityPropsCollection</code> is now imported completely.
9082949058959982052	AUTOSAR export and import: The naming of <code>CAN-TP ADDRESSES</code> is stable on import and export.
9082949059058522013	AUTOSAR export and import: The AUTOSAR export and import with AUTOSAR version 24-11 now support the creation of <i>Coupling Port Details</i> with more than 8 <i>Coupling Port Traffic Classes</i> , <i>FIFO Traffic Class Assignments</i> or <i>Assigned Priorities</i> .
9082947086107991024	AUTOSAR Adaptive Explorer: The mode of a function group is displayed in the Startup Dependencies Editor of the Software Cluster Deployment category.

1.5.8 Diagnostics

ID	Resolution
9082949059167491875, 9082949059040662111	Diagnostic export: The <i>Export Compare</i> metric block indicates deltas in case attribute values are listed in a different order, even if their values are the same.
9082949059626972113	Diagnostic export: Complex initial values are now exported with correct prioritization of the Name and Value attributes for enumeration type modeling.

ID	Resolution
9082949059137192005	Diagnostic export: The attributes <i>AsrDataElementRef</i> and <i>AsrServiceDependencyRef</i> use a single blank as separator to be in line with downstream toolchain.
9082949058119532113	Diagnostic export: The invalid value of an application data type is considered in case there is no <i>Scale Linear Verbal Table Conversion</i> or <i>Linear Verbal Table Conversion</i> used on the data type.
9082949058119522113	Diagnostic export: The <i>Data Type Unit</i> of an application data type is considered for the export in case there is no <i>Data Type Unit</i> available on the <i>Computation Method</i> or no <i>Computation Method</i> available at all.
908294905885333108	J1939 Diagnostic Trouble Codes: The PREEvision metamodel and the Property View have been extended to allow the possibility to set a Failure Mode Identifier (FMI) attribute and an SPN attribute for <i>Diagnostic Trouble Codes</i> relevant for J1939.

1.5.9 Communication

ID	Resolution
9082949058230361029	Frame-PDU synthesis: The frame-PDU synthesis now supports <i>Secured IPDUs</i> which reference <i>Signal IPDUs</i> that are also part of a <i>Container IPDU</i> .
9082949059503651807	Frame-PDU synthesis: The performance of the frame-PDU synthesis when synthesizing a lot of <i>Multiplexed IPDUs</i> has been improved.
9082949059801961917	Frame-PDU synthesis: The Information View indicates <i>Signal Gateway Routing Entries</i> without In/Out transmissions.
9082947087148943089	Signal router: The correct data type mapping is considered to determine reuseable signals in case of complex classic-adaptive routing with asymmetric data type mappings.
9082949058587751807	Signal router: <i>Fire and Forget Methods</i> of <i>Service Interfaces</i> which are deployed to software compositions are handled correctly.
8682711686993061917	Merge signal refactoring: A hint was added to the manual that only artifacts that are not checked-in and have the same revision can be merged.
9082949059703791911	All valid values can be entered for PNC wakeup attributes of <i>CAN ECU Interfaces</i> .

1.5.10 Hardware architecture

ID	Resolution
9082949059549603090	The size of <i>Sheet Connector</i> link boxes is automatically adjusted after splitting a connection to properly display all referenced targets, independent of whether a target range limitation is set via object configuration.
9082949059073222081	Auto-layout diagrams for wiring harness (diagram-based or model-based auto-layout diagrams) do not support wire bridges, this means wires connected to one inline connector or one <i>Splice</i> cluster. An appropriate error message is displayed which references the affected wires. Appropriate error messages are displayed both when creating the auto-layout diagram via refactoring or via metric.
9082949059547642112	In the Show/Hide Headers and Pins dialog of a component in an Electric Circuit Diagram or Wiring Diagram individual pins can be selected and deselected again.
9082949059723802083	In the Assign Pins to Contactings table, assigning and replacing a <i>Hardware Device</i> pin via drag and drop action Assign and Replace Hardware Device Pin , replaces the formerly set <i>Hardware Device</i> pin, removes the <i>Internal Schematic Connection</i> from the replaced <i>Hardware Device</i> pin and reassigns the <i>Internal Schematic Connection</i> to the newly assigned <i>Hardware Device</i> pin.
9082949059795191994	The wiring harness router properly routes a wire with assigned "Must Use" <i>Condition</i> on a <i>Topology Segment</i> containing a <i>Topology Segment Point</i> .
9082949059263652062	The <i>Add-in</i> "Electrologic and Harness", which contains the KBL import and KBL export metrics, also contains the corresponding required KBL <i>Custom Attribute Profiles</i> as well as the KBL import and export configuration files, to ensure the proper use of the KBL import and export metrics.
9082947085810882062	KBL export: For the custom attribute CrossSectionArea , comma separated decimal values are converted into the correct data format (point as decimal separator) and are properly exported to KBL.

1.5.11 Geometry

ID	Resolution
9082947085784933090	When creating a diagram representation of a <i>Connector Location</i> in a <i>Geometry Diagram</i> , for example via drag and drop, only one label is created and displayed instead of two.

ID	Resolution
9082949059154712083	In a <i>Geometry Diagram</i> , the waypoint handles of an <i>Installation Space</i> which has been changed to a polygon, can be selected and moved. Additionally, a feedback figure is displayed.
9082949059762252083	There are two scenarios for the calculation of a <i>Splice</i> position: > Calculation of the <i>Branch-Off</i> (as <i>Splice</i> position) based on the shortest total length of all wires connected to the <i>Splice</i>. > Calculation of the <i>Branch-Off</i> (as <i>Splice</i> position) based on the minimal total weight of all wires connected to the <i>Splice</i>. If for one or more wires no valid weight can be obtained, for example, if no weight is set on the corresponding <i>Wire Type</i> of the wire or if a wire does not have assigned a <i>Wire Type</i> at all, the calculation falls back to the scenario of a calculation based on the shortest total length.
9082949059684342112	In the <i>Geometry Diagram</i>, the toolbar buttons to align figures are now activated when multiple <i>Installation Locations</i> within the same <i>Installation Space</i> are selected. The prerequisite for this is that the alignment action does not move a figure outside the <i>Installation Space</i>.

1.5.12 Product line engineering

ID	Resolution
9082949059066931912	The checkout of an <i>Asset</i> when routing a wire, which is a core artifact of the <i>Asset</i> , is avoided.
9082949059426142012	Updating an <i>Asset</i> will no longer trigger an unnecessary checkout of related <i>Assets</i> without predecessors. Because external relations are no longer considered conflicting, updates run faster.

1.5.13 Variant management

ID	Resolution
9082947086104872042	The Object Information property page is available for <i>Sets</i> .
9082947085110861914, 9082947085889122108, 9082949058825761917, 9082949058111331998	The performance problems when opening the VM Explorer or the VM Explorer without Customer Feature Model which were caused by filter configurations set on specific explorer categories, have been resolved.

1.5.14 Change and release management

ID	Resolution
9082949059687992080	A problem with the Triggering Changes table on the Suspect Links property page has been resolved: The target artifact was linked to a source artifact that had several reuses with different versions. If the source artifact was deleted, the Triggering Changes table of the target artifact displayed multiple identical entries, although the reuses of the deleted artifact were not linked to the target artifact.
9082949059416592105	When you select the artifacts that shall be attached to the selected <i>Ticket</i> in the Commit Dataset dialog, deselecting an artifact does not add any other artifacts.
8682711684953992106	When you compare formatted texts in the Compare perspective, the differences are properly highlighted within the formatted texts instead of highlighting the complete formatted text.
9082949059594142080, 9082947086001030064	When you compare formatted texts in the Compare perspective, the compared formatted texts are displayed read-only and cannot be edited.

1.5.15 Rules

ID	Resolution
9082949058805422051	Consistency check results can be exported to Excel even if the linked artifacts are no longer available in the model, for example, after an ARXML export.

1.5.16 Metrics

ID	Resolution
9082949058301642102	Log messages of the metric execution status with severity "Info" are only written to the log if the client initialization parameter <code>-DshowConfiguration</code> is set to <code>true</code> . Log messages of the metric execution status now include the XMIID and the UUID of the context artifacts.
8682711686828932024	An error has been fixed that occurred in the identity comparison of the <i>Compare Model Tree</i> metric block.
8682711687341612039	The <i>Compare Model Tree</i> metric block correctly executes the metric-based matching via a <i>Compare Configuration</i> , if a metric is provided.
9082949058956302102	Metric tests are now executed in their own context. This prevents concurrent modification exceptions.

1.5.17 Reports

ID	Resolution
9082949058781112105	Generating reports has been improved in case the generated report contains many bookmarks, for example, for placeholders.
9082949059685401992	You can define chart settings for generating a report regardless of which PREEvision license you use. All literal artifacts are available in all licenses.

1.5.18 Collaboration

ID	Resolution
9082949058766053013	Changing the <code>installationMode</code> initialization parameter no longer causes an error when loading the local model cache.
9082949058092213104	The performance of loading a <i>Product Line</i> for comparison has been improved.
8682711687346422051	A commit error has been fixed that occurred if a user deleted an artifact that had been changed by another user.
9082949059817891030	An error has been resolved that occurred when replacing an <i>Asset</i> with a version from history and led to unnecessary check-outs.

1.5.19 Administration

ID	Resolution
9082949059700061868	<i>Add-ins</i> now propagate the context artifacts of a <i>Model Context</i> below a metric executor. This allows for the static assignment of artifacts to a <i>Model Context</i> within the scope of a metric executor.
9082949059708921995	<i>Add-ins</i> now propagate the <i>Table Update Filter</i> for tables.
9082949059820342012	<i>Add-ins</i> now propagate <i>Consistency Rules</i> and their <i>Quick Fixes</i> for <i>Explorer Categories</i> .
9082949059798152080	<i>Add-ins</i> now propagate the <i>Query Rule Group</i> that is assigned to a <i>Query Context</i> below a <i>DnD Action</i> .
9082947087364681028	After an <i>Add-in</i> installation, reuses are synchronized.
9082949059605602012	An error that caused unwanted relations to be created in the model after an <i>Add-in</i> installation has been fixed.
9082949058202253046	With partial <i>Add-in</i> delivery, the same checks are performed as with full <i>Add-in</i> delivery.

ID	Resolution
9082949059667723108	When the Life Cycle State of a checked-in artifact in a "Version" Type <i>Life Cycle</i> changes, creating a comment during a life cycle transition no longer causes the artifact to be checked-out.

1.5.20 Installation

ID	Resolution
9082949059424771860	In the <code>deploy.properties</code> , the <code>MailFromAuthUser</code> parameter has been added for configuring the e-mail notification in the application server. It is now possible to distinguish between an e-mail user that is used for authentication at the e-mail server and the e-mail address that is used as sender e-mail address.

1.5.21 Server API

ID	Resolution
9082949059718721861	In the API server, models are only preloaded when the application server is fully started.
9082949059688191993, 9082949059874852203	An issue has been fixed that occurred in the API server during the <code>refreshToken</code> REST call when using OpenID Connect authentication.

1.6 Known issues

Known issues in PREEvision 10.20

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
-	The suspect links feature requires Oracle database version 19.13 or later. To avoid malfunctions, the suspect links feature must be activated by setting a client INI parameter. If you use Oracle database version 19.13 or later and want to use the suspect links feature, contact the Vector support.
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
9082949059853333059	When comparing two artifacts, in the Compare perspective one of the Property Views of the artifacts to be compared is, in some cases, not displayed in compare mode. Workaround: Close the Compare perspective and execute the artifact compare again.
9082949059882312105	In review and vote tables (Review Table) with an active filter, it may happen that a table may not be updated automatically if an attribute value in the table is changed in a way that the active filter would have to filter out the corresponding artifact. Workaround: Deactivate the filter and activate it again.
9082949059821032062	During KBL export with propagation, more artifacts are exported than were propagated. This is caused by an issue in the export framework. For example, it is currently not possible to export only a specific <i>Connector Location</i>

ID	Known issue
	if its <i>Installation Location</i> is part of the propagated artifacts, since all contained <i>Connector Locations</i> are exported. The exported KBL file however is valid.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i> , the Calibration Attributes property page is missing in the Property View . It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082949059943151029	<i>Axis Point Number</i>, <i>Axis Value</i> and <i>Function Value</i>, which can be created under a <i>Calibration Parameter Record Layout</i>, are not yet propagated by a software <i>Asset</i> and the corresponding <i>Add-ins</i>. Workaround: Manually assign <i>Axis Point Number</i>, <i>Axis Value</i> and <i>Function Value</i> of each <i>Calibration Parameter Record Layout</i> to the <i>Asset</i> or <i>Add-in</i>.
9082949059944112068	When updating the "Example Data: Systems Engineering" <i>Demo Add-in</i>, an error may occur that causes the update to fail. The new version of the example data can require changing the type of <i>State Machine</i> conditions from <i>Condition</i> to <i>Non-Parsable Condition</i>. The latter type does not allow child artifacts. The error can occur when <i>Conditions</i> with child artifacts are changed to <i>Non-Parsable Conditions</i>. Workaround: 1. Delete the existing <i>Demo Add-in</i> from your model. 2. Delete the "SE Example: Robot Vacuum Cleaner" <i>Product Line</i> containing the conflicting demo data. 3. Install the new version of the <i>Demo Add-in</i>.
9082949058916421857	Due to an error in the compatibility check, service packs of minor releases, for example, 10.17 SP1, cannot be used for backup and restore. Workaround: Update to the next minor release without service pack, for example, 10.18.
9082949059717192203	If the application server is installed on Linux, committing files with a file size larger than 500MB causes an error.

ID	Known issue
9082949059891171896	Artifacts that have been unloaded from the temporary scope are kept in memory. Workaround: Commit the model to remove artifacts of the temporary scope from memory.

2 PREEvision 10.19

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2.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.19.0
PREEvision license server	3.0.4
PREEvision database server	10.18.0.01
PREEvision application server	10.19.0

Documentation

Manual	Version number
PREEvision manual	10.19.0
PREEvision configuration manual	10.19.0
PREEvision operating manual	10.19.0
PREEvision system requirements	10.19.0
PREEvision server API	10.19.0

2.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.19 and the migration to PREEvision 10.19, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.19, refer to the PREEvision system requirements.

License server

With PREEvision 10.19, the new version 3.0.4 of the standalone license server is available.

When you use the standalone PREEvision license server (RMI), it is recommended to update the license server to the new version 3.0.4.

System requirements

The following system requirement has been changed:

The recommended version of Apache Tomcat has been changed to 9.0.104.

Backup directory

The **Configuration** page of the administration panel has been removed for security reasons.

You can now define the backup directory in the `deploy.properties` via the parameter `vCollab.Backup.Directory`.

You can also set the backup directory in the context file of the application server `vCollab.xml` via the following parameter:

```
<Environment name="servermigration/vCollab.Backup.Directory"
value="<backup directory>" type="java.lang.String"
override="false"/>
```

The backup directory is automatically created if it does not exist. If the application server has no access rights to write into the directory, a warning is reported in the server log file.

If no backup directory is specified, a `backup` directory within the workspace directory of the application server is used, for example:

```
%TOMCAT_HOME%\work\Catalina\eclipse\workspace\backup
```

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14

Client version	Server version	Database server script version	Metamodel change ID
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29
10.16.0	10.16.0	10.16.0.04	2024-11-08
10.17.0	10.17.0	10.17.0.03	2025-01-07
10.18.0	10.18.0	10.18.0.01	2025-02-24
10.19.0	10.19.0	10.18.0.01	2025-02-24

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.19.



Migrating to PREEvision 10.19 is only possible from PREEvision 10.0 SP17 or later. All remote operations (backup and direct migration) available in the PREEvision 10.19 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later. If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.19, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.19 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.19, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

2.3 New features in PREEvision 10.19

ReqIF import improvements

PREEvision variant information is no longer excluded from the ReqIF import. The variants are imported as custom attributes and transferred as multi value enumerations.

An updating ReqIF import of multi value enumerations is now possible and a changed set of selected values is now correctly processed during import. In addition, it is now possible to change an attribute definition from an enumeration to a multi value enumeration via updating ReqIF import, and vice versa.

REQ-LA:Mappings are no longer excluded from the ReqIF import, Logical Architecture Mappings can be imported as custom attributes with data type *String*.

Sequence diagram improvements

For sequence diagrams, the following improvements have been implemented:

- > *Lifelines* can now be moved in an *Interaction* using drag and drop.
- > Messages can now be moved and reattached in an *Interaction* using drag and drop.
- > Software architecture artifacts, for example, port types or runnables, can now be assigned from the **Model View** using drag and drop.
- > Reopening an *Interaction* applies the last zoom setting.
- > In the **Select Representative** dialog for *Execution Specifications* and messages, a context help into the PREEvision User Manual can now be opened via help button or <F1>.
- > To improve performance, the **Select Representative** dialog for *Execution Specifications* and messages is now switched from tree view to list view when exceeding a maximum number of represented artifacts. The maximum number of represented artifacts shown in tree view can be defined in the Sequence Diagram preferences.
- > Positioning feedback is shown in the *Interaction* when inserting *Execution Specifications*.
- > Messages of an *Interaction* in an UML *Package* in the software layer can now be assigned to *Methods* and *Properties* of *Classes* and *Interfaces* as well as to content of *Service Interfaces*.
- > The creation of self-messages is now supported.
- > The "Systems Engineering" *Product Line Package* in the PREEvision demo model is enhanced by several *Interaction* examples:
 - > SysML Concepts: new *System Software Architecture* demonstrating the supported software representatives for *Execution Specifications* and messages.
 - > Window Lifter Example: *Interaction* extensions under *System Software Architecture* and UML *Package*.

Copying of test items, test item steps and test routines

The copy and paste actions of test artifacts have been extended and integrated into the **Test Specification Editor**.

Copy and paste before/after actions can now also be executed via context menu and shortcuts for the following artifacts:

- > *Test Item* -> *Test Item*
- > *Test Item* -> *Test Routine*
- > *Test Routine* -> *Test Routine*
- > *Test Routine* -> *Test Item Step*

Shortcuts for special paste actions:

- > Copy before: <Ctrl>+<Shift>+<Arrow up>
- > Copy after: <Ctrl>+<Shift>+<Arrow down>

The copy and paste before/after action of *Test Item Steps* can be executed via:

- > drag and drop
- > context menu
- > shortcut <Ctrl>+<C> and <Ctrl>+<V>

Relations subject to verify and artifact under test

New classes can be linked as subject to verify with *Test Items* for horizontal traceability:

- > SW block instances
- > *SW Ports*
- > Interaction
- > Logical block instances
- > Logical ports

To define a test specification context, an artifact under test can be assigned to a *Test Specification / Test Heading* via drag and drop in the **Property View**.

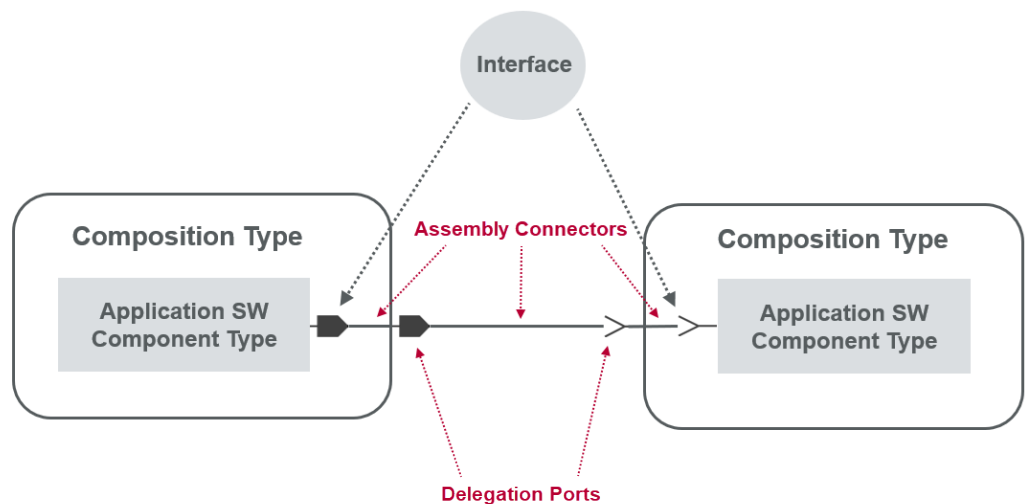
Support of AUTOSAR 24-11

PREEvision 10.19 supports the import and export of AUTOSAR 24-11 files both for AUTOSAR Classic and Adaptive.

Optimization for software architecture modeling

For faster development and smaller model sizes, PREEvision supports the modeling of software architectures without using assembly connectors or delegation ports:

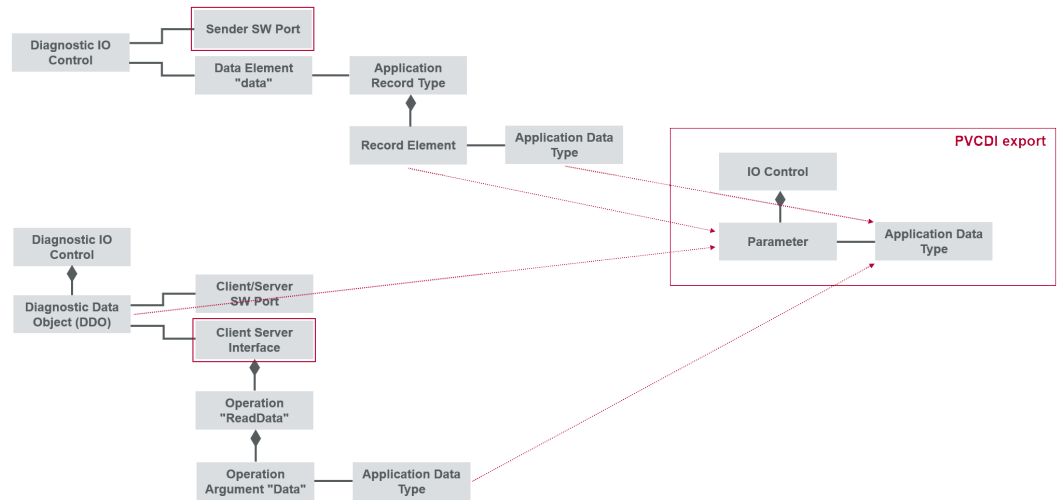
- > Assembly connectors are implicit in case provider ports and receiver ports use the same port interface.
- > For composition types, delegation ports provide the communication of contained software component types to the outside world. In some scenarios, they do not carry additional information compared to the software ports at the software component type.



In this case, you can reduce the size of the model excluding those artifacts. During AUTOSAR export, PREEvision synthesizes missing assembly connectors and delegation ports temporarily. These artifacts are added to the export file, but do not persist in the model.

IO control with client server interface

Diagnostic IO Controls can be realized in the software either by a *Sender Receiver Interface* or a *Client Server Interface*. In case of a realization with a *Client Server Interface*, the I/O control must have a *Diagnostic Data Object* which is referenced to the *Client Server Interface* with the relevant *Operations* and *Operation Arguments*.



PREEvision 10.19 supports the realization with a *Client Server Interface*. The **Diagnostic Realization Explorer** now provides for each use case a dedicated table:

- > IO Control SR table
- > IO Control CS table

Wiring harness explorer: New table

The **Wiring Harness Explorer** has been enhanced with a new table in the **Wiring Connection Overview** category.

The Same Wire Color Combinations at Wiring Connector table provides an overview of all those wires connected to a *Wiring Connector* which have the same *Color* or *Color Combination*. Those wires could cause difficulties in the proper manufacturing of the wiring harness.

The new table is integrated in the **Wiring Harness Explorer** but can also be opened as a standalone table on a *Product Line* via context menu **Open with | Electrologic and Harness| Same Wire Color Combinations at Wiring Connector**.

Asset core artifact modifications - performance optimization

Core artifact consistency checks are now bundled and run deferred at the end of interactions/metrics.

Especially *Assets* with many (propagated) core artifacts benefit from the improved scaling behavior.

Asset creation or refresh warnings in case of product line external core artifacts

Assets always focus on their *Product Line*. Using or updating an *Asset* integrates artifacts in the target *Product Line* even if they are not part of the source *Product Line*. Such external core artifacts typically mean unwanted dependencies.

During a create or refresh *Assets* and check-in, a warning is now reported in the **Information View** if core artifacts are located in a different *Product Line* than the *Product Line* of the *Asset*.

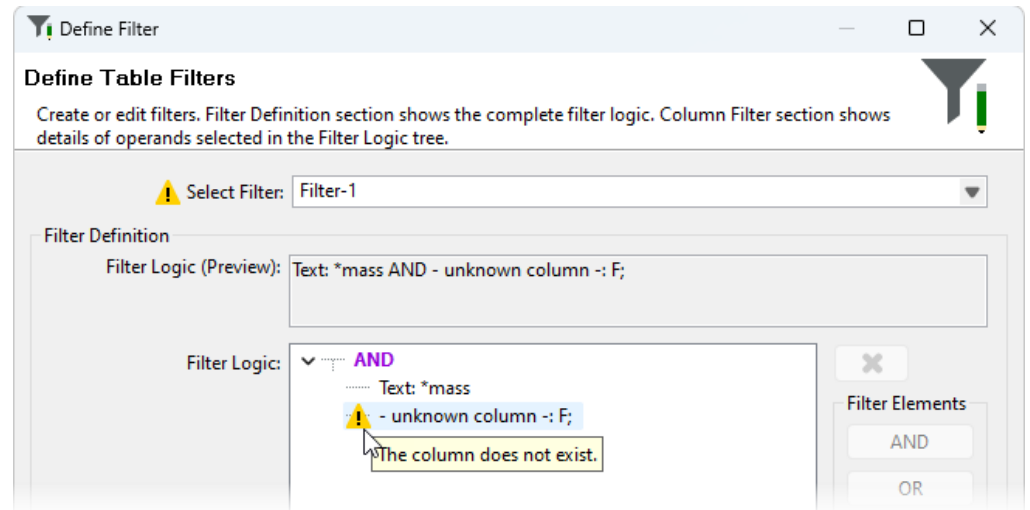
Configurators can easily disable the check, or they can use it to enforce model and *Asset* quality.

Extended filter management in tables

For the extended filter management in tables, the following improvements have been implemented:

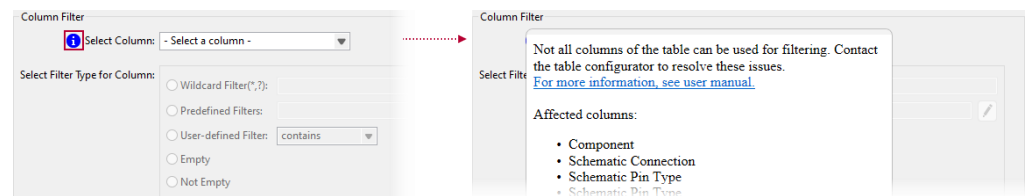
> Indicators for unavailable table columns

If a table filter uses columns that are not available in the opened table, because they are hidden or have been deleted, an indicator informs you accordingly. In the filter drop-down list, a filter that uses unavailable columns is grayed out. In the **Define Filter** dialog, the  icon and a tooltip inform you that the column that is used by the selected filter is not available.



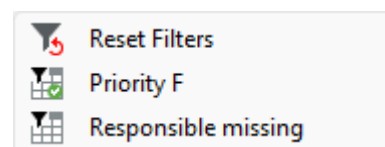
> Improved information about multiple paths

In the **Define Filter** dialog, an overview pop-up displays columns that cannot be used for filtering, because they are part of a table configuration with multiple paths. A direct link to the relevant online help chapter provides further information.



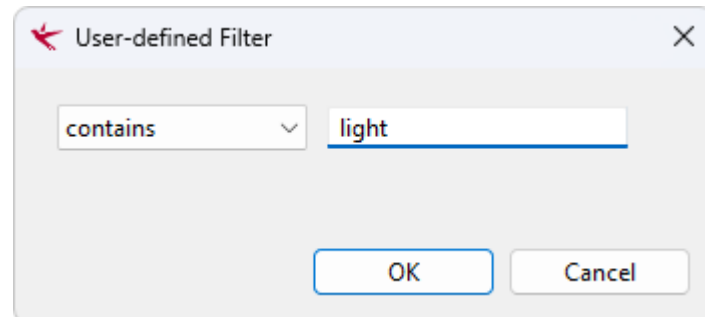
> New option for resetting filters

With the new **Reset Filters** option in the filter drop-down list, you can reset an active filter in a table without deactivating column filters.



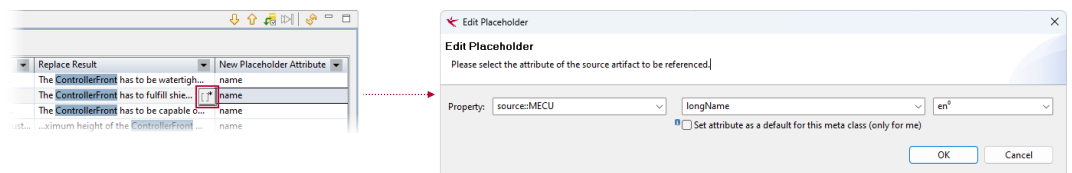
> **Dedicated dialog for user-defined column filter**

Via the **User-defined Filter** option in the drop-down list of a column header, you can open a dedicated dialog for user-defined column filters. This dialog allows you to apply a user-defined filter on a column that is part of a table configuration with multiple paths.



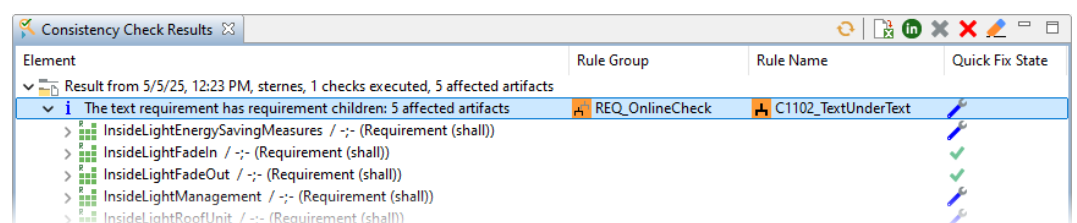
Search and replace in tables: Editing placeholder attributes

When you replace a placeholder with another placeholder, two new columns in the **Replace** view display the current **Placeholder Attribute** and the **New Placeholder Attribute**. Via a button in the **New Placeholder Attribute** column, you can open the **Edit Placeholder** dialog to change the attribute that is referenced by the new placeholder. For attributes with language support, you can also change the language of the attribute.



Quick fixes for consistency checks

In the Consistency Check Results view, a new column has been added that displays the **Quick Fix State**. The  icon indicates that a *Quick Fix* is available for an inconsistency. Via the context menu, you can execute *Quick Fixes* for single or multiple elements that are listed in the **Consistency Check Results** view. The  icon indicates that a *Quick Fix* has already been executed for an inconsistency.



Via the  button in the toolbar of the view, the consistency check results can be recalculated for the same artifacts and checks.

Information view: severity decorators for custom icons

If a custom icon has been defined for the **Information View**, the severity of an entry can now be identified at the top level of the entry. For entries with the severity "Error", the  decorator is added to the custom icon, and for entries with the severity "Warning", the  decorator is added to the custom icon.

API server extensions

You can now configure if and which models shall be loaded in advance during the API server start-up. This significantly reduces the duration of the initial login.

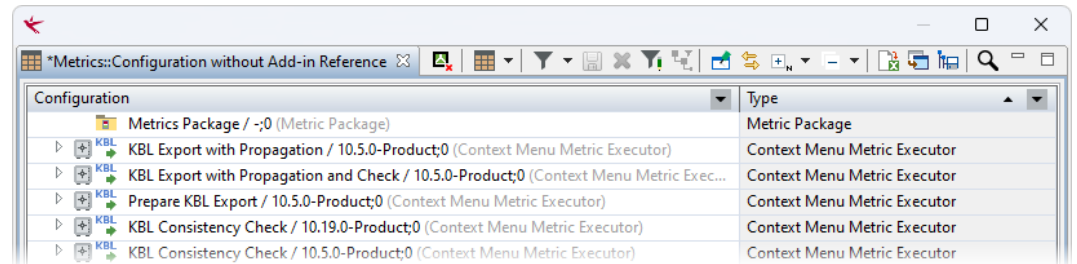
It is now possible to retry the commit of a transaction if the commit call returned a lock conflict (response code 409).



For detailed information, refer to the PREEvision server API manual.

Overview of artifacts
that are not part of an
add-in

The **Configuration without Add-in Reference** table provides an overview of all artifacts in a subtree that are not part of an *Add-in*. The table is delivered with the product *Add-in "Add-ins Development"*.



Configuration	Type
Metrics Package / -;0 (Metric Package)	Metric Package
KBL Export with Propagation / 10.5.0-Product;0 (Context Menu Metric Executor)	Context Menu Metric Executor
KBL Export with Propagation and Check / 10.5.0-Product;0 (Context Menu Metric Executor)	Context Menu Metric Executor
Prepare KBL Export / 10.5.0-Product;0 (Context Menu Metric Executor)	Context Menu Metric Executor
KBL Consistency Check / 10.19.0-Product;0 (Context Menu Metric Executor)	Context Menu Metric Executor
KBL Consistency Check / 10.5.0-Product;0 (Context Menu Metric Executor)	Context Menu Metric Executor

2.4 Configuration information

Size limitation for loading and changing the version of an artifact

When loading or changing the version of an artifact, the transfer of the artifact's subtree uses a serialization format that is limited to a size of 2 GB. This corresponds to 9.4 million artifacts or relations. The maximum size refers to the selected artifact and its subtree, as well as additionally required external types and their relations.

Take this limitation into account when you structure the model, so that the affected actions run successfully for your use cases.



In PREEvision 10.0 versions prior to 10.0 SP17 and in PREEvision 10.x versions prior to 10.11, the size of the artifact's subtree is limited to 3.1 million artifacts or relations.

The following actions are affected by the size limitation:

- > *Asset* update
- > replace with version
- > replace with selected version
- > restore selected version
- > reuse historical version
- > update *Asset* to historical version in checked-in *Product Line* (customer-specific action)
- > load *Product Line* in read-only mode (customer-specific action)
- > compare against historical version
- > compare for reuse inconsistencies

Other actions are not affected, for example:

- > loading the (full) model and updating the model
- > loading the scope
- > backup and restore
- > migrating models
- > using *Assets*

New metric blocks: Diagnostic operation creator

The *Diagnostic Operation Creator* metric block can be used to create dedicated *Operations* of a *Client Server Interface* used for diagnostics.

Palette category: **Diagnostic**

Required inputs (*Data Target Ports*):

- > "interface" (data type: `MClientServerInterface`): The *Client Server Interface* in which the *Operation* is to be created.
- > "requiredOperation" (data type: `String`): *Operation* to be created.
Possible values:
 - > ReadData
 - > WriteData
 - > ReturnControlToECU
 - > ResetToDefault
 - > FreezeCurrentState
 - > ShortTermAdjustment
 - > Start
 - > Stop
 - > RequestResult

Outputs (*Data Source Ports*):

- > "infoView" (data type: `MInformation`)
- > "interface" (data type: `MClientServerInterface`): Returns the changed *Client Server Interface*.

Changed metric blocks: The *AUTOSAR Export* metric block has a new optional input port *AUTOSAR export* "delegatePortsAndCreateConnections" (data type: `Boolean`, default: `false`) which is relevant for classic AUTOSAR exports. If set to `true`, necessary delegation ports are temporarily created and exported. In case when provider and receiver share the same port interface, assembly and delegation connectors are temporarily created and exported.

Changed metric blocks: The *Export Compare* metric block has a new output port "numberOfDifferences" (data type: `Long`) which returns the number of differences between the compared files.
Export compare

2.5 Fixed issues

Fixed issues in PREEvision 10.19

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Collaboration](#)
- > [Administration](#)
- > [License](#)
- > [Backup, restore, and migration](#)

2.5.1 Common

ID	Resolution
9082949058725391003	In the PREEvision configuration manual, the chapter "Filtering the context menu" has been updated. It now correctly describes how to filter submenus by using the <code>PARENT-ID</code> as <code>MENU-ID</code> for filtering.
9082949058777642039	When switching a perspective which contains a Model View without filters but with <i>Query Rule Groups</i> that extend the model tree, the Model View is now correctly refreshed.
9082949058587232105	If you work with a split editor area displaying several editors at the same time, the focus is maintained after you commit your changes.
9082949058652072039	In the Model View , the performance of loading folders that are displayed via <i>Query Rule Groups</i> has been improved.

2.5.2 Diagrams

ID	Resolution
9082947086053671874	In the Populate Artifact dialog, the naming of the different populate tabs has been adjusted. The naming of the tabs has been changed to Classic , Advanced and Metric-based . The descriptions of the different populate functions have been adjusted accordingly.
9082947086141341204	It is no longer possible to paste artifacts via Paste as copy from a diagram into the Model View . The Paste Layout functionality is not affected.
9082949058744152081	Icons of diagrams which are set via object configuration are displayed in the diagram tab as well. This is possible especially if the object configuration uses constraints.
8682711687197671999	Multiple diagrams in the Label Configuration view have been renamed from "Editor" to "Diagram". For example, Lifecycle Editor has been renamed to Lifecycle Diagram .
9082949058764532045	Diagrams which are opened in the background, for example when executing an action in a table which requires the execution of the <i>Diagram Artifacts Collector</i> block, do not persist their last viewport information (position, zoom level) when the diagram is closed. No error concerning the former viewport information is displayed anymore.

2.5.3 Tables

ID	Resolution
9082949058780840064	When you add a temporarily opened table to the model as <i>Table Proxy</i> , the Define Filter dialog can only be opened after the creation of the <i>Table Proxy</i> has been completed. This prevents an active table filter from being erroneously displayed as invalid in the Define Filter dialog.
9082949058332872112	In table cells that are read-only, no buttons for opening a cell editor are displayed.
9082949058542013126, 9082949058696092111	For table cells that contain multiple artifacts, the selection propagation works properly. If you select one of the artifacts in the table cell, only the selected artifact is selected in the Model View and in the Property View as well.
9082949059131373082, 9082949058931410099	An artifact in a table cell can be copied to the table cells below using the fill handle, even if the action query of the table cell is implemented by a metric executor that has an enablement condition.
9082949059265921897	If replacing text with an artifact creates several placeholders within the same formatted text, each of the created placeholders is unique and can be edited separately.

2.5.4 Requirements

ID	Resolution
9082949058606162105	ReqIF export: Borders around images in formatted texts are ignored when exporting them as ReqIF. The borders do therefore no longer cause ReqIF schema validation errors.
9082947087398773082	ReqIF import: PREEvision variant information is no longer excluded from the ReqIF import. Variants are imported as custom attributes. They are transported as multi valued enumerations from the exporting PREEvision instance.
9082949059146672101	ReqIF export: The entry <code>exportExternalLinks</code> in the ReqIF export configuration file no longer has any effect on the test data export. This also removes the observed need for writing access to requirement data during the test data ReqIF export.

2.5.5 AUTOSAR

ID	Resolution
8682711687278812051, 8682711687278822051	Consistency checks: Redundant checks for initial values have been consolidated. All related checks were renamed according to a new naming convention.
9082949059040982014	Consistency checks: Several AUTOSAR checks have been corrected for service-oriented architecture use cases.
9082949058938152010	Consistency checks: Several AUTOSAR checks of the rule group "ServiceNeeds" have been renamed or fixed.
9082949058910332010	Consistency check: Several AUTOSAR checks for the <i>Internal Behavior</i> have been renamed or fixed.
9082947087131372051	Consistency check: The following checks will not hit anymore for an <i>Application Literal</i> with a string as value that is used as an initial value in combination with a <i>Bit Table Conversion</i>. > cac1221_DataTypedInformationUnit_with_invalid_InitValue_for_Enumeration > cac1221_NvDataReceiverComSpec_with_invalid_InitValue_for_Enumeration > cac1221_ParameterRequiredComSpec_with_invalid_InitValue_for_Enumeration > cac1221_SenderComSpec_with_invalid_InitValue_for_Enumeration > cac1221_ParameterProvidedComSpec_with_invalid_InitValue_for_Enumeration > cac1221_ReceiverComSpec_with_invalid_InitValue_for_Enumeration

ID	Resolution
9082949058715811808	AUTOSAR export: The creation of <code>J1939-Cluster-Conditional</code> in export has been corrected.
9082949058915433089	AUTOSAR export: Data constraints of implementation data types are now merged by ImEx-ID as well.
9082949058913151913	AUTOSAR ECU extract: The constant specification mappings are completely exported if they are entirely defined in the application and implementation domains.
9082949058888481024	AUTOSAR import and export: The roundtrip for <code>AR-Packages</code> and their assigned artifacts has been corrected.
9082949059029172052, 9082949059029202052	AUTOSAR import: The import considers AUTOSAR version specific modeling of the LIN attributes P2 Max , P2 Timing and Max Number Of Resp Pending Frames for <i>LIN Tp Nodes</i> .
9082949058985521024	AUTOSAR import: If circular static socket connections exist in the import file, the import file will be rejected.
9082949059077491024	AUTOSAR import: Exceptions during AUTOSAR import regarding integer literals without values are prevented.
9082949058766582052	Dereferencing a port from an <i>Assembly SW Connector</i> in Property View is possible.

2.5.6 Diagnostics

ID	Resolution
9082949059058452005	In the Diagnostic Realization Explorer and the Diagnostic Concept Explorer , columns for the attributes Automatic end and Cycle status storage have been removed from the tables for the <i>Diagnostic Operation Cycle</i> .
9082949059040662111	Diagnostic export: The <i>Export Compare</i> metric block indicates deltas in case attribute values are listed in a different order, even if their values are the same.
9082949058940182113	Diagnostic export: The export considers only the relevant <i>Sender Communication Specification</i> or <i>Receiver Communication Specification</i> in the context of diagnostic data objects.

2.5.7 Communication

ID	Resolution
9082949058766041024	Signal router: When starting the signal router on a <i>Composition</i> , both sending and receiving ports will be routed.

ID	Resolution
9082949058831252005	The context menu for <i>Communication</i> has been reorganized with a sub menu for communication packages.

2.5.8 Hardware architecture

ID	Resolution
9082949058444430084	An issue during ground spot optimization with activated preference Exclude from active variant has been corrected. If multiple wires, <i>Splices</i> or <i>Wiring Harness Inline Connectors</i> are excluded from the active variant, all hardware to topology mappings of those artifacts are excluded from the active variant, instead of excluding only the mappings up to the first <i>Splice</i> or <i>Wiring Harness Inline Connector</i> .
9082949058911022083	When executing the refactorings Assign Connector Type and Create Wiring Connector or Assign Connector Prototype and Create Wiring Connector for a <i>Splice</i> , the relation between the created <i>Contacting</i> at the <i>Wire Pin</i> of the <i>Splice</i> and the connected wire is set.
9082949058696772045	When trying to commit a model structure which has been identified as invalid (for example invalid modeling of internal connections between internal and external <i>Hardware Devices</i>), the client no longer switches to read-only mode. The client instead rejects the commit and creates a bug report. Additionally, an error dialog including an information view entry is reported.
9082949058827091037	In the Select Cable dialog, the Show recently used Cables option triggers an update of the table content when changes are made. Show recently used Cables in this context means that the last ten artifacts (<i>Cables</i>) which have been used in this dialog before, are displayed when activating the option. The creation of a new <i>Cable</i> or <i>Core</i> in the Model View does not mean this artifact is "recently used" and is displayed in the dialog.
9082949058712912041	An issue has been resolved for the Show/Hide Headers and Pins function in <i>Electric Circuit Diagrams</i> and <i>Wiring Diagrams</i> . If a <i>Component Combination</i> and one of its child components are placed in the same section or diagram area, hiding pins of one component does not remove those pins from the other. Showing pins that are already shown by the other component displays them correctly.
9082949058928113104	When routing <i>Cables</i> during wiring harness routing, it is irrelevant, for different <i>Cores</i> of the same <i>Cable</i> , whether the routing endpoint is a <i>Connector Location</i> or a <i>Branch-Off</i> .

2.5.9 Product line engineering

ID	Resolution
9082949058960402101	An <i>Asset</i> update no longer changes the type of the asset-external instance to asset-internal.
9082949059246591914	The use of an illegal external type (external type of source <i>Asset</i> is part of updated <i>Asset</i>) no longer leads to a stack overflow if an artifact has multiple different types.
9082949059272632012	The <i>Asset</i> propagation now considers units of data constraints (generic, long, double) assigned to application data types (boolean, enumeration, value, array, record, axis) or implementation data types (array, value, vector, reference).
9082949059137202012	Loading an historical version of a <i>Product Line</i> including the historical context relations does not establish relations to external artifacts at a specialization relation end anymore. This requires less locks.
9082949059245042012	Core artifact consistency checks are now bundled and run deferred at the end of interactions/metrics. The execution time for an <i>Asset</i> with 100,000 core artifacts can decrease from 1.5 hours to 9 seconds.
9082949059034181804	The performance for <i>Asset</i> creation and refresh has been significantly improved, especially for a large number of core artifacts, for example 100,000 core artifacts, due to an optimization of the core artifact consistency checks. The execution time for an <i>Asset</i> with 100,000 core artifacts can decrease from 1.5 hours to 9 seconds.

2.5.10 Test engineering and test management

ID	Resolution
9082949058711163082	Multiple <i>Test Items</i> of different source <i>Test Specifications</i> can be moved into a new <i>Test Specification</i> .
9082949059093361030	For classes, for example <i>Test Case Runs</i> , for which custom attribute values can be set, these can now be displayed again.

2.5.11 Rules

ID	Resolution
9082947084956741792	<i>Multi Classifier Object LHS</i> artifacts are now properly displayed on the Objects property page of <i>MofClasses</i> .
9082949058279521918, 9082947085602182023	In the Consistency Check Results view, the error message that is displayed if the number of results exceeds the limit has been adjusted.

2.5.12 Metrics

ID	Resolution
9082949058107302024	<i>Metric Diagrams</i> are no longer unintentionally closed.
9082947085943102039	The <i>Get Assets from Upstream to Convert Foreign Relations</i> block can now handle downstream artifacts that are not located in <i>Product Lines</i> .

2.5.13 Collaboration

ID	Resolution
9082949058733102049	Removing an artifact from the temporary scope unloads only the temporarily added artifacts.
9082949058963781992	A performance optimization has been implemented for loading a model from the hard disc.
9082949059042141849	An issue during a Replace With Selected Version has been resolved. The correct instance relations for external types are created.

2.5.14 Administration

ID	Resolution
9082949058137631995	The "Defining life cycle transition constraints" chapter of the PREEvision configuration manual now includes additional information on naming the <i>Model Context</i> and how life cycle transition execution depends on the severity of the consistency checks.

2.5.15 License

ID	Resolution
9082947087399592054	The logging of the license server has been improved to avoid unnecessary log entries.

2.5.16 Backup, restore, and migration

ID	Resolution
9082947085101292020	During the backup process, the <code>richtexts</code> directory, in which formatted texts are stored, is cleaned up after the verification model has been written.

2.6 Known issues

Known issues in PREEvision 10.19

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
9082949059058522013	AUTOSAR export and import with AUTOSAR version 24-11 do not support the creation of <i>Coupling Port Details</i> with more than 8 <i>Coupling Port Traffic Classes</i> , <i>FIFO Traffic Class Assignments</i> or <i>Assigned Priorities</i> .
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.
9082949059167491875	The <i>Export Compare</i> block for PVCDI files has identified differences in the order of artifacts even if the order is not relevant. This occurs for listed attribute values inside an <i>Attribute Definition</i> and for enumeration values inside an enumeration entry.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.

ID	Known issue
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i> , the Calibration Attributes property page is missing in the Property View . It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i> , and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.
9082949058188121799	If you define an AND combination of two prototype column filters where the content of one column is defined via a search query and the content of the other column is defined without using a search query, the filter result might be wrong. Workaround: If you filter combinations of prototype columns, make sure that all filtered prototype columns are based on search queries.
9082949058916421857	Due to an error in the compatibility check, service packs of minor releases, for example, 10.17 SP1, cannot be used for backup and restore. Workaround: Update to the next minor release without service pack, for example, 10.18.

3 PREEvision 10.18

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3.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.18.0
PREEvision license server	3.0.3
PREEvision database server	10.18.0.01
PREEvision application server	10.18.0

Documentation

Manual	Version number
PREEvision manual	10.18.0
PREEvision configuration manual	10.18.0
PREEvision operating manual	10.18.0
PREEvision system requirements	10.18.0
PREEvision server API	10.18.0

3.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.18 and the migration to PREEvision 10.18, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.18, refer to the PREEvision system requirements.

License server

With PREEvision 10.18, the new version 3.0.3 of the standalone license server is available.

When you use the standalone PREEvision license server (RMI), it is recommended to update the license server to the new version 3.0.3.

System requirements

The following system requirement has been changed:

VisualSVN Server 5.4.3 is recommended for the PREEvision Subversion server.

Server configuration

The Java parameters for the Java Virtual Machine have been changed.

The following Java parameters must be set for the start-up of Apache Tomcat:

```
--add-modules=ALL-SYSTEM
--add-opens=java.base/java.lang=ALL-UNNAMED
--add-opens=java.base/java.net=ALL-UNNAMED
--add-opens=java.base/sun.nio.ch=ALL-UNNAMED
--add-opens=java.base/java.nio=ALL-UNNAMED
--add-opens=java.base/java.lang.reflect=ALL-UNNAMED
--add-opens=java.base/java.text=ALL-UNNAMED
--add-opens=java.base/java.util.concurrent.atomic=ALL-UNNAMED
--add-opens=java.base/java.util.concurrent=ALL-UNNAMED
--add-opens=java.base/java.util=ALL-UNNAMED
--add-opens=java.desktop/java.awt.font=ALL-UNNAMED
```

These Java parameters have been updated in the preconfigured Apache Tomcats of all server components. For manually configured Apache Tomcats, update the parameters on all server components.

The following parameter must no longer be set for the start-up of the application server and the standalone middleware license server:

```
-Djdk.util.zip.disableZip64ExtraFieldValidation=true
```

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20

Client version	Server version	Database server script version	Metamodel change ID
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29
10.16.0	10.16.0	10.16.0.04	2024-11-08
10.17.0	10.17.0	10.17.0.03	2025-01-07
10.18.0	10.18.0	10.18.0.01	2025-02-24

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.18.



Migrating to PREEvision 10.18 is only possible from PREEvision 10.0 SP17 or later.

All remote operations (backup and direct migration) available in the PREEvision 10.18 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.18, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.18 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.18, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

3.3 New features in PREEvision 10.18

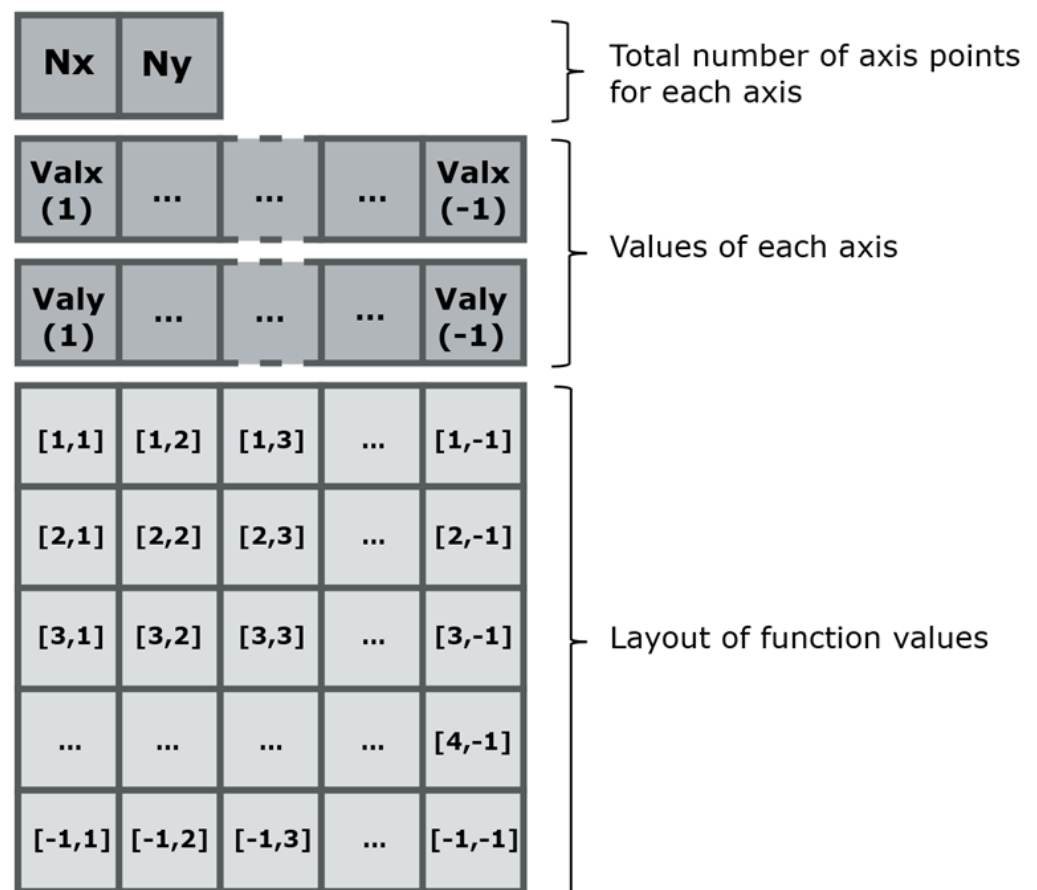
Sequence diagram improvements

For sequence diagrams, the following improvements have been implemented:

- > *Activities* and *Actions* can be assigned to *Activity Execution Specifications/Action Execution Specifications* in the diagram via drag and drop.
- > *Non-Parsable Conditions* of *Interaction Operands* can now be created in the diagram via the **Palette**.
- > A new type of *Execution Specification* is introduced for an *Interaction* in the *System Software Architecture* layer allowing assignments to *Compositions*, software components, and *Runnables*.
- > Messages of an *Interaction* in the *System Software Architecture* layer can now be assigned to all relevant port types and their interface-specific data. Additionally, a message can be assigned to a *Runnable* of the target *SW Component Type*.

Support of record layouts

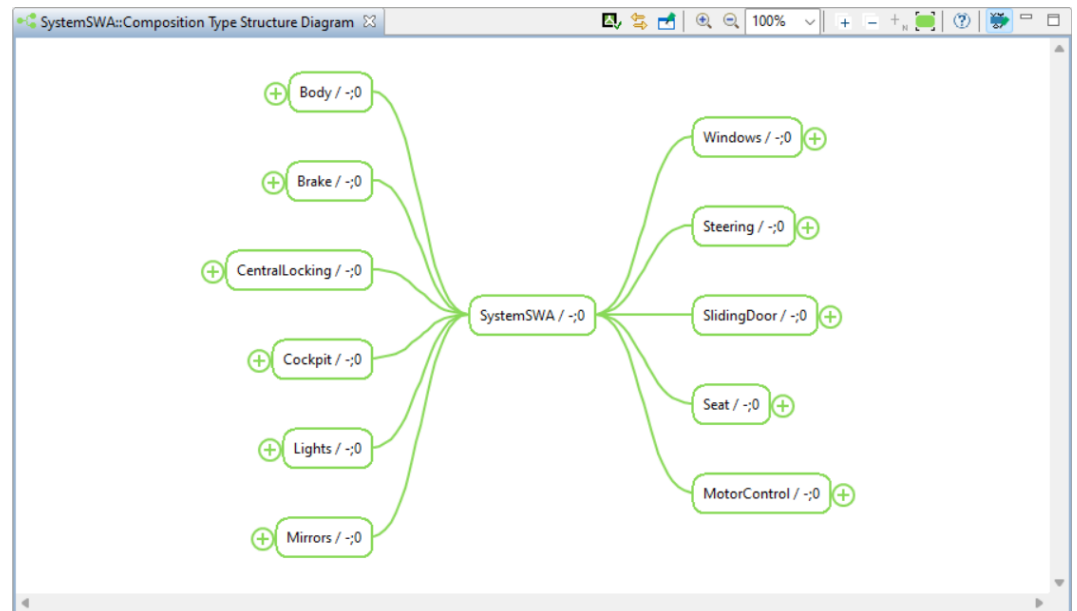
In AUTOSAR, record layouts describe how data objects are stored and serialized in the memory of an ECU.



In PREEvision the record layout for calibration parameters can be defined using a *Calibration Parameter Record Layout* that corresponds to the AUTOSAR meta class *SwRecordLayout*. Within the *Calibration Parameter Record Layout*, you can define artifacts representing the number of axis points, the axis values and the function value. PREEvision supports the export and import of record layouts for calibration parameters via AUTOSAR.

Software composition type structure diagram

The composition type structure diagram provides a quick overview of the hierarchical structure of a *Composition Type*.



The read-only diagram displays a *Composition Type* and the software types and composition types it contains and allows easy navigation through the structure. Therefore, the diagram behaves differently from the other diagrams in PREEvision:

- > You do not have to model the diagram. The layout is automatically created.
- > You always see the current structure of the composition type. Any changes in the composition type are automatically reflected in the diagram. For example, if you add an *Atomic SW Component Prototype* to the "SystemSWA", the *Atomic SW Component Type* will immediately be visible in the diagram.
- > Since the diagram is read-only, no locks or check-outs are needed when working with the diagram.

Hardware library explorer

The Hardware Library Explorer for the electrologic and harness layers has been enhanced by new categories and additional tables.

The following categories with corresponding tables have been added:

- > **Connector Type Overview**
- > **Pin Type Overview**
- > **Seal and Plug Type Overview**

Refactoring for creating missing wiring connectors

The refactoring **Create missing Wiring Connectors** has been adapted with respect to the naming of created Wiring Connectors.

The *Wiring Connector* created for the *Header* receives the same name as the associated *Header* to facilitate the assignment between *Wiring Connector* and *Header*.

When creating an appropriate *Wiring Connector* for a *Header* via the refactoring, the refactoring automatically creates the following assignments:

- > The *Wire Pins* of the *Wiring Connector* are automatically assigned to the *Wiring Cavities* of the created *Wiring Connector* if the pin numbers of the *Wire Pins* match the cavity numbers of the *Wiring Cavities*. The corresponding pin *Contactings* via which the *Wire Pins* are assigned to the *Wiring Cavities* are created as well.
- > If a *Wire Pin* has an assigned wire, the relation between pin *Contacting* and wire is set automatically.

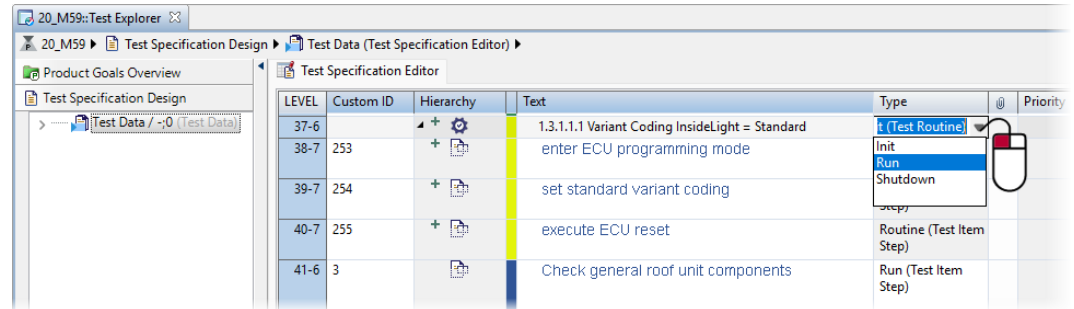
Additionally, the Create Missing Wiring Connectors block can be used to create an appropriate *Wiring Connector* for an already defined *Header*.

Refactoring for creating missing installation locations and connector locations

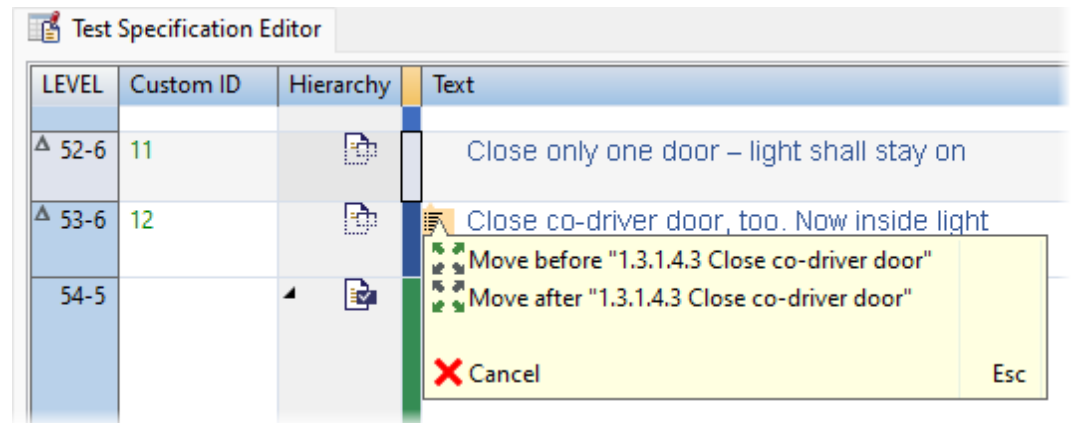
The refactoring **Create missing Installation and Connector Locations** has been enhanced. The refactoring can now additionally be carried out on a Component Package. When carrying out the refactoring on a *Component Package*, *Installation Locations*, *Connector Locations* as well as corresponding mappings are created for all components of the *Component Package*.

Test specification editor improvements

In the *Test Specification Editor*, the role of a Test Item Step or a Test Routine can be set via a drop-down list in the **Type** column. If the role is changed, the *Test Item Step* or the *Test Routine* is automatically reordered accordingly.

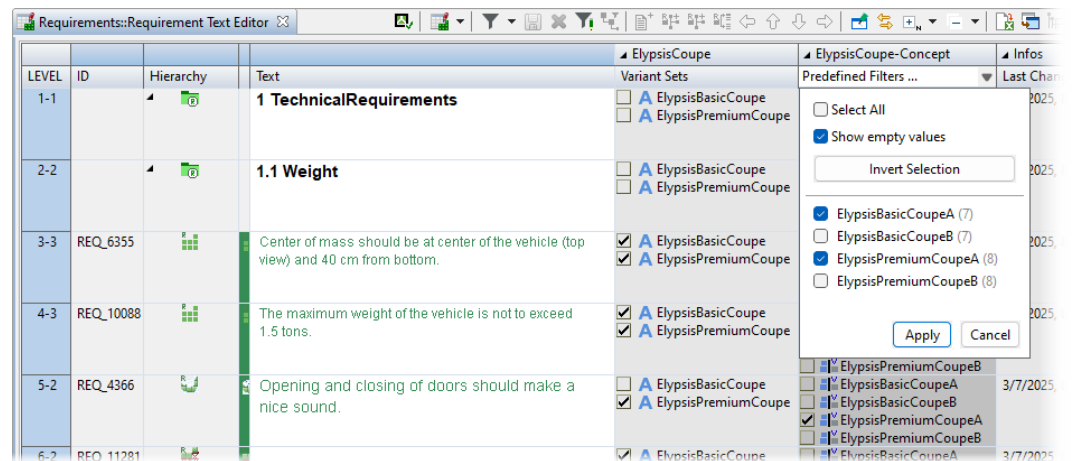


Artifacts displayed in the *Test Specification Editor* can be ordered via the drag and drop menu.

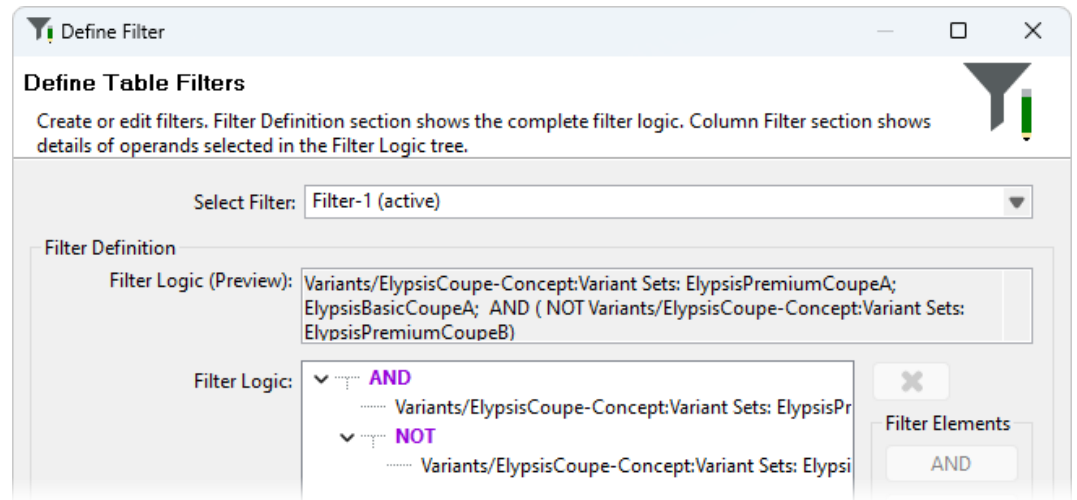


Filtering table cells with multiple values

In columns that display multiple values in one cell, you can use the predefined filter to filter for single values.

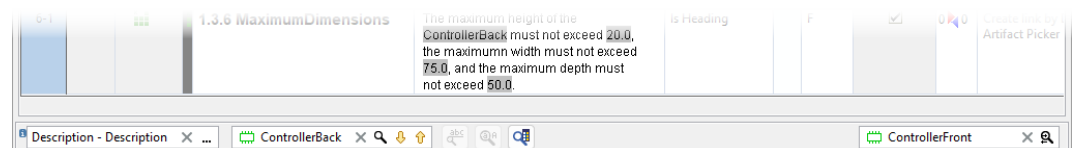


Via the Define Filter dialog, you can create filter definitions that combine the single values of a cell with AND, OR, XOR, and NOT operators.

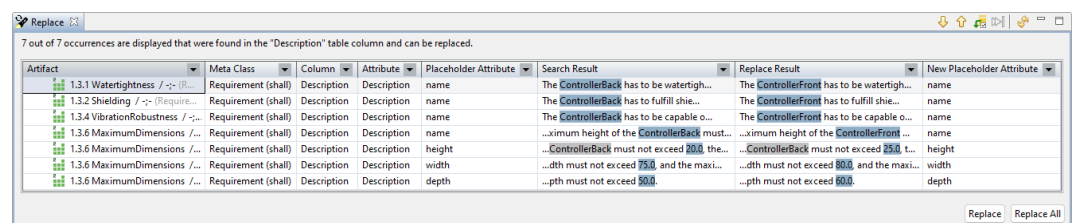


Searching and replacing placeholders in tables

In tables, you can search and replace placeholders in formatted text that reference a specific attribute of an artifact. To search for a placeholder, insert the artifact that is referenced by the placeholder via drag and drop from the **Model View** into the search field. To replace the placeholder with another placeholder, you can insert another artifact into the replace field.

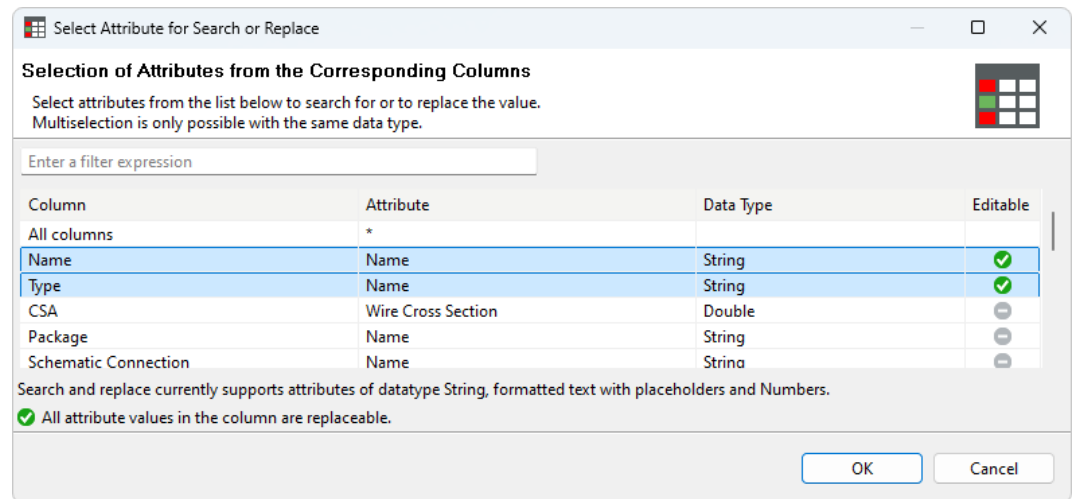


In the **Search** result view and in the **Replace** view, the search values and the replace values are highlighted in blue gray.

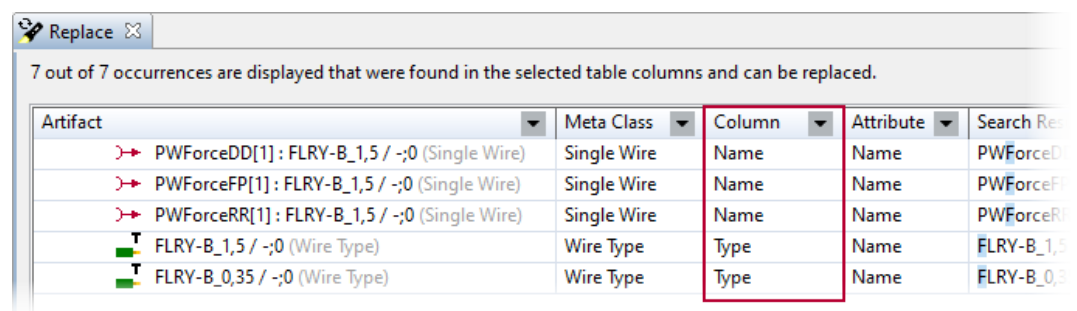


Searching and replacing in multiple table columns

For searching and replacing attribute values in tables, you can now select several columns that contain attribute values of the same data type.



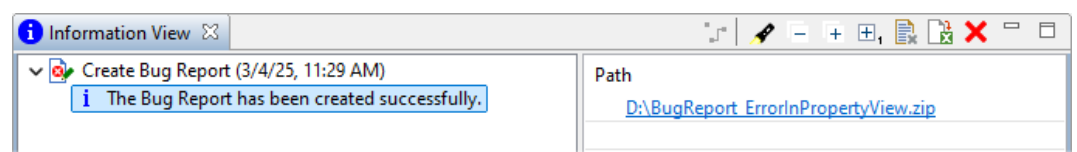
An additional column in the **Search** result view and in the **Replace** view displays the column of the result.



Bug report improvements

The Create Bug Report dialog has been improved.

The location of the saved bug report in the file system is displayed in the **Information View**.



3.4 Configuration information

Size limitation for loading and changing the version of an artifact

When loading or changing the version of an artifact, the transfer of the artifact's subtree uses a serialization format that is limited to a size of 2 GB. This corresponds to 9.4 million artifacts or relations. The maximum size refers to the selected artifact and its subtree, as well as additionally required external types and their relations.

Take this limitation into account when you structure the model, so that the affected actions run successfully for your use cases.



In PREEvision 10.0 versions prior to 10.0 SP17 and in PREEvision 10.x versions prior to 10.11, the size of the artifact's subtree is limited to 3.1 million artifacts or relations.

The following actions are affected by the size limitation:

- > *Asset* update
- > replace with version
- > replace with selected version
- > restore selected version
- > reuse historical version
- > update *Asset* to historical version in checked-in *Product Line* (customer-specific action)
- > load *Product Line* in read-only mode (customer-specific action)
- > compare against historical version
- > compare for reuse inconsistencies

Other actions are not affected, for example:

- > loading the (full) model and updating the model
- > loading the scope
- > backup and restore
- > migrating models
- > using *Assets*

New metric blocks: Create missing wiring connectors

The *Create Missing Wiring Connectors* metric block can be used to create an appropriate *Wiring Connector* for an already defined *Header*. The metric block can be executed on a hardware component which has an assigned *Header*. If the *Connector Type* of the *Header* has a defined applicable opposite *Connector Type* with corresponding *Connector Prototype*, the *Wiring Connector* receives this defined *Connector Type* and *Connector Prototype*. Based on the structure and content of the *Connector Prototype*, slots, cavities and contactings for the *Wiring Connector* are created as well. Wires connected to the *Wire Pins* of the *Wiring Connector* are directly assigned to their corresponding contactings.

Palette category: **Electrologic and Harness**

Required inputs (*Data Target Ports*):

- > "components" (data type: `List<MDetailedElectric>`): One or multiple components for which missing *Wiring Connectors* shall be created.
- > "wiringHarness" (data type: `MWiringHarness`): Location where the created *Wiring Connectors* are stored.

Changed metric blocks: Get workspace

The functionality of the "suppressInfoView" *Data Target Port* of the *Get Workspace* metric block has been corrected. If "suppressInfoView" is set to `true`, no results are reported in the **Information View**.

Changed metric blocks:
Model export

The behavior of the following input ports of the *Model Export* metric block has been changed:

- > "exportElement" *Data Target Port*: Defines the artifacts that shall be exported to an EEA file. If the Data Target Port "exportActiveVariantOnly" is set to `true`, all artifacts and their child artifacts that are part of the active variant are considered for the export.
- > "setToAddExportedArtifacts" *Data Target Port*: If an active variant is exported ("exportActiveVariantOnly"= `true`) the port defines a *Set* to which all exported artifacts are added.
Known issue: The assignment to the *Set* does not work properly, use the export wizard instead.

3.5 Fixed issues

Fixed issues in PREEvision 10.18

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Metrics](#)
- > [Collaboration](#)
- > [Administration](#)

3.5.1 Common

ID	Resolution
8682711554206582001	The Quick Fix View only takes focus when a new quick fix entry is created. The focus is not changed if the quick fix entries stay the same or if entries are removed.
8682711554420462023	In the Create Bug Report dialog, the file name of the bug report is kept while browsing for a file location.
9082949058624632105	A check has been added to avoid an error that occurred when closing the client.

3.5.2 Diagrams

ID	Resolution
9082949058595701995	Selecting multiple labels with <Ctrl> + <Shift> in a diagram and resizing them, no longer moves the selected labels to the same position. If the selected labels have the same orientation, they are resized by maintaining their current position. If the selected labels have a different orientation, the resize operation is prohibited.

3.5.3 Tables

ID	Resolution
9082949058415842107	If tables with charts are filtered, parent artifacts that are displayed in the table via the corresponding button in the table toolbar are not considered in the chart or the chart table.
9082949058780900064	In the Define Filter dialog, clicking on the edit button for Predefined Filters always opens a dialog where you can select the filter values. The selection is only applied when you click on the [Select] button.
8682711555198283126	In the selection dialog for setting attributes with multiple values and in the selection dialog for predefined column filters, the button label has been changed to [Apply] .

3.5.4 Requirements

ID	Resolution
8682711555133422025	<Ctrl> + click on a preview image in a formatted text opens the linked <i>File Attachment</i> .
9082949058348522106	A deadlock has been solved that could occur when exporting certain constellations of OLEs via ReqIF or Excel export.
9082949058770942105	ReqIF import: Improved robustness when embedded objects (file attachments) contain additional technical tags. Additionally, the robustness of the import has been improved in case of various errors in the ReqIF file.
9082949058678982042	ReqIF import: During import of files containing ReqIF tool extensions which are not supported due to their structure appropriate information is reported in the Information View .
9082949058578293082	Improved robustness of the ReqIF export in case formatted texts contain file links with invalid file paths which cannot be resolved in the Windows file system.
9082949058529122100	In the Requirement Text Editor , all formatted texts are displayed with the same font size, independently from the monitor resolution and scaling of the user who creates the texts. Formatted texts that are loaded from the database have the same font size as formatted texts that are stored locally.

3.5.5 Logical function architecture

ID	Resolution
9082947086141342042	The selection of multiple ports in <i>Logical Architecture System Diagrams</i> is propagated in the Model View .

ID	Resolution
9082949058501851030	When creating an <i>Assembly</i> connection in a <i>Logical Architecture System Diagram</i> between two <i>Logical Functions</i> , which are located in different <i>Building Blocks</i> or <i>Logical Domains</i> , and starting from an existing port the newly created target port automatically adopts the name and interface of the existing <i>Port Prototype</i> .

3.5.6 AUTOSAR

ID	Resolution
9082949058403491024	AUTOSAR import: AUTOSAR Adaptive 2011 files that contain a <i>UCM-Module-Instantiation</i> can be imported.
9082949058444431024	AUTOSAR import: AUTOSAR Adaptive 2011 files that contain an <i>IDS-Module-Instantiation</i> can be imported.
9082949058183071024	AUTOSAR import: The import can handle AUTOSAR Adaptive 20-11 files that contain a <i>PlatformModuleEthernetEndpointConfiguration</i> .
9082949058777491852	AUTOSAR import: When importing an AUTOSAR file that contains an artifact without short name, an error dialog and detailed information in the Information View are shown.
9082949058539521911	AUTOSAR export: ECU extracts contain the <i>Sender Receiver To Signal Group Mappings</i> of degraded <i>Signals</i> .
9082949058736571807	AUTOSAR export: <i>Data Transformations</i> are exported in the AUTOSAR system description.
9082947086005442051	AUTOSAR export block: For child elements of <i>MIExecutionOrderConstraints</i> and <i>MIEOExecutableEntityRefGroups</i> no default sorting is applied.
9082949058698872003	Consistency checks: PREEvision provides the two new checks "cac2544_ApplicationValueType_with_invalid_MinMax_Value" and "cac2544_ApplicationValueType_with_invalid_MinMax_TypeReference" that cover the AUTOSAR constraint 2544.
9082949058708432108	Consistency checks: The obsolete rules c3010 and c3013 have been removed. The rules c3009, c3011, and c3012/px3050 have been optimized to improve performance.

3.5.7 Software architecture

ID	Resolution
9082947087294201807	The Property View of software artifacts correctly shows <i>BSW-NET Mappings</i> .

3.5.8 Diagnostics

ID	Resolution
9082949058664103056	Diagnostic export: <i>Freeze Frame Data Assignments</i> and <i>Diagnostic Routine</i> operations are considered when exporting variants.
9082949058829732113	Diagnostic export: Default values of data types that are used multiple times are exported, even for <i>Application Enumerations</i> .
9082949058193642113	Diagnostic export: Export files that contain custom attributes are readable for CANdelaStudio.
9082949058691422111	<i>Export Compare</i> block: If an <i>Application Enumeration</i> is used indirectly by a <i>Diagnostic Data Object</i> , for example, as the type of a <i>Record Element</i> or array, the UUIDs of the enumeration entries are now exported. Note: PVCDI reference files must be newly exported for use in the <i>Export Compare</i> block.
9082949058768562005	Diagnostic import: PREEvision versions that support PVCDI 2.1.0 files will also import PVCDI 2.0.0 files.

3.5.9 Hardware architecture

ID	Resolution
9082949058347771029	When creating a <i>Wiring Connector</i> for a <i>Header</i> via the refactoring Create Missing Wiring Connectors , the <i>Wiring Connector</i> receives the same name as the associated <i>Header</i> . Additionally, when creating and assigning a <i>Wiring Connector</i> for a <i>Splice</i> via refactoring or drag and drop, the <i>Wiring Connector</i> receives the name from the <i>Splice</i> .
9082949058293571029	When creating a <i>Wiring Connector</i> for a <i>Header</i> via the refactoring Create Missing Wiring Connectors , the <i>Wiring Connector</i> is created with slots, cavities and contactings for the <i>Wire Pins</i> , if an applicable opposite <i>Connector Type</i> is set for the <i>Connector Type</i> of the <i>Header</i> . If a <i>Wire Pin</i> has an assigned wire, the relation between pin <i>Contacting</i> and wire is now set as well, if the relation can be clearly identified.
9082949058605981808	KBL import: During KBL import, a <i>KBL.Node</i> with an assigned <i>KBL.Fixing_occurrence</i> is imported into PREEvision as a <i>Branch-Off</i> with a relation to the corresponding <i>Topology Type</i> .

ID	Resolution
9082949058411432083	KBL export: The export option Use coordinates based on Connector Locations now correctly exports the coordinates for each <i>Connector Location</i> .
9082949058725391784	The <i>Attribute Definitions</i> for installation instructions and processing instructions of <i>Splices</i> must be defined on the <i>Wiring Connector</i> . The corresponding <i>Attribute Definitions</i> set on <i>Splices</i> are omitted and are no longer exported to KBL.

3.5.10 Geometry

ID	Resolution
9082949058718142083	When creating missing <i>Installation Locations</i> and <i>Connector Locations</i> via the refactoring Create missing Installation and Connector Locations , the names are derived from the mapped artifacts according to naming attribute conventions. The name of the <i>Installation Location</i> is taken over from the name of the mapped component, the name of the <i>Connector Location</i> is taken over from the name of the mapped <i>Wiring Connector</i> . Additionally, <i>Topology Inline Connectors</i> receive their names from the mapped <i>Wiring Harness Inline Connectors</i> according to the naming attribute convention.

3.5.11 Product line engineering

ID	Resolution
9082949058416563108	The instance of a type referenced in an <i>Asset</i> as a core artifact is not copied after an <i>Asset</i> update if the instance of the type exists outside the <i>Asset</i> .
9082949058713001914	During <i>Asset</i> update, an inconsistent reuse of software types after a replace of an orphaned type has been fixed.
9082949058733882082	An <i>Asset</i> update does not add types to to-n-type-of relations in case the types leave the <i>Asset</i> during the update but remain in the model (due to other <i>Assets</i>). Now, the types of the upstream <i>Asset</i> win.
9082949058723102068	The type of an instance is no longer moved if the instance is moved from <i>Asset</i> internal to external after <i>Asset</i> update.
9082949058767971030	Context relations between asset-internal types and other core artifacts are not lost during <i>Asset</i> update if instances of these asset-internal types are children of the <i>Asset</i> , for example, because a custom attribute definition is in the core of an <i>Asset</i> and is used for a value describing the <i>Asset</i> .
9082949058822491842	A missing revoke of foreign <i>Asset</i> (s) has been resolved in case a to-n-type of end leaves an <i>Asset</i> during update.

3.5.12 Metrics

ID	Resolution
9082949058192932039	The functionality of the "suppressInfoView" <i>Data Target Port</i> of the <i>Get Workspace</i> metric block has been corrected. If "suppressInfoView" is set to <code>true</code> , no results are reported in the Information View .
9082949058387331912, 8682711687064211912, 9082949058276842013	The behavior of the <i>Model Export</i> metric block has been corrected. If the "exportActiveVariantOnly" port is set to <code>true</code> , all artifacts provided by the "exportElement" port and their child artifacts are considered for the export if they are part of the active variant.
9082949058382690091	The <i>Table Selection List</i> metric block no longer causes exceptions in the log file when a <code>null</code> input is set.
9082949058562062111, 9082949058688573056	The result table of a <i>Consistency Rule Group</i> metric block can be exported via the <i>CSV Export</i> metric block.

3.5.13 Collaboration

ID	Resolution
9082949058824231993	The defragmentation of the model cache on the server no longer leads to scope loading errors.
9082949058291802051, 9082949058260082051	An error in the file defragmentation has been resolved. Artifacts can be temporarily added to the scope again via the Scope Quickview .
9082949058689202105	Renaming configuration files no longer leads to an error during the model update.
9082949058654062044, 9082949058661701914	A special model configuration is now correctly handled during the <i>Asset</i> update and can be committed.
9082949058675662203	Changing the package path of a metric source code no longer leads to errors when executing the metric in the API server.

3.5.14 Administration

ID	Resolution
9082949058619382203	STARTTLS can be configured as the protocol for mail server. In the <code>deploy.properties</code> , the parameter <code>MailProtocol</code> must be set to <code>smtp</code> . Using the JavaMail API, all required parameters for encryption must be set as JVM parameters starting with <code>-Dmail.smtp.*</code> .
9082949058695861028	The checkout model has been corrected to prevent commits from being denied when installing <i>Add-ins</i> in certain situations.

ID	Resolution
9082949058703222011	A global <i>Change Profile Model</i> that is referenced by <i>Add-ins</i> is no longer moved to a <i>Generic Package</i> when the <i>Add-ins</i> are delivered.

3.6 Known issues

Known issues in PREEvision 10.18

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i> , the Calibration Attributes property page is missing in the Property View . It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.

ID	Known issue
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i> , and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.
9082949058188121799	If you define an AND combination of two prototype column filters where the content of one column is defined via a search query and the content of the other column is defined without using a search query, the filter result might be wrong. Workaround: If you filter combinations of prototype columns, make sure that all filtered prototype columns are based on search queries.
9082949058916421857	Due to an error in the compatibility check, service packs of minor releases, for example, 10.17 SP1, cannot be used for backup and restore. Workaround: Update to the next minor release without service pack, for example, 10.18.

4 PREEvision 10.17

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4.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.17.0
PREEvision license server	3.0.2
PREEvision database server	10.17.0.03
PREEvision application server	10.17.0

Documentation

Manual	Version number
PREEvision manual	10.17.0
PREEvision configuration manual	10.17.0
PREEvision operating manual	10.17.0
PREEvision system requirements	10.17.0
PREEvision server API	10.17.0

4.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.17 and the migration to PREEvision 10.17, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.17, refer to the PREEvision system requirements.

System requirements

The following system requirement has been changed:

The recommended version of Apache Tomcat has been changed to 9.0.98.

Secure SMTP (SMTPS)

SMTPS can now be configured as protocol for the automated e-mail notification for life cycle state changes. The protocol that is used is reported in the application server log file.

You can configure SMTPS in the `deploy.properties` with the following parameters:

- > `MailProtocol`
- > `mailing.Internal.Ssl.*`

You can also configure SMTPS in the context file of the PREEvision server application (`vCollab.xml`).

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29
10.16.0	10.16.0	10.16.0.04	2024-11-08
10.17.0	10.17.0	10.17.0.03	2025-01-07

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.17.



Migrating to PREEvision 10.17 is only possible from PREEvision 10.0 SP17 or later.

All remote operations (backup and direct migration) available in the PREEvision 10.17 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.17, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.17 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.17, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server

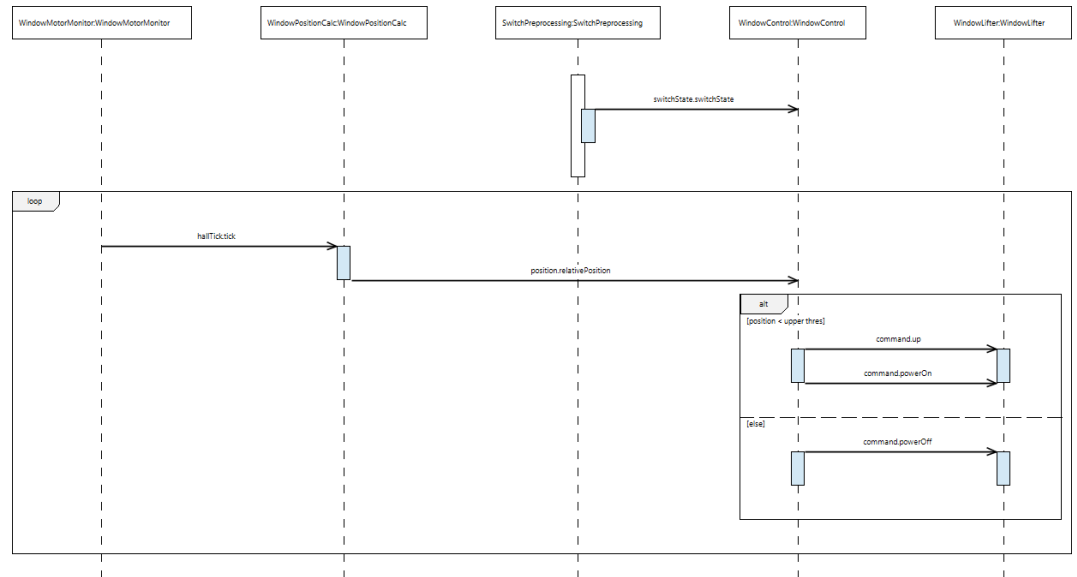


For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

4.3 New features in PREEvision 10.17

Sequence diagram

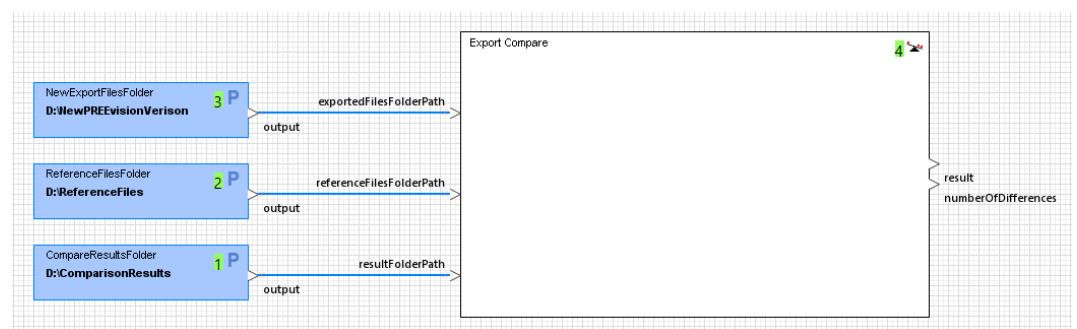
PREEvision now offers sequence diagrams with full auto-layout of all created artifacts, and modeling support of interactions on different abstraction layers. The window lifter demo in the PREEvision demo model has been enhanced by examples of *Interactions*.



Automatic comparison of export files

AUTOSAR and PVCDI exports new files made by a new PREEvision version can be compared with reference files made by previous PREEvision version. This is meant to check if a new version of PREEvision affects your exports. Differences in the export files can be caused by changes in the meta model or model transformation of the new PREEvision version.

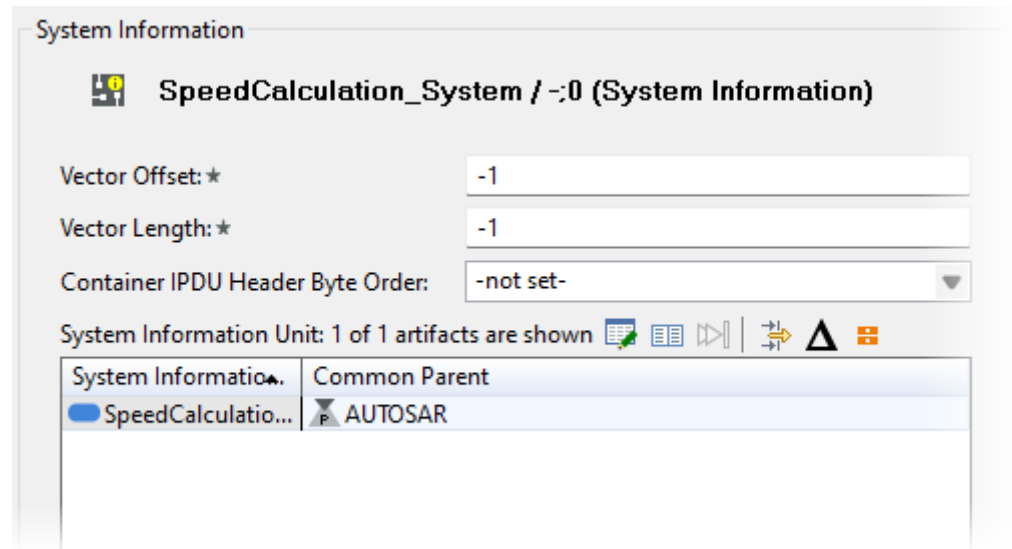
The Export Compare metric block searches for differences in export files with the same name. The results are provided in Excel files listing all new, deleted and changed elements. The metric framework supports automation with an automation server, for example, Jenkins.



Name and path of root compositions in ECU extracts

Keeping the AUTOSAR references inside a PVCDI file in sync with the software structure inside the ECU extract allows an automatic integration of the DCM/DEM with the application software in later tools, like DaVinci Configurator or DaVinci Team.

You can now define the name of the root composition created for an ECU extract and adapt it to the name used for the AUTOSAR references in PVCDI to keep them in sync. The name can be defined via a new attribute of the System Information.



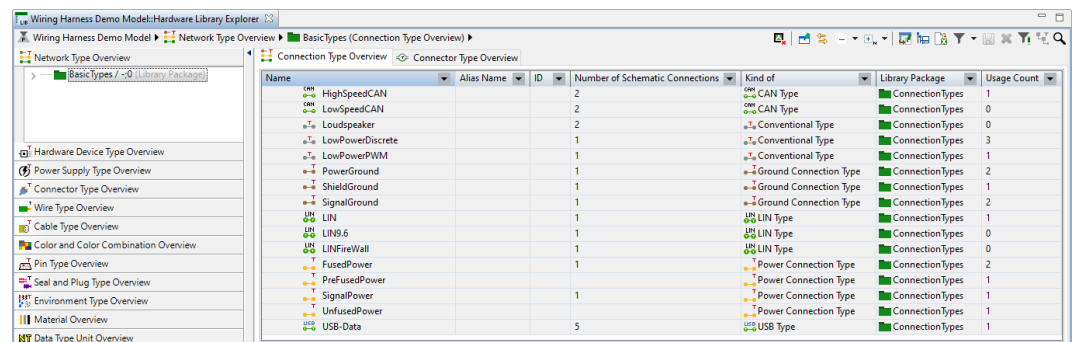
Instantiation of hardware device types in the model view

The creation of a Hardware Device based on a hardware device type does no longer require a diagram. A *Hardware Device* based on a hardware device type can now be created within the **Model View** via a drag and drop action.

Hardware library explorer

A new Hardware Library Explorer for the electrologic and harness layers has been implemented. The explorer structures all hardware- and harness-related types and parts defined in the *Library*. By means of different categories and tables, the explorer offers a structured overview of all types and parts relevant for consistently modeling the hardware.

The **Library Explorer** can be opened on a *Product Line* or a *Library*.



Asset creation or refresh warning in case of external types of core artifacts

Used types are part of an artifact's version. External types violate the self-containment principle of *Assets*. External types of core artifacts or their children can lead to unwanted cross-product line dependencies or import packages.

The creation or refresh of *Assets* and check-in warns if the self-containment is violated due to external types.

Configurators can easily disable the check or use the check to enforce *Asset* quality.

Tables in diagrams: Performance and usability improvements

The usability and performance have been increased when using tables in diagrams.

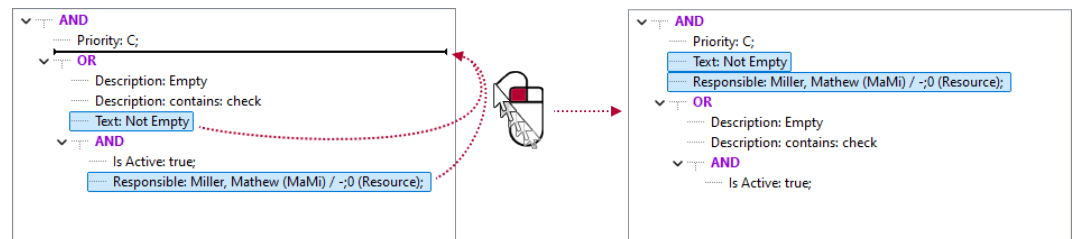
Tables in diagrams can be refreshed individually. Especially for large diagrams containing many tables, it is less time consuming to refresh individual tables instead of refreshing the entire diagram.

The reference lines between tables and corresponding artifacts can be hidden. This way, disturbing overlaps of the reference lines with the diagram content, and reference line crossings can be avoided to ensure a better readability of the diagram.

Extended filter management in tables

In the filter logic tree of the Define Filter dialog, you can now replace operators via the context menu or the respective shortcuts.

Via drag and drop, you can move column filters and operators with their entire substructure to a different position. A black horizontal line shows you the exact drop location.

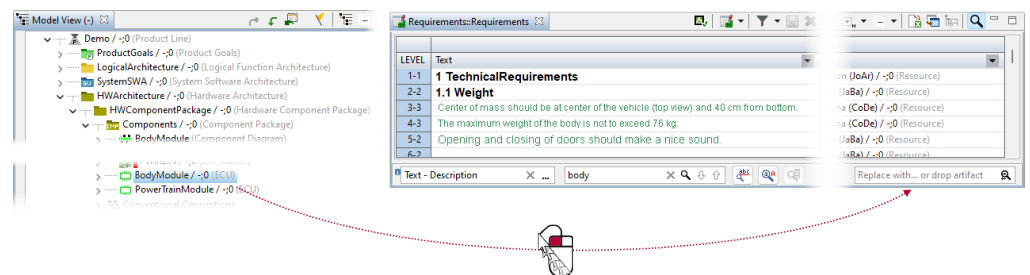


If a filter is currently active in a table, the active filter is preselected, when you open the **Define Filter** dialog.

Search and replace in tables

The search and replace function has been further enhanced:

- > As search values and as replace values, you can now also enter numbers.
- > In formatted texts, you can replace a character string with a placeholder by inserting an artifact into the replace field via drag and drop.



4.4 Configuration information

New metric blocks: Export compare

The *Export Compare* metric block searches for differences in export files with the same name. The results are provided in Excel files listing all new, deleted and changed elements. The metric framework supports automation with an automation server, for example, Jenkins.

Palette category: **Configuration Test**

Required inputs (*Data Target Ports*):

- > "exportedFilesFolderPath" (data type: *String*): Path to the folder with the files to be compared.
- > "referenceFilesFolderPath" (data type: *String*): Path to the folder with the files that serve as references for the comparison.
- > "resultFolderPath" (data type: *String*): Path to the folder with the Excel file containing the comparison results.

Outputs (*Data Source Ports*):

- > "result": Since the results are posted in the Excel files, the result port has no function for the *Export Compare* block.

Changed metric blocks: Populate

The *Populate* metric block is used to populate connected artifacts of a given start artifact in a diagram.

The "routingStyle" input port (*Data Target Port*) now also supports the value "rectangular" in addition to "rectilinear" to define the line routing style for displayed connections.

4.5 Fixed issues

Fixed issues in PREEvision 10.17

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Change and release management](#)
- > [Metrics](#)
- > [Collaboration](#)
- > [Administration](#)

4.5.1 Common

ID	Resolution
17938293798689312	When editing/configuring the Customized Label or Customized Name Label in Diagram via the Label Configuration or the Object Configuration , the entered text can be saved and the corresponding dialog closed via the shortcut <Ctrl>+<Enter> .
9082947087339343042	External synchronization links for which no Channel ID is defined are properly displayed in the Property View .

4.5.2 Diagrams

ID	Resolution
9082947087146443099	The icons and texts for routing style split buttons in the toolbar of diagrams have been adjusted and unified.
9082949058442532083	The routing style "rectilinear" has been replaced by "rectangular" in the Routing preferences of diagrams. Additionally, the <i>Populate</i> metric block also accepts both, the value <code>rectangular</code> and <code>rectilinear</code> as possible values of the routingStyle input port.
9082949058423032196	The possibility has been added to assign an <i>Activity</i> of an UML <i>Method</i> to an <i>Activity Execution Specification</i> .

4.5.3 Tables

ID	Resolution
9082949058115432101, 9082949058234572105	The performance of the search in formatted texts has been improved by downloading the formatted texts in one batch.
9082947086104711897	In case of large numbers of results, the Replace view displays only a part of the results. After you have replaced the displayed results via [Replace All] , the next batch of results is automatically loaded in the Replace view.
9082947087361942105	If the Replace view displays attribute values of artifacts that are locked by another user, you can still use [Replace All] to replace attribute values of artifacts that are not locked.
9082947087356040123	The Replace view always displays an information if the table in which the search was performed contains collapsed table cells.
9082949058145032023	If you reopen the predefined filter of an active filter in the Define Filter dialog, the Predefined Filters drop-down list offers all entries that are available in the selected column.
8682711554740723126	In case of existing file attachments, the column for file attachments in the Test Specification Editor and the Requirement Text Editor now displays the corresponding icon correctly.
9082949058192963042	If an Artifact Picker is configured via <i>Metric Artifact Picker</i> or <i>Meta Class Artifacts Picker</i> , the Show all artifacts in Artifact Picker action is available if more than 500 artifacts are displayed.
9082947085911062101	When a portlet view which displays an editor (for example a table) is duplicated, the new portlet also displays the editor instead of an empty pane. The portlet view is reset to its initial state if the displayed artifact has been deleted.
9082949058615833082	The navigation button on a table column cell opens the registered default editors for the corresponding artifact.

4.5.4 Requirements

ID	Resolution
9082947086108091790, 9082947086115112051	A problem when pasting content from the Microsoft Windows clipboard into formatted texts has been resolved: sometimes, the last text copied or cut from a formatted text was pasted instead of the current content of the clipboard.
8682711555195363013	In the Requirement Text Editor , it is again possible to copy a <i>Resource</i> into a cell that is already filled using the shortcuts <Ctrl>+<C> and <Ctrl>+<V> .

ID	Resolution
9082949058355542105	ReqIF export: Formatted texts containing hyperlinks with target properties are exported in a schema valid way.
9082949058216222101	ReqIF export: Unordered lists containing special formatting are exported to ReqIF in a schema valid way.
9082949058219852105	The handling of OLE objects has been improved to prevent deadlocks during the conversion of OLE objects.
8682711686179212044	An error occurred during report generation with a corrupt template. A specific error message has been implemented to inform the user about the current problem and how to solve it. Additionally, an information detail page refers to the corrupt template.
9082947087393672105	The scaling and offset in SVG images in report generated documents (PDF files) has been improved to avoid missing content.

4.5.5 AUTOSAR

ID	Resolution
9082947085852652003	The AUTOSAR consistency check "cac5398_EthernetEcuConnectorWithoutController" has been renamed and corrected. Redundant checks have been removed.
9082949058194312003	The AUTOSAR consistency check "AR_010703_ARC_430_PortDefinedArgument_without_IDT" has been corrected and renamed.
9082949058293622003	The AUTOSAR consistency check "Constr1087_AssemblySwConnector" has been corrected and renamed.
9082949058298332003	The AUTOSAR consistency check "AR_010806f_PV_ModeSwitchReceiverComSpec Without_MDGE" has been deleted because of redundancy.
9082949058298372003	The AUTOSAR consistency check "aConstantSpecification_without_Value" has been deleted because of redundancy.
9082949058303652003	The AUTOSAR consistency check "aServerComSpec_without_Operation" has been deleted because of redundancy.
9082949058303662003	The AUTOSAR consistency check "aApplicationTypeImplementationTypeMapping_without_ImplementationDataType" has been deleted because of redundancy.
9082949058303702003	The AUTOSAR consistency check "C3101_emptySRInterface" has been deleted because of redundancy.

ID	Resolution
9082949058310922003	Multiple AUTOSAR consistency checks have been deleted because of redundancy.
9082949058265162003	Several consistency checks for the AUTOSAR constraint <code>constr_1088</code> have been corrected and renamed.
9082949058293612003	Several consistency checks for the AUTOSAR constraint <code>constr_1086</code> have been corrected and renamed.
9082949058347943013	The AUTOSAR consistency check "pc1003_SharedAxisWithoutAxisType" does not fail if the parent artifact of the <code>xAxis</code> is an <i>Application Axis Type</i> .
9082947086046781914	<i>Implementation Function Pointers</i> and <i>Implementation Data Pointers</i> with their target are now included in the ECU extract even if their target is used by other data types.
9082949058234262005	AUTOSAR export: Instance references used in <code>COLLECTIONS</code> are exported in the correct order.
9082947086101312108	AUTOSAR export: Default values for the attributes <code>canBeInvokedConcurrently</code> and <code>supportsMultipleInstantiation</code> are exported up to AUTOSAR version 4.4.
9082949058221522051	A <i>Role Based Data Assignment</i> of an <i>Nv Block Needs</i> is now properly exported to the ECU extract.
9082949058261351807	The AUTOSAR import can handle incomplete <code>SenderRecRecordElementMappings</code> .
9082949058238041992	The structure and behavior of <i>Virtual Packages</i> for AUTOSAR exports has been clarified in the manual (chapter "General AUTOSAR concepts").

4.5.6 Software architecture

ID	Resolution
9082947086096592106	Drop down widgets in cells configured for value handling close automatically if an entry is selected by keyboard or mouse.
9082947086114692106	The creation of literals for enumerations has been simplified.
9082949058331523042	The value handling now merges new values of enumerations properly with existing values.

4.5.7 Diagnostics

ID	Resolution
9082949058388732005	The attributes Automatic end and Cycle status storage for <i>Diagnostic Operation Cycles</i> have been removed from the Property View as they are no longer supported in AUTOSAR.
9082949058634721875	In the Diagnostic Realization Explorer in the SW Type Preparation category, a <i>Sender Port Type</i> with a <i>Parameter Interface</i> for a <i>Diagnostic Data Identifier</i> can be created in the DID table.

4.5.8 Communication

ID	Resolution
9082949058412891029	In the Property View of a <i>Container IPDU</i> , on the PDU Attributes property page, the Collection Semantics attribute has been added.
9082947087381891911	The frame-PDU synthesis now checks for recursions in the modeling of <i>PDU Transmissions</i> which prevents stack overflow errors.

4.5.9 Hardware architecture

ID	Resolution
9082947085852672083	The refactorings of the hardware diagrams to corresponding system diagrams provide the option to be created Without System Master . The option is active by default. The following diagrams are affected: > <i>Network Diagram</i> > <i>Electric Circuit Diagram</i> > <i>Wiring Diagram</i> > <i>Geometry Diagram</i>
9082949058234633104	When executing a Ground Spot Optimization refactoring and canceling the subsequent Lock dialog, all changes applied by the refactoring are correctly reverted.
9082949058359882046	Creating an auto-layout diagram for a <i>Wiring Diagram</i> has caused an error in case multiple parallel wires are connected between the same <i>Wire Pin</i> and the same <i>Splice</i> . The creation algorithm has been enhanced to correctly handle parallel wires during the creation of auto-layout diagrams.
8682711687672632062	In the Assign Pins to Cavities table, improvements and enhancements for drag and drop actions for several table columns have been implemented, such as improvements of the descriptions and used icons for the individual drag

ID	Resolution
	and drop actions. Additionally, the default merge drag and drop action has been removed.

4.5.10 Product line engineering

ID	Resolution
9082949058303002112, 9082949058403492052	The issue that has caused an unwanted check-out of a revoked <i>Asset</i> during an <i>Asset</i> update has been resolved.
9082949058501832113	Changing the composite relation of recursive children of core artifacts does no longer result in out-of-sync problems during <i>Asset</i> updates.
9082949058535542012	<i>Asset</i> updates correctly reset attributes of artifacts from "-not set-" to their initial value if the initial value is set in the target version.
17938307714742040	When reusing and automatically integrating several <i>Assets</i> via drag and drop, a progress information is provided.
9082949058347980091	The unnecessary setting of change markers that have caused full locks during a version replace or restore has been resolved.
9082947087293581995	The error feedback has been improved in case no target or multiple targets are given at the "target" input port of the <i>Use Asset</i> metric block.

4.5.11 Change and release management

ID	Resolution
9082949058585102112	When using <i>Change Profiles</i> , the [Commit] button in the Commit Dataset dialog is disabled if the model contains validation errors (for example, commit rejecting online checks).

4.5.12 Metrics

ID	Resolution
9082949058365030124	<i>Embedded Metric Executors</i> used in table actions revert the operation and any model changes previously made within that metric execution if the result state or sub-state in a metric block is set to "CANCEL".
9082947086115262023	When executing the <i>Check-In</i> metric block, check-in validation errors are always reported in the Information View , even if the metric executor suppresses check-in dialogs.

4.5.13 Collaboration

ID	Resolution
9082949058276442034	The Change history displays the full history of an artifact, even if a <i>Localization</i> or <i>Localization Package</i> was previously deleted. If the <i>Localization</i> and the <i>Localization Package</i> are recreated, the history continues accordingly.
9082949058529123139	The Extended Lockstatus Information , which can be displayed if an artifact is locked by another user, has an additional column with the user's Mobile Phone Number .
9082949058203202108	The actions to show reuses that are available on the Version History property page, now include the selected version of the artifact in the Search result view, even if that version does not have any reuses.
9082947087376092108	If you replace or restore an artifact version via the Version History , the Progress Information now correctly states if a replace or restore process is in progress.
9082949058127702101	Canceling a check-in in certain use cases is now possible without the need of restarting PREEvision after the cancel.

4.5.14 Administration

ID	Resolution
9082949058245671028	Fixed an issue that could cause metrics to recompile during <i>Add-in</i> installation.
9082949058161721995	<i>Add-ins</i> now propagate the <i>Configuration Test Suites</i> and <i>Test Metric Executors</i> of <i>Configuration Test Suites</i> top-down.

4.6 Known issues

Known issues in PREEvision 10.17

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.

ID	Known issue
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i>, and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.
9082949058188121799	If you define an AND combination of two prototype column filters where the content of one column is defined via a search query and the content of the other column is defined without using a search query, the filter result might be wrong. Workaround: If you filter combinations of prototype columns, make sure that all filtered prototype columns are based on search queries.

5 PREEvision 10.16

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5.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.16.0
PREEvision license server	3.0.2
PREEvision database server	10.16.0.04
PREEvision application server	10.16.0

Documentation

Manual	Version number
PREEvision manual	10.16.0
PREEvision configuration manual	10.16.0
PREEvision operating manual	10.16.0
PREEvision system requirements	10.16.0
PREEvision server API	10.16.0

5.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.16 and the migration to PREEvision 10.16, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.16, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

It is recommended to use VisualSVN Server version 5.4.1 for the PREEvision subversion server.

License server

If the standalone license server is connected via a proxy, the parameter `-Djava.rmi.server.hostname=<proxy server>` must be set in the Virtual Machine Parameters of the license server.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29
10.16.0	10.16.0	10.16.0.04	2024-11-08

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.16.



Migrating to PREEvision 10.16 is only possible from PREEvision 10.0 SP17 or later.

All remote operations (backup and direct migration) available in the PREEvision 10.16 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.16, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.16 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.16, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

5.3 New features in PREEvision 10.16

Usability and performance improvements

Spell checking in automated use cases have been disabled with PREEvision 10.16 resulting in an improved performance, for example, when exporting table content to Excel.

The technical character styles starting with "AQ" have been removed from the **Styles and Formatting** view to improve clarity and to avoid using of a formatting intended for technical purposes. When needed, these styles are automatically assigned and receive special treatment in subsequent processes.

Support of persistency interfaces

PREEvision 10.16 supports persistency interfaces used in AUTOSAR Adaptive to access persistent data by application software. *Persistency File Storage Interfaces* and *Persistency Key Value Storage Interfaces* can now be created in the **Model View** including *Persistency File Elements* and *Persistency Data Elements*.

- ▼ **TE** Interfaces / -;0 (Software Type Package)
 - ▼ **PFS** Persistency File Storage Interface / -;0 (Persistency File Storage Interface)
 - ▼ **PFE** Persistency File Element / -;0 (Persistency File Element)
 - ▼ **PKS** Persistency Key Value Storage Interface / -;0 (Persistency Key Value Storage Interface)
 - ▼ **PDE** Persistency Data Element1 / -;0 (Persistency Data Element)
 - ▼ **PDE** Persistency Data Element2 / -;0 (Persistency Data Element)

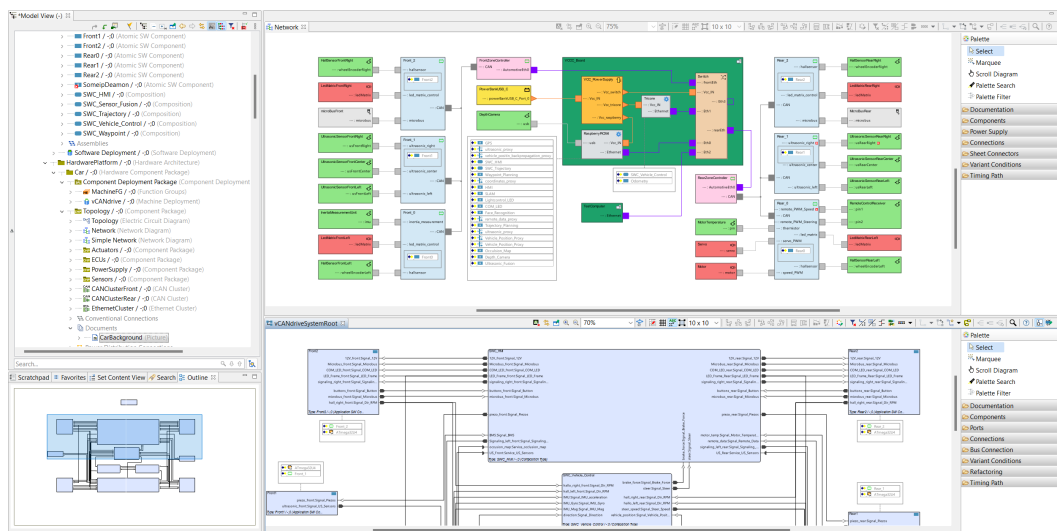
Additionally, *Persistency Data Required Com Specs* can be modelled under Adaptive port types. Also, bidirectional *Adaptive Provided Required Port Types* are now available to enable full AUTOSAR compliant modeling of persistency interfaces.

Export of variants

The EEA export of active variants has been improved. Only artifacts that are selected and that are part of the active variant will be exported. With an export profile, for example, the implicit selection can be extended.

vCANdrive demo

To showcase the Vector software factory for the development of software-defined vehicles, the vCANdrive demo was presented during the SDV Symposium Europe 2024.



The modeling data of the vCANdrive demo is part of the demo model delivered with PREEvision 10.16. This model serves as a basis for Vector's evaluation and testing platform and covers almost all layers of the design process.

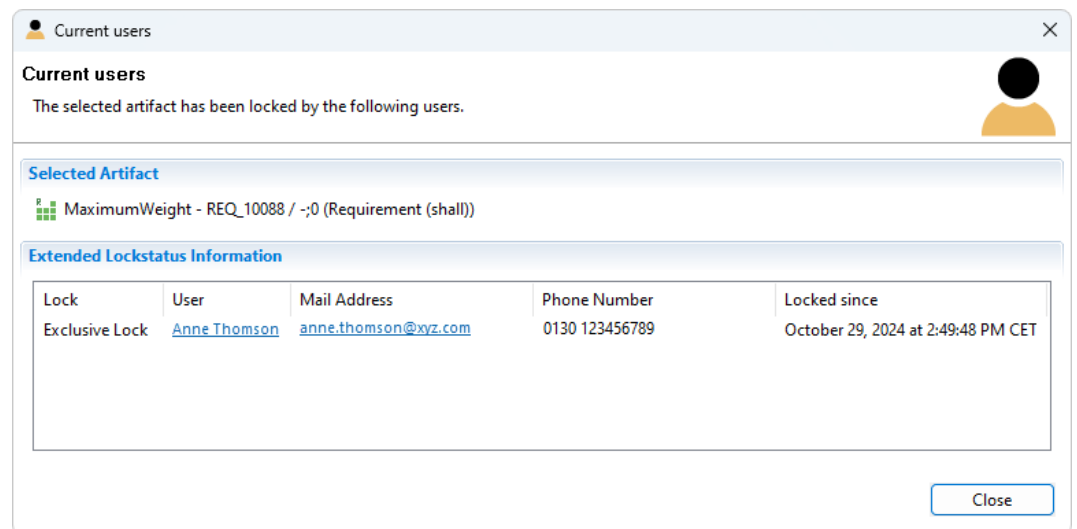
Handling of write protection for replace and restore

Historical versions can be restored in place including context attributes, such as the **ImEx-ID**. A write protection of artifacts in the historical version could prevent a restore. A restore could fail due to write protection of child artifacts in the head.

A replace or restore is now carried out successfully regardless of write protection of artifacts in the historical version or modified artifacts in the head. Restoring a historical version in place is possible if it includes artifacts with enabled write protection.

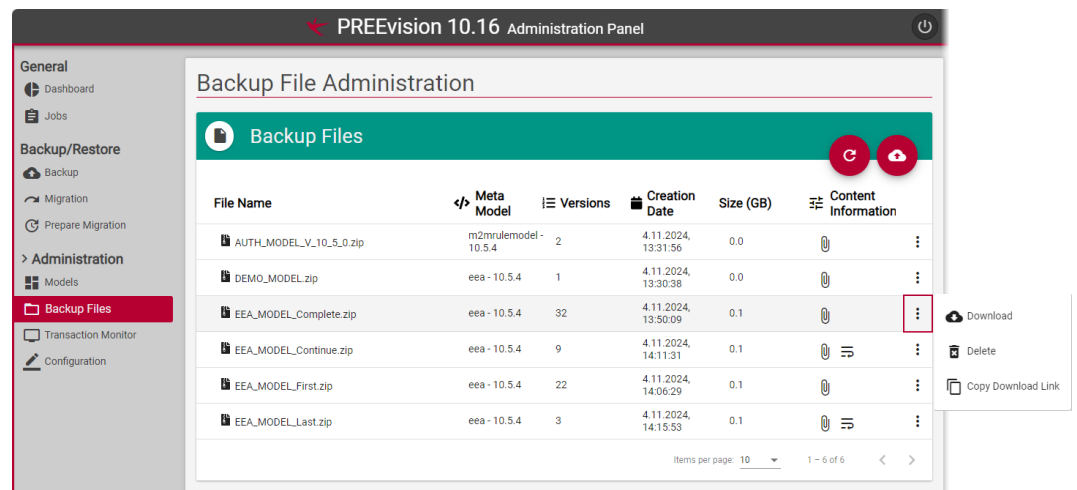
Extended information about lock owner

If an artifact is locked by another user, you can now display extended information about the user in the **Extended Lockstatus Information** popup and the **Current users** dialog. New contact options via mail and messenger allow you to directly contact the user who has locked the artifact.



Administration panel: Backup files

The administration panel provides a new page for administering backup files.



On the **Backup Files** page, you can:

- > display all backup files that are available on the application server.
- > download backup files.
- > delete backup files.
- > upload backup files to the application server.
- > copy and share the download link of backup files.

Additionally, if a backup job is completed, the backup file can be downloaded from the **Job Details**.

**Improved client startup
with large updates**

During client startup, large model updates on the server are now directly detected and handled without displaying a dialog. If a large update is detected on the server, the client cache is automatically cleared, and the model is instantly reloaded from the server. This reduces unnecessary waiting times since the model is not initially loaded from the client cache file.

**PREEvision server API
extension: tracked
artifact set**

The new tracked artifact set part of the PREEvision server API allows users to configure different sets of artifacts to monitor for changes. It is roughly based on the [Tracked Resource Set](#) (TRS) specified by the Open Services for Lifecycle Collaboration (OSLC).

The API extension allows monitoring model parts for changes via REST, for example, allowing a third-party tool to react to model changes.

The tracked artifact set API extension provides the following options:

- > Configuring sets of artifacts to track in the form of individual artifacts or artifacts of specific meta classes in model subtrees.
- > Retrieving all individual artifacts that are currently tracked by a set.
- > Retrieving the changelog of a set, which chronologically records the changes, additions, and deletions of artifacts in the set.

**Extended filter
management in tables**

Via the **Define Filter** dialog, you can create and edit complex table filters combining several column filters with the operators **AND**, **OR**, **XOR**, and **NOT**. The filter logic is displayed in a graphical and a textual overview.

Define Filter

Define Table Filters

Create or edit filters. Filter Definition section shows the complete filter logic. Column Filter section shows details of operands selected in the Filter Logic tree.

Select Filter: New Filter

Filter Definition

Filter Logic (Preview): ID: Empty OR Text: 2 LegalRequirements; 3 LegacyFeatureList; 1 TechnicalRequirements OR (NOT (Priority: is: A AND Infos:Last Change Time: before: 2024-10-04))

Filter Logic:

OR

ID: Empty

Text: 2 LegalRequirements; 3 LegacyFeatureList; 1 TechnicalRequirements

NOT

AND

Priority: is: A

Infos:Last Change Time: before: 2024-10-04

Filter Elements

AND

OR

XOR

NOT

Column Filter

Column Filter

Select Column: Priority

Select Filter Type for Column:

Wildcard Filter(*,?): *

Predefined Filters: 2 LegalRequirements; 3 LegacyFeatureList; 1 TechnicalRequirements

User-defined Filter: is A

Empty

Not Empty

Filter Name: Filter-1

Apply

Save

Save as New Filter

Cancel

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Version 10.20

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Search and replace for formatted text in tables

In tables, you can now search and replace values in formatted text. As search and replace values you can enter character strings, blanks, and special characters, and it is also possible to search for text in placeholders. To show the context, the **Search** view and the **Replace** view also display text before and after the searched value, and the searched value itself is highlighted.

The screenshot shows the 'InsideLight-Requirement Text Editor' window. It contains a table with requirements and a search/replace view below it.

LEVEL	ID	Hierar...	Text	Type	Prior...	Is Active
1-1			1.1 Function	Requirement Package	F	✓
2-2			1.1.1 InsideLight	Is Heading	F	✓
3-3			Inside Light Roof Unit The roof unit is located on the roofliner just behind the rear view mirror. The roof unit provides manual control to the vehicle's occupants for interior and reading lights.	Requirement (shall)	F	✓

Search: Text - Name | Description | inside | interior

Replace: 8 out of 8 occurrences are displayed that were found in the "Text" table column and can be replaced.

Artifact	Meta Class	Attribute	Search Result	Replace Result
1.1.1 InsideLight / -:0 (Requirement (shall))	Requirement (shall)	Name	InsideLight	interiorLight
InsideLightRoofUnit / -:0 (Requirement (shall))	Requirement (shall)	Description	Inside Light Roof Unit	interior Light Roof Unit
InsideLightFadeln / -:0 (Requirement (shall))	Requirement (shall)	Description	Fade in inside light	Fade in interior light
InsideLightFadeln / -:0 (Requirement (shall))	Requirement (shall)	Description	Inside light starts to fad...	interior light starts to fad...
InsideLightFadeln / -:0 (Requirement (shall))	Requirement (shall)	Description	Inside light starts to fad...	interior light starts to fad...
InsideLightFadeln / -:0 (Requirement (shall))	Requirement (shall)	Description	Fade out inside light	Fade out interior light

5.4 Changes

Undo lock action no longer available

The **Undo Lock** action, which allowed you to release locks of artifacts that had not been modified, is no longer available. To release locks and discard changes, you can still use the **Undo all own locks** action.

New demo model content

The "Systems Engineering" *Product Line Package* in the PREEvision demo model has been enhanced with the "RFLP Concepts: Requirement, Functional, Logical and Physical" and the "SE Example: Crash Detection System" *Product Lines*.

> "RFLP Concepts: Requirement, Functional, Logical and Physical"

> Generic concepts to support RFLP

> "SE Example: Crash Detection System"

> Stakeholder Requirements

> Feature model

> Use Case Diagram

> System Requirements

> Activity Diagram

> Logical System Architecture

> Network Topology and Component Diagram

> System/Component Matrix

> SW Architecture

> Class Diagram

> State Machine

> System Test Specification

5.5 Configuration information

Table filters: Migration of tables

The format of table filters has been changed. All custom tables and table templates must be migrated to be compatible with the new filter format. Table templates that are part of the product configuration are updated through updating *Add-ins*.

During the migration, the following steps are processed:

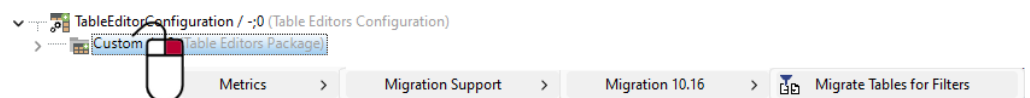
- > Saved filters in the old format are migrated.
- > Relations are set between the column filter artifact and the filtered column.
- > Relations are set between the column in the table instance and its associated column in the table template.

During the migration, the following restrictions apply:

- > Tables are only migrated in the current model version. Historic model versions are not migrated.
- > Checked-in tables are not migrated.
- > If a table is locked, the migration is cancelled and rolled back completely. Therefore, make sure to have exclusive access to the model and all users have released their locks.
- > Opened tables are not migrated correctly. Therefore, close all tables before starting the migration.
- > If a table template is migrated, all its associated table instances and table proxies are migrated as well.
- > If a table instance or a table proxy is migrated, its associated table template is not migrated.

The following procedure is recommended to migrate all custom table templates and their associated table instances and proxies:

- > Precondition: The following initialization flag is set in the `PREEvision.ini`:
`-DshowConfiguration=true`
 - > Precondition: The complete E/E model is loaded and in the active scope.
 - > Precondition: You have exclusive access to the model. All users have released their locks in the model.
 - > Precondition: All tables are closed.
 - > Precondition: *Add-ins* have been installed/updated to update the table templates of the product configuration.
1. In the **Model View**, under *Administration | Table Editors Configuration*, select the *Table Editor Packages* that contain custom table templates.
 2. Open the context menu and select **Metrics | Migration Support | Migration 10.16 | Migrate Tables for Filters**.



All table templates and their associated table instances and table proxies are migrated to be compatible with the new filter format.

To migrate all tables that are not associated to a table template:

1. In the **Model View**, either select the artifacts/packages that contain tables or, to ensure all tables are migrated, select the *Repository Root*.
2. Open the context menu and select **Metrics | Migration Support | Migration 10.16 | Migrate Tables for Filters**.

All tables are migrated to be compatible with the new filter format.

During the **Migrate Tables for Filters** action, the **Information View** lists all tables and table templates that are processed during migration. Depending on whether the migration was successful or not, the following categories are reported in the **Information View**:

- > "Migration successful": Lists tables that have been completely migrated to be compatible with the new filter format.
- > "Migration failed": Lists tables that could not be migrated at all, for example, because they are checked in or locked by another user.
- > "Filter migration failed": Lists tables and those filters that could not be migrated, either because the filter could not be migrated or because the relation to the filtered column could not be set.
- > "Template column not assigned to instance column": Lists table templates and templates columns that could not be associated to a column in the table instance.

Possible reasons and solutions for tables with "Migration failed":

Reason	Solution
The table is checked in.	Check-out the table and migrate it again.

Possible reasons and solutions for tables with "Filter migration failed":

Reason	Solution
Columns are hidden.	Show all columns and migrated the table again.
Columns have been renamed or deleted.	Synchronize the table with its table template (action Update Table Instance Keep Local Filters) and migrate the table again.
Columns are neither hidden nor available in the table template.	Delete the filter and create it anew.

Possible reasons and solutions for tables with "Template column not assigned to instance column":

Reason	Solution
Columns in the table instance have been renamed or deleted.	On the Settings property page of the instance column, manually assign the Associated Template Column . or Synchronize the table instance with its table template (action Update Table Instance Keep Local Filters or Update Table Instance Reset Local Filters).
Columns in the table template are not uniquely named.	1. In the table template, define a unique name for each column. 2. Update all table instances of the table template. 3. Migrate the table instances again.

The migration is implemented via metric. The preconfigured metric is installed via the *Add-in* "Migrate Table for Filters" and can be found under:

"Administration" | "Metrics" | "Product" | "L270_UI_Concepts" | "279_Table Framework" | "Table Filter Configuration Format Head Migration"

In the *Metric Diagram* palette under *Tables*, the new *Migrate Tables for Filters* metric block is available to individually configure the migration of tables.

If a table is not migrated, the table can still be opened. The table can also be filtered in the new filter format and filters can be saved.

Restrictions for not migrated tables:

- > Old filters are not listed.
- > The **Create Table Instance** action cannot be executed.
- > The **Update Table Instance** action cannot be executed.
- > An error dialog is displayed if old filters exist in the table.

Table filters: Multiple paths in table configuration

"Multiple path" in the table configuration means that multiple *Data Providing Table Columns* depend on the same source *Data Providing Table Column*.

The *Data Providing Table Columns* with multiple paths cannot be used for complex filtering in the **Define Filter** dialog since the filter result may be misleading.

Data Providing Table Columns with multiple paths can still be used for filtering via the table column header. However, the filter result may be misleading, like in previous PREEvision releases.



Direct Attribute Columns can always be used for filtering.

Therefore, it is strongly recommended that you check your custom tables and table templates for multiple paths and redesign your table configuration.

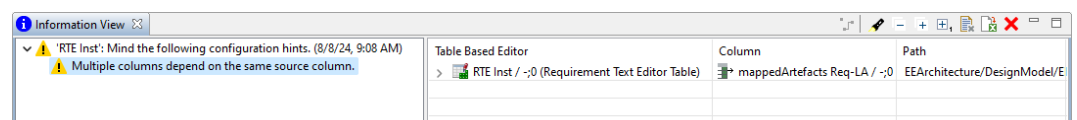
To check your table configurations for multiple paths:

- > Precondition: The following initialization flags are set in the `PREEvision.ini`:
 -DshowConfiguration=true
 -DcheckTBContracts=true
- > Precondition: *Add-ins* have been installed/updated to update the table templates of the product configuration.

In the menu bar, select **Administration | Check Table Configurations (in Scope)**.

All tables in the active scope are checked for multiple paths. The **Information View** lists tables for which multiple paths have been detected.

Alternatively: If you open a table that contains multiple paths, the **Information View** reports a warning.



The **Define Filter** dialog also indicates if a table contains columns that cannot be selected for filtering.

To redesign affected table configurations and resolve multiple paths, the following solutions are available:

- > Redesign table configuration: If possible, redesign your table configuration and configure all columns with a 1:1 relation between the input/output.
- > Option **All Values in Same Cell**: If this option is activated on a *Data Providing Table Column*, all values are listed in the same table cell separated by a semi-colon. Activate the **All Values in Same Cell** option on the **General** property page of all dependent *Data Providing Table Columns*. Then the columns are offered for filtering in the **Define Filter** dialog.
- > Option **Use Only Single Result for Filtering on all Dependent Columns**: If you make sure that all dependent *Data Providing Table Columns* only deliver one value, you can use this option. For example, if the dependent *Data Providing Table Columns* display all values in the same cell. Activate the **Use Only Single Result for Filtering on all Dependent Columns** option on the **General** property page of the source *Data Providing Table Column*. All dependent *Data Providing Table Columns* are then offered for filtering in the **Define Filter** dialog.
- > Use a combined table: You may use a *Combined Table Based Editor* in which the source *Data Providing Table Column* and one dependent *Data Providing Table Column* are displayed in one table of the *Combined Table Based Editor* and the other dependent *Data Providing Table Column* is displayed in another table of the *Combined Table Based Editor*.

5.6 Fixed issues

Fixed issues in PREEvision 10.16

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Metrics](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Server API](#)

5.6.1 Common

ID	Resolution
8682711554193192051, 9082947087133851783	If the details table of the Information View has been sorted by columns, the initial sort order can now be restored. When the sort order is changed, the expansion state does not change.
9082947086003442048	Custom attributes: Values for custom attributes can be reset to the default value if a default value is provided in the attribute definition. The property editor refreshes and displays the current value.

5.6.2 Diagrams

ID	Resolution
9082947087358672101	Object configurations with <i>Query Rule</i> constraints are properly applied to the master diagram of <i>Legends</i> and to the <i>Legend</i> displayed in diagrams that use the corresponding <i>Diagram Configuration</i> .

5.6.3 Tables

ID	Resolution
8682711687091882001	If several artifacts are displayed in a table cell, the tooltip for the table cell now displays all artifacts.

ID	Resolution
8682711687179133082	If you display the table pop-up by moving the mouse on a table cell with links, the focus is set on the table. If you select an artifact in the table pop-up, the selection is propagated to the Model View .
9082947086141902107	Opening the filter drop-down list on column headers of tables with many rows is faster now.
9082949058115432101	The performance of the search in formatted texts has been improved by downloading the formatted texts in one batch.

5.6.4 Requirements

ID	Resolution
9082947087146442101	ReqIF agreement export: During export, placeholders contained in <i>Attribute Definitions</i> of type <i>Application Text Type</i> (formatted text) are exported properly.
9082949058107302105	The handling of links with invalid file paths in formatted texts has been improved so this will no longer disrupt a ReqIF export.
9082947086108091790, 17938299155002108	A problem when pasting content from the Microsoft Windows clipboard into formatted texts has been resolved: sometimes, the last text copied or cut from a formatted text was pasted instead of the current content of the clipboard.
9082949058129022105	The problem of invalid characters in links has been resolved, an Excel export is now possible.

5.6.5 Logical function architecture

ID	Resolution
9082947085560841807	When moving logical ports from one logical block (for example a <i>Logical Function</i>) to another logical block, they are now automatically removed from the origin block in all opened and non-locked <i>Logical Architecture (System) Diagrams</i> .
9082947086107862106	The issue that a table displayed in a <i>Logical Architecture Diagram</i> could not be rendered, and which then resulted in an incomplete diagram export as image, has been resolved.

5.6.6 AUTOSAR

ID	Resolution
9082947085954611003	AUTOSAR export: The ARXML file header contains the correct PREEvision version.

ID	Resolution
9082947086174741867	If an AUTOSAR file to be exported contains COLLECTIONS of the category RELATION , it does now contain the full instance reference including SW-COMPONENT-PROTOTYPES and ROOT-SW-COMPOSITION-PROTOTYPE .
9082947086366032005	If an AUTOSAR file to be imported contains COLLECTIONS of the category RELATION , the contained instance references are properly considered for the import even in cases of multi-instantiations of software compositions.
9082947085181792052	AUTOSAR export: <i>VLANs</i> are exported correctly even if they are linked to a <i>Virtual Package</i> , which is not necessary.
9082947087310083042	The consistency check "AR_010104_PV_SharedAxisWithoutAxisType" correctly returns only <i>X-Axis</i> artifacts with the Axis Category set to "Common".
9082947087417842003	The consistency checks in the cluster AUTOSAR Software Design now evaluates the same artifacts as the export considers.
9082949058118441045	AUTOSAR system description: A software architecture selected for export that contains elements belonging to the AUTOSAR Adaptive platform might lead to an erroneous export of the system description. To export only AUTOSAR Classic relevant artifacts, an active variant can be used to define a valid export scope.
9082947087418891024	AUTOSAR import with replace: Import with replace can be executed for root ports with the same port type.

5.6.7 Diagnostics

ID	Resolution
9082947086046770063	<i>Diagnostic Event Info Needs</i> can be created from context menu.
8682711684967902005	Diagnostic export: The attribute XMI:UUID will not be written into PVCDI files anymore.
9082949058146862005	Diagnostic export: The PVCDI Migrator delivered with PREEvision has been updated to version 1.0.2.
9082947085805991875	Diagnostic export: The handling of <i>Multi Value Attribute Definitions</i> during Diagnostic Exchange Export for CANdelaStudio has been improved. The export can be executed but the <i>Multi Value Attribute Definitions</i> will not be included in the export.

5.6.8 Communication

ID	Resolution
9082947086170391825	ECU communication extract: <i>LIN Schedules</i> are exported correctly.
9082947087358721032	DBC export: If a frame that has multiple senders, the alphabetically first sender will be considered for export.

5.6.9 Hardware architecture

ID	Resolution
9082947087417942083	For ground spot optimization some improvements have been implemented with respect to the <i>Wiring Harness</i> target package. The drop-down list for the selection of the target <i>Wiring Harness</i> no longer displays a <i>Wiring Harness</i> which is located in the <i>Administration</i> . If a workspace is set on a <i>Wiring Harness</i> , this workspace is preselected when opening the Ground Spot Optimization dialog.
9082947087380242112	When performing the ground spot optimization on pins with existing <i>Ground Connections</i> , affected <i>Wiring Harness Inline Connectors</i> are not deleted. Only if all contained <i>Schematic Pins</i> would be deleted, the <i>Wiring Harness Inline Connector</i> is deleted as well. Furthermore, selected invalid solutions in the Ground Spot Optimization dialog cannot be executed anymore.
9082947087342771027	Contents provided by a <i>Query Rule Group</i> or metric in a <i>Title Block Diagram</i> is displayed in the corresponding <i>Title Block</i> of an auto-layout diagram when opening the diagram. No refresh of the diagram is necessary.
9082949058119571874	Providing contents by a new <i>Query Rule Group</i> or metric in an existing <i>Title Block Diagram</i> which is displayed in the corresponding <i>Title Block</i> of an auto-layout diagram, does no longer lead to a client crash.
9082947086020632083	When assigning a <i>Plug-in Location</i> to a <i>Hardware Device</i> , an information is reported in the Information View in case one or more pins of the <i>Hardware Device</i> could not be assigned to the cavities of the <i>Plug-in Location</i> . Additionally, the Assign Pins to Contactings table is opened, where the pins can be assigned manually.
9082947086019122083	When working with <i>Plug-in Locations</i> , the Assign Pins to Contactings table is opened in case the pins of the <i>Hardware Device</i> could not be matched to the cavities of the <i>Plug-in Location</i> . Two actions are available to assign a <i>Hardware Device</i> pin to a <i>Contacting</i> of a <i>Plug-in Location Cavity</i> via the table. The first action assigns the <i>Hardware Device</i> pin and replaces the existing <i>Hardware Device</i> pin. The second action additionally assigns the <i>Hardware Device</i> pin.

5.6.10 Product line engineering

ID	Resolution
9082947087379822108	The problem that too many locks have been allocated during a restore / replace operation has been resolved.
9082947086068432024	Running metric blocks for updating <i>Assets</i> can be aborted to reduce the waiting time after cancelling the operation.
9082949058112752012	A replace or restore with selected version could have failed due to the initialization of <i>Life Cycles</i> in case the <i>Life Cycle</i> was introduced after the version was created. <i>Life Cycles</i> are not initialized anymore for checked-in historical versions.
9082947087373432108	The commit performance for restored <i>Assets</i> has been significantly improved.
9082947086183262012	Restoring a version may include checked-out artifacts. If a restore would have created a reuse the restore operation was prevented. Now, instead of preventing the restore, a warning is displayed. The next commit runs all necessary checks to prevent inconsistent reuses.
9082949058230212102	With the <i>Update Asset</i> metric block, an artifact that has its own non-versionable child artifact referenced as type can be replaced successfully again, for example, <i>Title Block</i> .

5.6.11 Metrics

ID	Resolution
9082947085995372034	An error during highlight calculation in <i>Metric Diagrams</i> which occurred after a model update has been resolved.
8682711687064211912	<i>Model Export</i> block: Only artifacts which are selected and are part of the active variant are exported.
9082947087334482102	The error handling for the <i>Label to String Converter</i> block has been improved.
9082947087424441995	Editors opened by metrics open in the expected area of the <i>Perspective</i> .

5.6.12 Collaboration

ID	Resolution
8682711687176861856	Sending an e-mail during a life cycle transition properly works if the <i>SendMail</i> action is triggered in a <i>Delegate Calculation</i> metric block.
9082947087330042034, 9082947087386452101	The Undo all own locks action is only displayed in the context menu, if own locks are active.

ID	Resolution
8682711685290971877	If an artifact is locked by another user, you can now display extended information about the user in the Extended Lockstatus Information popup and the Current users dialog. New contact options allow you to directly contact the user who has locked the artifact.
9082947086156333082	The action Restore Selected Version in the Version History can now also be executed if a context freezing point is set on the <i>Product Line</i> .
9082947087149211030	A commit error in the context of a fixed localization of complex external types during a Replace With Selected Version has been resolved.
9082947085489302017	The issue concerning erroneously detected activated/deactivated partial model support during client start has been resolved.
8682711684953952104	The performance has been improved in case of large updates during the startup of PREEvision, and no more blocking message dialogs are displayed.
9082947085944073089, 9082947085984471806	Importing artifacts from an EEA file with new UUIDs is now possible even if the EEA file contains artifacts with different branch names.

5.6.13 Administration

ID	Resolution
9082947086100172068	Check-in of <i>Demo Add-ins</i> or <i>Test Add-ins</i> that contain propagated artifacts is working again.
9082947087137001028	An error message is now displayed if an <i>Add-in</i> installation fails due to a missing <i>Localization Package</i> in the target model.
9082947086103911028	Corrected handling of <i>Add-in</i> installation of localized attributes: Installing a localized attribute overwrites the string values of the attribute in the target model. Unset values of the installed attribute are also reset in the target model.
9082947086164131995	<i>Add-in</i> propagation now includes the following prioritized perspective elements of <i>Perspective Configurations</i> : <i>Reports</i> , <i>Context Menu Metric Executors</i> , <i>Collaboration Metric Executors</i> , <i>Consistency Rule Groups</i> , <i>Primary Editors</i> , and <i>Quick Search Extensions</i> .
9082947087304192011	Non-relevant findings regarding change and default markers in reuse recovery validation no longer cause an <i>Add-in</i> installation to fail.

5.6.14 Server API

ID	Resolution
9082947087372862203	Deleting a non-existent tracked artifact set configuration now returns HTTP status 404.
9082947087372872203	The REST call to create tracked artifact set configurations has been changed to <code>PUT /tas/config/<identifier></code> .
9082947087372912203	The REST call for creating and updating tracked artifact set content has been unified: <code>POST</code> is now used in both cases.
9082947087372982203	Correct endpoint is now used when configuring tracked artifact sets.
9082947087373052203	Added restrictions on valid configuration identifiers for tracked artifact sets.
9082947087394332061	The tracked artifact set configuration now has a description field for adding additional information.

5.7 Known issues

Known issues in PREEvision 10.16

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file.

ID	Known issue
	- Open the location of the file in the Windows Explorer and delete the file. - Update from the server to force a reload of the file.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: - Delete the authority model. - Connect to the authority model. - Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i>, and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.
9082949058145032023	If you reopen the predefined filter of an active filter in the Define Filter dialog, the Predefined Filters drop-down list offers only those entries that are currently shown in the filtered table. Workaround: Deactivate the filter and open the filter definition in the Define Filter dialog again.
9082949058188121799	If you define an AND combination of two prototype column filters where the content of one column is defined via a search query and the content of the other column is defined without using a search query, the filter result might be wrong. Workaround: If you filter combinations of prototype columns, make sure that all filtered prototype columns are based on search queries.

6 PREEvision 10.15

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6.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.15.0
PREEvision license server	3.0.2
PREEvision database server	10.15.0.02
PREEvision application server	10.15.0

Documentation

Manual	Version number
PREEvision manual	10.15.0
PREEvision configuration manual	10.15.0
PREEvision operating manual	10.15.0
PREEvision system requirements	10.15.0
PREEvision server API	10.15.0

6.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.15 and the migration to PREEvision 10.15, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.15, refer to the PREEvision system requirements.

License server

With PREEvision 10.15, the new version 3.0.2 of the standalone license server is available.

When you use the standalone PREEvision license server (RMI), it is recommended to update the license server to the new version 3.0.2.

The standalone license server 3.0.2 starts with the parameter `PREEvisionLS.forcePermanentPort=true`, by default. The parameter defines, that the license server only uses a single port for the communication (by default 1099) instead of a port range.

Amazon Corretto that is provided with the Windows installer of version 3.0.2 has been updated to version 11.0.23.9.1.

LibreOffice update

The internal LibreOffice component has been updated for more stable use and editing of formatted texts.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08
10.15.0	10.15.0	10.15.0.02	2024-08-29

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.15.



Migrating to PREEvision 10.15 is only possible from PREEvision 10.0 SP17 or later.

All remote operations (backup and direct migration) available in the PREEvision 10.15 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.15, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.15 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.15, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server

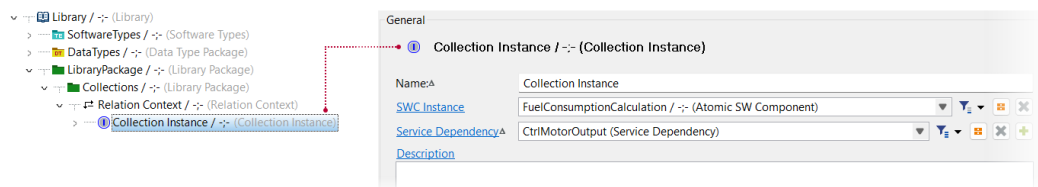


For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

6.3 New features in PREEvision 10.15

AUTOSAR import of relation context for instances

PREEvision 10.15 supports the AUTOSAR concept of *Collections*. Under *Library | Library Package | Relation Context*, you can create a *Collection Instance*. You can currently use a *Collection Instance* to combine an *Atomic SW Component* and a *Service Dependency*.



Model adaption and checks during value handling

The value handling for the comfortable setting of values like initial values or invalid values has been improved. To adapt the value handling to your needs, you can integrate metrics that are executed right before and right after the values are created or changed via value handling.

The pre value handling metric can perform checks, model corrections or other adaption before the product value handling mechanism starts. The post value handling metric can analyze or adapt the model the right after the value handling mechanism has been carried out.



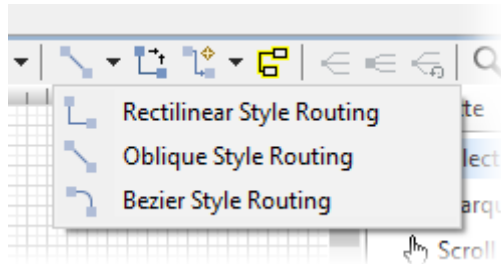
Support of parameter interfaces for DIDs

Ports with parameter interfaces can now be used for *Diagnostic Data Identifiers* (DIDs) in diagnostic design. The Diagnostic Realization Explorer supports creation of port types with *Parameter Interfaces* as well as the preparation of the ports types for DIDs.

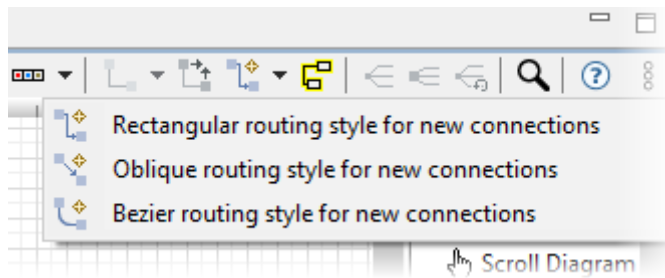
DID	IOControl	Routine	Event	Operation Cycle	Enable Condition	Storage Condition
SWC Type	Port Type	Realizing Object	ADT	Initial Value	Prepared for...	Service Dependency
calcWindowSta...	Position	Position_relative	Position_relative			
	DataService_Hall2	data	Tick	0	Prepared	DataService_Hall2
	DataService_Hall1	data	Tick	0	Prepared	DataService_Hall1
	Routine_CalHall	RoutineServices...	Tick		Incompatible	CalHall
	Hall1	Tick	Tick			
	Hall2	Tick	Tick			
	Sender Port	Parameter	AdtName		Prepared	Service Dependency
Conditions						
Force	Current	Current	Current			
HallSensor	Hall	Tick	Tick			

Usability improvements for diagram toolbar buttons

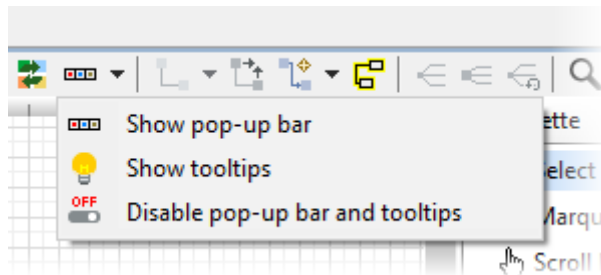
The diagram toolbar buttons for changing the line routing style of connections between **Rectilinear Style Routing**, **Oblique Style Routing**, and **Bezier Style Routing** have been consolidated into a split button.



The triple toggle button for changing the line routing style for new connections between the rectangular, oblique, and Bezier style has been changed to a split button.

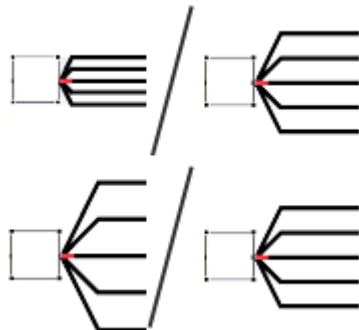


The triple toggle button for showing and disabling the pop-up bar/tooltips has been changed to a split button.



Resetting fan size and fan waypoints

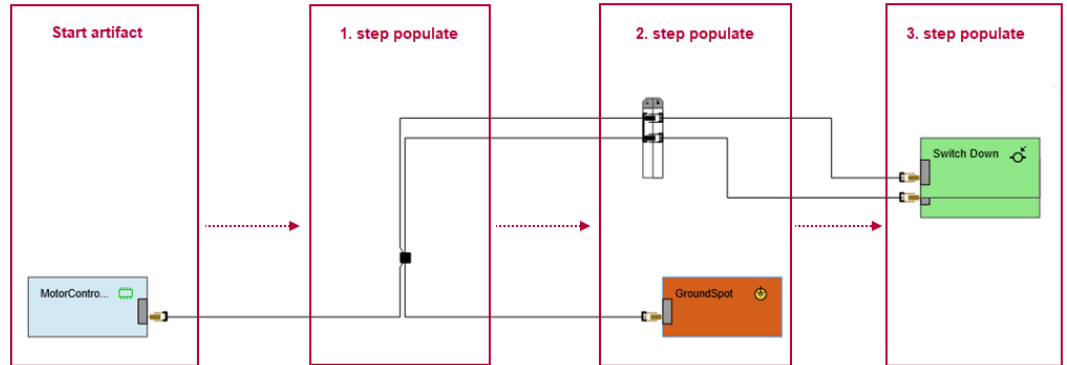
In the diagram toolbar, the new  button resets the fan size and fan waypoints of a previously increased/decreased sender port.



The fan size and fan waypoints can also be reset via the diagram context menu.

Extended populate function for wiring harness artifacts

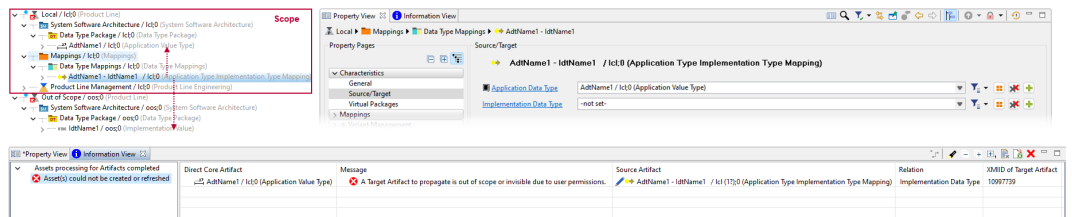
In wiring harness design, the standard populate function for *Wiring Diagrams* and *Wiring System Diagrams* has been enhanced by an extended populate option. With the extended populate, all wiring artifacts from one *Schematic Pin* to all target *Schematic Pins* of components, including all wires, *Splices* and inline connectors, are populated into the diagram in a stepwise manner.



The extended populate function can also be executed via the new *Populate* metric block.

Asset creation: detection of insufficient permissions during propagation

During *Asset* creation or refresh, reasons for an incomplete propagation of artifacts due to out-of-scope or invisible artifacts are reported in the **Information View**.



The reasons for an incomplete propagation are also provided at the "invisibleAndOutOfScopeArtifacts" output port of the *Asset Factory* metric block.

Variant management

The **Variant Condition Editor** has been improved to display an icon and headline as well as an information if no default *Data Type Package* is set.

The new *Open Condition Editor* metric block is available to:

- > open the **Variant Condition Editor**, for example, on a *Pre Build Variant Condition* that is displayed in a table.
- > open the **Condition Editor for Activities** and the **Condition Editor for State Machines**, for example, on a condition that is displayed in a table.

6.4 Configuration information

New metric blocks: populate

The new *Populate* metric block executes the extended populate function for *Wiring Diagrams* and *Wiring System Diagrams*. With the extended populate, all wiring artifacts from one *Schematic Pin* to all target *Schematic Pins* of components, including all wires, *Splices* and inline connectors, are populated into the diagram in a stepwise manner.

Required inputs (*Data Target Ports*):

- > "startArtifact" (data type: MDIRepresentableArtefact): Start artifact of the populate function. Depending on the kind of diagram, different meta classes are allowed/expected.
- > "diagram" (data type: MDiagram): Diagram in which the populate function is executed.

Optional inputs (*Data Target Ports*):

- > "artifactsToPopulate" (data type: Collection<MDIRepresentableArtefact>): After execution, the populate generally fetches all technically relevant artifacts. Only artifacts that are part of the "artifactsToPopulate" are finally displayed in the target diagram. The artifacts displayed (and contained in the "artifactsToPopulate") are then the starting point for a successor populate. If "artifactsToPopulate" is empty, all found artifacts are displayed in the diagram. If incorrect artifacts are part of the list for the respective diagram, they are ignored.
- > "direction" (data type: String): Direction in which all populated artifacts are shown in the target diagram.
Possible values:
 - > "right" (default)
 - > "left"
 - > "up"
 - > "down"
- > "populateKind" (data type: String): Kind of populate.
Possible values:
 - > "standard" (default): classic populate function. All populate options are active and all available artifacts are to be shown.
 - > "externalMultiHop": The populate result is largely depending on the type of diagram. The function does point outwards to external connected artifacts and does not stop at an intermediate artifact. It is performed until the chain of artifacts end at a target artifact.
- > "routingStyle" (data type: String): Line routing style of the displayed connection. The default value is defined by the current line routing style of the target diagram.
Possible values:
 - > "oblique"
 - > "rectilinear"
 - > "Bezier"

Outputs (*Data Source Ports*):

- > "notPopulatedArtifacts" (data type: Collection<MDFObject>): Returns the artifacts which do not exist in the diagram or where not populated in the diagram.

New metric blocks: open condition editor

The new *Open Condition Editor* metric block:

- > opens the **Variant Condition Editor**, for example, on a *Pre Build Variant Condition* that is displayed in a table.
- > opens the **Condition Editor for Activities** and the **Condition Editor for State Machines**, for example, on a condition that is displayed in a table.

Required inputs (*Data Target Ports*):

- > "inCondition" (data type: `MPreBuildVariantCondition` or `MAbstractCondition`): Condition on which the **Condition Editor** shall be opened.

Outputs (*Data Source Ports*):

- > "outCondition" (data type: `List (MPreBuildVariantCondition, MAbstractCondition)`): Condition on which the **Condition Editor** was opened.
- > "dialogFinished" (data type: `Integer`): Number of the dialog button pressed by the user:
 - > 0 = **[OK]**
 - > 1 = **[Cancel]**
 - > -1: the dialog cannot be opened

Changed metric blocks: **add-in delivery** The *Add-in Delivery* metric block has the following new optional inputs (*Data Target Ports*):

- > "cancelOnPropagationFindings" (data type: `Boolean`)
Possible values:
 - > `true`: The delivery is canceled in case the *Add-ins* are not propagated properly.
 - > `false` (default)
- > "cancelOnBranchSuffixFindings" (data type: `Boolean`)
Possible values:
 - > `true`: The delivery is canceled in case contained artifacts do not have a branch suffix.
 - > `false` (default)

Changed metric blocks: **asset factory** The *Asset Factory* metric block has the following new output (*Data Source Ports*):

- > "invisibleAndOutOfScopeArtifacts" (data type: `Map <CoreArtefact, ITempTable>`): Information on invisible and out of scope artifacts during propagation grouped by direct core artifact / asset. It contains the source artifact, the relation that contains the artifact with insufficient permissions and the XMIID of the target artifact. Users with sufficient rights can look up the artifact for the XMIID and resolve the rights issue.

6.5 Fixed issues

Fixed issues in PREEvision 10.15

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [Server API](#)
- > [Backup, restore, and migration](#)

6.5.1 Common

ID	Resolution
9082947085201491866	Formatted texts containing formula objects are no longer treated as changed when opened in the text editor. No lock or check-out dialogs are displayed anymore.

6.5.2 Diagrams

ID	Resolution
9082947085490292081	In the German equivalent of the Populate Artifact dialog, Nachbarn zeigen , the option Zeige AuswahlDialog has been changed to Anzuzeigende Artefakte auswählen .
9082947085965342024	The performance has been improved for opening diagrams with certain label configurations.
9082947085944382046	Object configuration constraints that use an <i>Embedded Metric Executor</i> and are triggered from a diagram, receive the correct input artifact.

ID	Resolution
8682711687361192050	When selecting a diagram in the Model View and subsequently selecting artifacts in the diagram via multi-select, the initial selection of the diagram is kept.
8682711687689231878	A <i>Legend</i> displayed in diagrams can no longer be resized manually in a diagram. Its size is always determined by the size of the <i>Section</i> defined in the <i>Legend</i> diagram.
8682711687637842041	The table border rendering during a PDF export of a <i>Geometry Diagram</i> has been improved.

6.5.3 Tables

ID	Resolution
9082947084981671992	In a table cell that provides a drop-down list, you can now use copy and paste to filter the entries or to select an entry.
9082947085872961030	When filtering tables that contain charts, the charts display results according to the filtered data in the table.

6.5.4 Requirements

ID	Resolution
9082947085784772105	A problem has been resolved that an Excel export aborts without helpful information for the user. An error message and a message in the Information View are shown when the content which should be written into an Excel cell exceeds the maximum of 32,767 characters.
8682711686994932017	The handling of hyperlinks in formatted texts that link to files on unreachable network targets has been improved.

6.5.5 AUTOSAR

ID	Resolution
9082947085954611003	File header contains correct PREEvision version in AUTOSAR exports.
8682711686649931003	AUTOSAR export: The payload of <i>Secured IPDUs</i> is exported for ECU extracts and for cluster extracts.
9082947084846702052	AUTOSAR export: <i>Nv Data Receiver Com Specs</i> are exported properly in case no NV Data is referenced but an Initial Value .
9082947086046791915	AUTOSAR export: LIN Frames for sporadic frames are ordered in a deterministic on export.
9082947086101302108	AUTOSAR export: The attribute <code>isService</code> is only exported for Classic interfaces.

ID	Resolution
9082947086065032108	AUTOSAR export: The version of AUTOSAR schema regarding AUTOSAR 4.3.1 and 4.4.0 has been corrected.
8682711687044903013	AUTOSAR export: AUTOSAR software component export can handle out of scope artifacts via the relation from implementation data type to its users.
9082947086149422051	AUTOSAR import: To adapt the package structure, an 'Implementation Data Type Pointer' data type package is created under the 'Implementation Data Types' package on import.
9082947085967191825	AUTOSAR import: ARXML files are correctly imported.
9082947085480742113	AUTOSAR import and export: Collections with InstanceReferences in an ARXML file are now considered on import and export and represented as Relation Context in PREEvision .
8682711687100782052	ECU extract: The ECU Extract can handle <i>Root Compositions</i> which are directly mapped to the exported ECU.
9082947085099021911	ECU extract: Socket connections on client side are exported properly for ECU centric exports, like ECU extract or ECU communication extract with AUTOSAR version 19-11 or higher.
9082947085889683042	Consistency check: The performance of the <i>Consistency Rule</i> "cx2508_redundant_shortNames_in_virtualPackage" has been improved.
9082947085984600091	Consistency check: The performance of the <i>Consistency Rule</i> "AR_019908_ARC_all_ComponentWithSameName_PortPrototype" has been improved.
9082947086061081915	Consistency check: The localization texts of the <i>Consistency Rule</i> "c3148_DataTransformation_with_invalid_ExecuteDespiteDataUnavailability" reference the correct AUTOSAR constraint.
9082947086046781915	Consistency check: Signal transmissions related to <i>Signal Groups</i> are not flagged as erroneous.
9082947085767421807	<i>Variation Points</i> will not be exported if no AUTOSAR variant is selected.

6.5.6 Software architecture

ID	Resolution
9082947085105201825	The property page General shows the attribute ASIL decomposed for <i>Application SW Components</i> , <i>Compositions</i> , <i>Sensor Actuator SW Components</i> , <i>ECU Abstraction Components</i> , <i>Complex Device Driver Components</i> , and <i>Adaptive Application SW Components</i> .

ID	Resolution
9082947085590601825	Minor Version and Major Version of <i>Service Interfaces</i> are imported and exported via Franca.
9082947085901231804	The property page Ports has been removed for software component types. The property page Unit Groups has been added for software component types.
9082947086096042106	When defining invalid values or initial values, enumeration values in table cells are displayed correctly when the cell editor is closed.
9082947086067922111	Data types with conversions now only get an enumeration widget in table cells using value handling if the conversion is a <i>Verbal Table Conversion</i> .
9082947085903861804	When the value handling mechanism creates a clone of a value specification structure with multiple users, the naming conventions are carried out for the cloned objects within the value handling business logic.
9082947085897991268, 9082947085567782196, 9082947084934901029	In the Property View of <i>Input Activity Data Instances</i> and <i>Output Activity Data Instances</i> only artifacts with the right meta class are shown.

6.5.7 Diagnostics

ID	Resolution
9082947085600373056	Diagnostic export: <i>Diagnostic Trouble Codes</i> are not exported if they are not contained in an active variant and the export option Export only active variant is set.
8682711553173592113	The property page Diagnostic Realization of <i>Diagnostic Data Objects</i> displays the Package that contains the Assigned Data Elements .
9082947086062551867	Diagnostic export: The attributes Encoding and Bit Length of primitive data types that are mapped to <i>Parameter Interfaces</i> are exported.
9082947085895012113	Diagnostic export: Irrelevant information removed from log information during export.

6.5.8 Communication

ID	Resolution
9082947085560892046	Signal router: In case <i>System Signals</i> are routed, an already routed path is identified, even if more than one <i>Bus System</i> is involved.
9082947085588182046	Signal router: <i>System Signals</i> and <i>Signal IPDUs</i> created by the signal router are assigned to the active variant if necessary.

ID	Resolution
9082947084966211914	Signal router: The user information has been improved in case of routing errors when dynamic VLAN edge weightings are applied, for example, if a preferred VLAN is set.
17938307346772040	The description of the design approaches with <i>Signals</i> and <i>System Signals</i> or with <i>Signals</i> only in the manual has been clarified.

6.5.9 Hardware architecture

ID	Resolution
9082947085592203084	For a <i>Single Wire</i> or <i>Core</i> , the Property View displays the <i>Wiring Connectors</i> of the <i>Wire Pins</i> on the Connected Pins in Electric Circuit property page. The directly connected <i>Wiring Connectors</i> are displayed as well as the <i>Wiring Connectors</i> of <i>Wire Pins</i> which are connected via <i>Contactings</i> . If both relations are established, the relation via <i>Contactings</i> has priority.
9082947085824852083	The Property View of a <i>Cable Prototype</i> additionally displays all contained <i>Shielding Prototypes</i> . Due to this, the name of the corresponding property page and the name of the table on the property page have been changed to Contained Prototypes .
9082947085055062062	The Choose Counterpintype dialog and the Choose Pintype dialog have been renamed and the dialog descriptions adapted accordingly. The Choose Counterpintype dialog has been renamed to Choose Opposite Pin Type or Pin Type Family . The Choose Pintype dialog has been renamed to Choose Pin Type or Pin Type Family .
9082947085854172083	The Property View of a <i>Wire Pin</i> has been improved with respect to a directly assigned <i>Wiring Connector</i> . The relation Directly assigned Wiring Connector now displays the correct directly assigned <i>Wiring Connector</i> . If there is no directly assigned <i>Wiring Connector</i> for the <i>Wire Pin</i> , the relation remains empty. If the directly assigned <i>Wiring Connector</i> differs from the <i>Wiring Connector</i> assigned via <i>Contacting</i> , a warning icon is displayed.
8682711686800132112	The standard populate function for <i>Wiring Diagrams</i> and <i>Wiring System Diagrams</i> has been enhanced by an extended populate. It is possible to populate all wires, splices, inline connectors from component to component in a stepwise manner.

6.5.10 Product line engineering

ID	Resolution
9082947085939132112	When integrating artifacts of <i>Assets</i> , detailed information is reported in the Information View if a merge is prevented due to the current <i>Scope</i> or permission restrictions.
9082947085995432012	Restoring a historic <i>Asset</i> has failed if an artifact of the historic <i>Asset</i> has had an external relation to an artifact that is still in the head. Restoring a historic <i>Asset</i> is only aborted if a restored artifact is a checked-out reuse of an artifact outside the <i>Asset</i> .
8682711686591192023	If the External Relation Analyzer is already open, an information dialog is displayed if you try to open the External Relation Analyzer again on another artifact. Via the dialog you can decide whether to close the already opened External Relation Analyzer and automatically open the new one on the newly selected artifact, or to keep the already opened External Relation Analyzer .

6.5.11 Variant management

ID	Resolution
9082947085767411807	VM Explorer : Check for AUTOSAR compliance has been updated to the latest specification.

6.5.12 Change and release management

ID	Resolution
9082947085834521029	The demo <i>Add-ins</i> of the product delivery have been updated to contain the complete <i>Change Profile</i> configuration.
9082947086001030064	The Compare Table correctly displays differences of formatted texts. Additionally, unedited formatted texts are no longer saved when closing the Compare Table .

6.5.13 Test engineering and test management

ID	Resolution
9082947085591492101	An issue has been fixed where for specific Test Specification Editor tables an invalid threat access message was shown when opening the table.

6.5.14 Metrics

ID	Resolution
9082947085022702024	The error handling of <i>Collaboration Metric Executors</i> has been improved to report the same error only once in the user interface. When the metric execution fails, the status is now reported in the same way as for <i>Embedded Metric Executors</i> , which is as flat entries instead of nested entries.
9082947085592202102	The behavior of the <i>Open Editor in Area</i> metric block has been improved: > When an editor is to be opened without a defined "Split Option" port in an area that is already subdivided ("sash"), it is now added to one of the subdivision's stacks. > When the target area for the new editor is already split ("sash"), no additional areas are created.

6.5.15 Reports

ID	Resolution
9082947085073431995	The handling of reports has been improved to avoid rare cases in which the report could no longer be opened because of erroneous placeholders.
9082947085905842046	Generating reports has been improved to resolve placeholders in headings that are referenced by the table of content.

6.5.16 Collaboration

ID	Resolution
9082947085573222105	If the identity provider for authentication is not available, the client no longer repeatedly shows error messages. Instead, the client switches to offline mode.
9082947085601052203	The model update works properly even if many reuses (more than 1.000) have been updated.
9082947085965352024, 9082947085965132024, 9082947085967182106	An update error has been resolved that occurred if an artifact with localization support and model roots in a generic package was deleted.
8682711687660712101	The commit and update performance has been improved when changing the subtree to another revision.
8682711687495052041	The Commit dialog correctly displays changed custom attributes in the popup window of the changed artifact.
9082947085962002106	Undo All Own Locks cannot be executed when the client model is in read-only mode after an error during a model update.

ID	Resolution
9082947084934482105	The performance has been improved for temporarily loading many artifacts into the scope. The performance of cancelling the action has been improved as well and no longer leads to errors.

6.5.17 Administration

ID	Resolution
8682711687484481808	Improved check that customized <i>Add-ins</i> cannot be customized again, which is not a supported use case.
9082947087135501786	A commit error has been fixed that was caused by the online check calculation of <i>Propagate Definitions</i> on the server if the underlying <i>Propagate Definition</i> rule was modified. The error occurred after manual change of the <i>Propagate Definition</i> or during <i>Add-ins</i> installation/update.
8682711554642701806	Model consistency checks are not executed redundantly when loading a model and model consistency check results are not redundantly reported in the Information View .

6.5.18 Installation

ID	Resolution
8682711687651811229	A check for special characters has been added to the validation of file paths during installation. If invalid characters are found in the path, an error dialog is displayed.

6.5.19 Server API

ID	Resolution
9082947085982233115	The ISO-8601 date time format is supported in the API server.

6.5.20 Backup, restore, and migration

ID	Resolution
9082947085911601806	A model preparation streaming error has been fixed that could occur if a remote backup or restore was executed in the administration panel and the user enabled model preparation. The model preparation is also automatically executed during a remote backup or a remote restore.

6.6 Known issues

Known issues in PREEvision 10.15

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
9082947086366032005	If an AUTOSAR file to be imported contains COLLECTIONS of the category RELATION , the contained instance references might not be imported correctly in cases of multi-instantiations of software compositions. If an <i>SW Component Type</i> is instantiated only once, the import works correctly.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.

ID	Known issue
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i>, and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.

7 PREEvision 10.14

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7.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.14.0
PREEvision license server	3.0.1
PREEvision database server	10.14.0.05
PREEvision application server	10.14.0

Documentation

Manual	Version number
PREEvision manual	10.14.0
PREEvision configuration manual	10.14.0
PREEvision operating manual	10.14.0
PREEvision system requirements	10.14.0
PREEvision server API	10.14.0

7.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.14 and the migration to PREEvision 10.14, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.14, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > Oracle 12.1.0.2 and Oracle 12.2.0.1 are no longer supported for the PREEvision database server.
- > It is recommended to use VisualSVN Server version 5.3.2 for the PREEvision subversion server.

KeyCollector

A new version of the PREEvision KeyCollector (`keyinfo_collector.bat`) is available. You can use the PREEvision KeyCollector to create a file that contains the system information that is necessary for issuing a license. The script can either be found in the client installation directory under `../res/tools` or can be separately downloaded.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06
10.14.0	10.14.0	10.14.0.05	2024-07-08

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.14.



Migrating to PREEvision 10.14 is only possible from PREEvision 10.0 SP17 or later.

All remote operations (backup and direct migration) available in the PREEvision 10.14 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.14, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.14 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.14, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server

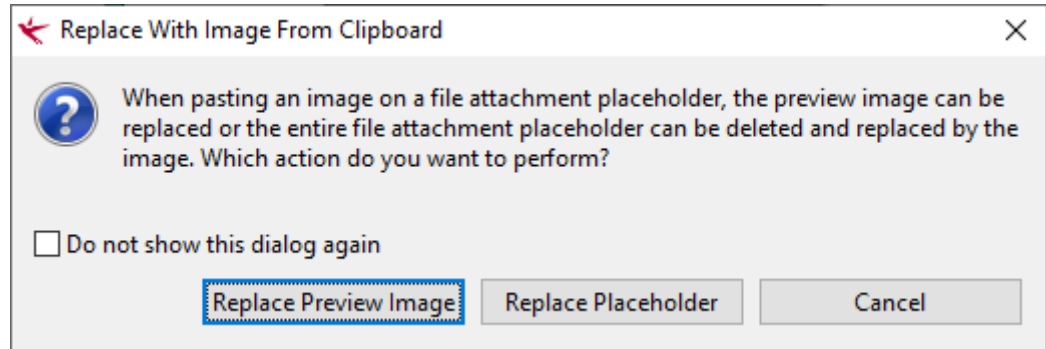


For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

7.3 New features in PREEvision 10.14

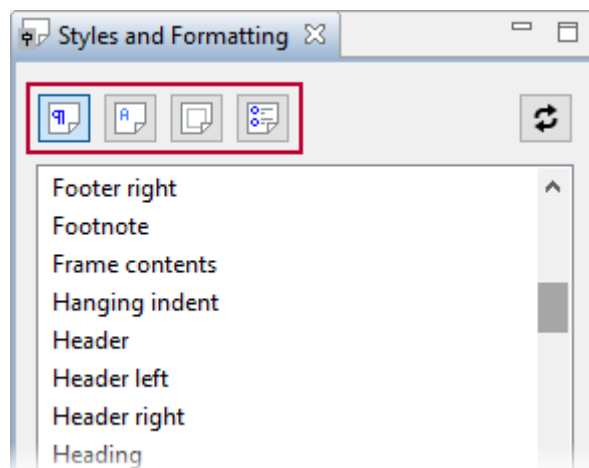
Usability improvements for working with file attachment placeholders

When pasting images onto *Preview Images* of *File Attachments*, the new **Replace With Image From Clipboard** dialog offers the possibility to replace the Preview Image of a *File Attachment* or to replace the entire *File Attachment* placeholder.



Usability improvements for the styles and formatting view

The usability of the **Styles and Formatting** view has been improved. When changing perspectives or upon closing and reopening of the **Styles and Formatting** view, the previously chosen tab is retained.

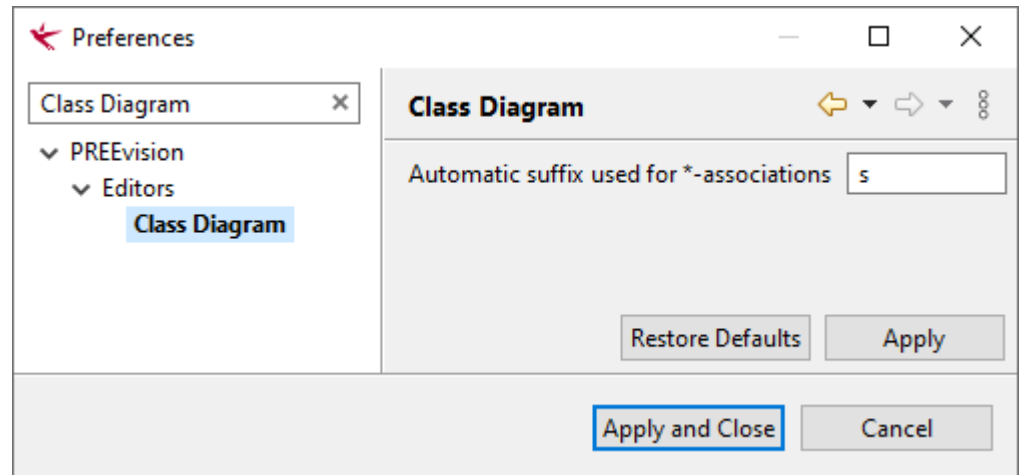


Usability improvements for class diagrams

Multiple usability improvements for *Class Diagrams* have been implemented:

- > Default multiplicities are defined based on relation type.

- > Default role names based on associated class name and multiplicity have been optimized, the multiplicity suffix is adjustable via the new **Class Diagram** preferences page.



- > Default names of generalizations and realizations have been optimized.
- > No labels on relations are displayed in the diagram per default.

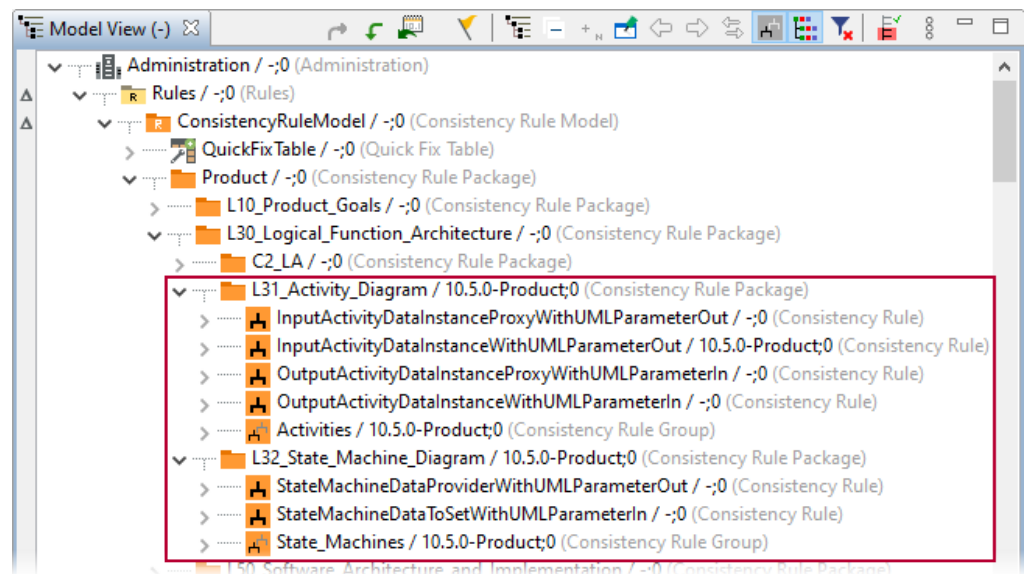
Activity diagram:
modeling activities for
methods and fire and
forget methods

An *Activity* can now be created under *Methods* and *Fire and Forget Methods*. *UML Parameters* serve as input/output data for the *Activity*. The **Condition Editor for Activities** now support using *UML Parameters* to express conditions. An enhanced window lifter example is available in the demo model.

Behavior modeling:
additional online
checks

Additional online checks to verify that *UML Parameters* with direction IN or OUT are not connected as output or input data, respectively. This applies to the following artifacts:

- > *State Machine Data Instance*
- > *Input Activity Data Instance*
- > *Output Activity Data Instance*
- > *Input Activity Data Instance Proxy*
- > *Output Activity Data Instance Proxy*



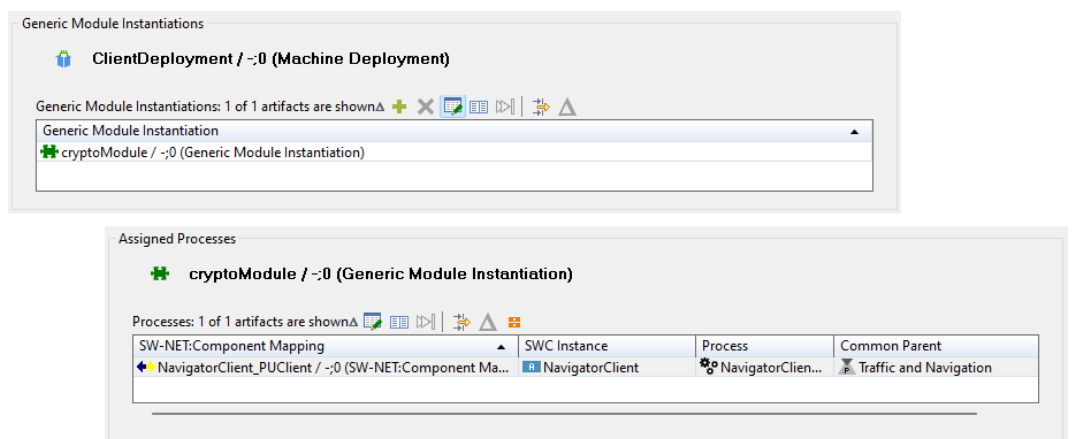
Support of timeouts of process startup configurations

The **Enter Timeout Value** and the **Exit Timeout Value** can now individually be set for *Process Startup Configurations*. You can enter the values on **Timeouts** page in the **Property View** or in the Startup Dependencies Editor in the **AUTOSAR Adaptive Explorer**. The values can be exported via the software cluster design description and the execution manifest.



Support of generic module instantiation on a machine

For AUTOSAR Adaptive designs, *Generic Module Instantiations* can be assigned to *Machine Deployments*.

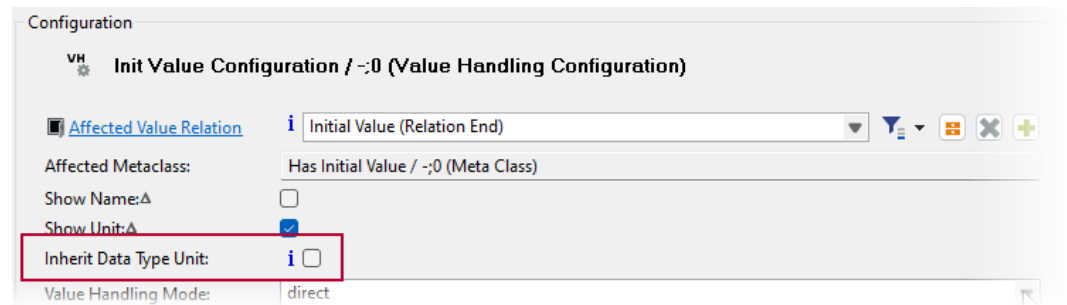


The *Generic Module Instantiations* can be exported using AUTOSAR Adaptive exports like machine manifest, machine design extract, software cluster design description, and execution manifest. Consistency checks prevent *Processes* with more than one *Machine Deployment* and *Generic Module Instantiations* without a process assignment in the model.

Usability for calibration parameters: take over of unit in value handling

The value handling for objects typed by calibration data types like axis, curves or maps is further simplified. When setting values for objects typed by such data types, the *Unit* of the data type is directly taken over to the literal carrying the value. Prioritization rules defined by AUTOSAR are considered.

The inheritance of the unit can be enabled or disabled with the **Boolean flag Inherit Data Type Unit** on the Value Handling Configuration.



Support of parameter interfaces for DIDs

Diagnostic Data Identifiers and their *Diagnostic Data Objects* are realized with a combination of a software port and selected details of its interface. This can be:

- > a *Data Element* of a *Sender Receiver Interface*
- > an *NV Data* of a *NV Data Interface*
- > a *Client Server Interface* and its details

With PREEvision 10.14, also *Parameters* and *Parameter Interfaces* are supported. *Diagnostic Data Identifiers* with *Parameters* and their details are considered for the diagnostic export.

3D coordinates for topology segment points

3D coordinates can be defined for *Topology Segment Points* to properly import and export 3D coordinates of Topology Segment Points via KBL.

3D coordinates are supported by the KBL import and KBL export as *Cartesian_points* referenced by a *Fixing_occurrence* (a *Topology Segment Point* with assigned *Topology Type*) or an *Accessory_occurrence* (a *Topology Segment Point* with assigned *Mounting Clip*).

Product line engineering improvements

For product line engineering, improvements for the following use cases have been implemented.

Revoking assets:

- > A uniform revoke behavior has been implemented for *Assets*. A revoke is executed until the integration target candidate is orphaned, this means no core artifact of an *Asset* with predecessor anymore.
- > For a revoke via reuse, the external duplicate relations of an *Asset* are removed in the following cases:
 - > if the relation is no type-of-relation and is not marked with *forceCopyContent*
 - > if the relation is not contained in another *Asset* with predecessor

Integrating assets:

Integrations via move are now part of the integration order. To-one-relations or type-of-relations are considered. Generally, integrations via move are placed after integrations via merge in the integration order. The automatic integration via move fails if the artifact to be integrated has a to-one-relation or a type-of-relation to an artifact to be integrated.

Extended model consistency checks:

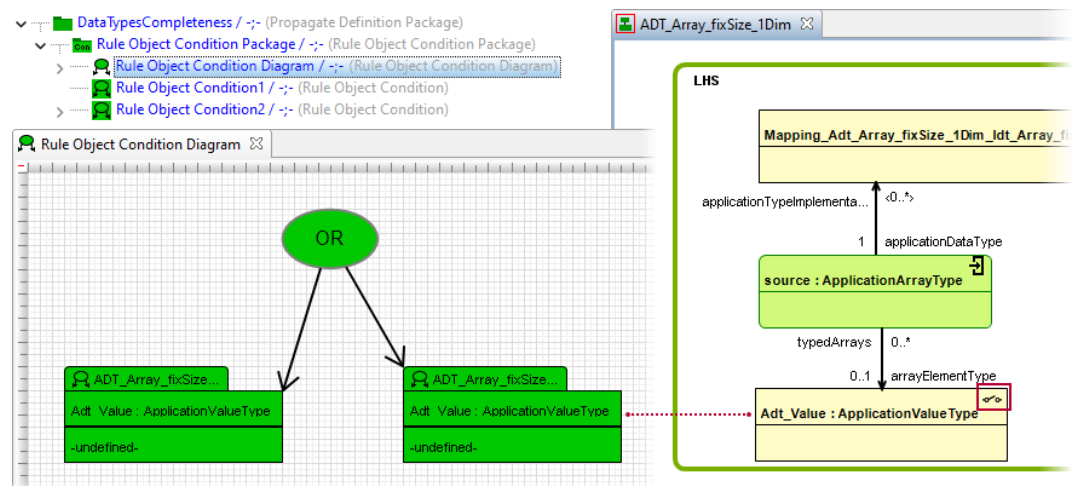
Extended model consistency checks are available to cover invalid states of artifacts to be integrated. For example, a core artifact must not be contained in a core integration assigned to another *Asset* or no *Asset*.

Integration via merge for abstraction from downstream:

An integration via merge is now possible if the abstraction or substitution from downstream is invisible or out-of-scope.

Activation conditions for propagate definitions

For *Propagate Definitions*, it is now possible to define an activation condition. To define a condition, *Object LHS* of the *Propagate Definition* can be linked with each other via a *Rule Object Condition*. *Rule Object Conditions* can be modeled in the new *Rule Object Condition Diagram*, which can be created in a *Rule Object Condition Package* under the *Propagate Definition Package*. In the *Rule Object Condition Diagram*, *Object LHS* of the *Propagate Definitions* can be assigned to a logical operator via drag and drop. In the *Propagate Definition Diagram*, *Object LHS* that are assigned to a *Rule Object Condition* are indicated by an icon.



Add-ins installation: mandatory and optional add-ins

In the **Add-in Installation** dialog on the **Add-ins** tab, the new **Installation Type** column displays whether an *Add-in* is mandatory or optional. All mandatory product *Add-ins* are installed/updated by default and cannot be deactivated. Optional *Add-ins* can be additionally installed.

7.4 Changes

Naming of prototypes in software cluster design description
(8682711686940071024)

The name of the root software component prototype of an *Executable* (`Executable.rootSwComponentPrototype`) is set during the export of a software cluster design description. For the `RootSwComponentPrototype.shortName`, the following rules apply:

If via software component an *Executable* references:

- > an *Adaptive Application SW Component Type* for which exactly one *Atomic SW Component Prototype* exists, the name of this *Atomic SW Component Prototype* is used.
- > a *Composition Type* for which exactly one *Composition Prototype* exists, the name of this *Composition Prototype* is used.
- > a *Composition Type* which is instantiated as a *Root Composition*, the name of the *Root Composition* is used.
- > a *Composition Type* which is instantiated both as a *Composition Prototype* and a *Root Composition*, the name of the *Composition Prototype* is used.
- > an *Adaptive Application SW Component Type* or a *Composition Type* for which multiple instantiations exist (*Atomic SW Component Prototypes* or *Composition Prototypes*, respectively), then, as currently, the name of the *Executable* is used.



To allow different names used for a type and a prototype of a software component, the checkbox **If only one instance exists, synchronize type name and instance name** should be deactivated under **Window | Preferences | PREEvision | Editors LA / SW**.

Variant propagation rules in demo model

For more consistency within the demo model, the existing *Variant Propagation Rules* have been moved to a new package structure that reflects the modeling layers. Some obsolete *Variant Propagation Rules* have been deleted.

- ▼  VariantPropagationRuleModel / -;- (Variant Propagation Rule Model)
 - ▼  Product / -;- (Variant Propagation Rule Package)
 - >  L10_Product_Goals / -;- (Variant Propagation Rule Package)
 - >  L30_Logical_Function_Architecture / -;- (Variant Propagation Rule Package)
 - >  L50_Software_Architecture_and_Implementation / -;- (Variant Propagation Rule Package)
 - >  L70_Communication / -;- (Variant Propagation Rule Package)
 - >  L90_Diagnostics / -;- (Variant Propagation Rule Package)
 - >  L110_Hardware_Architecture / -;- (Variant Propagation Rule Package)
 - >  L130_Electrologic_and_Harness / -;- (Variant Propagation Rule Package)
 - >  L150_Product_Lines_Variants_and_Versions / -;- (Variant Propagation Rule Package)
 - >  L170_Change_and_Release_Management / -;- (Variant Propagation Rule Package)
 - >  L190_Functional_Safety / -;- (Variant Propagation Rule Package)
 - >  L210_Test_Engineering_and_Test_Management / -;- (Variant Propagation Rule Package)
 - >  L230_Verify_Model / -;- (Variant Propagation Rule Package)
 - >  L290_Collaboration_Management / -;- (Variant Propagation Rule Package)
 - >  L310_Administration / -;- (Variant Propagation Rule Package)

Enhanced "Wiring Harness Demo Model" product line

The "Wiring Harness Demo Model" *Product Line* in the PREEvision demo model has been enhanced with additional *Wire Type Families*, *Pin Types*, *Seal Types*, and *Connector Types*. In addition, the used parts for the demo harness represent real parts with real part numbers of the mentioned suppliers.

7.5 Configuration information

- Rule name uniqueness** During rule generation, uniqueness of rule names is now checked case insensitive. For example, the rule names "BusTypes" and "busTypes" are identified as identical and are reported as error during rule generation.
- Rule names must be unique throughout the entire rule model type. For example, within the *Query Rule Model*, the names of the *Query Rules* must be unique.
- Changed metric blocks** To the *Update Asset With Historical Version* metric block, the following *Data Target Port* has been added:
- > "restrictSelectionToHigherRevisionsInSameBranch" (optional, data type: `Boolean`): Only those checked-in versions of the *Product Line* are shown in the selection that contain an *Asset* predecessor in the same branch but with a higher revision number. Default: `false`
- The *Add-in Content* metric block has been changed:
- > The block can now be used to propagate several *Add-ins* at once.
 - > The "addInContent" *Data Source Port* has been removed. The propagated artifacts can instead be accessed via the method `MDFReuseUnitUtility.getPropagatedReuseUnit(add-in).mdfGetReuseUnitCore()`.

7.6 Fixed issues

Fixed issues in PREEvision 10.14

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements and customer features](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [License](#)
- > [Backup, restore, and migration](#)

7.6.1 Common

ID	Resolution
8682711687676021995	The default <i>Export Profile</i> for the model export has been added to the "EEA Export" <i>Add-in</i> . The "EEA Export" <i>Add-in</i> is installed as mandatory product <i>Add-in</i> .

7.6.2 Diagrams

ID	Resolution
9082947085174091843	Custom attributes are evaluated properly for labels defined in the Label Configuration .
9082947084906702059	In the search field of diagrams, the shortcuts <Ctrl>+<C> , <Ctrl>+<V> , <Ctrl>+<A> , and <Ctrl>+<X> are correctly executed and are only applied to the search field if the focus is set on the search field.
8682711687614392046	The text color in diagrams is exported again when choosing the WMF file format.

ID	Resolution
9082947084962572196, 9082947085484832196	In the Property View , the enclosing method name is correctly displayed in the display name of the <i>Parameter</i> for the Data Provider and Data to Set relations of <i>Input Activity Data Instances/Output Activity Data Instances</i> if the <i>Activity</i> is created under a UML <i>Class</i> .
9082947085484832196, 9082947084962572196	In the Property View , additional information, for example, context, direction, or data type are included in the display name of the <i>Parameter</i> , <i>Operation Argument</i> , <i>NV Data</i> , and <i>Data Element</i> for the Data Provider and Data to Set relations of <i>Input Activity Data Instances/Output Activity Data Instances</i> .
8682711686960422041	Diagram export as PNG file: The representation of rotated texts has been fixed.

7.6.3 Tables

ID	Resolution
9082947084906630095	When editing formatted text in a table cell, the text editor is properly closed when leaving the table cell.
8682711687075110069	Expanded artifacts in tables are reliably re-expanded after a table refresh (<F5>).
8682711687471372105	In the search field and in the replace field of tables, the shortcuts <Ctrl>+<C>, <Ctrl>+<V>, <Ctrl>+<A>, and <Ctrl>+<X> can be executed correctly.
9082947084966342080	In the Search result view and Replace view, the shortcuts indicated in the tooltips for Show Next Match and Show Previous Match are consistent and work as expected.
9082947084989621884	In the Object Configuration Error View , an error in the same object configuration is only reported once, even if it is reported for different artifacts.
9082947085015131884	In the Object Configuration Error View , the Error Status column displays a message if the execution of a rule or metric was skipped because it is part of an already deactivated object configuration.

7.6.4 Requirements and customer features

ID	Resolution
9082947085490482107	The integrated LibreOffice version has been updated to fix the deadlock during the report to PDF conversion.
9082947085052252100	A deadlock has been fixed which occurred if editing a formatted text was not possible and the restorable formatted text from the Information View was empty.
8682711687688162105	ReqIF Export: Formatted texts that contain hyperlinks with a name no longer cause schema validation errors.

ID	Resolution
8682711687501582025	The PREEvision undo action correctly works after replacing a text placeholder with a file attachment preview image.
9082947085563152105	It is now possible to assign multiple values to custom attributes.
8682711554419382106	Icons and texts listed in table columns with check box lists are aligned properly with all display resolutions.
9082947084933612102	For <i>Customer Features</i> , an icon has been implemented to indicate <i>Customer Features</i> as tagged for deletion.

7.6.5 Logical function architecture

ID	Resolution
9082947084905622105	Opening a <i>Logical Architecture Diagram</i> which contains broken mapping boxes does not lead to client freezes anymore.

7.6.6 AUTOSAR

ID	Resolution
8682711554188122004	ECU extract: <i>Value Specifications</i> under the port types are exported correctly.
9082947085110801825	ECU extract: The severity of the <i>Consistency Check</i> "pc1000_PduGroupWithoutECU " has been changed to error and the error message has been improved.
8682711685439951807	ECU extract: In exports >19-11, service instances of the opposite <i>ECU</i> are only exported if they are relevant in the communication.
8682711687081002004	ECU extract: <i>RemoteUnicastAddresses</i> for static service discovery are exported correctly.
9082947084966161914	The demo <i>Product Line</i> "Vector Calculator" has been corrected by adding relations between <i>Service Providers</i> or <i>Service Consumers</i> and software component types.
8682711687395961029	AUTOSAR platform types are now provided in a dedicated demo <i>Add-in</i> called "AUTOSAR Platform Types". This <i>Add-in</i> is not mandatory.
8682711686532692051	AUTOSAR import: When importing a folder with an unsupported AUTOSAR version, an error dialog will be shown.
8682711686939801024	AUTOSAR import (AR 20-11): An exception during the import of unsupported artifacts or attributes, like <i>DiagnosticParameter</i> , <i>DiagnosticDataElement</i> , or <i>DiagnosticTroubleCodeUds.severity</i> , has been resolved.

ID	Resolution
9082947085061771998	AUTOSAR import: Formulas for variation points that consist of a single literal are now correctly handled and can be imported.
9082947085111021794, 9082947085096251024	AUTOSAR import: The behavior of the parser has been fixed for old AUTOSAR versions before the multiplicity changed for the relations <code>ServiceInstanceToMachineMapping</code> . <code>secureComPropsForUdp</code> and <code>ServiceInstanceToMachineMapping</code> . <code>secureComPropsForTcp</code> .
9082947085171821794, 9082947085096251024	AUTOSAR import with merge: <i>PortTransformationSpecifications</i> are now correctly imported and merged.
9082947084901510091	<code>AbstractGlobalTimeDomainProps</code> . <code>globalTimeDomainProperty</code> in AUTOSAR is supported by import and export for version 4.4.0 and higher.
9082947084916991024, 9082947085096251024	AUTOSAR Adaptive import: Also incompletely modeled <code>EthernetCommunicationConnectors</code> can be imported.
9082947085110281003	AUTOSAR export: The attribute Event Group Control Type of <i>So Ad Routing Groups</i> with value "TRIGGER-UNICAST" is now exported correctly.
9082947084989673089	AUTOSAR Adaptive Explorer: A column for the Major Version has been added to SOME/IP Consumed Service Instance SD Editor .

7.6.7 Software architecture

ID	Resolution
9082947085490552196	For object-oriented modeling with <i>Class Diagrams</i> , icons for indicating the virtual folders "Realizations" and "Generalizations" in the Model View have been implemented.
8682711687278111917	Two <i>Consistency Checks</i> have been added: "p1000_wrong_synchronization_name_for_attribute_definition" checks if the synchronization name does not match any attribute of the configured classes for the attribute definition. "p1001_wrong_synchronization_name_for_attribute_definition" checks if the synchronization name does not match any attribute of the returned class by the configured <i>Query Rule</i> at the synchronization method.
8682711687347542051	DBC export: <i>Attribute Definitions</i> of type enumeration for <i>Frame Transmissions</i> are now correctly handled.
8682711687394533013	In the dialog for initial value it is now possible to enter initial values for arrays.

ID	Resolution
8682711687494201804	Variables and parameters in an <i>Internal Behavior</i> are now exported as local or global ("autosar") according to the variable and parameter type.
8682711687672551045	Missing attributes on property pages of <i>Constant Memory</i> were added.
9082947084768291825	Attribut convention for java default values works now. When an attribute convention is applied that sets the value of an attribute to the java default value (for example, "0 "), then the default marker for the attribute will be set to <code>FALSE</code> and the change marker will be set to <code>TRUE</code> .
9082947084769491024	The property page Executables has been added for <i>Composition Types</i> and <i>Adaptive Application SW Component Types</i> including a table that shows the referenced <i>Executables</i> and their parent.
9082947085174212052	When creating a new software type and prototype via the Select or Create SW Type dialog, the last selected <i>Software Type Package</i> where to insert the new software type persisted. Thus, no new selection is necessary when the dialog is opened another time. If no package is selected or if no package can be found, the active <i>Software Type Package</i> or <i>Software Types</i> workspace is used as initial package selection.
9082947085022692108	For calibration data types like maps and curves with a shared axis, the Set Values dialog now correctly displays the name of the shared axis.
9082947085763001804	Multiple <i>Value Handling Configurations</i> for the same meta relation now lead to less errors, due to the configuration prioritization of the relation of the concrete meta class compared to the abstract meta class.

7.6.8 Diagnostics

ID	Resolution
8682711687441283013	Diagnostic export: The diagnostic export is possible if an interface that is used for a software realization of a diagnostic object is additionally assigned to another port in the same <i>ECU</i> .
9082947085109672005	Diagnostic export: The content of a PVCDI file is now written in a deterministic way. The contained artifacts have a fixed order after export.
9082947085181642111	Diagnostic export: Default values of custom attributes are properly considered for export if the <i>Attribute Definition</i> is part of the export profile and of the active variant.
9082947085488712113	Diagnostic export: If the Bit Length of data types is "0", is only checked for data types that are used in the context of a diagnostic object, not in the context of an <i>Attribute Definition</i> .

ID	Resolution
9082947085889122113	Diagnostic export: Initial values of data types with a Scale <i>Linear Verbal Table Conversion</i> can be shared with other data types (that is, with a linear conversion). Only enumerations and data types with <i>Verbal Table Conversions</i> require individual initial values.

7.6.9 Communication

ID	Resolution
8682711687711581030	Frame-PDU synthesis: The frame-PDU synthesis now creates dedicated <i>Frame Transmissions</i> and <i>PDU Transmissions</i> for every sending <i>J1939 Nm Node</i> .
9082947085195792050	The communication path router no longer attempts to route the communication path if either the source or the target artifact is not part of the active variant.
9082947084956721032	DBC export: A warning in the Information View indicates if there are invalid selector signals in a multiplexed frame.
9082947084933901029	DBC-specific property pages are now located in the Property View of <i>CAN Signal Transmission</i> instead of the <i>Signal Transmission</i> .

7.6.10 Hardware architecture

ID	Resolution
8682711687409022081	The icon of the <i>Electric Circuit System Diagram</i> is now used consistently. For indicating <i>Electric Circuit System Diagrams</i> in PREEvision, the icon of the <i>Electric Circuit System Diagram</i> meta class as displayed in the Model View is used.
9082947085014631878	When canceling the progress dialog while executing a synchronicity check for an auto-layout diagram or an origin diagram, no message is displayed at all, anymore. A message is only displayed in case of errors or after the synchronicity check has been executed displaying the result of the check.
8682711687689972050	In the Model View , a <i>Schematic Pin</i> can be moved from one connector to another connector if the target connector is of the same type as the original connector. Logical power out and logical power in connectors are considered as equal.
8682711687664123090	The error which occurred during the calculation of highlighting in the context of tables displayed in a <i>Wiring Diagram</i> has been resolved.

ID	Resolution
9082947085580222083	The online check "C8023_AbstractWire_withoutWiringModule" has been adjusted and is triggered if a wire is not assigned to a <i>Wiring Module</i> .
9082947085574592083	The online check "C8115_WiringConnector_withoutHeaderConnector" has been adjusted and only considers <i>Wiring Connectors</i> which are not part of a <i>Wiring Harness Inline Connector</i> or <i>Wiring Harness Multi Inline Connector</i> .
9082947085580522083	The online check "C8111_Wirepin_withoutWiringConnector_onlineConnector" has been adjusted and is triggered if a <i>Wire Pin</i> is not assigned to a <i>Contacting</i> .
9082947085481212083	The online check "C8755_Artifact_withLength_HasNoDataTypeUnit" has been adjusted and is only triggered for wiring harness relevant artifacts which have no assigned <i>Data Type Unit</i> as length unit.
9082947085137532083	KBL export: The export of a Cross Section Area set for a <i>Cable Type</i> is properly executed. As decimal separator for the defined numerical value a "." must be used. Invalid entries are exported as "0.0" to KBL.

7.6.11 Product line engineering

ID	Resolution
8682711687570561995	The automatic integration of an <i>Asset</i> is properly executed during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are invisible or out-of-scope. Such specific relations are now ignored for the integration.
9082947084982491029	During <i>Asset</i> update, a missing match of core artifacts has been resolved.

7.6.12 Change and release management

ID	Resolution
8682711687667032024	The "createAgreementTaskItemIfAbsent" metric of the Review Table now checks whether the core artifact is <code>null</code> prior to further processing.

7.6.13 Test engineering and test management

ID	Resolution
9082947085049262008	In the Test Specification Editor , the column Req/CF-Links has been renamed to Subjects to Verify .

7.6.14 Rules

ID	Resolution
9082947085055051837	During rule generation, uniqueness of rule names is now checked case insensitive. For example, the rule names "BusTypes" and "busTypes" are identified as identical and are reported as error during rule generation.

7.6.15 Metrics

ID	Resolution
8682711687055213090	Using <code>ICloneEnvironment</code> in a metric for creating artifacts no longer leads to a different check-out behavior.

7.6.16 Reports

ID	Resolution
8682711687182481783	Existing and newly created conditional placeholders as well as additional text contained in the placeholder are correctly formatted with a character style.

7.6.17 Collaboration

ID	Resolution
9082947085793571918	Checked-out artifacts like <i>ECUs</i> can be reused without external relations. However, <i>Product Lines</i> must be checked-in so that they can be reused.
8682711687669772106	An issue has been fixed that lead to an error during the undo operation. An automatic model update is no longer triggered during an undo operation.
9082947084769602106, 9082947085110471024	An error has been fixed which occurred during loading the model from the local model cache file.
8682711687502592101	An issue has been fixed, which caused an error when the user cancelled the locking of artifacts.
8682711687618912081	In the Property View , the highlighting for out-of-scope contents is only displayed if a formatted text field contains a placeholder that references an artifact that is

ID	Resolution
	out-of-scope. If the referenced artifact itself is in the scope and contains another placeholder to an artifact out-of-scope, no highlighting is displayed.

7.6.18 Administration

ID	Resolution
9082947085071782054, 8682711686653982050	Administration panel: The maintenance mode can be deactivated by the administrator who activated the maintenance mode even if another administrator tried to deactivate the maintenance mode, which was denied by the administration panel.
8682711687661042011	In the Add-In Installation wizard, the default setting for selecting the <i>Add-ins</i> model to install has been changed from Use Product Add-ins Model to Use customized Add-ins Model .
9082947085011703046	The Installation/Update Of Add-ins page of the Add-In Installation Wizard now updates after changing the selection of the <i>Add-ins</i> model to be installed. The [Install] button is now active only on this page.
9082947085015412012	The Add-in Type column of the selection table on the Installation/Update Of Add-ins page of the Add-in Installation wizard has been renamed to Installation Type .
9082947085490292011	To the Add-ins Overview table, an Installation Type column has been added.
9082947085546783046	The <i>Add-in Delivery</i> block now accepts <i>Add-ins</i> , <i>Add-in Packages</i> , and both local and global <i>Add-ins</i> models as input.
9082947085543300063	Obsolete Rule Groups will not be moved to the "Obsolete" <i>Add-in</i> but deleted directly.
9082947085586041995	<i>Object and Label Configuration Delta Files</i> have been removed from mandatory and recommended <i>Add-ins</i> to allow for customization of these <i>Add-ins</i> .
9082947085819752020	Non-versioned artifacts are now checked out when updating <i>Add-ins</i> . Previously failed commits can now be completed.
9082947085886251868	The toolbar button for checking-in <i>Add-ins</i> in the Add-ins Overview table has been made functional.
8682711687095223115	<i>Life Cycle Triggers</i> with undefined Trigger Type are now treated as <i>Life Cycle Triggers</i> of the "Manual" Trigger Type .
8682711686247122101	The Information View no longer displays unnecessary messages related to transitions between <i>Life Cycle States</i> .

7.6.19 License

ID	Resolution
9082947085490482051	An error in the PREEvision KeyCollector has been fixed. A new version of the PREEvision KeyCollector (<code>keyinfo_collector.bat</code>) is available. The script can either be found in the client installation directory under <code>../res/tools</code> or can be separately downloaded.

7.6.20 Backup, restore, and migration

ID	Resolution
8682711686593812054, 9082947085816431837	An issue has been fixed in the server-to-server backup/restore from PREEvision 10.5 to PREEvision 10.5.

7.7 Known issues

Known issues in PREEvision 10.14

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file.

ID	Known issue
	- Open the location of the file in the Windows Explorer and delete the file. - Update from the server to force a reload of the file.
9082947085201491866	Formatted texts containing formula objects are erroneously treated as changed when opened in the text editor. This may lead to unwanted and unnecessary locks and check-out dialogs. Workaround: Deny lock/check-out in the dialog. A way to repair these formula objects will be implemented in one of the following releases.
8682711687572062012	Using the control-key to navigate in a formatted text which contains a placeholder or using shortcuts to cut or copy and paste a placeholder may lead to editors being opened in the background. Workaround: Close the opened editors and continue.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: - Delete the authority model. - Connect to the authority model. - Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
9082947085110861914, 9082947085889122108	Opening the VM Explorer or the VM Explorer without Customer Feature Model may lead to performance problems. This may be due to filter configurations which are set on specific explorer categories. Workaround: Customize the corresponding "VM Explorer" and "VM Explorer without Customer Feature Model" <i>Add-ins</i>, and remove the <i>Explorer Filter Configurations</i> set on the affected explorer categories.
9082947085911601806	Remote backup or migration may be terminated by a model preparation streaming error. This only affects remote backup or restore in the administration panel when the user enables model preparation. Workaround: The model preparation should be executed as an independent step on the source server. The backup or migration can then be performed.

8 PREEvision 10.13

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8.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.13.0
PREEvision license server	3.0.1
PREEvision database server	10.13.0.02
PREEvision application server	10.13.0

Documentation

Manual	Version number
PREEvision manual	10.13.0
PREEvision configuration manual	10.13.0
PREEvision operating manual	10.13.0
PREEvision system requirements	10.13.0
PREEvision server API	10.13.0

8.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.13 and the migration to PREEvision 10.13, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.13, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > The recommended version of Apache Tomcat has been changed to 9.0.88.
- > Amazon Corretto version 11.0.23.9.1 is provided with the PREEvision client installation. It is recommended to use this version on all server components as well.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14
10.13.0	10.13.0	10.13.0.02	2024-05-06

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.13.



Migrating to PREEvision 10.13 is only possible from PREEvision 10.0 SP17 or later. All remote operations (backup and direct migration) available in the PREEvision 10.13 administration panel can only be performed on PREEvision 10.0 SP17 or later. Remote model preparation must be performed on PREEvision 10.0 SP18 or later. If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.13, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.13 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.13, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

8.3 New features in PREEvision 10.13

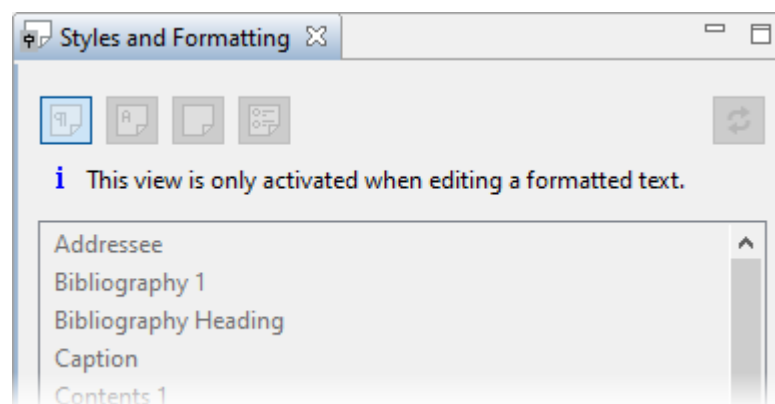
Usability improvements for working with file attachment placeholders

Preview images of *File Attachment* placeholders can now be changed without navigating to preview images via a file chooser dialog. With the new context menu entry **Replace Preview Image from Clipboard** preview images of *File Attachment* placeholders can now be changed directly from the clipboard. It is also possible to paste the same image formats as before.

Usability improvements for the styles and formatting view

Multiple usability and user guidance improvements for the **Styles and Formatting** view have been implemented:

- > Styles can now be assigned via a single click.
- > The **Styles and Formatting** view now reacts to the selection in formatted texts and shows the applied style. If no active formatted text is edited the **Styles and Formatting** view is disabled.



Support of AUTOSAR 23-11

PREEvision 10.13 supports AUTOSAR 23-11 for AUTOSAR Classic and AUTOSAR Adaptive. ARXML files for AUTOSAR 23-11 can be imported and exported.

Diagnostic port interfaces for Adaptive

All diagnostic port interfaces for the Adaptive platform including the new interfaces from AUTOSAR Release R23-11 are supported in PREEvision. The **AUTOSAR Adaptive Explorer** provides dedicated tables to create and edit the diagnostic port interfaces.

Diagnostic Port Interfaces		Diagnostic Data Identifier Interfaces	Diagnostic Data Element Interfaces	Diagnostic Routine Interfaces
Interface		Diagnostic Operation Argument Data		
☐ Diagnostic Data Element Interface		☐ Operation Argument Data		Data Type
		☐ Diagnostic Operation Argument		uint8_t

Data type strategy of signal router

The signal router offers an initial creation of *System Signals*, *Signals*, *System Signal Groups* and *Signal Groups* that are derived from the software model.

The signal router considers the details of data types used in this software modeling:

- > If **Create System Signals** is activated in the signal router options, the *Unit* and *Computation Method* is set on the *System Signal*.
- > If **Create System Signals** is deactivated in the signal router options, the *Computation Method* is set on the *Signal*.
- > *Base Type* and **Bit Length** are set on the *Signal*.

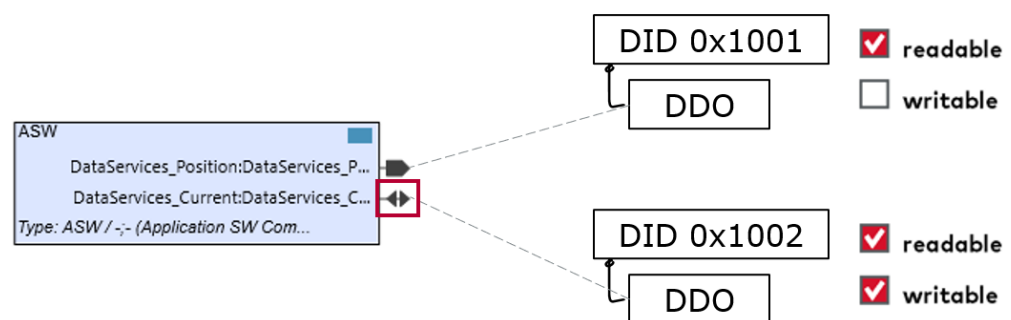
The details are selected based on the following priority:

- > If there is an application data type directly assigned to the *Data Element* of the *Sender Receiver Interface*:

- > Priority 1: The details of the *Implementation Data Type Reference* are considered (*Computation Method*).
- > Priority 2: The details of the mapped implementation data type are considered (*Computation Method, Base Type*).
- > Priority 3: The details of the application data type are considered (*Computation Method, Unit*, as a fallback the *Unit* of the *Computation Method*)
- > Otherwise, the directly assigned implementation data type is considered:
 - > Priority 4: details of directly assigned implementation data type are considered (*Computation Method, Base Type*).

Read-write-services in diagnostics tool chain

For *Diagnostic Data Identifiers*, the AUTOSAR standard requests bi-directional sender-receiver ports that can both read and write. The **Diagnostic Realization Explorer** does now support the creation and usage of these ports.



Target range limitations for sheet connectors

Sheet Connectors can be used to visualize and relate connections across different diagrams of the hardware layer. The *Sheet Connector* target links are displayed in corresponding link boxes.

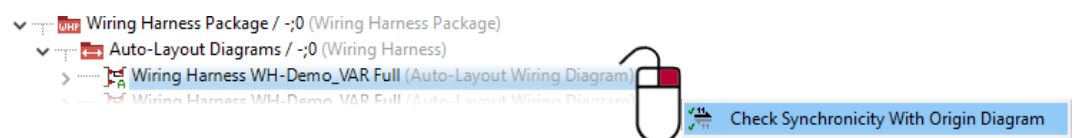
The range for the *Sheet Connector* targets can now be configured via object configuration. Thus, it is possible to limit the range of displayed Sheet Connector targets to package level, for example. Only connections in diagrams which are contained in a certain defined package are then considered and only the *Sheet Connector* targets for these connections are displayed in the link boxes.

Improved change identification of auto-layout diagrams

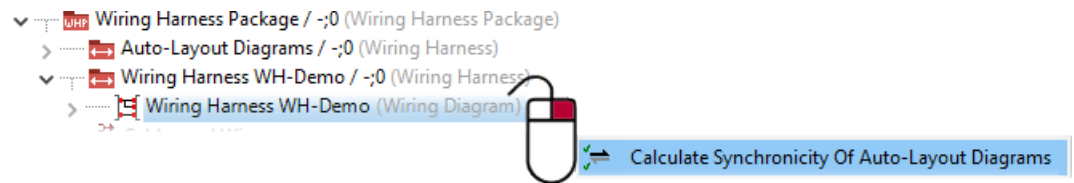
For diagram-based *Auto-Layout Wiring Diagrams*/*Auto-Layout Wiring System Diagrams* and *Wiring Diagrams* for which auto-layout diagrams are available, a synchronicity check can be used to check whether the diagrams are still up to date.

The synchronicity can be checked via context menu on the auto-layout diagram or on the origin diagram.

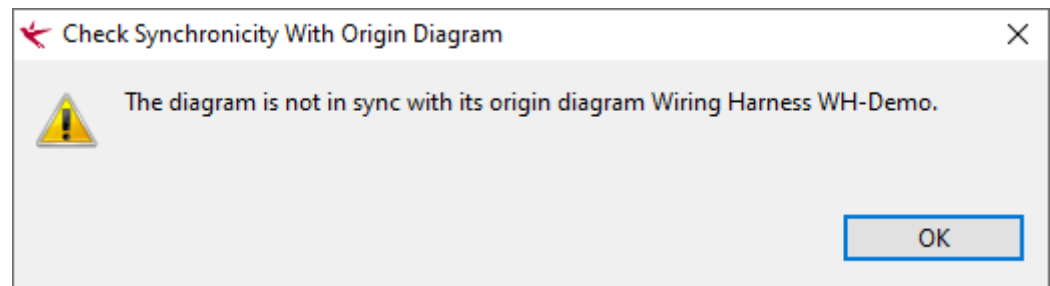
For auto-layout diagrams the synchronicity with the origin diagrams can be checked.



For origin diagrams the synchronicity of the corresponding auto-layout diagrams can be calculated.



The synchronicity check provides direct information on the result of the check.



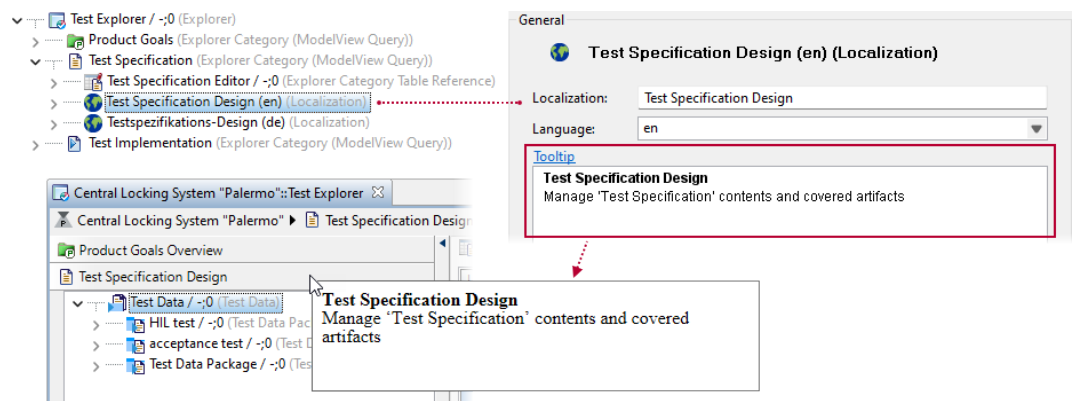
Object configuration error view

The **Object Configuration Error View** can now be opened via the quick access in the main toolbar or select **Window | Show View | Common** in the main menu.

When you publish a diagram, a status is delivered in case that contained object configurations are deactivated.

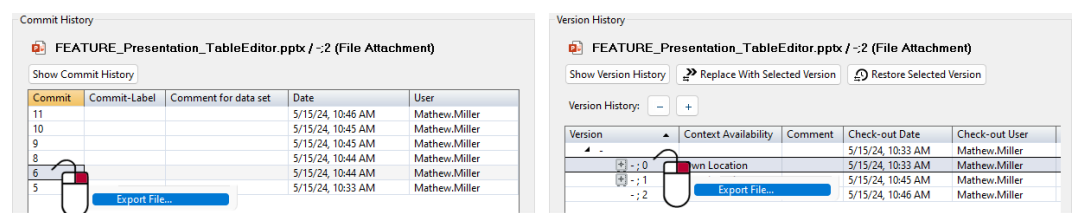
Tooltips for explorer categories

Tooltips can now be defined for an Explorer Category by adding a *Localization* under the *Explorer Category* and defining a **Tooltip** on the *Localization*. You can use formatted text to define the content of the tooltip. The tooltip is displayed when moving the mouse over the category in the explorer.



Exporting files from commit history and version history

Historic versions of file artifacts can be exported from the **Commit History** property page and the **Version History** property page via the **Export File...** context menu.



8.4 Changes

Working copies

PREEvision 10.13 no longer supports external SVN working copies:

- > The **Create Working Copy** context menu entry has been removed from the **Model View**, the **Test Implementation Editor**, and the **Test Execution Editor**.
- > The **Working Copies** view has been removed.
- > The **Create URL** action no longer provides the possibility to create a Subversion URL.

Client-side backup, restore, and model preparation

PREEvision 10.13 no longer supports the client-side backup, restore, and model preparation.

Use the administration panel for server-side backup, restore, and model preparation.

Deprecated online check

The online check "Checksum Diagram Differences" and thus the visual labeling of outdated auto-layout *Wiring Diagrams* and *Wiring System Diagrams* is no longer supported with PREEvision 10.13.

8.5 Configuration information

New metric blocks: Object selection dialog

The new *Object Selection Dialog* metric block opens the **Select Object** dialog to select an artifact or multiple artifacts from a list.

Optional inputs (*Data Target Ports*):

- > "objectList" (data type: `List<MDFObject>`): List of artifacts to be displayed in the dialog.
- > "overwriteSelection" (data type: `List<MDFObject>`): List of artifacts to be used as selected artifacts without displaying the dialog.
If "overwriteSelection" is set and provides a valid list of artifacts, these artifacts are used as selection and the dialog is not displayed.
If "overwriteSelection" is not set, "objectList" must be set and the dialog is displayed.
- > "multiSelectionAllowed" (data type: `Boolean`, default: `true`): If set to `true`, multi-selection is possible. If set to `false`, only one artifact can be selected.

Outputs (*Data Source Ports*):

- > "selectedObjects" (data type: `List<MDFObject>`): Returns a list of the selected artifacts.

Changed metric utilities

The library `com.google.guava` has been updated to version 33.0.0. This could affect metrics that use the import package `com.google.common*`.

Server API: get artifacts

The Server API REST call for fetching multiple artifacts (GET `<baseUrl>/<model>/artifacts/<xmiids>`) has been changed.

Since the URL must not contain comma-characters, the comma can now be encoded with "%2C".

Example request:

```
GET <baseUrl>/EEA_MODEL/artifacts/1%2C2%2C3
```

The request gets the artifacts with XMIID 1,2, and 3.

8.6 Fixed issues

Fixed issues in PREEvision 10.13

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
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- > [Functional safety](#)
- > [Metrics](#)
- > [Collaboration](#)
- > [Administration](#)
- > [License](#)
- > [Server API](#)
- > [Backup, restore, and migration](#)

8.6.1 Diagrams

ID	Resolution
17938291894399295	The default width for displaying labels of ports and pins in diagrams can be configured by means of the <code>-DmaxDefaultLabelWidth</code> parameter in the PREEvision initialization file <code>PREEvision.ini</code> . How to configure the default width is documented in the PREEvision configuration manual.
8682711687109682050	When opening diagrams, the last view and zoom level is now saved.
8682711687100792081	If an artifact in a diagram has a mapping box which displays the current mappings of the artifact, the Select Mappings dialog, opened via Show/Hide Mappings , displays these mappings as preselected. When closing the dialog, no additional mapping box is created but, instead, the current mapping box of the artifact is updated, for example, if further mappings are selected or mappings are removed.
8682711687212292039	When creating mappings via drag and drop from the Model View on a rotated figure in a diagram, the drag and drop menu is displayed at the mouse position on the rotated figure.

ID	Resolution
8682711687210152112	Inner edges of connections in diagrams can only be deleted from a diagram if both ends are connected to <i>Sheet Connectors</i> or to waypoints to which <i>Sheet Connectors</i> are attached.
8682711686802341268, 8682711686780091843	Diagrams and <i>Sections</i> are printed on separate pages.
8682711687654952083	<i>Diagram Configurations</i> have been moved from the <i>Administration Packages</i> to new <i>Diagram Configuration Packages</i> of the corresponding category in the <i>Diagram Configuration Model</i> . Furthermore, all package structures of rules, metrics, reports, and tables in the <i>Administration</i> have been adapted to a new package structure.
9082947084917013042	No error is displayed if the Object Configuration Error View is not available because of insufficient rights.

8.6.2 Tables

ID	Resolution
8682711687010913082	In tables, the Show Column context menu action now also properly works for prototype columns (column categories).
8682711687560011995	The table profiler export has been enhanced by better formatting, for example, it now provides the number of columns.
8682711685414782105	To prevent long processing times, a warning dialog is displayed when you use the Select all cells action or press <Ctrl>+<A> in a table with more than 5.000 lines. In the dialog, you can cancel the action.
8682711686784481877	Table columns that display dates can now be filtered correctly with the User-defined Filter dialog.

8.6.3 Requirements

ID	Resolution
8682711554181022001	The buttons in the toolbar of the Requirement Text Editor which are available for creating a new requirement or <i>Customer Feature</i> are displayed in the same order as the corresponding buttons in the individual table cells.
8682711687494172049, 8682711687580502105	During the ReqIF export the conversion of formatted text containing OLE objects is properly executed.

8.6.4 AUTOSAR

ID	Resolution
8682711687100772052	AUTOSAR software component description: <i>Triggers</i> and <i>Trigger Interfaces</i> are properly exported.
9082947084849252051	AUTOSAR export: For the AUTOSAR ECU extract, AUTOSAR software component description, and the AUTOSAR system description, the propagation of <i>Data Type Unit Groups</i> has changed. Now only directly used <i>Data Type Unit Groups</i> are propagated and thus also exported with all their grouped <i>Data Type Units</i> . <i>Data Type Unit Groups</i> are no longer propagated by used <i>Data Type Units</i> .
8682711687182621998	AUTOSAR export: An erroneous fallback has been removed which determined the parent of an <i>ECU Interface</i> according to the sent / received <i>Frame Transmissions</i> .
8682711687426362069	AUTOSAR import: For an AUTOSAR import from folder containing files with duplicate UUIDs, inconsistency checks are supported.
8682711687690171024	AUTOSAR import: The import of several artifacts belonging to the AUTOSAR Adaptive Platform, and which have a long name in AUTOSAR but have no long name in PREEvision is now possible.
8682711687488452014	AUTOSAR Adaptive export: The AUTOSAR service interface description does not export the attribute Is Service for Adaptive diagnostic interfaces.
8682711687690191024	AUTOSAR Adaptive Explorer: In the Service Interface Editor a new table column Namespace has been added.
8682711687190803013	The AUTOSAR consistency check "AR_010805b_ARC_430_constr1043_ReceiverComSpec_invalid_Interface" no longer incorrectly indicates an error if a <i>Sender-Receiver Delegation Port Type</i> is involved.
8682711687484441045	The AUTOSAR consistency check "c1044_ReceiverComSpec_with_wrong_DataFilterType" has been corrected to precisely check the AUTOSAR constraint constr_1044.
8682711687619082003	AUTOSAR consistency checks which check AUTOSAR compatible naming have been unified and improved.

8.6.5 Diagnostics

ID	Resolution
8682711686352872108	Diagnostic export: If a diagnostic exchange export is started on a <i>Diagnostic Master</i> referencing application data types or base types with a bit length = 0 or <i>-not set-</i> an export warning is reported in the Information View .

ID	Resolution
8682711687400932005	Diagnostic export: The diagnostic export is possible via software realization for a <i>Diagnostic Master</i> , even if the collected diagnostic artifacts are located below another <i>Diagnostic Master</i> .
8682711687639892113	Diagnostic export: <i>Diagnostic Events</i> without correctly modeled <i>Diagnostic Trouble Codes</i> cannot be exported correctly, and therefore the export is canceled with an error.

8.6.6 Communication

ID	Resolution
8682711687123261840	Signal router: The signal router wizard not only displays existing <i>Software Deployment Packages</i> but also <i>Software Deployments</i> of the current <i>Product Line</i> .
8682711687359821029	Signal router: During the initial creation of <i>Signals</i> , the <i>Computation Method</i> of the software modeling is taken over to the created <i>System Signal</i> , if available, or the <i>Signal</i> . If several <i>Computation Methods</i> are modeled, the one with the highest priority according to AUTOSAR is considered.
8682711687359351029	Signal router initial <i>Signal</i> creation: If there is only an implementation data type assigned to the <i>Data Element</i> , the <i>Base Type</i> and <i>Computation Method</i> of this implementation data type are assigned to the created <i>System Signal</i> (only <i>Computation Method</i>) and <i>Signal</i> .
8682711687400901029	Signal router: During the initial creation of <i>Signals</i> and <i>Signal Groups</i> , details like <i>Computation Method</i> and <i>Base Type</i> are taken over from a mapped implementation data type structure even if the application data type structure is considered for the creation of the <i>Signal Group</i> .
8682711687711571030	Frame-PDU synthesis: The frame-PDU synthesis now assigns the <i>Signal Transmission</i> of the multiplexor signal to all <i>PDU Transmissions</i> of the <i>Signal IPDUs</i> belonging to the <i>Dynamic Part Alternatives</i> of a <i>Multiplexed IPDU</i> .
8682711687288031029	DBC export: The <i>Base Type</i> of a <i>Signal</i> is exported even if no implementation data type is assigned. If no <i>Base Type</i> is assigned to a <i>Signal</i> , the <i>Base Type</i> of the assigned implementation data type is used.
8682711687420602004	DBC export: The DBC export exports the <i>Computation Method</i> of the <i>System Signal</i> if no <i>Computation Method</i> is assigned to the <i>ISignal</i> .
8682711686804291909	A DBC-specific translation between send types in DBC and send modes in PREEvision has been documented in the PREEvision user manual.
8682711687359381029	<i>Signal Receiver Attributes</i> can now be correctly created under <i>CAN Signal Transmissions</i> via the context menu.

ID	Resolution
	Additionally, the Property View for <i>Signal Receiver Attribute</i> and <i>Frame Sender Attribute</i> is enhanced to display the referenced <i>CAN ECU Interface</i> . In the Property View of a <i>CAN ECU Interface</i> , the tables on the Received/Sent Communication Attributes property page have been corrected, and the page is now placed below the Signal Receiver Attributes page.

8.6.7 Hardware architecture

ID	Resolution
8682711687500591912	In the Property View of a <i>Pin Type</i> or <i>Pin Type Family</i> , a table is added on the Applicable Types property page. This table displays the <i>Cavity Types</i> to which the <i>Pin Type</i> or <i>Pin Type Family</i> is assigned.
8682711687290002081	The refactoring Swap Wires on a <i>Schematic Pin</i> of an inline connector in a <i>Wiring Diagram</i> locks the <i>Wiring Diagram</i> where the refactoring is executed.
8682711687084141037	The range for the <i>Sheet Connector</i> targets displayed in a diagram can now be configured via metric in the object configuration of the diagram. Thus, it is possible to limit the range of displayed <i>Sheet Connector</i> targets to package level, for example, to <i>Wiring Harness</i> .
8682711687223651029	A new <i>Application Double Type</i> has been added to the global <i>Library</i> to resolve the dependencies between the "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model and the global <i>Administration</i> .

8.6.8 Geometry

ID	Resolution
8682711687061311843	In a <i>Geometry Diagram</i> , the mapping boxes for mapping assignments to <i>Connector Locations</i> can be moved again, especially for rotated figures.

8.6.9 Product line engineering

ID	Resolution
8682711687471372159	The performance for the <i>Asset</i> update (replace with version) has been improved by removing misleading and unnecessary log entries and by improving the calculation of invisible artifacts during the <i>Asset</i> update.
8682711687643853126	The performance for retrieving historical versions of <i>Assets</i> during an <i>Asset</i> update with historical version has been improved.

8.6.10 Change and release management

ID	Resolution
8682711686958612034	When displaying a historic version of a <i>Source Code</i> in the Change history view, the code can be copied from the Value column of the Change history view and pasted correctly into an external editor without changing its content (like removing HTML code).
8682711686361112052	The Merge drag and drop action works for the following configurations: "keep identity of the target and replace all data", "keep identity of the target and data of the source has higher priority", and "keep identity of the source and data of the target has higher priority".

8.6.11 Functional safety

ID	Resolution
8682711687273842079	In the demo model, the instances of the HW Failure Data Editor tables have been replaced with table proxies.

8.6.12 Metrics

ID	Resolution
8682711687273562112	The metric blocks <i>Reset Labels in Diagrams</i> and <i>Update Labels in Diagrams</i> now check all parts of a <i>Schematic Connection</i> .
8682711687329312112	A <code>NullPointerException</code> that occurred when selecting artifacts in <i>Metric Diagrams</i> with internal loop ports without assigned <i>Internal Loop</i> has been fixed.

8.6.13 Collaboration

ID	Resolution
8682711687353742112	The model is completely loaded after a server restart. In PREEvision 10.11 or lower it may happen in rare cases, that the model is loaded incompletely after a server restart.
8682711687363422068	The Check-out view shows the correct cause for the check-out when an artifact has multiple causes for the check-out.
8682711687077021995	A performance problem that occurred during the update of the Model View has been resolved.
8682711555203353013	Executing Undo all own Locks no longer leads to a client freeze.

8.6.14 Administration

ID	Resolution
8682711687004822024	To improve robustness, the evaluation of role constraints has been adjusted in the roles and rights management: > <i>Transition Authorizations</i> on <i>Lifecycle Transitions</i> are ignored if they reference no <i>Role</i>. > <i>Lifecycle State Authorizations</i> on <i>Lifecycle States</i> that restrict the target state visibility based on user roles are ignored if they reference no <i>Role</i>.
8682711687171812203	All snapshots of the monitoring infrastructure services are stored in a single <code>snapshot</code> folder within the installation folder.
8682711687637102068	To avoid errors, <i>Add-ins</i> with the branch suffix of the target model can no longer be installed.
8682711687185073046	When the authority cache is initialized, no <code>RefuseObjectChange</code> listeners are informed.
8682711687257211790	When manually transitioning between <i>Lifecycle States</i> , the Progress Information dialog box opens earlier, preventing PREEvision from freezing.

8.6.15 License

ID	Resolution
8682711687362001994	Creating and deleting license users no longer leads to an issue where user assignments to a named user license could exceed the license's quantity.

8.6.16 Server API

ID	Resolution
8682711687361242076	The Server API REST call for fetching multiple artifacts (GET <baseUrl>/<model>/artifacts/<xmiids>) has been changed. Since the URL must not contain comma-characters, the comma can now be encoded with "%2C". Example request: <pre>GET <baseUrl>/EEA_MODEL/artifacts/1%2C2%2C3</pre> The request gets the artifacts with XMIID 1,2, and 3.

8.6.17 Backup, restore, and migration

ID	Resolution
8682711687278441036	Check-in state errors are detected during the remote model preparation. The remote model preparation must be performed on PREEvision 10.0 SP18 or later.

8.7 Known issues

Known issues in PREEvision 10.13

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file.

ID	Known issue
	- Open the location of the file in the Windows Explorer and delete the file. - Update from the server to force a reload of the file.
8682711687075110069	The state of expanded artifacts in tables is not reliably restored after a refresh (<F5>).
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: - Delete the authority model. - Connect to the authority model. - Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i> , the Calibration Attributes property page is missing in the Property View . It will be restored in a future minor release.
8682711687441283013	The diagnostic export can currently not handle situations, where an interface, that is used for a software realization of a diagnostic object, is additionally assigned to another port in the same <i>ECU</i>. The diagnostic object will nevertheless be exported, but the details might not be available. Workaround: Interfaces should be used exclusively for diagnostic objects and their diagnostic ports. For other ports, please use a duplicate of the original interface, or remove other interface assignments temporarily during the diagnostic export.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.

9 PREEvision 10.12

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9.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.12.0
PREEvision license server	3.0.1
PREEvision database server	10.12.0.02
PREEvision application server	10.12.0

Documentation

Manual	Version number
PREEvision manual	10.12.0
PREEvision configuration manual	10.12.0
PREEvision operating manual	10.12.0
PREEvision system requirements	10.12.0
PREEvision server API	10.12.0

9.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.12 and the migration to PREEvision 10.12, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.12, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > Client requirements: The requirements for the client and for the administration client are documented in a common chapter "Client requirements".

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19
10.12.0	10.12.0	10.12.0.02	2024-03-14

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.12.



Migrating to PREEvision 10.12 is only possible from PREEvision 10.0 SP17 or later. Also, all remote operations (model preparation, backup, direct migration) available in the PREEvision 10.12 administration panel can only be performed on PREEvision 10.0 SP17 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.12, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.12 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.12, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



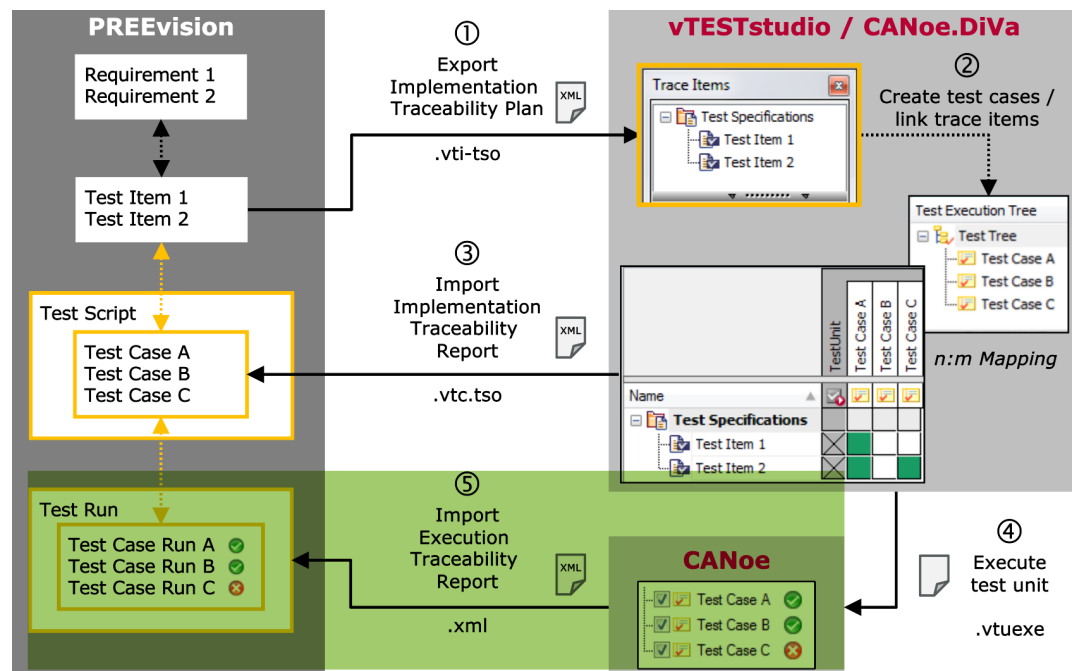
For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

9.3 New features in PREEvision 10.12

Automated import of test execution reports

The test data management toolchain provides test data exchange between PREEvision and test design tools, for example vTESTstudio or CANoe.DiVa, and test execution tools, for example CANoe.

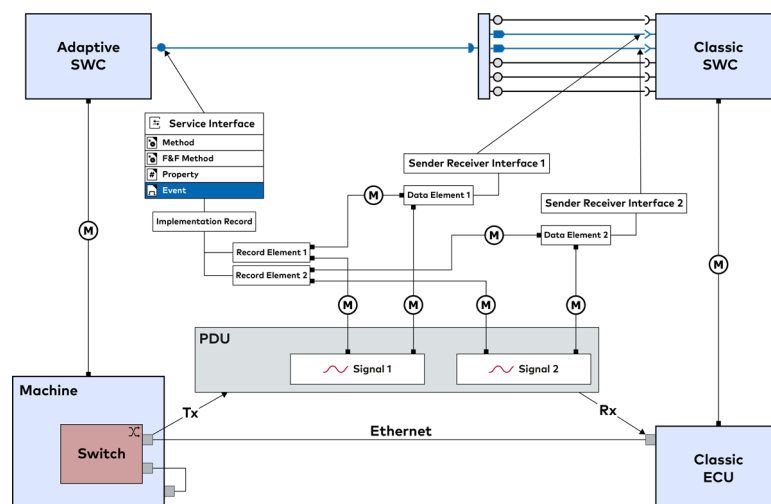
Test runs from test execution tools previously had to be imported manually. With PREEvision 10.12 an automated import of test execution reports is supported by the *Test Execution Importer* metric block. The execution of this metric block can be automated via Apache Ant scripts.



An import from CANoe is supported out of the box. An import from third party tools is possible by customizing.

Extensions for signal-to-service mappings

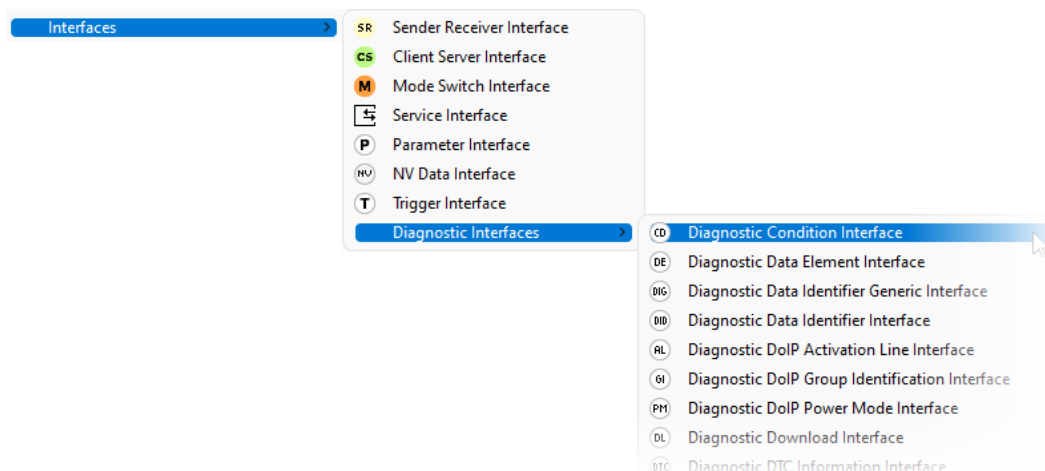
The Platform Interface Mapping Design editor has been enhanced to simplify the mapping signals of signal-based platforms to interface elements like events of service-oriented platforms.



Also, for AUTOSAR 22-11, the handling for *Fire And Forget Methods* has been adapted.

Diagnostic interfaces for AUTOSAR Adaptive

19 different diagnostic port interfaces defined by AUTOSAR Adaptive are introduced. The new artifacts can be created and edited in the **Model View** and **Property View**.

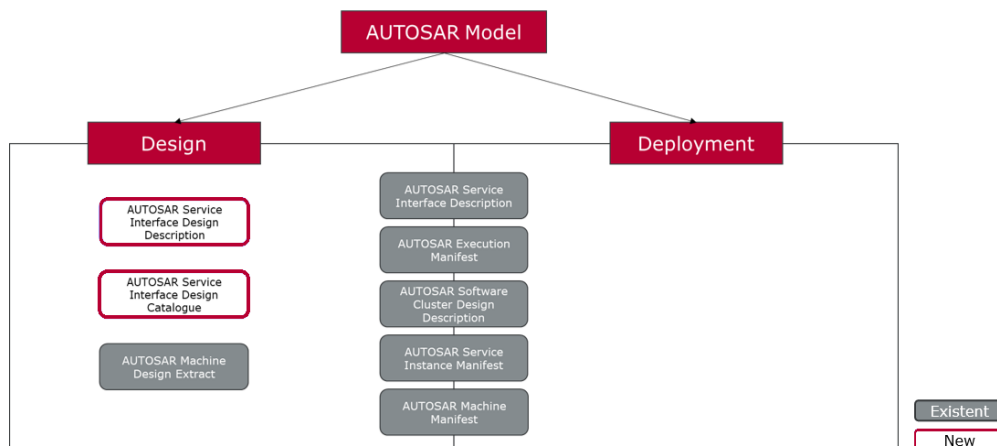


You can import and export the new diagnostic interfaces as **SW Cluster Design Description**. When exporting in AUTOSAR version 20-11, the required service dependency structures are generated.

Export of service interface catalog

New AUTOSAR Adaptive exports allow the exchange of service interfaces:

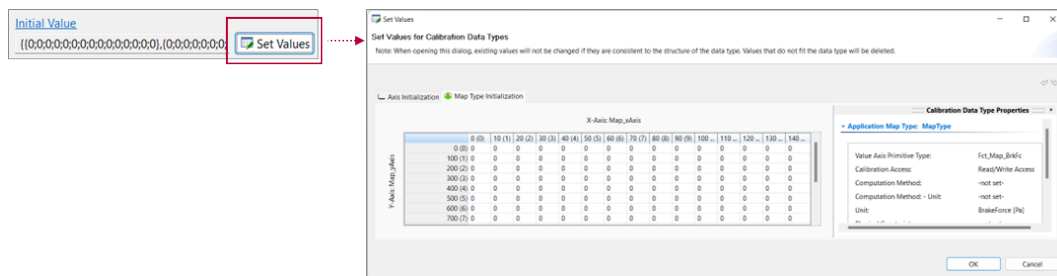
- > The AUTOSAR Service Interface Design Description exports one *Service Interface* without deployment details.
- > The AUTOSAR Service Interface Design Catalog exports a catalog of *Service Interfaces* without deployment details.



Usability improvements for calibration parameters

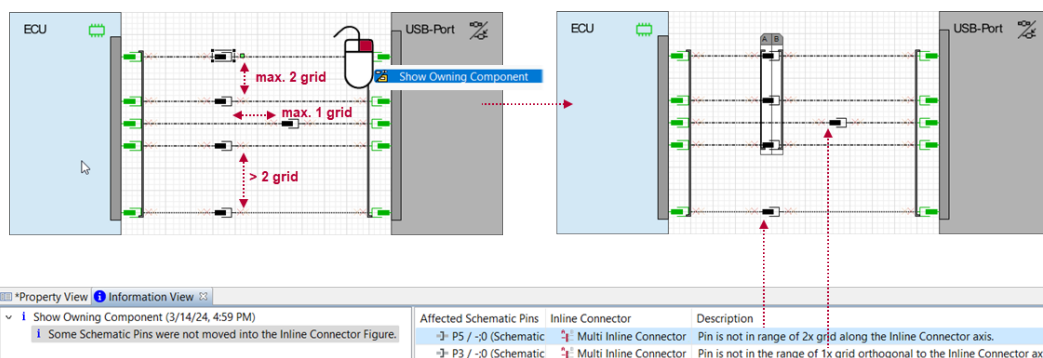
Initial values for the calibration data types *Application Curve Type* and *Application Map Type* can easily be set in a dedicated dialog. Also, their axes can be initialized. When opening the dialog, all required artifacts are created automatically in the background.

Additional properties of the relevant data type are provided in an expandable section. The **Set Values** dialog can be opened in the **Property View** and in tables.



Improvements for the show owning component action

The Show Owing Component action, which can be used on a *Schematic Pin* to display the inline connector of the *Schematic Pin*, has been improved. In case a pin cannot be inserted into the corresponding inline connector, an appropriate information is reported in the **Information View**. Additionally, the location of the inline connector sides A and B is now based on the orientation of the first selected pin. The location is independent of the defined representation of the connector sides in the preferences.



Evaluation of diagram contents and diagram refactorings

Diagram refactorings, for example the conversion of an *Electric Circuit Diagram* into a *Wiring Diagram*, access diagram data. When converting diagrams, diagram repair and update mechanisms are processed prior to the conversion, which ensures that the state of the diagram remains up to date. This applies to manually triggered refactorings as well as to refactorings via metric functions. All diagram refactorings are affected by these new mechanisms:

- > Conversion into and from system diagrams
- > Refactorings across model layers, for example, the conversion of an *Electric Circuit Diagram* into a *Wiring Diagram*
- > Creation of diagram-based auto-layout *Wiring Diagrams* or *Wiring System Diagrams*

The created diagrams are opened by default after creation. For the corresponding metric blocks there is the possibility to close diagrams after the creation. This is useful especially when multiple diagrams are processed.

During a refactoring for multiple diagrams, a **Progress Information** dialog is displayed. The refactoring can be canceled, for example, if diagrams display errors or are out-of-scope.

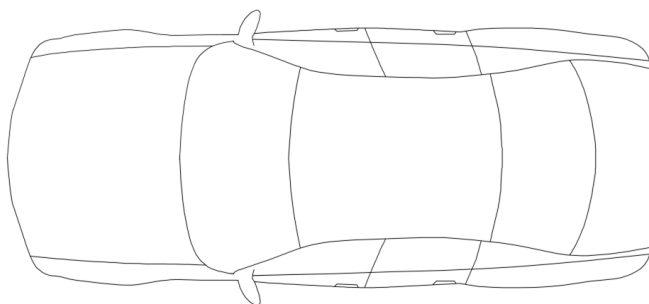
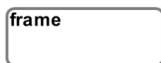
Rotation of figures in diagrams

In addition to text objects which can already be rotated in diagrams, it is now possible to also rotate the following objects:

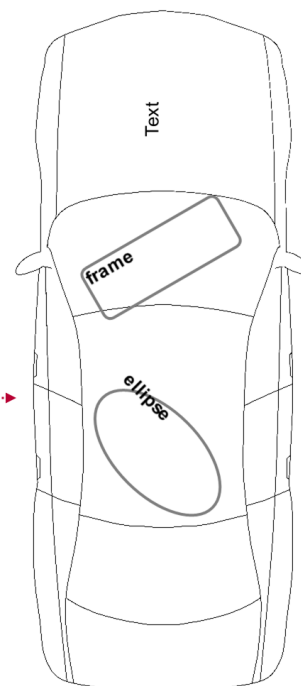
- > frame
- > ellipse

> picture

Text



picture



picture

New object configuration error view

Defective object configurations are hard to find and lead to many disturbing error dialogs when modeling.

Instead of displaying error dialogs, a new **Object Configuration Error View** has been implemented, which displays defective object configurations based on rules or metrics.

For the *Add-in* installation, for example, this ensures a smoother installation process without disturbing error dialogs.

Affected Rule or Metric	Object Configuration Category	Affected Artifact or Meta Class	Error Status	Date
isWakeUpRelevant / -> (Embedded Metric Executor)	Grouping Folder	Component Package	The calculation of Sourcecode isWakeUpRelevant has caused an Exception:	Mar 14, 2024, 6:14:54 PM
isWakeUpRelevant / -> (Embedded Metric Executor)	Background Color	Power Train (Wiring Diagram)	java.lang.NullPointerException	Mar 14, 2024, 6:14:55 PM
isWakeUpRelevant / -> (Embedded Metric Executor)	Background Color	AirFlowControl / -> (ECU)	Skipped Execution	Mar 14, 2024, 6:14:55 PM
isWakeUpRelevant / -> (Embedded Metric Executor)	Background Color	ECU	Skipped Execution	Mar 14, 2024, 6:14:55 PM
isDelayedPowerOff / -> (Label Metric Executor)	Customized Label/Customized Name Label in Diagram	AirFlowControl / -> (ECU)	The calculation of Sourcecode isDelayedPowerOff has caused an Exception:	Mar 14, 2024, 6:14:55 PM
isPowerTrain / -> (Query Rule Group)	Icon	Power Train (Wiring Diagram)	java.lang.NullPointerException False will be returned because Exception occurred in executing MeDeLa for ...	Mar 14, 2024, 6:18:13 PM

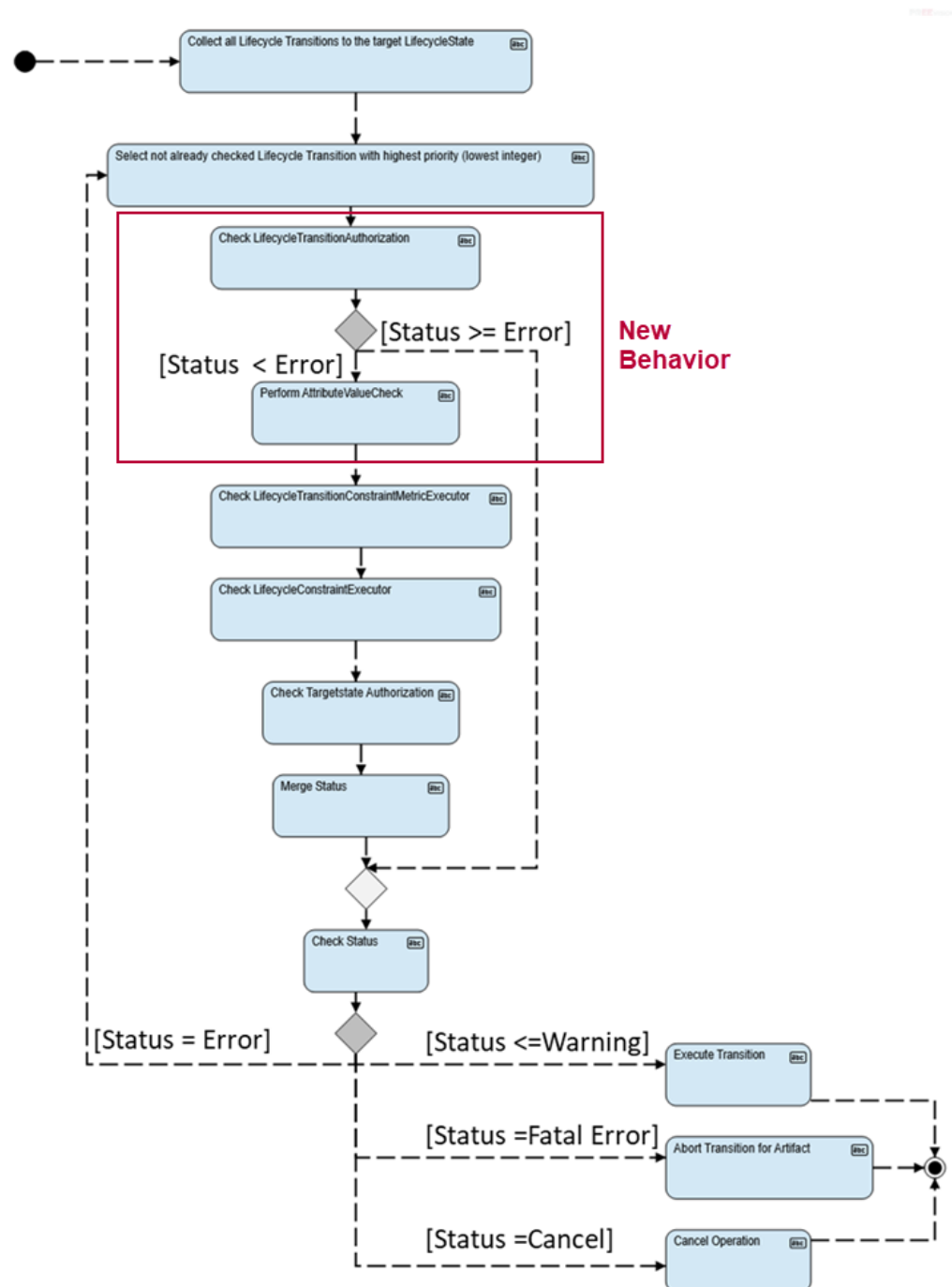
Improvements for lifecycles

The check sequence for *Life Cycle* constraints has been optimized. Also, the performance for complex lifecycle scenarios with *Life Cycle Transition Authorizations* has been increased.

Lifecycle constraints are evaluated in the following order:

- > Evaluate *Life Cycle Transition Authorization* first:
 - > If the *Life Cycle Transition Authorization* status $\geq$ Error, no further constraint types for this *Life Cycle Transition* are evaluated.
 - > If the *Life Cycle Transition Authorization* status $<$ Error, the evaluation of all remaining constraint types continues. The status of all constraints (the highest status/severity level) are merged.

- > The resulting status/severity level of the *Life Cycle Transition* constraints determines if the transition is executed.



9.4 Changes

Deprecated online check

The online check "Checksum Diagram Differences" and thus the visual labeling of outdated auto-layout *Wiring Diagrams* and *Wiring System Diagrams* will no longer be supported with PREEvision 10.13.

9.5 Configuration information

New metric blocks: Test Execution Importer

The *Test Execution Importer* metric block imports one or more *Test Runs* and *Test Case Runs* based on a test protocol from a test execution tool like CANoe. To establish the traceability, the imported *Test Case Runs* are linked with the artifacts from the corresponding test implementation step.

Required inputs (*Data Target Ports*):

- > "testProtocol" (data type: `String`): Path to file on the file system. Test protocol of a test execution tool (for example, CANoe) containing test verdicts.
- > "destinationTestTask" (data type: `MTestTask`): *Test Task* artifact to which the resulting *Test Runs* are imported to.

Optional inputs (*Data Target Ports*):

- > "userDefinedXSLTFile" (data type: `String`): Path to an XSL transformation file on the file system in which the mapping between the test execution tool and the PREEvision model is defined.
Default: `CANoeReport2ExecutionTraceabilityReport.xslt`

Outputs (*Data Source Ports*):

- > "testRuns" (data type: `MTestRun`, `MTestCaseRun`)

Changed metric blocks

The following *Data Target Port* has been added to the *Create Electric Circuit System Diagram* metric block, the *Create Electric Circuit System Diagram* metric block, and the *Create Wiring Diagram* metric block:

- > "closeEditorAfterCalculation" (optional, data type: `Boolean`): Closes the tab of the created diagram. In case of creating multiple diagrams, you do not have to manually close multiple tabs.
Default: `false`

The ports of the *Create Diagram-Based Auto-Layout Wiring (System) Diagram* metric block have been renamed:

- > "Origin Wiring Diagram" renamed to "originWiringDiagram"
- > "Package" renamed to "package"
- > "Diagram Configuration" renamed to "diagramConfiguration"
- > "scaling x-coordinate" renamed to "scalingXCoordinate"
- > "scaling y-coordinate" renamed to "scalingYCoordinate"
- > "Component Height" renamed to "componentHeight"
- > "Minimal Label Distance" renamed to "minimalLabelDistance"
- > "Close editor after calculation" renamed to "closeEditorAfterCalculation"
- > "template Diagrams" renamed to "templateDiagrams"
- > "Close Range Top" renamed to "closeRangeTop"
- > "Close Range Mid" renamed to "closeRangeMid"
- > "Close Range Bottom" renamed to "closeRangeBottom"
- > "Use Calculated Section Height as Fallback" renamed to "useCalculatedSectionHeightAsFallback"
- > "Show Coordinate System" renamed to "showCoordinateSystem"
- > "Result" renamed to "result"
- > "Diagram" renamed to "diagram"

The ports of the *Create Model-Based Auto-Layout Wiring (System) Diagram* metric block have been renamed:

- > "Input Artifact Collection" renamed to "inputArtifactCollection"
- > "Top Components" renamed to "topComponents"
- > "Diagram Class" renamed to "diagramClass"
- > "template Diagrams" renamed to "templateDiagrams"
- > "Package" renamed to "package"
- > "AutoLayout Origin" renamed to "autoLayoutOrigin"
- > "Diagram Configuration" renamed to "diagramConfiguration"
- > "scaling x-coordinate" renamed to "scalingXCoordinate"
- > "scaling y-coordinate" renamed to "scalingYCoordinate"
- > "Component Height" renamed to "componentHeight"
- > "Minimal Label Distance" renamed to "minimalLabelDistance"
- > "Close Range Top" renamed to "closeRangeTop"
- > "Close Range Mid" renamed to "closeRangeMid"
- > "Close Range Bottom" renamed to "closeRangeBottom"
- > "Use Calculated Section Height as Fallback" renamed to "useCalculatedSectionHeightAsFallback"
- > "Show Coordinate System" renamed to "showCoordinateSystem"
- > "closeEditorAfterCalculation" renamed to "closeEditorAfterCalculation"
- > "Result" renamed to "result"
- > "Diagram" renamed to "diagram"

Deleted metric blocks

The following metric block is no longer supported with PREEvision 10.12:

- > *Prepare Transport Product Line*

9.6 Fixed issues

Fixed issues in PREEvision 10.12

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Change and release management](#)
- > [Variant management](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)

9.6.1 Diagrams

ID	Resolution
8682711552015411912	In addition to text objects, the following objects in the Documentation diagram palette can be rotated in diagrams: > frame > ellipse > picture
8682711686736422042	When disabling the Automatic figure completion for the current diagram via the corresponding button in the diagram toolbar, the disabled state is persisted even after a commit.
8682711686971162072	In the Property View of a <i>Diagram Configuration</i> , an information icon is added for the Legend and Master Diagram on the General property page to inform the user that changes may influence existing diagrams.
17938308170242112	Diagram refactorings as well as the <i>Diagram Artifacts Collector</i> block consider the current state of the model instead of using the persisted state of diagrams.

ID	Resolution
8682711686887712081	For a <i>Diagram File</i> created, for example via the Publish function for a diagram, the Diagram Configuration is persisted and cannot be changed. In the Property View of a <i>Diagram Configuration</i> on the property page Diagram File , the Configured Diagram Files table is read-only to prevent unwanted changes.
8682711686852223090	For tables in diagrams, it is not possible to set the scaling factor below 0.1 (10 percent) anymore, which prevented the proper diagram export as PDF. This refers to manually resizing a table as well as setting the scaling factor via the object configuration. If in the object configuration, the Table Scaling Factor for diagram tables is set below 0.1, the value is automatically changed to 1.0.
8682711687223483077	An error while exporting diagrams within a report has been resolved. The content of the diagram is printed correctly.
8682711687267181204	If the graphical representation of an artifact is not copyable, for example of a <i>Concept Space</i> (SpiderWebAxisGraphNode), the Copy context menu entry is not available.
8682711687210142112	If an edge of a connection with a label is deleted in a diagram, the label is moved to another edge of the same connection if possible. Labels are only moved if the same label is not already displayed on the other edge. Labels are not moved to edges that are only connected via <i>Sheet Connectors</i> to the deleted edge.
8682711686960432041	Trying to refresh a table during printing of a diagram will not result in the table missing in the printed file anymore.

9.6.2 Tables

ID	Resolution
8682711686866022102	Configured display names are properly displayed in tables.
8682711687198632107	Faulty <i>Table Proxys</i> no longer prevent that the <i>Explorer Proxy</i> in which they are referenced cannot be opened. Faulty <i>Table Proxys</i> that are not locked or checked-out are automatically deleted when an <i>Explorer Proxy</i> is opened. The Lock dialog is suppressed when faulty <i>Table Proxys</i> are automatically deleted. The Information View lists the deleted <i>Table Proxys</i> .
8682711687199292107	Tables of <i>Combined Table Based Editor Proxys</i> are displayed in the same order as defined in the table template.
8682711687003202112	In <i>Combined Table Based Editors</i> , the selection-sensitive table is now always visible, even if the selection-sensitive table is without content, or if a filter results in an empty table.

ID	Resolution
8682711687212392112	An issue has been fixed that caused a deadlock when selecting newly created artifacts and closing the table in which they were created.
8682711687210792106	After refreshing the opened formatted text editor of a table cell, the selection propagation works properly.
8682711687178783082	Deactivating the Show empty values option of a predefined column filter properly filters empty values.
8682711687067713104	If a <i>Query Rule Group</i> is used to obtain the root artifacts of an <i>Explorer</i> category, sort and filter settings of the <i>Query Rule Group</i> , such as filtering duplicates, are correctly applied.

9.6.3 Requirements

ID	Resolution
8682711687041922105	Unnecessary messages of report generation in the Information View during the review and vote ReqIF export have been suppressed.
8682711684910072105	After executing the Check Images/OLEs for Default Settings in Formatted Texts check, formatted text can be opened from within the Information View and edited without any problems.
17938308052811030	Updating ReqIF imports can now change the subclass of a requirement.
8682711687107801839	LibreOffice has been updated to ensure that LibreOffice is working properly when the Windows Temp folder is cleaned while PREEvision is running.
8682711686866012105	During ReqIF export of a test specification no ReqIF schema validation errors occur anymore.
8682711554028422106	Requirement specifications with a large number of artifacts (over 20k) can be opened in the Requirement Text Editor within less than one minute.

9.6.4 Logical function architecture

ID	Resolution
8682711686736582042	When using the expand function, fan waypoints in a <i>Logical Architecture Diagram</i> are moved correctly, if the reference line intersects the port orthogonally (is not aligned with the port orientation).
8682711686736412042	<i>Activity Chains</i> can be resized in each direction, when using reference lines to create additional space.

9.6.5 AUTOSAR

ID	Resolution
8682711686580002052	AUTOSAR export: The export works for <i>Operation Arguments</i> with assigned <i>Implementation Union Types</i> .
8682711687210271804	AUTOSAR export: A new consistency check has been added that checks if an <i>Operation Argument</i> has an initial value set. If an <i>Operation Argument</i> is linked to an initial value, the AUTOSAR export aborts with a fatal error.
8682711687277161998	AUTOSAR ECU extract: New consistency checks verify <i>Bus Systems</i> of communication channels for CAN, FlexRay, and LIN.
8682711687024541917	AUTOSAR import: An error message and an entry in the Information View indicate if the AUTOSAR file contains artifacts with duplicated UUIDs or duplicated short names.
8682711686925361807	AUTOSAR ECU extract: For pure gateways, <i>SecOcCryptoServiceMappings</i> are only exported, if an <i>EcuInterface</i> or <i>PduPort</i> regarding the extracting ECU sends or receives the payload PDU.
8682711687160602052	Fixed a problem where the AUTOSAR import created two <i>Root Ports</i> for a port type due to a wrongly calculated transformation ID within the transformation.
8682711684984602052	AUTOSAR software component update: If the <i>DataConstrs</i> in an AUTOSAR file have no ID, a deterministic ID will be generated based on the name of the <i>DataConstr</i> and the UUID or path of the parent. This generated ID will be used to merge the artifacts.
8682711686550401914	The consistency check "p1169_VirtualPackagePart_without_VirtualPackage" no longer hits for diagrams, <i>Conventional Connectors</i> , <i>Conventional Connections</i> , and artifacts belonging to the <i>Logical Function Architecture</i> . The consistency check now also hits for artifacts included in <i>Product Lines</i> that do not define a <i>Virtual Package Root</i> . The severity of the consistency check was changed from "Error" to "Warning" and the description was updated to reflect this change.
8682711686846442108	When setting an initial value for an enumeration using the value handling configuration the symbol attribute is set as well.
8682711687074972108	When using the value handling mechanism, existing value specifications referenced by multiple objects are now cloned properly according to the defined Value Handling Mode in the <i>Value Handling Configuration</i> .
8682711687187162108	AUTOSAR consistency check: It is not allowed that a <i>TransformationComSpecProps</i> is added under a <i>SenderCommunicationSpecification</i> . If this pattern is modeled, a consistency check indicates this invalid configuration.

9.6.6 Diagnostics

ID	Resolution
8682711687278572113	Diagnostic export: When modeling diagnostics together with its realization in software, only diagnostic artifacts that are directly assigned to a software port are considered during export.
8682711687287322113	Diagnostic export: A clear error message informs, if initial values cannot be exported because they are used in the context of different data types.

9.6.7 Communication

ID	Resolution
8682711553300091029	For length calculation of communication artifacts, the length of a transformer is added to the signal length instead of the PDU length.
8682711686527141998	The data type of the attribute Data ID of <i>End To End Transformation Properties</i> has been changed from integer to long to support full range of possible values.
8682711686976312050	The communication path router aborts and provides helpful hints in the Information View if communication artifacts, like <i>Coupling Ports</i> , are missing.
8682711687049672004	The signal router creates <i>Network Endpoints</i> for all Ethernet use cases.
8682711686994871915	The consistency rule "ARC422_MultiCastMACNotValid" accepts MAC addresses using lower-case hex digits.
8682711686925932052	The refactoring to automatically connect ports uses existing <i>Assembly</i> connections only when all containing ports match the requirements for a valid connection.
8682711554636272051	The attribute Bit Length of <i>Signal Groups</i> is removed from the Property View . The attribute is not necessary for modeling.

9.6.8 Hardware architecture

ID	Resolution
8682711686746941037	Artifacts, for example a <i>Schematic Pin</i> at an <i>ECU</i> in an <i>Electric Circuit Diagram</i> , located inside a <i>Section</i> of a diagram can be moved at the containing component.
8682711686697532196	If a diagram is opened (not locked), model operations, which were caused, for example, by the wiring harness router or modeling in a different diagram, may change artifacts in the opened diagram. Carrying out an undo operation does not close the PREEvision client anymore.

ID	Resolution
8682711686802102101	KBL export: Special characters defined for artifact attributes, for example, Name , Alias Name , or ID are properly exported to KBL. Only characters required by the XML specification (&, <, >, ", ') are now escaped.
17938307945862046	The refactoring of a <i>Wiring System Diagram</i> on an <i>Electric Circuit Diagram</i> via the <i>Create WH System Diagram</i> metric block displays the correct <i>Headers</i> and <i>Pins</i> in the <i>Wiring System Diagram</i> after a prior substitution of <i>Headers</i> in the <i>Electric Circuit Diagram</i> .
8682711686960452081	<i>Hardware Devices</i> in <i>Wiring Diagrams</i> , <i>Electric Circuit Diagrams</i> , and their corresponding system diagrams, are now correctly displayed according to their <i>Hardware Device Template Diagram</i> even if they are rotated.
8682711687210251843	In a <i>Component System Diagram</i> mapping box entries for mappings to a <i>Basic Software</i> are properly displayed.

9.6.9 Product line engineering

ID	Resolution
8682711687091221995	The automatic integration of an <i>Asset</i> is properly executed during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are invisible or out-of-scope. Such specific relations are ignored for the integration by means of a configurable filter. You may contact the customer service for further support.
8682711687210641995	After an integration merge of an <i>Asset</i> with multi type-of types but without the merge of the corresponding instances (still unintegrated or integrated via move,) a commit is properly executed.
8682711687211022082	After revoking an <i>Asset</i> with multi type-of types, no out-of-sync problems occur for the corresponding instances.
8682711687191081995	An <i>Asset</i> is properly updated in case the artifacts to be updated have invisible or out-of-scope relations.
8682711687194422082	An <i>Asset</i> is properly updated in case the artifacts to be updated are reused in a <i>Product Line</i> which is invisible due to missing rights.
8682711687207971868	An <i>Asset</i> with structural type-of (STO) artifacts is properly updated in case the STO artifacts to be updated are reused in a <i>Product Line</i> which is invisible due to missing rights.

9.6.10 Change and release management

ID	Resolution
8682711684953342106, 8682711686453692023	When comparing formatted texts in the Property View of the Compare perspective, it is now possible to click into the read-only formatted text field.
8682711687036562101	When <i>Custom Attributes</i> are defined as a trigger for a <i>Change Profile</i> , the meta class of the owner artifact is now considered.
8682711554021822106	Review and vote: Copy and paste of comments in review and vote tables can be carried out properly.
8682711554180702001	Review and vote: In review and vote tables and the Requirement Text Editor , comments can be created via double click in the corresponding table cell.

9.6.11 Variant management

ID	Resolution
8682711686868632002	Sets, documentation artifacts and conditions can be copied from one and pasted into another <i>Variant Diagram</i> .

9.6.12 Test engineering and test management

ID	Resolution
8682711554818603108	An import from vTESTstudio or CANoe is properly executed even if the web application name of a PREEvision project contains a "/" character.

9.6.13 Rules

ID	Resolution
8682711686939142181	<i>Multi Classifier Objects</i> in <i>Consistency Rules</i> and <i>Query Rules</i> now support <i>Framework Links</i> .
8682711554430282023	The Query Rule Group property page of a <i>Query Rule</i> shows the immediate parent of a <i>Query Rule Group</i> which provides a convenient way to analyze the contents of an obsolete <i>Add-in</i> .
8682711687100033042	The performance of executing consistency checks via metric has been improved.
8682711686901672101	An Excel export of the Consistency Check Results view is now possible even if the number of findings exceeds the limit defined in the Preferences .

9.6.14 Metrics

ID	Resolution
8682711687195292102	If metrics are automatically executed via Ant-scripts, undo all locks is executed on disconnect. This prevents locks by technical users which can only be reset by an administrator.
8682711687067261027	When using the <code>ReuseUnitDeleteHelper.deleteObjectsWithSTOSyncIfNeeded()</code> method in a metric, the subsequent commit properly works.

9.6.15 Reports

ID	Resolution
8682711686425902046	Many consecutively inserted diagrams with a specific page layout are now properly inserted in reports.
8682711686737142105	Multiple <i>Query Contexts</i> can be inserted in a report directly next to each other without spaces or other characters in between them.
8682711687036721992	Sections can be included as diagram placeholders in reports again.

9.6.16 Collaboration

ID	Resolution
8682711687176861856	Sending an e-mail during a life cycle transition properly works if the <code>SendMail</code> action is triggered in a <i>Delegate Calculation</i> metric block.
8682711686976392024	An issue has been fixed where branch names were missing after an update of the model in the client. If the branch name of an artifact is changed and then checked-in and checked-out, other users may observe that the new branch name is missing after an update of the model in PREEvision 10.11 or lower. An update to 10.12 is therefore recommended.
8682711687298082068	To improve performance, the Checkout dialog shows a maximum of 1.000 artifacts.
8682711687024181995, 8682711687272223013, 8682711687195423013, 8682711687407143013, 8682711687074822051, 8682711687044981995	Model View updates caused by model updates with a large number of artifacts no longer block the user interface.
8682711687076982203	If the certificate validation in the connection between client and server is activated, no unnecessary additional connections are now established between client and server.

ID	Resolution
8682711686983681993, 8682711687003681806, 8682711687160502099	The server model cache remains valid even if the application server system is rebooted.
8682711687040322076	The startup of the application server has been improved, loading the model has been optimized.
8682711686587422054	An issue has been fixed that caused expensive and unnecessary update cache calculations on the application server.
8682711687353742112	A problem when loading the model after a server restart has been solved. In PREEvision 10.11 or lower it may happen in rare cases, that the model is loaded incompletely after a server restart. This then leads to several problems for users. An update to 10.12 is therefore recommended.

9.6.17 Administration

ID	Resolution
8682711687065662203	Optional Tomcat JDBC Connection Pool parameters have been removed from the vCollab default configuration, since these parameters could lead to malfunctioning database connectivity.
8682711686548902054	The "Long-running test" of the function and performance test now uses larger datasets of 15.000 artifacts to improve the comparability of the measured values.
8682711687006061808	Server-side logging of database errors is now provided when deleting models via the administration panel.
8682711554206562068	Errors caused by calculating a metric or rule which is part of an object configuration do not cause the continuous occurrence of error message dialogs anymore. Instead, such kind of errors are reported in the Object Configuration Error View . Only the first invocation of an affected object configuration is displayed in the view. For the <i>Add-in</i> installation, for example, this ensures a smoother installation process without disturbing error dialogs.
8682711686232042039	Custom metric hooks are disabled during <i>Add-in</i> installation.
8682711686983371806	The Compile metrics when creating an add-in delivery file option, which should not be used in production use cases, has been removed from the Add-ins preferences.
8682711687210541914	<i>Add-in</i> installation is rolled back if installed/updated rules or utilities that are executable in the source model are not executable in the target model at the end of the installation process.

ID	Resolution
8682711687277382050	The Add-in Artifacts without Branch Suffix table now produces the same results as the existing check performed during <i>Add-in</i> delivery.
8682711686537692102	When a table with an <i>Outline Table</i> is assigned as a core artifact to an <i>Add-in</i> , all components of the <i>Outline Table</i> are now propagated in addition to the <i>Outline Table</i> itself.

9.6.18 Installation

ID	Resolution
8682711687085682017	In the preconfigured Tomcats, the <code>setenv.bat</code> and <code>setenv.sh</code> files have been restructured to match the technical areas. The following options are moved from the environment variable <code>CATALINA_OPTS</code> to <code>JAVA_OPTS</code> to be available during the Tomcat shutdown process: <pre>set JAVA_OPTS=%JAVA_OPTS% -Dhttp.shutdown.port=[[VCOLLAB.HTTP.SHUTDOWN.PORT]] set JAVA_OPTS=%JAVA_OPTS% -Xverify:none set JAVA_OPTS=%JAVA_OPTS% -Djdk.util.zip.disableZip64ExtraFieldValidation=true set JAVA_OPTS=%JAVA_OPTS% -XX:ErrorFile=%CATALINA_BASE%\logs\hs_err_pid%p.log</pre>
8682711687203802017, 8682711687190811993	In the <code>setenv.bat</code> and <code>setenv.sh</code> files of the preconfigured Tomcats, only one parameter is set per line.
8682711687160731893	During the build of the vCollabAPI application, the deploy property <code>vCollabAPI.vCollabMessaging.poolsize</code> is properly integrated in the context XML file.
8682711687048581895	A security vulnerability within OpenSearch (CVE-2023-23612) has been resolved. OpenSearch, which is used in the PREEvision monitoring infrastructure services, has been updated to version 2.11.

9.7 Known issues

Known issues in PREEvision 10.12

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file.

ID	Known issue
	2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711687075110069	The state of expanded artifacts in tables is not reliably restored after a refresh (<F5>).
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i> , the Calibration Attributes property page is missing in the Property View . It will be restored in a future minor release.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.

10 PREEvision 10.11

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10.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.11.0
PREEvision license server	3.0.1
PREEvision database server	10.11.0.03
PREEvision application server	10.11.0

Documentation

Manual	Version number
PREEvision manual	10.11.0
PREEvision configuration manual	10.11.0
PREEvision operating manual	10.11.0
PREEvision system requirements	10.11.0
PREEvision server API	10.11.0

10.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.11 and the migration to PREEvision 10.11, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.11, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > The recommended version of Apache Tomcat has been changed to 9.0.83.

LibreOffice update

The internal LibreOffice component has been updated for more stable use and editing of formatted texts.

Server configuration

For the startup of all server components, the following additional Java 9 JVM parameters must be set:

```
--add-opens=java.base/java.net=ALL-UNNAMED  
--add-opens=java.base/java.util.concurrent=ALL-UNNAMED
```

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13
10.11.0	10.11.0	10.11.0.03	2024-01-19

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.11.



Migrating to PREEvision 10.11 is only possible from PREEvision 10.0 SP17 or later. Also, all remote operations (model preparation, backup, direct migration) available in the PREEvision 10.11 administration panel can only be performed on PREEvision 10.0 SP17 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.11, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.11 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.11, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

10.3 New features in PREEvision 10.11

ReqIF extensions and improvements

Class changes by an updating ReqIF import are now reflected, for example, if a *Definition* (*must*) requirement changes to an *Information* (*can*) requirement.

ReqIF export formulas embedded in the formatted text are now exported as images (PDF with image preview).

During the Excel export, formulas, diagram placeholders, and PREEvision table placeholders embedded in formatted texts are now exported as a PDF with a preview in the Excel sheet.

Conversion of OLEs to file attachments

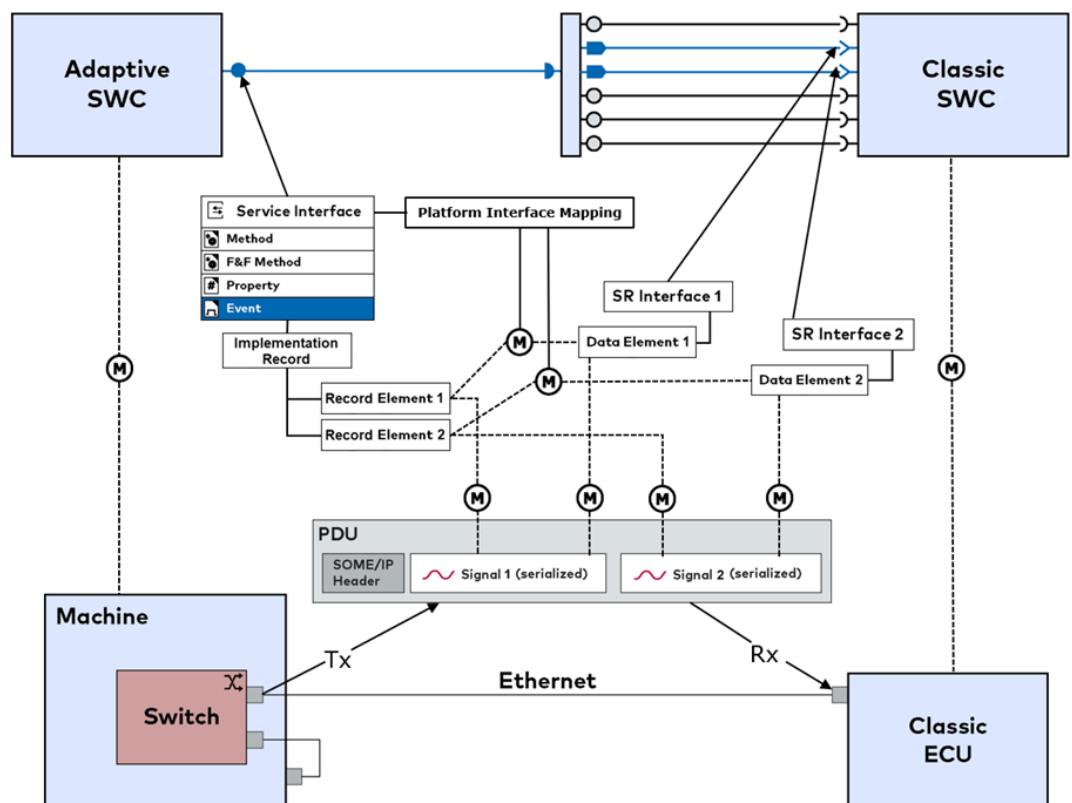
Conversion of OLEs to file attachments can now be used without restrictions. The performance issues in the resulting formatted text have been resolved. An extraction and replacement of OLEs from formatted texts is possible using the OLE Object Extraction and Replacement metric block. The OLEs are handed over as RTF files for further treatment. When an Excel OLE (xlsx) is unpacked, the sheet is now visible by default.

Improvements in calibration parameter handling

A refactoring simplifies the setting of initial values for calibration parameters by creating the artifacts needed for complex data types. The refactoring supports *Application Axis Types*, *Application Curve Types*, *Application Map Types* and *Application Cube Types*. The synthesis can be started from the context menu on artifacts typed by a calibration data type.

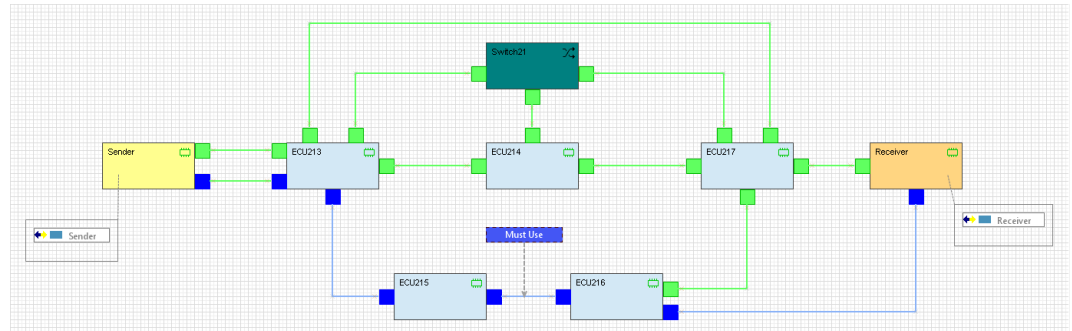
Extension for signal to service mappings

Platform interface mappings allow to map a sub-element of a *Service Interface* to any *Signal* in AUTOSAR Classic. This includes combinations like mapping different elements of Classic interfaces to elements of one Adaptive *Service Interface* or the mapping of nested complex data types. For better usability, the platform interface mapping editors have been improved.



Influencing the communication path router

The behavior of the communication path router can be influenced by conditions. You can set "Must Use" or "Shall Not Use" conditions. The conditions are assigned to a *Communication Path* and a topology artifact, for example, a *Bus System*.



The communication path router can be used for link load estimation and within the Diagnostic Communication Explorer and the Generic Communication Explorer.

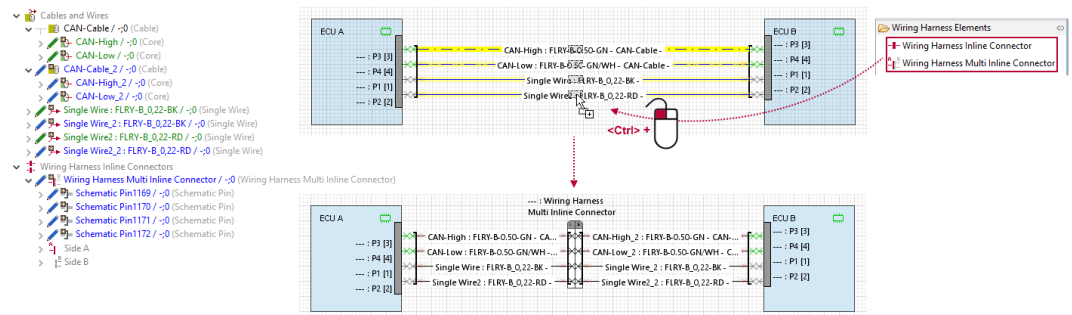
Splitting a cable or set of single wires by an inline connector

A *Cable* or a set of *Single Wires* can be split by an inline connector in one step by directly inserting a complete inline connector into the individual wires (*Cores/Shieldings* of a *Cable* or *Single Wires*).

A *Cable* or a set of *Single Wires* can be split by the following kinds of inline connectors:

- > Wiring Harness Inline Connector
- > Wiring Harness Multi Inline Connector

Splitting the wires is done by inserting the inline connector into the wires via a multi-select operation. Depending on the first selected wire, a vertical or horizontal inline connector is inserted. The representation of the connector sides (side A and side B) is supported by a side selection dialog.



Cable constraint online checks

Several online checks have been implemented for *Cable Constraints*.

- > C7020:
Checks, if the same *Schematic Connection* is assigned multiple times to a *Cable Constraint* via a *Schematic Connection Assignment*.
- > C7021:
Checks, whether a *Cable Constraint* contains multiple assignments with **Cable Content Kind** "Shielding".
- > C7022:
Checks, whether a *Cable Constraint* contains no *Schematic Connection Assignments* at all.
If so, such empty *Cable Constraints* can be deleted via a corresponding *Quick Fix*.
- > C7023:
Checks, whether there is a *Schematic Connection Assignment* with **Cable Content Kind** "-not set-".

- > Several checks for correct meta classes for derived abstract wires. It is checked whether the derived abstract wire has a different meta class than required by the *Schematic Connection Assignment*.
 - > C7024: Checks whether a *Single Wire* has set the **Cable Content Kind** "Core".
 - > C7025: Checks whether a *Single Wire* has set the **Cable Content Kind** "Shielding".
 - > C7026: Checks whether a *Shielding* has set the **Cable Content Kind** "Core".
 - > C7027: Checks whether a *Core* has set the **Cable Content Kind** "Shielding".

Wiring harness explorer enhancements and improvements

The **Wiring Harness Explorer** has been enhanced and improved to support the network layer with respect to components and logical connectivity.

Overview tables have been enhanced or newly implemented to display logical connectors and logical connections.

The **Component Overview** category has been enhanced with the following new tables:

- > **Component Attribute Overview**
- > **Power Provider Overview**
- > **Ground Connector Overview**
- > **Bus Connector Overview**
- > **Conventional Connector Overview**

A new category **Logical Connection Overview** has been implemented which contains the following tables:

- > **Power Connection Overview**
- > **Ground Connection Overview**
- > **Bus System Overview**
- > **Conventional Connection Overview**

Improvements for replace with version

Context attributes, including AUTOSAR export ImEx IDs, can now be restored from the history for a selected context. This allows, for example, AUTOSAR exports of previously archived artifacts.

Version History

ClientMic (Microprocessor)

Show Version History Replace With Selected Version Restore Selected Version

Version History: - +

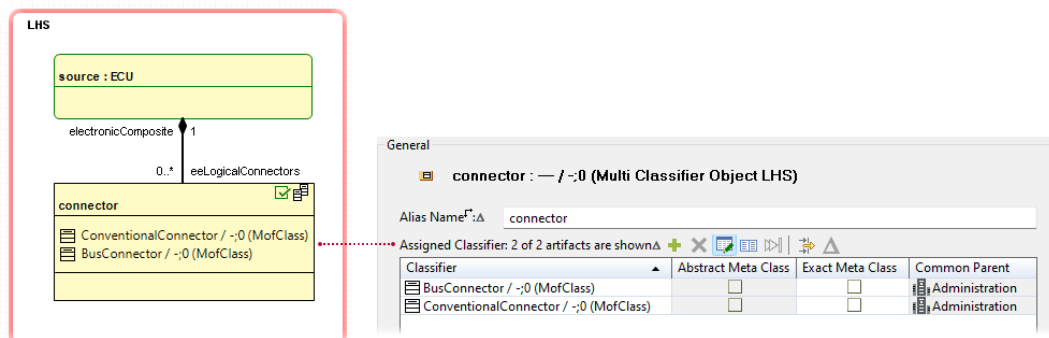
Version	Context Availability	Comment	Check-out Date	Check-out User	Check-in Date	Check-in User
Revision A						
Revision A ; 0	Another Location		2/8/24, 10:07 AM	Mathew.Miller	2/8/24, 10:07 AM	Mathew.Miller
Revision B						
Revision B ; 0	Own Location		2/8/24, 10:08 AM	Mathew.Miller	2/8/24, 10:08 AM	Mathew.Miller

Multi-classifier object in query rules and consistency rules

In *Query Rule Diagrams* and in *Consistency Rule Diagrams*, it is now possible to create Multi Classifier Objects that match artifacts of multiple assigned meta classes.

When creating *Link Pairs* from or to *Multi Classifier Objects*, only those roles that are available for all assigned meta classes of the *Multi Classifier Object* are displayed in the role drop-down list.

For *Multi Classifier Objects*, only static attribute value specifications ("=" and "!=") are supported, Java expressions are not supported.



10.4 Configuration information

Custom toolbar in diagrams and tables	It is now possible to integrate <i>Collaboration Metric Executors</i> for actions like commit and check-in in the custom toolbar of diagrams.
Changed metric blocks: Revoke Asset	The following Data Targets Ports have been removed from the <i>Revoke Asset</i> metric block: > "ignoreImpactOfAssetPredecessor" > "inhibitMoveOperations"
Deprecated metric blocks	The following metric blocks will no longer be supported in PREEvision 10.12: > <i>Prepare Transport Product Line</i>
Deleted metric blocks	The following metric blocks are no longer supported with PREEvision 10.11: > <i>Asset Integration Model Calculator</i> > <i>Asset Integration Model Integrator</i> > <i>Asset Reverse Integration</i>
Removed metrics	The "Analysis Based Integration" metrics have been removed.

10.5 Fixed issues

Fixed issues in PREEvision 10.11

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [Backup, restore, and migration](#)

10.5.1 Common

ID	Resolution
8682711686324792106	A performance issue has been resolved where multiple views, for example, the Model View and the Favorites view, performed unnecessary updates after model changes, such as adding new artifacts, in subtrees which were not expanded in the view.

10.5.2 Diagrams

ID	Resolution
8682711686081732041	<i>Comments</i> are preloaded and checked before exporting a diagram.
8682711686682811027	Exporting a diagram as PDF or generating a PDF <i>Report</i> that contains a diagram no longer leads to a <code>NullPointerException</code> .
8682711686247162099, 8682711686248101027, 17938305050522012	Additional diagram contents like <i>Title Blocks</i> , <i>Legends</i> , tables in diagrams, mapping boxes, query label boxes, <i>Sheet Connectors</i> , or cable symbols, which are functionally not relevant, are not part of a <i>System</i> content

ID	Resolution
	anymore. The online check "SystemSectionChecker" no longer checks artifacts which are functionally not relevant.
8682711686587502045	Customized palette entries for diagrams can be properly executed.

10.5.3 Tables

ID	Resolution
8682711686839092101	Opening tables no longer causes errors.
8682711686799463126	Tables maintain the state of expanded/collapsed artifacts when a cell content is selected in the table that is deleted by an operation.
8682711684940262105	Copied content from a formatted text in a table cell can be properly inserted into the search field of a table via <Ctrl>+<V> .
8682711686829101877	If a temporary filter is active in a table and filtering is switched off, the temporary filter can be reactivated by clicking the filter button again. The behavior is the same as if the "User-defined Filter" entry was selected directly in the filter drop-down list.
8682711686003903043, 8682711686788452111	Closing a table in an explorer no longer leads to a <code>NullPointerException</code> .
8682711686828992048	The table cell action Navigate to artifact properly navigates to artifacts in other categories of an explorer.
8682711685246242098	The selection propagation between Model View and tables works reliably if a table has been opened with an active filter and then switching to a different filter in the table.

10.5.4 Requirements

ID	Resolution
8682711686805842084	A performance problem has been resolved that was caused by an invalid state in the <code>content.xml</code> of the formatted text, which occurred after converting from Excel OLE to Excel file attachment.
8682711686592892105	Rendering of formatted text completes properly so no error messages are displayed.
8682711686769391783	Images which are inserted into formatted text via copy and paste are automatically and properly layouted.

10.5.5 Logical function architecture

ID	Resolution
8682711686736572042	The Set property page in the Property View of an <i>Activity Chain</i> in the <i>Logical Function Architecture</i> is available again.

10.5.6 AUTOSAR

ID	Resolution
8682711554890801998	To prevent inconsistent namespaces in AUTOSAR exports, a namespace lower case check was implemented to give feedback to the user.
8682711686541690063	AUTOSAR export: A <i>Service Interface</i> with a <i>Method</i> that directly references a data type is an inconsistency in AUTOSAR. Finding this case will cancel the export with an error message in the Information View .
8682711686536232051	AUTOSAR export: A background check was extended to also support SWC exports that are based on propagate definitions in <i>Metric</i> .
8682711687093983078	AUTOSAR export: The export of signal-to-service use cases as software cluster design description is now possible without transformation errors.
8682711687081871913	AUTOSAR ECU extract: An <i>Addressing Method</i> assigned to a <i>Parameter</i> of a <i>Parameter Interface</i> is properly exported.
8682711686791821807	AUTOSAR import: A transformation error caused by importing an <i>Execution Context</i> has been fixed.
8682711686007422052	AUTOSAR import: A bug concerning minimal AUTOSAR files which leads to an incomplete model structure in PREEvision has been fixed.
8682711553648922108	Consistency check: A new consistency check finds runnables with identical symbol within an <i>Internal Behavior</i> which is not allowed.
8682711555191931911	Consistency check: The checks "p1078_AtomicSWComponent_without_SWComponentMapping" and "p1078_AtomicSWComponent_with_invalid_SWComponentMapping_multiplicity" have been corrected to ignore <i>Port Adapters</i> that are not mapped to <i>ECUs</i> or <i>Computers</i> . <i>Port Adapters</i> must not be mapped to hardware components.
8682711686663062003	Consistency check: The check "AR_010608_AR_all_PortTypeOffSWComponentInvalid" has been corrected to ignore <i>Port Adapters</i> .

10.5.7 Software architecture

ID	Resolution
8682711685250883013	Consistency check: The rule "C3016_Homeless_Port" has been adjusted to avoid false positives on P-Ports of parameter components.
8682711685521972014	For <i>Application Map Types</i> , the Data Type Configuration property page is available in the Property View .
8682711553393642113	The table for creating <i>Literals of Application Enumeration Types</i> now correctly shows the value "not set" instead of "0" if the value is not set by user.
8682711553633573043	The special paste action for two-dimensional arrays now supports column wise paste of initial values for complex data types. This option can be configured with a new flag in the tool preferences.
8682711554773572052	In the dialog for setting initial values, float values can now be displayed and edited properly without errors.
8682711686871651825	The display problem of the range check for a java long has been fixed in the Property View . The proper range is now displayed.
8682711555154482051	For conversions of <i>Computation Methods</i> , the column Value has been added to the Value Table on Conversion Configuration property page.
8682711686753882196	<i>Activity Diagram</i> : A <i>Building Block</i> containing <i>Logical Functions</i> as child artifacts can be assigned to an <i>Activity Partition</i> , as long as the <i>Logical Functions</i> are not yet assigned to an <i>Activity Partition</i> .
8682711686081722106	<i>Use Case Diagram</i> : The <i>Extension Points</i> of <i>Use Cases</i> are now visible and can be changed in the Property View of an <i>Extent Relation</i> .

10.5.8 Diagnostics

ID	Resolution
8682711686933892108	Diagnostic export: Despite inconsistencies related to the export content, the export runs correctly. Because the export will not be complete, warnings indicate the inconsistencies after the transformation.
8682711555205781045	When creating server port types for DIDs, the Diagnostic Realization Explorer creates client-server interfaces with the attribute IsService set as <code>true</code> .

10.5.9 Communication

ID	Resolution
8682711686266731917	The Dissolve PDU-FanIn/FanOut option is supported for Multiplexed IPDUs and properly processed during AUTOSAR export.
8682711686550171914	Consistency check: The rule "aApplicationEndPoint_without_ServiceInstance" has been removed.
8682711686550341914	Consistency check: The rules "C5616_signalTransmissionWithPDUTransmissionReceiving" and "C5617_signalTransmissionWithPDUTransmissionSending" have been removed.
8682711686550371914	Consistency check: Special rules for DBC have been moved from the group "AUTOSAR Communication" to "DBC".
8682711686664261030	The DBC export has been improved and filters frames with same identifier.
8682711686753511807	The frame-PDU synthesis now accepts two PDUs as compatible when routed over a <i>Gateway</i> , also if they contain <i>Signal Groups</i> .
8682711686841492052	Communication design explorer: In the user manual, the description to open the Communication Design Explorer has been corrected.
8682711554768591024	Signal router: An additional fallback has been implemented to use the channel (VLAN) to determine the <i>Ethernet Cluster</i> of existing <i>Signal Transmissions</i> that does not have ECU interfaces assigned.
8682711686697463078	Signal router: The signal router better considers already existing signals and PDUs.

10.5.10 Hardware architecture

ID	Resolution
8682711686576042196	When splitting <i>Single Wires</i> by inserting <i>Splices</i> or <i>Wiring Harness Inline Connectors / Wiring Harness Multi Inline Connectors</i> into wires via multiselection, the highlighting of the selected wires and the feedback indicators are removed after the action is finished.
8682711686653032041	<i>Schematic Connections</i> in an <i>Electric Circuit Diagram</i> are not rerouted when a hardware component is resized.
8682711686578102041	The refactoring Create Wiring Diagram can be executed properly on an <i>Electric Circuit Diagram</i> .

ID	Resolution
8682711686485643084	The automatic assignment of pins to <i>Contactings</i> in the Assign Pins to Cavities table has been improved. Automatic assignment can also be carried out when either nothing, a slot or a cavity is selected. Otherwise, the action is disabled.
8682711686805852041	KBL export: When exporting a <i>Wire Type</i> , the KBL export only considers the artifacts that are part of the export elements to avoid the export of unnecessary KBL elements.

10.5.11 Product line engineering

ID	Resolution
8682711686565022100	Before executing an <i>Asset</i> update it is checked if the user permissions are sufficient, for example, all referenced types of core artifacts and all core artifacts must be visible. If not, the <i>Asset</i> update is canceled, and details are reported to the Information View .
8682711686659292023	External relation analyzer: If a repair action for an external relation on a child artifact is cancelled by the user due to an external relation on the parent artifact, which should be repaired first, an information is reported in the Information View . The Information View displays the corresponding parent artifact for which the external relation is identified.

10.5.12 Variant management

ID	Resolution
8682711554019072106	If an artifact is added to a set that is assigned to an activated variant via the included relation, the artifact is no longer incorrectly displayed as active.

10.5.13 Metrics

ID	Resolution
8682711686431582042	The <i>Render Diagram</i> metric block renders all diagrams if the "renderInBackground" <i>Data Target Port</i> is set to <code>true</code> .

10.5.14 Reports

ID	Resolution
8682711686742991806	The report can now be created. In the customer's model, the artifacts that caused an error during report generation have been updated.

10.5.15 Collaboration

ID	Resolution
8682711686726561036	The performance has been improved for loading a large number of artifacts from history during the Replace With Revision action.
8682711686368623126	Tables, Property View , and Model View now consistently display the localized name of an artifact's current <i>Life Cycle State</i> .
8682711686752232203	Loading historic model versions is possible again.
8682711686673382023	If a lock operation cannot be completely executed because of invisible artifacts, the Information View lists the XMIDs of the invisible artifacts. In this way, an administrator can identify the invisible artifacts.
8682711686247341993	The update performance has been improved for certain situations where many updates are involved.

10.5.16 Administration

ID	Resolution
8682711685677911825, 8682711687040531873	The Add-in Installation... has been restricted to Architect licenses with Admin privileges.
8682711686240482011	Tooltips have been added to the advanced settings of the Add-ins installation dialog.
8682711686939152011	The Information View now shows whether an <i>Add-in</i> was added to the installation by installing its <i>Test Add-in</i> .
8682711685491993046	Rules are no longer automatically checked out when customizing <i>Add-ins</i> .
8682711686983102068	When installing <i>Add-ins</i> , the Check-out view no longer opens automatically.
8682711686546032054	Function and performance tests can now be executed when an authority model is active, even if the "FPT_MODEL" is not configured in the authority model. All users with activated Administrator option can execute the tests.

10.5.17 Installation

ID	Resolution
8682711686836852017	When building preconfigured Apache Tomcats for the PREEvision server components, the JVM parameters for configuring JMX access (<code>com.sun.management.jmxremote.*</code>) are now added under the CATALINA_OPTS instead of JAVA_OPTS.

10.5.18 Backup, restore, and migration

ID	Resolution
8682711686588622020	The server-side backup with activated model preparation correctly handles changes of non-versioned file artifacts.

10.6 Known issues

Known issues in PREEvision 10.11

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "----". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.

ID	Known issue
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711687075110069	The state of expanded artifacts in tables is not reliably restored after a refresh (<F5>).
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711686697532196	Model operations, caused for instance by the wiring harness router or modeling in a different diagram, may change artifacts in an opened but not locked diagram. Activating the undo action may unintentionally close the PREEvision client.
8682711687181061868	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are read-only. Workaround: Execute the automatic integration again.
8682711687091221995	The automatic integration of an <i>Asset</i> may be incomplete during use, reuse, or update of the <i>Asset</i> if related artifacts with abstraction or substitution links in a downstream <i>Product Line</i> are invisible or out-of-scope. Workaround: Temporarily add the relevant artifacts to the active scope and ensure you have the necessary rights. You may also contact the customer service for further support.

11 PREEvision 10.10

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11.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.10.0
PREEvision license server	3.0.1
PREEvision database server	10.10.0.03
PREEvision application server	10.10.0

Documentation

Manual	Version number
PREEvision manual	10.10.0
PREEvision configuration manual	10.10.0
PREEvision operating manual	10.10.0
PREEvision system requirements	10.10.0
PREEvision server API	10.10.0

11.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.10 and the migration to PREEvision 10.10, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.10, refer to the PREEvision system requirements.

Apache ActiveMQ security vulnerability

A critical security vulnerability within Apache ActiveMQ (CVE-2023-46604) is resolved. The Apache ActiveMQ libraries, which are integrated in the PREEvision messaging server, have been updated to version 5.16.7.



The Apache ActiveMQ version delivered with previous PREEvision 9.0, 9.5, 10.0, and 10.x versions contains a critical security vulnerability (CVE-2023-46604). Thus, it is highly recommended that you update the PREEvision messaging server. Contact the Vector support to provide you with a possible solution.

System requirements

The following system requirements have been changed:

- > Application server requirements: The recommended free hard disk space has been increased to 300 GB.
- > Subversion server requirements: Subversion 1.10 is no longer supported.
- > The recommended version of Apache Tomcat has been changed to 9.0.82.

Oracle JDBC driver

The Oracle JDBC driver, which is included in the deployment files of the application server, has been updated to version 19.21.

On the application server, update the Oracle JDBC driver as follows:

1. Unpack the product delivery of the PREEvision Collaboration Platform (PREEvisionCollaborationPlatform_<version>.zip).
The database driver is located in the folder /dbdrivers.
2. Copy the ojdbc8.jar to the %TOMCAT_HOME%/lib folder.

Server configuration

For the startup of all server components, the following additional Java 9 JVM parameters must be set:

```
--add-opens=java.base/java.net=ALL-UNNAMED  
--add-opens=java.base/java.util.concurrent=ALL-UNNAMED
```

License server

With PREEvision 10.10, the new version 3.0.1 of the standalone license server is available.

When you use the standalone PREEvision license server (RMI), it is recommended to update the license server to the new version 3.0.1.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18
10.10.0	10.10.0	10.10.0.03	2023-11-13

Migration and update

PREEvision 10.0 SP17 or later can be migrated to PREEvision 10.10.



Migrating to PREEvision 10.10 is only possible from PREEvision 10.0 SP17 or later. Also, all remote operations (model preparation, backup, direct migration) available in the PREEvision 10.10 administration panel can only be performed on PREEvision 10.0 SP17 or later.

If you want to migrate a PREEvision 10.0 version before 10.0 SP17 or PREEvision 9.5, contact the Vector support.

For the migration to PREEvision 10.10, it is recommended to update PREEvision 10.0 to the latest version (service pack update), at least PREEvision 10.0 SP17, before creating a backup and starting the migration.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.10 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.10, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

11.3 New features in PREEvision 10.10

Conversion of OLEs to file attachments

PREEvision 10.5 introduced the possibility to work consistently with file attachments, for example, the embedding into a formatted text or an import and export via ReqIF. Even though importing or exporting OLEs is still possible, file attachments increase the compatibility with third party tools. An extraction and replacement of OLEs from formatted texts is possible using the new *OLE Object Extraction and Replacement* metric block. The OLEs are handed over as RTF files for possible further treatment. Without further treatment, an OLE is replaced by an RTF as file attachment placeholder and the preview image remains unchanged.

Optionally, an individual *Calculation Block* can be added to extract the original file from the OLE and hand it over to the *OLE Object Extraction and Replacement* metric block instead of the RTF.



The PREEvision demo model contains an example metric.

Demo model path: "Administration" | "Metrics" | "Product" | "L10_Product_Goals" | "Convert OLE in File Attachments" | "OLE Extraction"

Improvements for working with formatted texts

With PREEvision 10.10, various rarely used options that additionally caused inconsistencies have been removed from the LibreOffice editor menu in previews of formatted texts, reports, and ReqIF exports, for example:

- > Formatted texts (still possible in reports)
 - > **Insert | Footnote and Endnote**
 - > **Insert | Shapes**
- > Formatted texts and reports
 - > **Insert | Media**

Model view

To prevent performance issues, in the **Model View**, the following changes have been implemented:

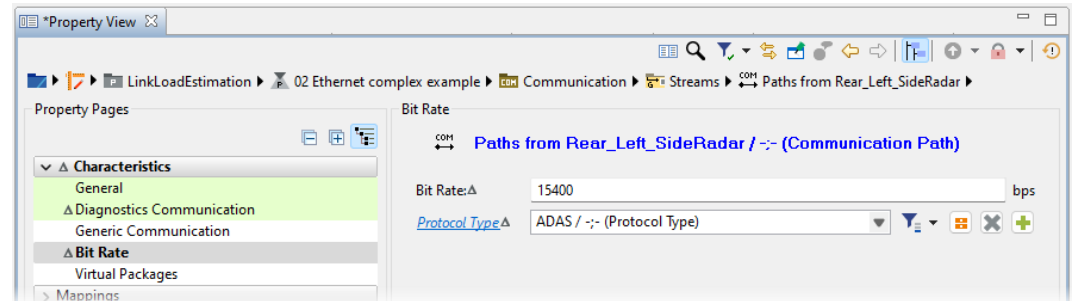
- > The expand action only expands the next three hierarchy levels.
- > The number of hierarchy levels to be expanded can no longer be configured in the **Preferences**.
- > The expand action is disabled on root artifacts.
- > The toolbar action to collapse a selected artifact has been removed.

In the Model View, the  button opens a table of available commit versions. By default, commit versions that are automatically created by asynchronously calculated online check results are not displayed in the table. To display online check commit versions, click on the filter button and select **No filter**.

type filter text 				
Version #	Creation Time	Comment	Commit Label	User
29	23.11.2023 16:47	Onlinecheck calculation for commit 28		Mathew.Miller
28	23.11.2023 16:47			Mathew.Miller
27	23.11.2023 15:45	Onlinecheck calculation for commit 26		Mathew.Miller
26	23.11.2023 15:45			Mathew.Miller
25	23.11.2023 15:35	Onlinecheck calculation for commit 24		Mathew.Miller
24	23.11.2023 15:35			Mathew.Miller

Link load estimation

For architecture design in early stages, PREEvision 10.10 can calculate the data load for *Bus Systems* based on estimations. The basis of the calculation are estimations of the data load of individual streams, that is the communication between exactly one sender and one or more receivers. To define the available bandwidth, you can now define for *Bus Types* if they are operating in half duplex or in full duplex mode.

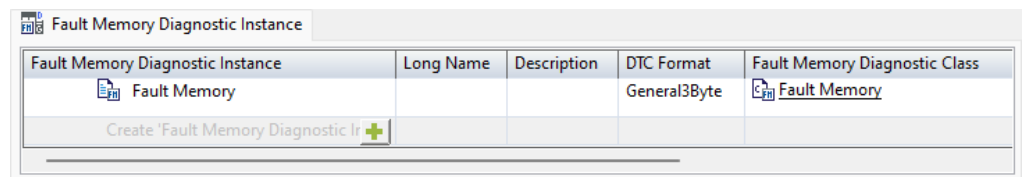


If you change, for example, the network topology, a new link load estimation immediately shows the consequences of your modifications. Note: To utilize link load estimation, a configuration is necessary.

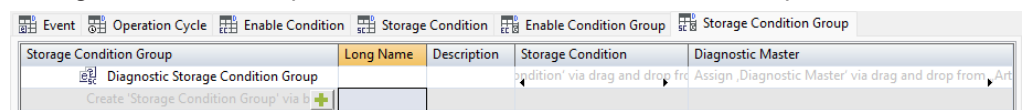
Diagnostic concept explorer

The Diagnostic Concept Explorer to specify diagnostic data in early phases has been further improved:

- > In the tables for DIDs, I/O controls, routines, event handling and fault memory diagnostic instances, diagnostic data can be assigned to a *Diagnostic Master*.



- > For the creation of Fault Memory Diagnostic Instances, Enable Condition Groups and Storage Condition Groups, new tables have been added to the explorer.



- > To support the management of diagnostic design, *Diagnostic Packages* and *Diagnostic Master* artifacts can now be planned.
- > In PREEvision 10.10, DTCs can be specified without a *Fault Memory Diagnostic Instance*. This allows to define DTCs and their event handling in an early specification step. Therefore, *DTC Packages* can be created in a *Diagnostic Packages*. Error codes are displayed with 4 Bytes. Note: These DTCs are not considered for export.

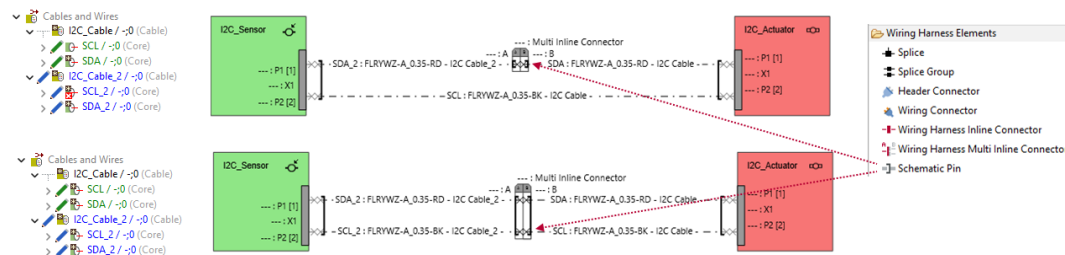
PVCDI import and export

- > The display of the import content in the import wizard has been improved by structuring the data by meta class.
- > The selection of the relevant *Diagnostic Master* in the export wizard has been simplified by displaying to path information of the *Diagnostic Master*.
- > PREEvision 10.10 provides a tool to migrate PVCDI file to the version supported by the import.

Inserting inline connector schematic pins into a cable

A *Cable* can be split by inserting an inline connector Schematic Pin into a Core or Shielding of the Cable. When inserting a *Schematic Pin* into a *Core* or *Shielding*, a *Wiring Harness Multi Inline Connector* is created. All subsequent *Schematic Pins* which are

inserted into further *Cores* of the *Cable* are automatically added to the already existing inline connector, and the pins connected to the corresponding *Cores* or the *Shielding* of the already existing *Cable* duplicate.

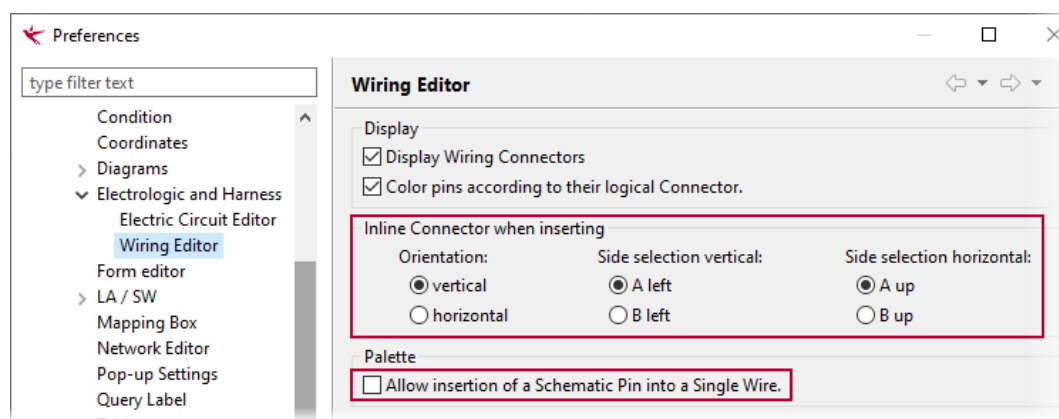


The **Show owning Component** context menu action for a *Schematic Pin* has been improved in so far that *Schematic Pins* are automatically and properly moved into the corresponding inline connector.

Enhanced preferences for inline connectors

The preferences for the orientation when inserting an inline connector have been enhanced. The vertical or horizontal orientation can be defined as well as a vertical or horizontal side selection for the different sides of the inline connector determined.

Additionally, inserting a *Schematic Pin* from the diagram palette into a *Single Wire* is now disabled by default.



Cable constraints

A new wiring artifact Cable Constraint has been implemented which is intended to technically group *Schematic Connections* which are later implemented as *Cores* or *Shieldings* of a *Cable* in the wiring harness.

A *Cable Constraint* can be used as a template to model a *Cable* based on the assigned *Schematic Connections*. A cable content kind can be specified which determines if a *Schematic Connection* is later represented as a *Core* or a *Shielding*.

Search and replace in tables

A new search and replace function for tables allows you to select an attribute displayed in a table column and search only in the values of this attribute. Attribute values that are editable can be replaced. The **Search and Replace** view shows the search results and a preview of the replace results.

In the selected table column „Components“ 8 out of 8 occurrences are shown, which can be replaced.

i The table contains collapsed elements, they are not considered in the search. Expand the table to extend the search range.

Artifact	Meta Class	Attribute	Search Result	Replace Result
LEDBackA / -:0 (Actuator)	Actuator	name	LEDBackA	LEDfrontA
LEDBackB / -:0 (Actuator)	Actuator	name	LEDBackB	LEDfrontB
LEDBackC / -:0 (Actuator)	Actuator	name	LEDBackC	LEDfrontC
LEDBackD / -:0 (Actuator)	Actuator	name	LEDBackD	LEDfrontD
LightBackA / -:0 (Actuator)	Actuator	name	LightBackA	LightfrontA
LightBackB / -:0 (Actuator)	Actuator	name	LightBackB	LightfrontB
LightBackC / -:0 (Actuator)	Actuator	name	LightBackC	LightfrontC
LightBackD / -:0 (Actuator)	Actuator	name	LightBackD	LightfrontD

Replace Replace All

11.4 Changes

Working copies no longer supported

Working with Subversion working copies is no longer supported.

Mapping view no longer supported

The generic **Mapping View** is deprecated and no longer supported with PREEvision 10.10.

11.5 Configuration information

New menu creation properties

Issue ID: 8682711685295062039

Translations can be adapted via *New Menu Creation Properties Delta Files*. In previous PREEvision versions, it was only possible to extend the model creation files via the deltas, but not the translations (group translations). To ensure that the configured new menu entries (model creation) and the associated translations (group translation) work properly, the files must be named accordingly:

- > Model creation delta files must contain "modelcreation" in the file name.
- > Group translation delta files must contain "grouptranslation" in the file name.

New metric blocks: OLE Object Extraction and Replacement

The *OLE Object Extraction and Replacement* metric block extracts OLEs from formatted texts. The OLE is extracted as an RTF containing this OLE. Using the loop ports, this RTF can be further modified to extract the original file. Subsequently, the file or the RTF is included as file attachment placeholder on the same place the OLE was. The OLEs preview is taken as preview for the file.

Changed metric blocks: Communication Path Router

The *Communication Path Router* metric block has been changed.

The new input port "calcLinkLoad" enables link loads to be calculated in parallel with communication path routing. The data type is `Boolean`. The default value is `true`.

Deleted metric blocks

The following metric blocks of the diagnostics import are no longer supported with PREEvision 10.10:

- > *Diagnostic Abstraction Link Creator*
- > *Diagnostic Abstraction Link Refresher*
- > *Diagnostic Definition Set Assignment and Creation of Attribute Profiles*
- > *Diagnostic Reference Identification Function*
- > *Diagnostic Library Creator*
- > *Diagnostic Replace Relevance Function*
- > *Diagnostic Product Line Selection*
- > *Diagnostic Library Identification Function*

11.6 Fixed issues

Fixed issues in PREEvision 10.10

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
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- > [Geometry](#)
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- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [License](#)
- > [Backup, restore, and migration](#)

11.6.1 Common

ID	Resolution
8682711554188622106	To prevent performance issues, in the Model View , the following changes have been implemented: > The expand action only expands the next three hierarchy levels. > The number of hierarchy levels to be expanded can no longer be configured in the Preferences. > The expand action is disabled on root artifacts. > The toolbar action to collapse a selected artifact has been removed.
8682711553592481029	The Information View is properly opened and displayed.
8682711685296932108	The performance of loading the dialog for selecting active mapping containers has been improved to prevent client freezes.
8682711686298661992	On the General property page of <i>Background Images</i> , the attributes Keep Image Ratio , Adjust Image Size Automatically , and Background Image Fix Point have been added.

ID	Resolution
8682711686301351998	Made evaluation of disadvantageous structured packages in consistency view more resilient to prevent freezes in client.
8682711686179092203	The performance of the quick search has been improved when searching by XMIID or UUID on large models with over two million artifacts and restricting the search to the selected artifact.
8682711686301351998	An issue has been fixed that sporadically lead to a client freeze when opening the Artifact Picker .
8682711555150891783	The Check-out dialog is not displayed when opening a formatted text editor and closing it without having carried out any changes.

11.6.2 Diagrams

ID	Resolution
8682711554638731998	The object configuration of artifacts in a <i>Software Architecture Diagram</i> is kept, if the artifact is moved.
8682711686544692062, 8682711686571832050, 8682711553471062041	Previously, the visibility of an artifact's background image in a diagram was not always updated correctly according to its condition in the object configuration. Now, all background images are always properly updated and displayed when opening or exporting the diagram.
8682711686246071825	Opening a diagram does not result in an error if a configured icon cannot be rendered. A fallback has been implemented to render the icon. If the configured icon still cannot be rendered, a new log entry provides further information.

11.6.3 Tables

ID	Resolution
8682711686179382048, 8682711686571732050	The table cell action Navigate to artifact properly navigates to artifacts in other categories of an explorer.
8682711686392002008	Filtering table columns via predefined filters: In the Predefined Filters ... dialog, the displayed number of hits for non-activated values is displayed correctly, even if the filter dialog is closed and reopened.

11.6.4 Requirements

ID	Resolution
8682711685484412105	Tables with borders in formatted texts no longer cause schema validation errors when being exported to ReqIF.

ID	Resolution
8682711685501392105	Selected <i>Requirement Packages</i> that are temporarily added to the scope are checked and displayed in the ReqIF Export dialog.
8682711684912852106	Adding a file attachment to a checked-in formatted text works at the first try.
8682711554406631783	The formulation that notifies users about overwritten model contexts while defining reports has been improved.
8682711685481082106	Consistent filtering behavior in table-based editors: when changing the object type of <i>Requirement</i> artifacts with an active column filter on the object type, only artifacts are shown that correspond with the active filter.
8682711686391982101, 8682711686430842106, 8682711686431572106, 8682711686430442105, 8682711686293742105, 8682711686372232105	The system behavior has been stabilized while working with formatted texts.
8682711684910001992	After importing requirements into the model, it is possible again to switch to Is Heading type in the Property View .

11.6.5 AUTOSAR

ID	Resolution
8682711686532692013	The improved AUTOSAR SW component description considers also an <i>Addressing Method</i> used by a <i>Memory Section</i> .
8682711686250021917	The ECU Extract can handle logical functions that are mapped to the ECU.
8682711686234451807	The Bus Off Recovery attributes of <i>CAN Clusters</i> are imported and exported.
8682711685818571998	The export of an Adaptive Application Description can handle multiple reference targets.
8682711554721442014	Literals for numerical values (double, integer, long, float) are exported to AUTOSAR as <i>Application Value Specification</i> with category <i>VALUE</i> .
8682711555035481003	Consistency check: The rule "c1221_DataTypedInformationUnit_with_invalid_ApplicationValueType_InitValue_B" checks now also <i>Linear Verbal Table Conversions</i> .
8682711684967232051	Data constraints that are used multiple times in an imported ARXML file are merged to one constraint at export time again, in case their min and max values still match, even if the representation of these values was different in PREEvision (for example, 100 and 1E2).

ID	Resolution
8682711686301112108	Consistency check: The rule "AR_010701b_MoreThanOneApplRecordElementForApplRecord" has been removed. It previously hit for <i>Application Record Types</i> that are referenced by more than one <i>Application Record Element</i> of another record. This pattern is allowed.
8682711686550201914	Consistency check: The rule "aSWPortPrototype_without_ReceiverComSpec_InitValue" has been removed due to a duplicate.
8682711686550211914	Consistency check: The severity of the rules "C5506a_muteProvidedPort", "C5506b_muteProvidedSWPort", and "C5506c_muteProvidedRootPort" has been changed from "Information" to "Warning".

11.6.6 Software architecture

ID	Resolution
8682711686312752052	The operation Update SW Component Type is also available in the context menu for software component types located in the <i>System Software Architecture</i> .
8682711552654251024	In the Property View of <i>Runnable Entities</i> , the unit of the attribute Minimum Start Interval has been corrected from ms to s .
8682711685250883013	Consistency check: The rule "C3016_Homeless_Port" has been adjusted to avoid false positives on P-Ports of parameter components.

11.6.7 Diagnostics

ID	Resolution
8682711684979942113	In the Property View of <i>Diagnostic Packages</i> und <i>Diagnostic Structure Packages</i> the Planning page has been added.
8682711686356952005	Diagnostic export: In case of incomplete software realizations for diagnostic objects (missing relation between SW Port and diagnostic objects), the software realizations are not exported anymore. If a diagnostic concept is available instead, this is considered for the export.

11.6.8 Communication

ID	Resolution
8682711553094891825, 8682711686540882052, 8682711686556351024	Performance problems of signal router with certain service interfaces (high number of artifacts inside the service interface) have been solved by checking routing compound artifacts only once.
8682711686448061807	SOA & Ethernet Explorer: The Artifact Picker in the VLAN Switch Configuration Editor displays all relevant <i>VLANs</i> .
8682711686448191807	SOA & Ethernet Explorer: The Service Instance Communication Design table gets properly refreshed after the calculation of Header IDs .
8682711686550391914	Consistency check: The severity and fault description of the consistency check "p1163_Signal_with_illegal_DataType" has been corrected.
8682711686550381914	Consistency check: The rule "EthPortConfWoMacAddr" has been removed due to a duplicate check.
8682711686550361914	Consistency check: The rule "dataElementWithoutApplicationDataType" has been removed due to a duplicate check.
8682711686550351914	Consistency check: The rule "ConsumedEventGroupNotSameAEP" has been removed because the check is not valid.
8682711686565081914	Consistency check: The rule "C5502_Uninformed_Signal" to check all relevant mappings on <i>Signal</i> and on <i>System Signal</i> side has been improved.
8682711554826071917	DBC export: Large numbers are supported for signal table values.
8682711686446891914	LDF export: Byte values of <i>LIN Free Format</i> frames are exported in the order they were defined.
8682711553303801913, 8682711552654241024	In the Property View of <i>Timing Events</i> , the unit of the attribute Offset has been corrected from ms to s .

11.6.9 Hardware architecture

ID	Resolution
8682711686282601992	<i>Internal Logical Connector Types</i> can be created under a <i>Library Package</i> via the context menu entry New Other Types Internal Logical Connector Type .
8682711685480271912	The following new attributes concerning electrical properties have been added for a <i>Schematic Pin</i> : > Max Stall Current > Inrush Current Duration > Max Stall Current Duration

ID	Resolution
	All attributes include a unit.
8682711685458722112	For <i>Single Wires</i> , <i>Cores</i> and <i>Shieldings</i> , the new attribute Nominal Operating Voltage including a unit has been added to the Electrical Properties property page.
8682711685484321204	A warning dialog is displayed in case an invalid <i>Schematic Pin</i> of a <i>Wiring Harness Inline Connector</i> has been added to a wire via drag and drop.
8682711686528021038	No error occurs concerning highlighting diagram content which is not active.
8682711554646962083	Importing a KBL file via the advanced KBL import metric creates <i>Contactings</i> below the <i>Wiring Cavities</i> .
8682711685822991914	Wiring harness router: The wiring harness router did not route <i>Schematic Connections</i> for which the start and end points were not located at the same component. This issue occurred due to multiple <i>Wiring Connectors</i> which were mapped to a single <i>Connector Location</i> . This issue has been resolved for wiring harness routing.
8682711686665122083	The "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model has been enhanced with an example of <i>Cable Constraints</i> .

11.6.10 Geometry

ID	Resolution
8682711685999491912	The endpoint of a <i>Topology Segment</i> is no longer displaced at a <i>Connector Location</i> on irregular zoom factors, for example 133%. This error occurred especially if the <i>Geometry Diagram</i> was printed with the Print Quality setting Draft .

11.6.11 Variant management

ID	Resolution
8682711555119922003	The <i>Consistency Rule</i> which checks the compliance of artifacts with AUTOSAR <i>Pre Build Variant Conditions</i> and <i>Post Build Variant Conditions</i> has been updated.

11.6.12 Change and release management

ID	Resolution
8682711554011401894	The Compare Table displays the layers of the E/E model in the same order as the Model View .
8682711554916332106	In the Compare Table , the performance of filtering columns during a model comparison has been improved.

ID	Resolution
8682711685315583082	Review and vote: When changing the status in the Review Table , the last modification date is updated.

11.6.13 Test engineering and test management

ID	Resolution
8682711685414613126	New test artifacts are sorted in a consistent order even if the list contains artifacts with and without a chapter ID.
8682711686453381030	Import of CANoe test reports: Test results of <i>Automatic Test Cases</i> with the same name but different ImEx-IDs are now imported.

11.6.14 Rules

ID	Resolution
8682711553143551999	The names within the <i>Propagate Definition Diagram</i> palette have been renamed to improve clarity and precision. The <i>CompletenessCheckLinkPair</i> meta class has been renamed to <i>Propagate Definition Link Pair</i> .

11.6.15 Reports

ID	Resolution
8682711685984473056, 8682711686304422105	Formatted texts that contain a text table as first element are now properly handled during report generation when combined with conditional formatting placeholders.

11.6.16 Collaboration

ID	Resolution
8682711554740723013	A filter to show or hide online check commits has been added to the commit history dialog that is available in the Model View via the "Change to historic model version" icon.
8682711686448320064	The logging has been extended so that it will be possible to identify the cause of an update error after a commit in special cases.
8682711686441192108	The performance of the commit has been improved in case the committed change set contains large amounts of reuses (new or old), changed branches, or changed revisions.
8682711686525922105	If the update fails after switching from offline to online mode because of still existing network problems, then the user will not be forced to reload the model.

ID	Resolution
8682711686247190000	During the creation of file attachments via the API Server the correct file name is used. Unicode and URL-encoded characters are properly handled.
8682711554027241995	The specification of the boolean <i>Transition Expansion Parameter</i> using the values <code>true</code> or <code>false</code> has been documented.

11.6.17 Administration

ID	Resolution
8682711686294432011	If an <i>Add-in</i> installation is aborted because of an error, the operation will be completely rolled back, leaving the model in the same state as before the installation.
8682711686530193046	<i>Add-in</i> installation rolls back (in case of error) only its own operations, not previous operations.
8682711684967892054	If an administrator is connected via OpenID Connect, expired sessions no longer cause errors in the Administration perspective.
8682711554406702203	If the PREEvision administration server is installed under Linux, models including files can be properly initialized via the administration panel.

11.6.18 License

ID	Resolution
8682711686406373090, 8682711686577952054	With PREEvision 10.10, the new version 3.0.1 of the standalone license server is available. The new version provides an improved mechanism for license reservation and improved logging during license reservation.

11.6.19 Backup, restore, and migration

ID	Resolution
8682711554031661036	In previous PREEvision versions, in rare cases, the restore failed with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." The issue has been resolved.
8682711686360131036	Restoring artifacts with a changed XMIID works properly.

11.7 Known issues

Known issues in PREEvision 10.10

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround:

ID	Known issue
	1. Navigate to the report under <i>Administration Report Model</i> and select the report file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686769391783	No automatic layouting is done for images which are inserted into formatted text via copy and paste. <i>Preview Images</i> of inserted <i>File Attachments</i>, however, are correctly layouted. Workaround: Manually format the selected image via context menu Default setting for image or via the corresponding button in the formatting toolbar.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521972014	For <i>Application Map Types</i>, the Data Type Configuration property page is missing in the Property View. It will be restored in a future minor release.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711686697532196	Model operations, caused for instance by the wiring harness router or modeling in a different diagram, may change artifacts in an opened but not locked diagram. Activating the undo action may unintentionally close the PREEvision client.

12 PREEvision 10.9

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12.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.9.0
PREEvision license server	3.0.0
PREEvision database server	10.9.0.03
PREEvision application server	10.9.0

Documentation

Manual	Version number
PREEvision manual	10.9.0
PREEvision configuration manual	10.9.0
PREEvision operating manual	10.9.0
PREEvision system requirements	10.9.0
PREEvision server API	10.9.0

12.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.9 and the migration to PREEvision 10.9, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.9, refer to the PREEvision system requirements.

System requirements

The following system requirements have been changed:

- > Client requirements: The recommended free hard disk space has been increased to 50 GB.

LibreOffice update

The internal LibreOffice component has been updated for easier maintenance and better functional support within PREEvision.

Server configuration

For startup of the application server and the standalone middleware license server, the following JVM parameter must be set:

```
-Djdk.util.zip.disableZip64ExtraFieldValidation=true
```

For the startup of all server components, the following Java 9 JVM parameter must be set:

```
--add-opens=java.base/sun.nio.ch=ALL-UNNAMED
```

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20
10.9.0	10.9.0	10.9.0.03	2023-09-18

Migration and update

PREEvision 9.5 and 10.0 can be migrated to PREEvision 10.9.

For the migration to PREEvision 10.9, it is recommended to update PREEvision 10.0 to the latest version (service pack update) before creating a backup and starting the migration.

Note the following restrictions of the different PREEvision 10.0 versions:

- > PREEvision 10.0 SP13 must not be used for backup, restore, and migration because of an issue regarding the commit information.
- > The model preparation framework, which supports an incremental and final model preparation, is available starting from PREEvision 10.0 SP6. Older PREEvision versions use the previous preparation mechanism, which always prepares all model versions from anew and does not persist preparation information in the database.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.9 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.9, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



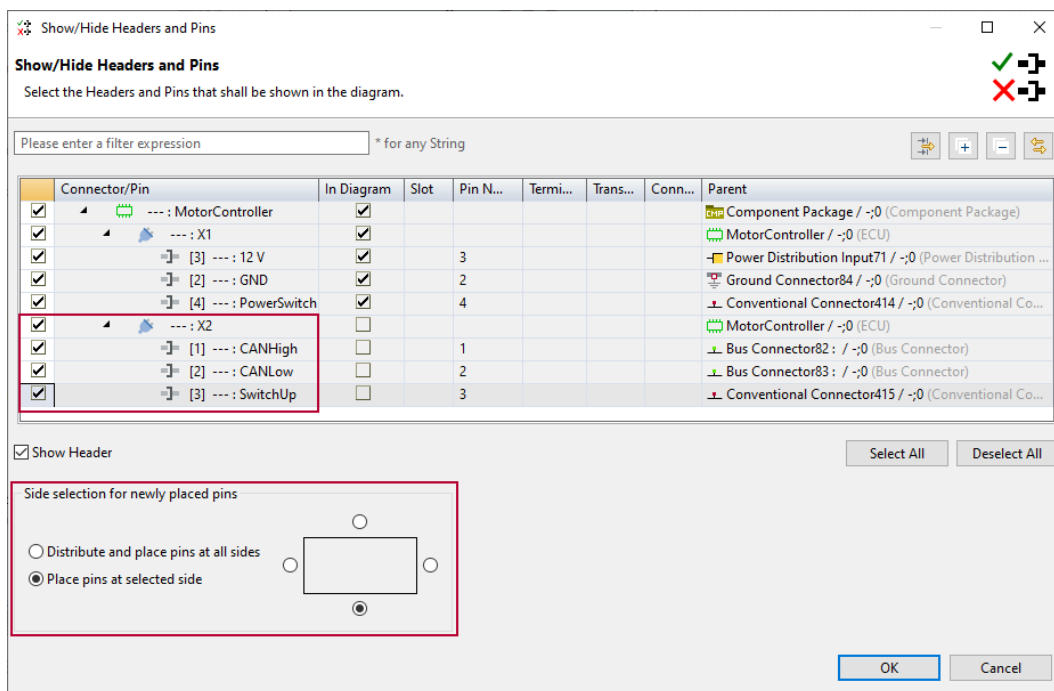
For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

12.3 New features in PREEvision 10.9

Showing and hiding headers and pins

Pins and headers can be displayed and arranged on components in *Wiring Diagrams* or *Electric Circuit Diagrams* by using the **Show/Hide Headers and Pins** dialog.

With the **Show/Hide Headers and Pins** dialog it is possible to define the side of the component where to place selected pins and their *Headers*. The side selection function for placing pins and *Headers* can only be carried out for newly created pins which are not yet added to the diagram. For pins and *Headers* which are already assigned to a component a side selection is not possible.



Splice position calculation

To properly run the wiring harness router, *Splices* need to be mapped to *Branch-Offs* in the *Geometry*. For mapping a *Splice* to a *Branch-Off*, the optimal target position where to map a *Splice* can be calculated automatically via the **Splice Position Calculation** metric.

Via the context menu **Metrics | Splice Position Calculation** available for a *Splice*, an optimal mapping target is calculated based on the shortest total length and minimum total weight of the wires.

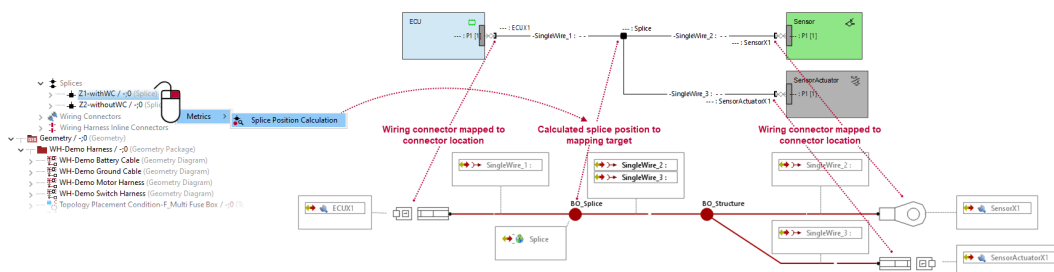


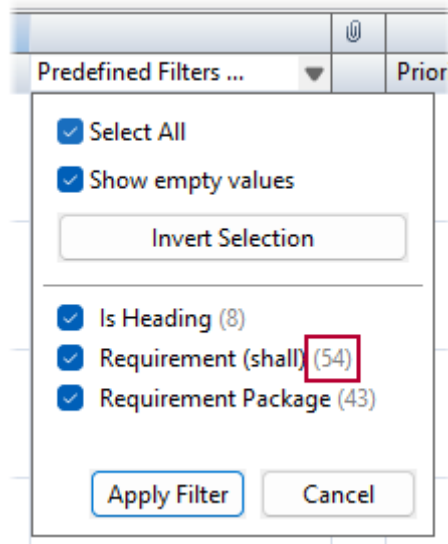
Diagram-based change management and evaluation of diagram content

Various functionalities, like for example diagram reports, printing, or publishing diagrams, access diagram data. Currently, the data stored in the model is taken into consideration for these functionalities.

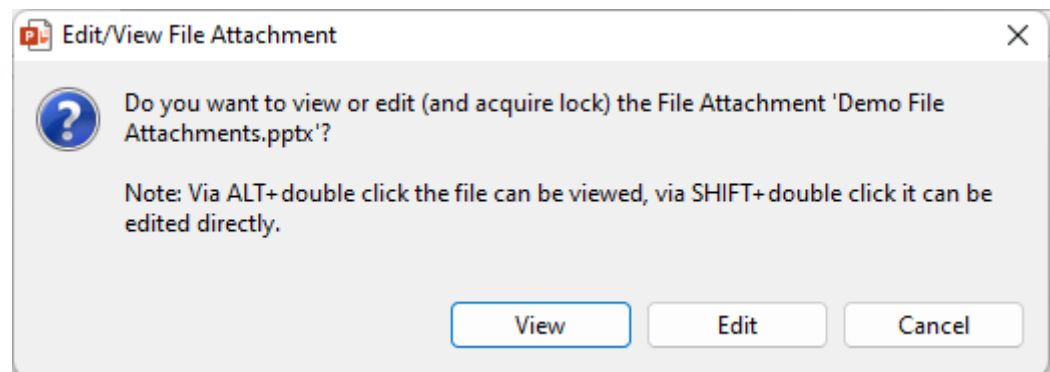
A diagram synchronization mechanism ensures that the state of the diagram is always up to date. Diagram repair and update mechanisms are processed prior to the conversion of a diagram. This applies to a manually triggered conversion as well as to conversions via metric functions.

Filter preview in predefined filters dialog of tables

The predefined filters selection for filtering table columns now displays the number of hits within the table column for each filter option. The number of hits is only displayed if more than one hit is found.



Editing file attachments After a double click on a *File Attachment*, the Edit/View File Attachment dialog opens.

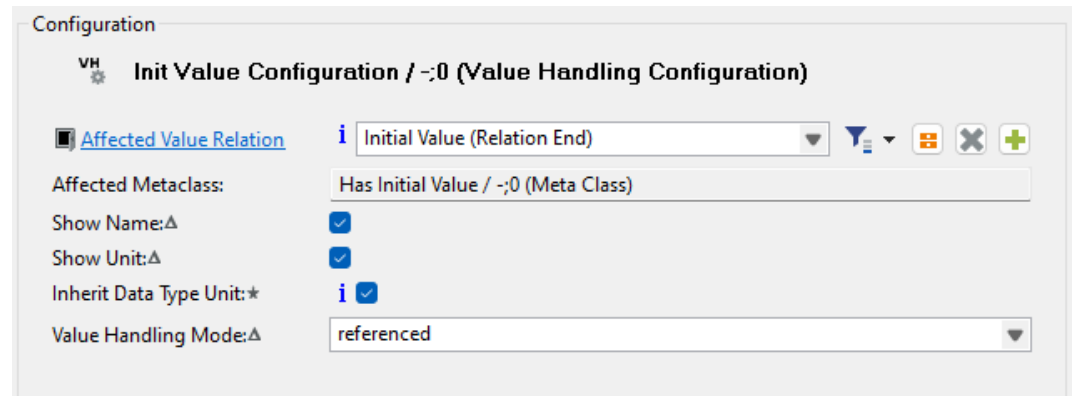


If you select **Edit**, the file is directly locked and opened for editing without displaying the lock dialog.

Extensions for value handling

In PREEvision, initial values or invalid values are stored individually in appropriate literals according to their data types. PREEvision 10.5 introduced a simplified definition of these values. With a value handling configuration, the user can simply enter initial or invalid values directly in the **Property View**, in data type editors, or tables. The system automatically creates the required value specifications in the background and associates them with the artifacts the user is editing.

With PREEvision 10.9 you can now decide if the unit of a value shall also be overtaken from the corresponding data type. This functionality can be enabled or disabled depending on the modeling style of each customer.



Also, values for *Data Types* that are interpreted as enumerations according to AUTOSAR, get drop-down lists in various editors.

Extensions for FlexRay controller configurations

Three new AUTOSAR attributes for the class *FlexRay Controller Configuration* are introduced:

- > **Key Slot Only Enabled**
- > **Key Slot Used for Sync**
- > **Key Slot Used for Startup**

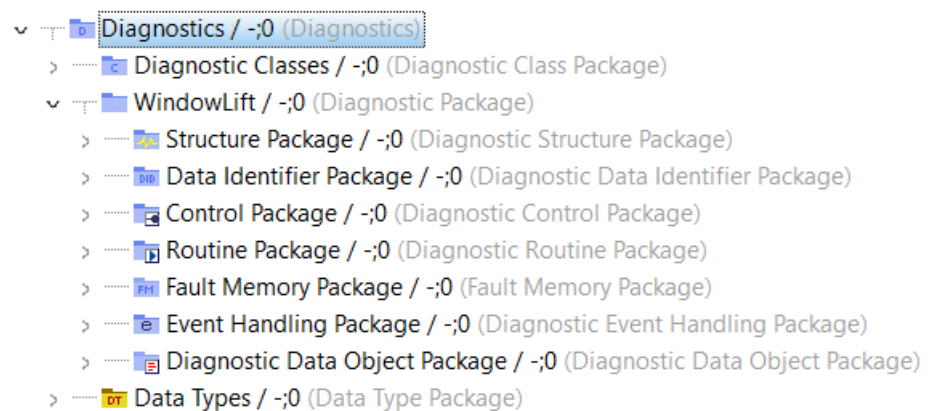
The meta model including range checks, the **Property View**, and AUTOSAR import and export have been extended accordingly.

Diagnostic import and export for diagnostics concept

PREEvision 10.6 introduced the possibility to define diagnostic concepts in early development phases independent of its later realization in software.

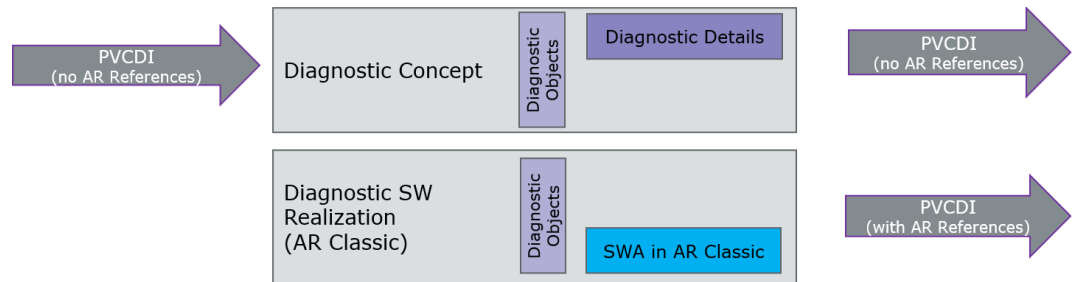
To better support the definition of diagnostic concepts, the data structure has been adapted as follows:

- > Diagnostic objects are stored in a generic diagnostic structure in parallel to *Diagnostic Master*.
- > A new relation between *Diagnostic Master* and diagnostic objects is introduced.
- > All information is part of the *Diagnostics* layer including *Data Type Packages*.



- > Local *Administration* for attribute definitions is supported.

With PREEvision 10.9, the PVCDI data exchange with CANdelaStudio supports these diagnostic concepts.



- > Diagnostic import:
 - > The diagnostic import now considers the new meta model for diagnostic concepts.
 - > The diagnostic import of *.pvcdi files is started with the import wizard.
 - > All data type relevant information is imported to application data types.
 - > Encoding, bit length and byte order is imported as base type requirements.



The updating PVCDI import in the software realization is no longer supported.

- > Diagnostic export:
 - > The diagnostic export considers the diagnostic concept.
 - > If both diagnostic concept and software realization are available, the software realization is prioritized.
 - > For a *Diagnostic Master* a mix of both is possible.
 - > The prioritization is handled for each diagnostic object individually.



With the introduction of the new diagnostic concept, the diagnostic import and export behavior has been changed. Diagnostic import is now imported as diagnostic concept. The diagnostic export now either considers diagnostic realizations or the diagnostic concept.

The diagnostic export no longer considers diagnostic data that was initially created by a diagnostic import in a PREEvision version prior to 10.9 and that is not yet realized in software.

For detailed instructions on how to migrate existing diagnostic data according to the diagnostic concept, contact the Vector support.

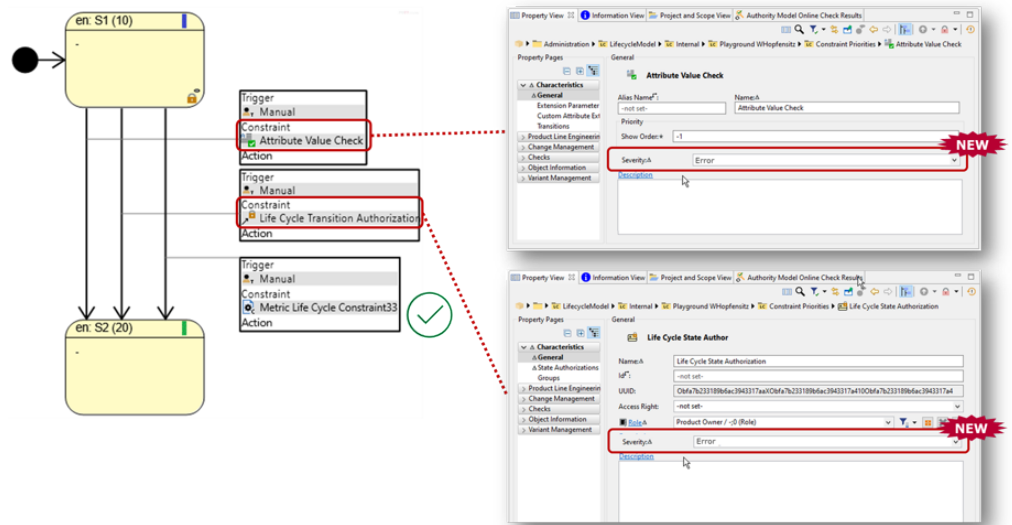
Improvements for life cycles

User-defined severity levels for all life cycle transition constraints:

- > New attribute severity as return status for life cycle transition constraints
 - > Attribute value checks
 - > Lifecycle transition authorizations
- > Available severities: **Error** (continue evaluation of other possible transitions) or **Fatal Error** (stop evaluation and rollback of trigger event)
- > Default Value for severity: **Error** (=present behavior)

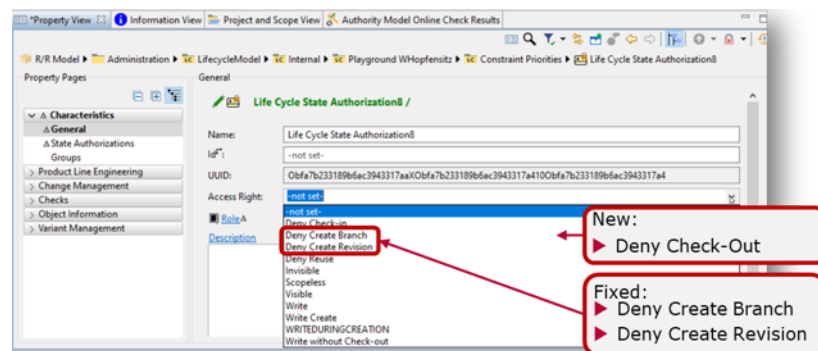
New severity level for life cycle transition actions:

- > Life cycle transition actions return severity level **Fatal Error** (new behavior: rollback of trigger event)



Additional improvements of life cycle handling:

- > New option for life cycle state authorization:
 - > **Deny Check-Out**
- > Fixed options:
 - > **Deny Create Branch**
 - > **Deny Create Revision**



12.4 Changes

Deprecated product line health viewer

The **Product Line Health Viewer** has been replaced with the **External Relation Analyzer** since PREEvision 10.5 and is no longer supported with PREEvision 10.9.

Deprecated mapping view

The generic **Mapping View** is deprecated and will no longer be supported with PREEvision 10.10.

12.5 Configuration information

Table configuration: Improve performance of loading artifact pickers

Issue ID: 8682711553599113013

If a *Generic Table Artifact Picker* is referenced in a table and displays many artifacts, use the following configuration guideline to improve the performance of loading the artifact picker.

On the *Data Providing Table Column* of the *Generic Table Artifact Picker*:

1. Use a metric (*Embedded Metric Executor*) to obtain the contents.
2. Disable the default sorting by creating a generic *EE Attribute* (**Name:** "sort", **Value:** "false") under the column.
3. In the metric, implement parallel sorting by:

```
Stream<MAbstractNameAttributeArtefact>.parallel().sorted
(Stream<MAbstractNameAttributeArtefact>
java.util.stream.Stream.sorted(Comparator<? super
MAbstractNameAttributeArtefact> arg0))
```

Changed metric blocks: Diagram artifacts collector

The *Diagram Artifacts Collector* metric block has been changed:

- > The "source" input port of the *Diagram Artifacts Collector* metric block has been changed to accept a list of diagrams (`List<Diagram>`) instead of a single diagram.
- > The new, optional input port "metaClassFilter" has been introduced to only collect artifacts of the given meta class (data type: `List<MMetaClassAuthorityProxy>`).
- > The new output port "diagramArtifacts" returns the represented artifacts of the defined meta classes for each diagram (data type: `HashMap<MDFObject, MDFObject>`).

Changed metric blocks: CSV export

Issue ID: 8682711555181132101

For the *CSV Export* metric block, the behavior of the "quote" input port has been changed depending on the set value of the "quote" port.

Quote port	Quote character	Quote mode
No value or empty value (default)	"	minimal: Values that contain the separator character are quoted by quotation marks. Values that contain no separator character are not quoted.
"NONE"	no quotes	none: Values are not quoted.
Defined character, for example, "	Defined character	all: All values are quoted by the defined quote character. For example, to quote all values by quotation marks, set " as quote character.

Changed metric utilities: GenericAttribUtil

The `GenericAttribUtil` class is moved from `aquintos.bridge.utils` to `vi.mm.commoncore.util`.

Changed metric utilities: ScratchpadUtil

Issue ID: 8682711684968112106

The method `ScratchpadUtil.isScratchpadArtifact(artifact)` has been changed to `ScratchpadUtil.isScratchpadArtifact(artifact, scratchpad)`. This improves performance for checking if an artifact has a relation to the scratchpad.

Existing metrics that use this method must be adjusted.

12.6 Fixed issues

Fixed issues in PREEvision 10.9

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Backup, restore, and migration](#)

12.6.1 Common

ID	Resolution
8682711685677142039, 8682711685540101897	The expand icon is shown correctly in the Information View and Information View entries can be expanded.
8682711685246322034	The action Window Reset all Perspectives to Model Definitions properly resets all perspectives.
8682711685347962001	Opening a <i>File Attachment</i> for editing automatically allocates all required locks without opening the lock dialog.
8682711553592293111	Special paste of diagrams works properly and has the same result when executed by drag and drop, shortcut, and context menu.
8682711684940262105, 8682711685463331865	The Check-out dialog is not displayed when opening a formatted text editor and closing it without having carried out any changes.

12.6.2 Diagrams

ID	Resolution
8682711555023062039	The value defined for variant highlighting in the Preferences is also applied to the online check indicators of the corresponding artifacts in the diagram.

12.6.3 Tables

ID	Resolution
8682711555133221032	Changes in the model, for example deleting elements or removing associations, do not lead to empty cells or missing rows in open table-based editors with active column filters anymore.
8682711554380662101	Table help entries are not shown in case that the main column is hidden.
8682711555166051992	The background color constraint metric of a column monitors also the first change of a custom attribute value. Therefore, the object configuration cache is cleared for every tree element which needs an update before the update is executed.
17938305535212106	Pinning in tables is still active after embedded formatted text cells have been opened.
8682711554396602001	An error when resizing a table column that belongs to a prototype, changed the size of all other columns belonging to the same prototype has been fixed. Now, the column width of prototype columns can be changed separately.
8682711684966583042	Key bindings of other opened tables are deregistered on tab switch to have the correct key bindings for the active table available.
8682711685476702023	Hyperlinks are directly exported as plain text content to Excel.

12.6.4 Requirements

ID	Resolution
8682711555182422106, 8682711685535942105, 8682711555195472106, 8682711685409162106, 8682711685497042105	Various model constellations which have led to multiple roots during the ReqIF export have been identified. In these situations, artifacts that erroneously were part of the exported set are ignored and thus no longer produce the multiple roots error.
8682711684912742101	XHTML attributes having a text as default value are imported correctly via ReqIF.
8682711685463712105	The ReqIF import can handle attributes with enumeration values that have an empty or missing name.

ID	Resolution
8682711685535322101	ReqIF export with reused test routines is now complete also if some reuses have a UUID containing the bit local reuse sequence.
8682711552408672105	The User-defined Filter correctly filters with the setting "contains not".
8682711552922422023	Layout problems in formatted texts when setting default styles for a multi-selection of OLE objects and images which are anchored at a paragraph have been fixed.
8682711685246242098, 8682711686314283082	The selection propagation between Model View and tables works reliably if artifacts with empty name attributes are selected.
8682711554764972106, 8682711685449862106	If the routine that converts formatted texts during the ReqIF export stops, the error log has been extended to inform about the artifact that produces this state and therefore enable better analysis and correction.

12.6.5 Logical function architecture

ID	Resolution
8682711554420841992	In the <i>Logical Architecture System Diagram</i> , port labels are displayed for the following ports: > <i>Service Provided Ports</i> > <i>Service Required Ports</i> > <i>Environment Sender Ports</i> > <i>Environment Receiver Ports</i>
8682711554721251992	In a <i>Logical Architecture System Diagram</i> , ports of <i>Building Blocks</i> can be connected even if one <i>Building Block</i> is located inside a <i>Section</i> and the other <i>Building Block</i> is outside the <i>Section</i> .
8682711685248702196	When creating a new logical port via a logical assembly connection in a <i>Logical Architecture Diagram</i> or <i>Logical Architecture System Diagram</i> , the new port instance takes over the name of its logical port prototype.
8682711555127641992	When connecting logical functions below <i>Building Blocks</i> in <i>Logical Architecture System Diagrams</i> across <i>Product Lines</i> , delegation ports are created below the <i>Building Blocks</i> . As a precondition, a workspace must be set in one of the <i>Product Lines</i> .
8682711685506471874	In a <i>Logical Architecture Diagram</i> or <i>Logical Architecture System Diagram</i> the context menu entry Open with Ports on a bus port is available again. Via this context menu a diagram can be opened in which one of the ports is represented.
8682711685498692196	Refactoring: When carrying out the Convert Block refactoring on a logical function, additionally to creating new types, also all possible existing types are displayed

ID	Resolution
	and can be selected in the Convert block dialog. On the right-hand side in the ports table, only those ports are listed which match the selected existing type.

12.6.6 AUTOSAR

ID	Resolution
8682711684970511029	ECU Extract: If an ECU Extract aborts because there are necessary artifacts outside the user's scope and loading these artifacts into scope leads to an update then the user is informed that the model is updated.
8682711554391981913	AUTOSAR export: The attribute <code>literalPrefix</code> of an <code>IncludedDataSet</code> is now exported.
8682711554636281917	AUTOSAR export: The attributes <code>allowHaltDueToClock</code> , <code>keySlotOnlyEnabled</code> , <code>keySlotUsedForStartUp</code> , and <code>keySlotUsedForSync</code> of the FlexRay communication controller are now exported.
8682711686287891031	AUTOSAR export: The variant sensitive AUTOSAR export terminates properly.
8682711686244821024	AUTOSAR export: The attribute Is Service of <i>Service Interfaces</i> will not be exported.
8682711685486411024	AUTOSAR export: The type emitter for platform types for AR 21-11 and AR 22-11 has been corrected.
8682711685521492013	The AUTOSAR SW Component Description (improved) has been improved: The <i>Addressing Method</i> is not considered during export, <i>Per Instance Memory</i> and <i>Constant Memory</i> are included in the export.
8682711686003892108	The consistency check "AR_019911a" has been adapted to [constr_1175] of the AUTOSAR specification.
8682711686006172108	An "IOControlRequest" <i>Sender Receiver Interface</i> must have three data elements that have one of the following names: "controlState ", "underControl" or "IOOperationRequest " or "data". The corresponding consistency check has been adapted so that the alias name is no longer checked.
8682711684984612052	AUTOSAR software component update: The selection of the reference model works properly.

12.6.7 Software architecture

ID	Resolution
8682711555034402108	Initial value fields for enumeration data types according to AUTOSAR now get a dropdown widget in the Property View and tables.

ID	Resolution
8682711553775382052	The <i>Data Type Package Type</i> for the implementation data type assignment is now global.
8682711685987671029	New consistency checks insure the consistency of event data access of an <i>Internal Behavior</i> .
8682711686006172108	An "IOControlRequest" <i>Sender Receiver Interface</i> must have three data elements that have one of the following names: "controlState ", "underControl" or "IOOperationRequest " or "data". The corresponding consistency check has been adapted so that the alias name is no longer checked.
8682711555203732108	The value handling mechanism is now able to automatically take over units from data types onto the value literals. This optional functionality is controlled by a dedicated configuration flag.
8682711554452891807	For the "AUTOSAR Adaptive Product Line" creation template, the attribute Branch Name Template is changed to "not set".
8682711555198512108	For objects with referenced initial values the <i>Constant Reference</i> is now visible in the Property View .
17938311317982042	The Service Deployment Editor supports the creation of multiple software instances via sequential drag and drop of service roles on a valid target.
8682711684984612052	AUTOSAR Software Component Update: problem with the selection of the reference model has been fixed.
8682711685249852051	For <i>Application Axis Types</i> , Calibration Access and Record Layout are displayed on the property page Data Type Configuration .

12.6.8 Diagnostics

ID	Resolution
8682711685486431875	Diagnostic export: Only conversions that are used by application data types in PVCDI are considered for export.
8682711685524621875	Diagnostic import: The attribute <code>HealingCycleCounterThreshold</code> is now also imported from PVCDI to EEA if there is no <code>diagIndicator</code> connected to the <code>diagConnectedIndicator</code> .
8682711686095402005	The consistency check "p1201" has been adapted. The severity has been changed from Error to Warning and the data types that are checked have been further specified.
8682711686095412005	The consistency checks "i1001", "i1002", and "i1003" have been adapted: the severity has been from Error to Warning and the error message has been extended.

ID	Resolution
8682711553097502113	For <i>Diagnostic Data Objects</i> , details for NV Data port interface types can be defined on the Realization Requirement property page.

12.6.9 Communication

ID	Resolution
8682711685475151915	The consistency checks "p1190_PDUTransmissions_without_ReceivingECUInterface" and "p1190_PDUTransmissions_without_SendingECUInterface" have been adapted. No errors are reported for <i>PDU Transmissions</i> of a <i>Multiplexed IPDU</i> that are completely transmitted over a gateway.
8682711685475171915	The consistency check "C5603_multiFramedTransmission" has been adapted. No errors are reported for <i>Signal Transmissions</i> correctly referencing a <i>Signal IPDU</i> which is part of a <i>Dynamic Part Alternative</i> of a <i>Multiplexed IPDU</i> .
8682711685475161915	The consistency check "C5505_targetlessInfoMapping" no longer leads to an error for <i>Sender Receiver To Signal Mapping</i> artifacts that are mapped to a <i>System Signal</i> .
8682711685475191915	The consistency check "C5509_deafLogicalRequiredPort" no longer leads to a warning for provided SW ports.
8682711685475181915	The consistency check "C5506_muteLogicalPorts" no longer leads to a warning for required SW ports.
8682711684983401807	Signal router: <i>Signal Transmissions</i> and port mappings on delegation ports are properly cleaned up if they are not used anymore, that is after changes of the software architecture.
8682711685250811024	AUTOSAR import: the import wizard allows navigating forward and backward between the wizard pages.
8682711685328641807	AUTOSAR export: I-SIGNAL-I-PDU-GROUP is now correctly exported.
8682711685440361807	The property page Time Domains of <i>Global Time Domains</i> properly displays assigned Master Domains and Sub Domains .
8682711685475131915	Frame-PDU synthesis: As soon as parts of a multiplexed IPDU are received by a gateway, its contained <i>PDU Transmissions</i> are now referenced to the receiving ECU interface by the frame-PDU synthesis.
8682711686007001003	Frame-PDU synthesis: The updated <i>PDU Transmissions</i> and <i>Frame Transmissions</i> are now at the right model location after repeated runs of the Frame-PDU synthesis.

ID	Resolution
8682711685500121030	DBC export: Pure gateway frames that are not sent or received by the <i>ECU</i> (node based) are not exported anymore.
8682711554383211918	DBC export wizard: The DBC export wizard applies DBC export properties to all export routines.
8682711685491722004, 8682711685486381915	On Node Configuration property page of <i>CAN Tp Nodes</i> the group Multicast has been renamed to Adress Configuration . Also, the attribute Tp Address Extension Value has been added to the group.
8682711686234441807	For <i>CAN Clusters</i> , additional parameters for Bus-off recovery are displayed on the property page CAN Cluster Parameters .

12.6.10 Hardware architecture

ID	Resolution
1792900832696	The Populate of Conductors options for influencing the display of <i>Cables</i> and <i>Cores</i> during a populate have been removed from the preferences Electrologic and Harness Wiring Editor .
8682711685475252083	If a <i>Splice</i> is created during wiring harness synthesis, the relation between <i>Splice</i> and <i>Schematic Connection</i> is set. Additionally, the naming convention for <i>Cores</i> during the creation of <i>Cables</i> based on wiring synthesis constraints is applied.
8682711684934163104, 8682711684934153104	When creating autolayout wiring diagrams with a coordinate system, the coordinate system is taken into consideration when calculating the <i>Section</i> width. Especially for wide <i>Title Blocks</i> in narrow autolayout diagrams, the coordinate system does no longer overlap the <i>Title Block</i> .
8682711685673902036	When creating autolayout wiring diagrams, the labels for <i>Wiring Connectors</i> are displayed.

12.6.11 Geometry

ID	Resolution
8682711555194112039	The delta configuration and corresponding artifacts for the bundle diameter calculation of <i>Topology Segments</i> have been moved to new optional <i>Add-in</i> . Duplicate label definitions of <i>Topology Segments</i> are thus avoided.

12.6.12 Product line engineering

ID	Resolution
8682711685420272012	The Product Line Health Viewer has been replaced by the more powerful External Relation Analyzer . The Product Line Health Viewer has been removed permanently.
8682711685988701029	<i>Assets</i> for software types only propagate artifacts via an <i>Interface Assignment</i> of a port and not, additionally, via type-local references, for example from communication specifications. Less artifacts are propagated than before if the model has inconsistencies. It is recommended to check for inconsistencies prior to <i>Asset</i> creation or refresh.

12.6.13 Change and release management

ID	Resolution
8682711554916322106, 8682711685547812051	The performance of loading the Compare Table during a model comparison has been improved.
8682711684953342106	When comparing formatted texts in the Property View of the Compare perspective, it is now possible to click into the read-only formatted text field.
8682711684942532052	When merging two artifacts, the selected identity of the surviving object (source/target) now correctly determines the order of sorted children.

12.6.14 Test engineering and test management

ID	Resolution
8682711685494373126	The drag and drop actions Move and Paste as copy without external relations for <i>Test Routine</i> have been enabled in the Text column of the Test Specification Editor .

12.6.15 Metrics

ID	Resolution
8682711554746032012	The <i>Collaboration Referable Metric Executor</i> now supports static inputs. The <i>Model Context</i> must be named "static".
8682711685198392111	Source code editors remains open when switching between explorer tabs, when switching the active table instance in a table, and when closing tables.
8682711555201921207	In the authority model, the Property View displays the Overwriting Model Context of <i>Model Contexts</i> .

ID	Resolution
8682711554478612041	The transparency check for variant highlights is done in the <i>Render Diagram</i> metric block.

12.6.16 Reports

ID	Resolution
8682711554027481992	The entry for creating an (outdated) Report Template File has been removed from the New menu.

12.6.17 Collaboration

ID	Resolution
8682711686232021791	A commit or check-in operation that is canceled because a life cycle constraint returns an error, no longer triggers the creation of a bug report.

12.6.18 Administration

ID	Resolution
8682711555144692174	The About PREEvision dialog has been simplified.
8682711685522002012	<i>Demo Add-ins</i> for <i>Dashboards</i> are now available.
8682711685295072039	The "Warmup Metric Run" <i>Add-in</i> is now optional.
8682711555163161855	<i>Add-in</i> context menu: All items in the context menu are displayed when the mouse pointer hovers over the menu.
8682711555024583046	The automatic integration of <i>Add-ins</i> now correctly detects merge conflicts.
8682711554418592068	<i>Consistency Rule Groups</i> can contain <i>Propagate Definitions</i> . Propagation extensions of <i>Propagate Definitions</i> are now also propagated.
8682711685422411993	The API server supports the configuration of the <code>username_claim</code> for the OpenID Connect authentication.

12.6.19 Backup, restore, and migration

ID	Resolution
8682711554488311808	The migration error caused by an incorrect UUID handling has been resolved.
8682711684937731036	If a restore on top fails and the delta between RAMC and database is greater than a given value (default 100,000 elements), the RAMC is deleted and rebuilt.

12.7 Known issues

Known issues in PREEvision 10.9

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
8682711554031661036	In rare cases, the restore fails with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." Contact the Vector support for getting instructions on how to proceed with the migration/restore.
8682711554406702203	If the PREEvision administration server is installed under Linux, models cannot properly be initialized via the administration panel. The initialized model does not contain any files. Workaround: Initialize the model via the PREEvision client.
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555150891783	Templates, like report templates, opened with the new LibreOffice version may be shown as changed and can be saved directly, giving the impression that they have not been migrated. This apparent error can be ignored.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.

ID	Known issue
8682711686247202025	When inserting a diagram placeholder based on templates, an error message is reported that the used template is incomplete. Workaround: 1. Navigate to the selected template under <i>Administration Configuration File Container Report Template Package</i> and select the affected template file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711686179212044	When generating a report for a diagram as PDF, an error message is reported that the report generation was not able to write any data in the Temp directory and is aborted. Workaround: 1. Navigate to the report under <i>Administration Report Model</i> and select the report file. 2. Open the location of the file in the Windows Explorer and delete the file. 3. Update from the server to force a reload of the file.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521972014	For <i>Application Map Types</i>, the Data Type Configuration property page is missing from the Property View. It will be restored in a future minor release.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.
8682711686356952005	Diagnostic export: In case of incomplete software realizations for diagnostic objects (missing relation between <i>SW Port</i> and diagnostic objects), these software realizations may be exported instead of an available diagnostic concept.
8682711686392002008	Filtering table columns via predefined filters: In the Predefined Filters ... dialog, the displayed number of hits for non-activated values is increasing every time the filter dialog is closed and reopened. Workaround: Deactivate the column filter and activate the column filter again, or filter for all values in the table column.

13 PREEvision 10.8

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13.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.8.0
PREEvision license server	3.0.0
PREEvision database server	10.8.0.02
PREEvision application server	10.8.0

Documentation

Manual	Version number
PREEvision manual	10.8.0
PREEvision configuration manual	10.8.0
PREEvision operating manual	10.8.0
PREEvision system requirements	10.8.0
PREEvision server API	10.8.0

13.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.8 and the migration to PREEvision 10.8, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.8, refer to the PREEvision system requirements.

Severe issue resolved: Incorrect deletion of model contexts

In PREEvision 10.8, a severe issue has been resolved, which may have led to deleted *Model Contexts* when editing formatted texts. If you use PREEvision 10.5, 10.6, or 10.7, it is highly recommended to perform a minor release update to PREEvision 10.8.

In PREEvision 10.5, 10.6, and 10.7, when formatted texts are edited, all *Model Contexts* below the associated artifact are automatically refactored to *Placeholder Contexts*. Additionally, orphaned *Placeholder Contexts*, which are not used as placeholder in the formatted text, are deleted.

This may have led to data loss if the *Model Contexts* are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These *Model Contexts* are deleted when any formatted text of the artifact is edited.

For detailed information, refer to the following presentation in the download center: [Information and Workarounds Unwanted Model Context Deletion](#).

Contact the Vector support to provide you with a database script and metric to identify and analyze deleted *Model Contexts*.

System requirements

The following system requirements have been changed:

- > Client requirements: If the Internet Explorer is installed as system browser, for displaying the online help, Internet Explorer version 11 must be installed.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01
10.8.0	10.8.0	10.8.0.02	2023-07-20

Migration and update

PREEvision 9.5 and 10.0 can be migrated to PREEvision 10.8.

For the migration to PREEvision 10.8, it is recommended to update PREEvision 10.0 to the latest version (service pack update) before creating a backup and starting the migration.

Note the following restrictions of the different PREEvision 10.0 versions:

- > PREEvision 10.0 SP13 must not be used for backup, restore, and migration because of an issue regarding the commit information.

- > The model preparation framework, which supports an incremental and final model preparation, is available starting from PREEvision 10.0 SP6. Older PREEvision versions use the previous preparation mechanism, which always prepares all model versions from anew and does not persist preparation information in the database.

An update of PREEvision 10.5 or one of its following minor releases, starting with version 10.6, to PREEvision 10.8 requires no migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.8, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server

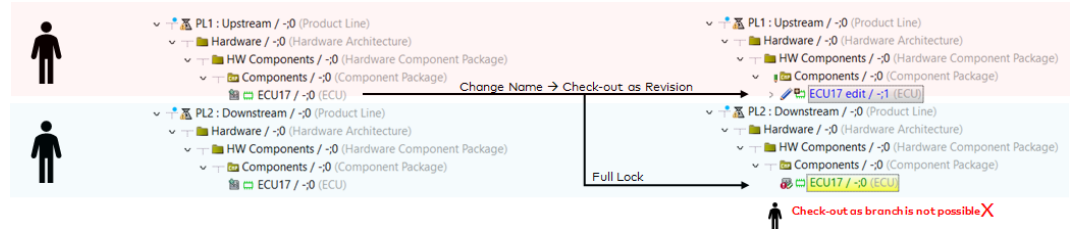


For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

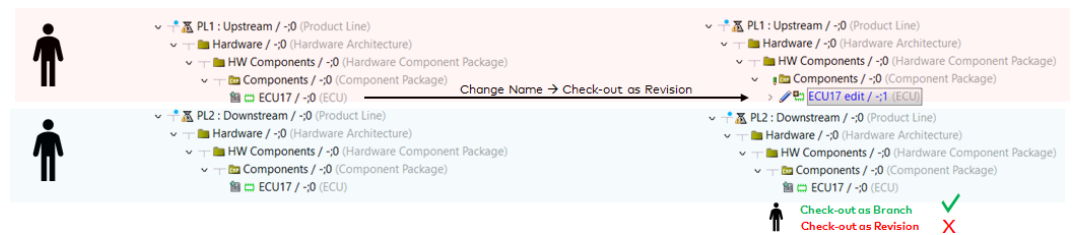
13.3 New features in PREEvision 10.8

Working in parallel with checked-in reuses

In previous PREEvision versions, a check-out as revision fully locks all reuses, which makes it impossible for other users to work with these reuses in parallel, for example, to check-out as branch.



In PREEvision 10.8, a check-out as revision only locks the artifact to be checked-out. In this way, it is possible to check-out the other reuses as branch.



Handling splices for cables

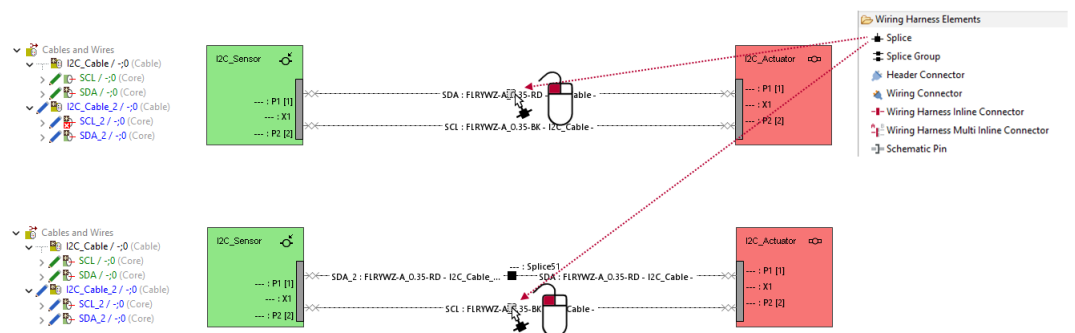
The handling of splices for cores/shieldings of cables has been expanded and improved. Different ways for different use cases are supported:

Successively inserting splices into individual cores/shieldings of a cable

Splices can be inserted into individual *Cores/Shieldings* of a *Cable* successively via the diagram palette entry **Splice**.

When inserting a *Splice* into a *Core/Shielding* of a *Cable*, a duplicate of the *Cable* including its *Cores/Shieldings* is created, and the *Splice* is connected to the corresponding *Core/Shielding*.

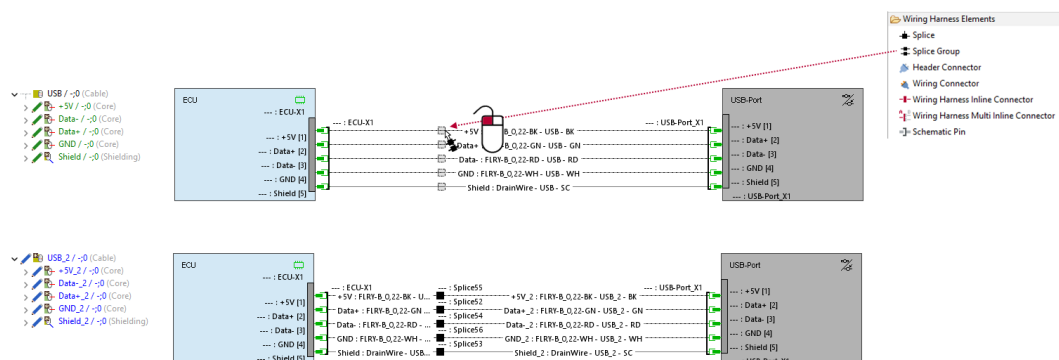
All subsequent *Splices* which are inserted into further *Cores/Shieldings* of the *Cable*, are automatically connected to the corresponding *Core/Shielding* of the already existing *Cable* duplicate.



Inserting splices for all cores/shieldings of an entire cable in one step

Splices for each *Core/Shielding* of a *Cable* can be inserted in one step via the diagram palette entry **Splice Group**, instead of splitting each *Core/Shielding* of a *Cable* separately.

Via the **Splice Group** palette entry, you only need to select a *Core/Shielding* of the *Cable* once, and a *Splice* is automatically inserted into each *Core/Shielding* of the *Cable* in one step. Specific splice feedback indicators on the individual *Cores/Shieldings* indicate where the *Splices* will be inserted.



Additionally, the refactoring **Insert Splice for Each Wire** is available on a single *Core/Shielding* in the diagram or **Model View** to insert a *Splice* for each *Core/Shielding* of a *Cable* in one step.

Excel export of requirement specifications including images

The Excel export of table contents has been improved.

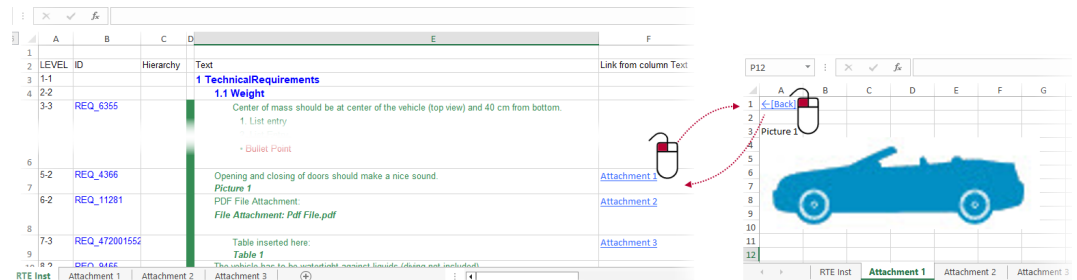
Table contents exported to Excel is not limited to unformatted text but is exported including most of the formatting as it is defined for formatted text in PREeVision. Formats supported are, for example, lists, bullet lists, font color, bold or italic font.

LEVEL	ID	Hierar...	Text
1-1			1 TechnicalRequirements
2-2			1.1 Weight
3-3	REQ_6355		Center of mass should be at center of the vehicle (top view) and 40 cm from bottom.
4-3	REQ_10088		The maximum weight of the vehicle is not to exceed 1.5 tons.
5-2	REQ_4366		Opening and closing of doors should make a nice sound.

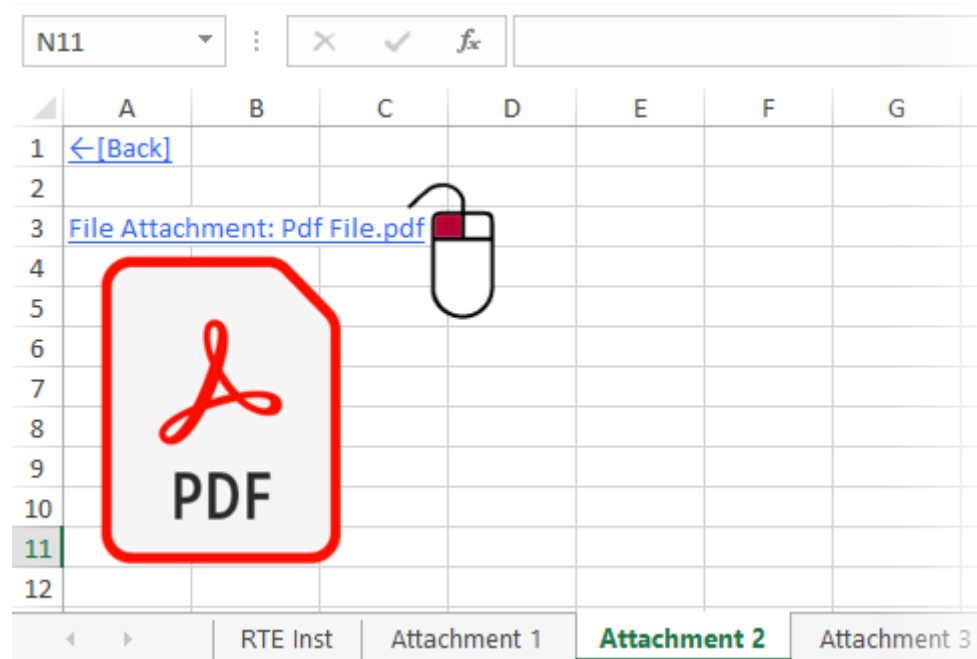
Table contents like images, file attachments, tables, or OLE objects contained in formatted text are exported and displayed in Excel on separate Excel sheets.

LEVEL	ID	Hierar...	Text
5-2	REQ_4366		Opening and closing of doors should make a nice sound.
6-2	REQ_11281		PDF File Attachment
7-3	REQ_472001552		Table inserted here:
8-2	REQ_9465		The vehicle has to be watertight against liquids (diving not included).

The different Excel sheets can be reached via attachment hyperlinks provided in an extra table column on the main Excel sheet. The navigation back from the separate Excel sheets to the main Excel sheet is also supported via hyperlinks.



File attachments can be directly opened from within the corresponding Excel sheet via a file attachment link. File attachments are stored in a folder next to the exported main Excel file.



The content of tables within formatted text is properly exported and displayed in the Excel table on the corresponding separate Excel sheet.

M11

	A	B	C	D	E	F
1	←[Back]					
2						
3	Table 1					
4	A.1	B.1	C.1			
5	A.2	B.2	C.2			
6	A.3	B.3	C.3			
7						
8						

RTE Inst Attachment 1 Attachment 2 **Attachment 3**

Data formats like OLE objects are wrapped in RTF files. This ensures the display of preview images of OLEs independent of the underlying software which is needed to edit the OLEs.

The hierarchy of a package structure in PREEvision can be displayed in the exported Excel file via indentation. Hierarchy levels can be set via column configuration on a table column in PREEvision and are then displayed via indentation according to the hierarchy groups in Excel.

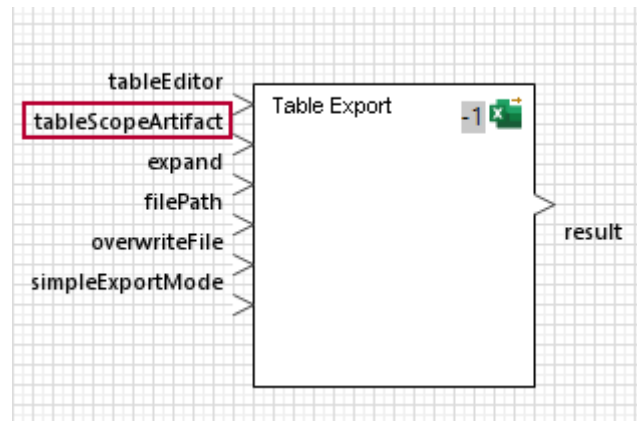
L39

1	2	3	4	5	6	C	D
10							The vehicle has to be watertight against liquids falling
11							2 LegalRequirements
12							2.1 Emissions
13							Idle emission limit content
14							2.1.1 AverageEmissionLimit
15							Average Emission Limitation content
16							2.2 SoundEmissions
19							2.3 Lighting
22							3 LegacyFeatureList
23							3.1 Climate
25							3.2 DriverAssistance
26							3.3 PowerTrain
27							3.3.1 Brake
30							3.3.2 CruiseControl
31							3.3.2.1 CruiseControl
32							3.3.2.1.1 AdaptiveCruiseControl
33							

Table export block

The Excel export Table Export metric block can now handle table template artifacts from the *Administration*. Via the metric, batch operations for the Excel export can now be carried out.

A new input port "tableScopeArtifact" has been added to provide the artifact on which the table is exported into Excel.



AUTOSAR multi-version support

A multi-version support of AUTOSAR releases in PREEvision allows the support of several non-backward compatible AUTOSAR versions. The new AUTOSAR versions supported for AUTOSAR Classic and Adaptive are 21-11 and 22-11.

AUTOSAR software component description

In addition to the standard AUTOSAR software component description export, an improved software component description is available, **AUTOSAR SW Component Description (improved)**.

This new export offers the following improvements:

- > better performance, up to 50 % for large models
- > improved error handling for hidden artifacts and artifacts with read-only rights

The new AUTOSAR software component description export will finally replace the previous export in PREEvision 10.11.

13.4 Changes

Deprecated metric blocks

The following metric blocks of the product line engineering are no longer supported with PREEvision 10.8:

- > *Asset Integration Model Calculator*
- > *Asset Integration Model Integrator*
- > *Asset Reverse Integration*

Deprecated product line engineering features

The **Product Line Health Viewer** has been replaced with the **External Relation Analyzer** since PREEvision 10.5 and will no longer be supported with PREEvision 10.9.

13.5 Fixed issues

Fixed issues in PREEvision 10.8

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [Backup, restore, and migration](#)

13.5.1 Common

ID	Resolution
8682711685314021995	When editing formatted texts, <i>Model Contexts</i> that are not used as placeholders in the formatted text are no longer deleted.
8682711553600482041, 8682711553775342052, 8682711684912722045, 8682711685338592068, 8682711553961961038	In the Information View , displayed icons no longer overlay the text.
8682711685246322034	The action Window Reset all Perspectives to Model Definitions properly resets all perspectives.
8682711554733332014, 8682711684958012101	Model export: The log output for tree artifact collisions is disabled by default to prevent client freezes.
8682711684937883054	The artifacts that are displayed by <i>Query Rule Group</i> extensions in the Model View are properly refreshed when changing the perspective or restarting the client.
8682711555165072024	Moving several selected artifacts before or after an artifact in the Model View maintains the order of the selected artifacts.

ID	Resolution
8682711685348732042	In the PREEvision system requirements, the following client requirement for the Internet browser has been added: If the Internet Explorer is installed as system browser, for displaying the online help, Internet Explorer version 11 must be installed.

13.5.2 Diagrams

ID	Resolution
8682711554779911994, 8682711554729512041	Diagrams which are displayed in the Search result view via the context menu Show diagrams in Search View , are propagated to the Model View when selecting a diagram in the Search result view.
8682711684925282046	A highlighting is no longer calculated for deactivated elements in diagrams. This prevents resulting errors.
8682711684951892046	The Child Area Graph Node for background images is removed when the object configuration of the background image is removed.

13.5.3 Tables

ID	Resolution
8682711554492202024	If a create action is executed on a table cell that has no children, the table is refreshed and shows the newly created artifact.
17938311332152098	The table selection is maintained if an artifact that is not contained in the table is selected in the Model View .
8682711554888343082	If you select multiple artifacts of different meta classes and different parents in the Model View and open them in a table via Open with , the artifacts are ordered by meta class.

13.5.4 Requirements

ID	Resolution
8682711554894201783	ReqIF export: Formatted texts containing tables that are aligned right via the table properties are exported in a schema valid way.
8682711554829312084, 8682711554750572105, 8682711685443922105	ReqIF export: Formatted texts containing specific list structures are exported in a schema valid way.

ID	Resolution
8682711555127671783	ReqIF export: Formatted text containing two following ordered lists is exported in a schema valid way. The list start level which has caused a schema violation and is not supported by the ReqIF schema is no longer exported.
8682711553529641783	ReqIF export: Formatted text containing text tables which have been manually adjusted in size are exported in a schema valid way.
8682711555203942023	ReqIF export: If a requirement contains a defective placeholder, the ReqIF Agreement Export does not abort anymore. Defective placeholders are diagram, table, or chart placeholders that reference an artifact that is no diagram, table, or chart, but, for example, an ECU. Defective placeholders are not exported.
8682711555129181038	The performance of the Excel export of requirement specifications has been significantly improved.
8682711552408672105	The User-defined Filter correctly filters with the setting contains not .

13.5.5 Logical function architecture

ID	Resolution
8682711554725130000, 8682711685346102113	The synchronization of names between port instance and port type works now in the <i>Logical Function Architecture</i> layer if only one instance is available and the option is activated.

13.5.6 AUTOSAR

ID	Resolution
8682711552506261029	AUTOSAR export: Handling of read-only artifacts during ECU extract or SW component description export (improved) has been corrected.
8682711553537611024	<i>Process Designs of Service Instance To Port Prototype Mappings</i> are considered when exporting or importing <i>Software Cluster Designs</i> .
8682711554188122004	ECU extract: <i>Value Specifications</i> under the port types are exported correctly.
8682711554631081058	Software cluster design description: the software cluster design description exports only the relevant <i>Signals</i> .
8682711554395361029	In the Property View of port types, the tables on The Port Communication Specification page include columns for RAM and ROM initial values and show NV Data.

ID	Resolution
8682711554455871807	When creating an AUTOSAR Adaptive Product Line , the packet <i>Service Interface Transformation</i> is also created. Missing <i>Root Compositions</i> are indicated by a tooltip.
8682711684910190063	<i>Data Constraints</i> of an implementation data type element of the category "reference" are exported correctly.
8682711685226072051	The consistency check "c1221_DataTypedInformationUnit_with_invalid_ApplicationValueType_InitValue" has been adapted to correctly work with <i>Application Enumerations</i> .
8682711685296732108	In the AUTOSAR export wizard, model elements are now selectable on second wizard page.

13.5.7 Software architecture

ID	Resolution
8682711555127633013	The consistency check "p1169_VirtualPackagePart_without_VirtualPackage" will not hit for a <i>Constant Reference</i> without <i>Virtual Package</i> , but the consistency check "p1169_VirtualPackagePart_with_illegal_VirtualPackage" will now hit for a <i>Constant Reference</i> with a referenced <i>Virtual Package</i> .
8682711554918561909	The <i>Consistency Rule</i> to check if the attribute Period of <i>Timing Events</i> is set correctly works as expected.
8682711554721252014	The value handling mechanism sets the attribute "Category" to "Value" on <i>Application Literals</i> typed by an <i>Application Value Type</i> .

13.5.8 Communication

ID	Resolution
8682711554535451918	DBC export: Minimum and maximum values of application data types are correctly exported.
8682711554884531810	Signal router: <i>VLANs</i> of existing service instances are considered during signal routing over Ethernet.
8682711555144622043	Signal router: The signal router also considers <i>System Signals</i> when looking for existing and correctly routed signal transmissions in gateway scenarios.
8682711555114232043	Signal router: When routing port groups the Information View informs about reachable and unreachable targets.
8682711554492261003	Signal router: Application data types are not set for <i>Signal Groups</i> and the contained <i>Signals</i> during signal routing.

ID	Resolution
7883112550092273727, 8682711554687372051	Ethernet: The calculation of <i>Fire and Forget Methods</i> without argument has been improved in the SOA & Ethernet Explorer .
8682711554421291807	The creation of <i>Socket Connection IPDU Identifiers</i> has been improved. <i>Socket Connection IPDU Identifiers</i> are only assigned to a <i>So Ad Routing Group</i> if the identifier belongs to the same <i>Service Instance</i> as the routing group's <i>Event Handler</i> (for events) or to the same <i>Service Instance</i> as the routing group itself (for methods). The routing group name now also includes the name of the <i>Service Instance</i> it belongs to.
8682711554601572159	The frame-PDU synthesis removes ECU interfaces of IPDUs contained in a <i>Container IPDU</i> if it is fully transmitted over a <i>Gateway</i> .
17938311447942004	When synthesizing the communication infrastructure in the Diagnostic Communication Explorer , cluster assignments are properly created and updated for <i>Do Ip Tp Configurations</i> .

13.5.9 Hardware architecture

ID	Resolution
17938288953319012	To assign a <i>Connector Type</i> to a <i>Wiring Connector</i> , a refactoring is available in the context menu of a <i>Splice</i> .
8682711554395341874	When using the refactoring Create Missing Wiring Connectors for a <i>Header</i> which already has assigned a <i>Wiring Connector</i> , a dialog is opened. In the dialog you can decide to either cancel the refactoring or create <i>Wiring Connectors</i> for <i>Headers</i> only which do not have assigned a <i>Wiring Connector</i> . Similarly, <i>Wire Pins</i> which are not assigned to a <i>Wiring Connector</i> are assigned to the proper <i>Wiring Connector</i> .
8682711555198611037	Components in a <i>Wiring Diagram</i> can be moved or resized up to the edge of the diagram <i>Section</i> , independent of the diagram zoom factor.
8682711555202122196	When carrying out the Resolve Splices refactoring on a <i>Schematic Connection</i> , the Resolve Splices dialog properly displays the <i>Schematic Pins</i> to select the target pin also in case the <i>Splices</i> to be resolved have a relation to the <i>Schematic Connection</i> .
8682711555173511268	The palette entries <i>Gateway</i> and <i>Software Gateway</i> have been removed from the <i>Component Diagram</i> .

13.5.10 Geometry

ID	Resolution
8682711554907222083	The Cut , Copy and Move action for template diagrams (<i>Connector Template Diagram</i> and <i>Hardware Device Template Diagram</i>) has been disabled. Instead, a special paste metric has been implemented to copy the diagrams and set the proper represented artifact relation to the target artifact afterwards.

13.5.11 Product line engineering

ID	Resolution
8682711554536752046	A checkout of <i>Assets</i> during cluster update is prevented in case of overlapping artifacts.
8682711554768852100	<i>Assets</i> can be updated if a core artifact to be updated is referenced upstream in an invisible foreign <i>Asset</i> .

13.5.12 Variant management

ID	Resolution
8682711553517111998	The <i>Consistency Rule</i> that is checking if artifacts are compliant to AUTOSAR pre-/post-build variant conditions has been updated.
8682711554764721995	The selected filter in the Set Content View is persisted.

13.5.13 Rules

ID	Resolution
17938311673332049	The Consistency Check Results view displays tooltips when moving the mouse over a message in the view. Therefore, the Tooltip must be defined on the <i>Localization</i> of the <i>Consistency Rule</i> .
8682711554024192106	Changes in a <i>Query Rule Diagram</i> , such as renaming an object, are directly displayed in the Outline view.

13.5.14 Metrics

ID	Resolution
8682711555117411848	The Update Metric Block action only creates a new port representation in the <i>Metric Diagram</i> if the port is also missing in the model.
8682711555198482100	A <code>NullPointerException</code> that occurred in the Property View during metric execution has been fixed.

ID	Resolution
8682711555153612046	Newly created artifacts can be deleted in a pre-commit hook.
8682711685447682084	<i>Model Contexts</i> or <i>Placeholder Contexts</i> with out-of-scope or invisible context artifacts are now handled correctly by the <i>Cleanup Placeholder</i> metric block.

13.5.15 Reports

ID	Resolution
8682711684953922112	After large pages in PDF exports, for example, for large diagrams, the page scaling factor of the following pages is correctly handled.

13.5.16 Collaboration

ID	Resolution
8682711554417533082, 8682711684915512106	Reusing from the Version History via drag and drop is possible again.
8682711555117312076	Loading the Version History can only be started once per client. An error message is displayed if the [Load Version History] button is clicked while another version history is currently being loaded.
8682711555122151790	Commit History entries which are older than the requested artifact are not displayed.
8682711555127672112	The check-out of an artifact does not lock all reuses of the artifact anymore. Instead, the check-out creates a revision and only locks the artifact to be checked-out. In this way, it is possible for other users to work with the reuses in parallel and, for example, check-out the reuses as branch.
8682711554778402100	Changing access rights, for example from invisible to visible, on a scope root artifact is properly handled. All scope root artifacts are always known on server and client side and are no longer filtered on the server-side scope cache.
8682711555198482101, 8682711685290821995	An error in the initialization of the model cache (RAMC) during client startup has been resolved.
8682711685463701993	Update requests no longer block the system because large updates are loaded from the database.
8682711555162831229	Fixed bug in <i>Life Cycle</i> transition evaluation handling for attribute value checks with multiple transition extension parameters.
8682711555190372070	Artifacts whose <i>Life Cycles</i> cause <i>Life Cycle</i> transitions to fail are now reported.

ID	Resolution
8682711555203531229	Tables can now be created using the context menu under the following artifacts: <i>Lifecycle States</i> , <i>Life Cycles</i> , and <i>Lifecycle Packages</i> .

13.5.17 Administration

ID	Resolution
17938311719341204	<i>Query Rule Group</i> icons set via object configuration are now part of the Add-in propagation.
8682711553989402102	A single <i>Query Rule Group</i> set as a filter configuration for the model view in an explorer is now part of the <i>Add-in</i> propagation. There is no propagation if multiple <i>Query Rule Groups</i> are set as filters.
8682711554632482064	<i>Add-ins</i> delivery: Improved error reporting if installation mode or scope is active.
8682711554779451225, 8682711554636281897	After <i>Add-in</i> installation, updates from server are properly loaded.
8682711554779851806	In the "Configuration" <i>Add-in</i> , unnecessary core relations to <i>Source Codes</i> which prevented <i>Calculation Blocks</i> from being deleted have been removed.
8682711555022821028	The check-out and check-in behavior of <i>Add-ins</i> during <i>Add-ins</i> installation has been corrected: <i>Add-ins</i> contained in the *.addins file of the installation are checked-in after installation.
8682711555164282102	The <i>Add-in</i> propagation of <i>Diagram Settings</i> now includes the <i>Perspective Configuration</i> , but does not propagate the <i>Perspective Configuration</i> itself.
8682711555186351217	Installation of default <i>Add-ins</i> is again possible without manual check-in of artifacts before installation.
8682711555191602102	The <i>Add-in</i> propagation of tables now includes <i>Collaboration Referable Metric Executors</i> in addition to <i>Embedded Metric Executors</i> for column actions, toolbar actions, and for metric executors that are direct children of a table.
8682711684912363046	When customizing <i>Add-ins</i> , <i>Add-in</i> -internal relationships to singletons that are not directly contained in the <i>Add-in</i> but indirectly through their parent are no longer lost.
8682711684973372011, 8682711554636332068	<i>Add-ins</i> installation: Improved Information View error reporting.
8682711554640422203	Initializing a server model with a file is possible when using a role with restricted access rights.
8682711555186071993	In the Model Management view, the download of all bug reports from the server is possible again.

13.5.18 Installation

ID	Resolution
8682711554631081872	Unnecessary installation scripts of the monitoring server have been removed from the PREEvision collaboration platform delivery.

13.5.19 Backup, restore, and migration

ID	Resolution
8682711685397011036	<i>Function Groups</i> of moved <i>Component Deployment Packages</i> are properly handled during restore.
8682711685315831036	Migration error caused by already existing item in repository has been resolved.

13.6 Known issues

Known issues in PREEvision 10.8

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
8682711554031661036	In rare cases, the restore fails with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." Contact the Vector support for getting instructions on how to proceed with the migration/restore.
8682711554406702203	If the PREEvision administration server is installed under Linux, models cannot properly be initialized via the administration panel. The initialized model does not contain any files. Workaround: Initialize the model via the PREEvision client.
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555150891783	Templates, like report templates, opened with the new LibreOffice version may be shown as changed and can be saved directly, giving the impression that they have not been migrated. This apparent error can be ignored.
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i> . Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.

ID	Known issue
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.
8682711685521972014	For <i>Application Map Types</i>, the Data Type Configuration property page is missing from the Property View. It will be restored in a future minor release.
8682711685521992014	For <i>Application Curve Types</i> and <i>Application Cube Types</i>, the Calibration Attributes property page is missing in the Property View. It will be restored in a future minor release.

14 PREEvision 10.7

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14.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.7.0
PREEvision license server	3.0.0
PREEvision database server	10.7.0.02
PREEvision application server	10.7.0

Documentation

Manual	Version number
PREEvision manual	10.7.0
PREEvision configuration manual	10.7.0
PREEvision operating manual	10.7.0
PREEvision system requirements	10.7.0
PREEvision server API	10.7.0

14.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.7 and the migration to PREEvision 10.7, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.7, refer to the PREEvision system requirements.

Deleted model contexts when editing formatted texts

PREEvision 10.7 contains a severe issue which may lead to data loss:

When formatted texts are edited, all *Model Contexts* below the associated artifact are automatically refactored to *Placeholder Contexts*. Additionally, orphaned *Placeholder Contexts*, which are not used as placeholder in the formatted text, are deleted.

This may lead to data loss if the *Model Contexts* are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These *Model Contexts* are deleted when any formatted text of the artifact is edited.

The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.

For detailed information and possible workarounds, refer to the following presentation in the download center: [Information and Workarounds Unwanted Model Context Deletion](#).

Contact the Vector support to provide you with a database script and metric to identify and analyze deleted *Model Contexts*.

LibreOffice update

The internal LibreOffice component has been updated for easier maintenance and better functional support within PREEvision.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03
10.7.0	10.7.0	10.7.0.02	2023-06-01

Migration and update

PREEvision 9.5 and 10.0 can be migrated to PREEvision 10.7.

For the migration to PREEvision 10.7, it is recommended to update PREEvision 10.0 to the latest version (service pack update) before creating a backup and starting the migration.

Note the following restrictions of the different PREEvision 10.0 versions:

- > PREEvision 10.0 SP13 must not be used for backup, restore, and migration because of an issue regarding the commit information.
- > The model preparation framework, which supports an incremental and final model preparation, is available starting from PREEvision 10.0 SP6. Older PREEvision versions use the previous preparation mechanism, which always prepares all model versions from anew and does not persist preparation information in the database.

An update of PREEvision 10.5 or 10.6 to PREEvision 10.7 requires no data migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.7, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server



For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

14.3 New features in PREEvision 10.7

ReqIF import: restrict link repair to selected product line

During the ReqIF import, the automated closing of links is now limited to links or associations having source and target in the import *Product Line*. This is the *Product Line* where the actual data (for example, requirements or test data) is imported into.

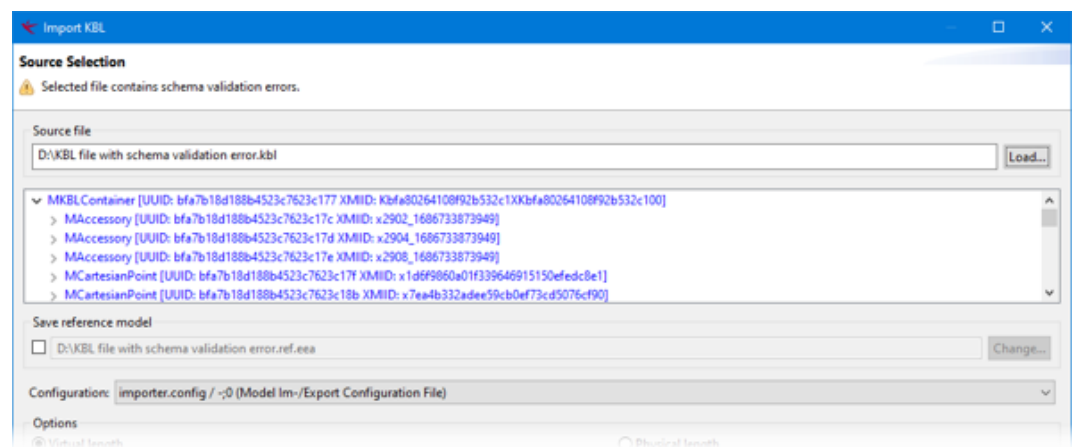
If there are relations imported with source or target in a different *Product Line*, a new action can be used to close these links. The action **Resolve open ReqIF Links** can be found in the **Refactoring** menu and can be executed on *Product Lines*.

The **Information View** shows all created links and relations and therefore can also be used as an analysis tool.

Improvements for KBL

More than 100 new online checks support the modeling from start to the file export via KBL. And the existing online checks were consolidated in function, naming, and error message.

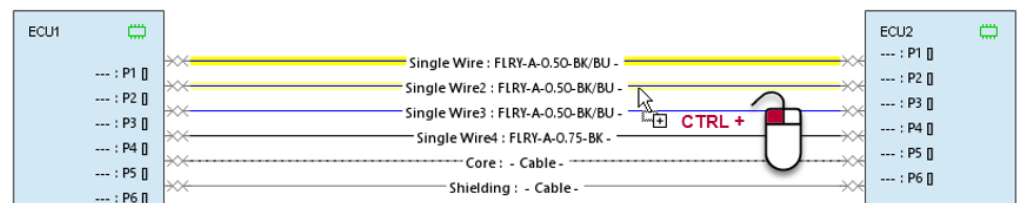
Also, KBL files are instantly validated during import. Violations of the schema are indicated in the import wizard as well as in the **Information View**.



Inserting a common splice into several single wires

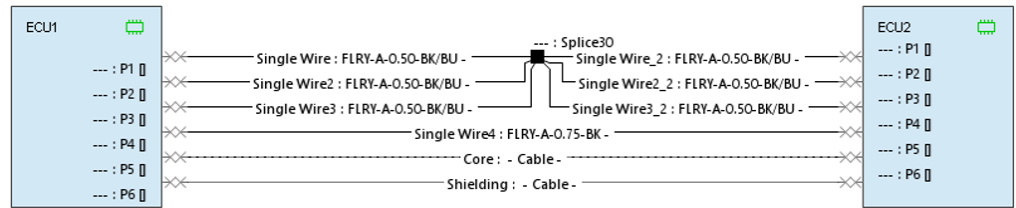
Inserting *Splices* into existing *Single Wires* via diagram palette has been improved. You can insert a common splice into multiple single wires using the **Splice** action in the diagram palette:

1. Select the **Splice** action in the diagram palette.
2. Hold **<Ctrl>** to select multiple *Single Wires*. Selected *Single Wires* are highlighted in yellow, valid selectable *Single Wires* are highlighted in blue.



3. Press **<Enter>** or release **<Ctrl>** before selecting the last wire to insert the *Splice*.

The *Splice* for the selected *Single Wires* is aligned with the bold highlighted *Single Wire*.

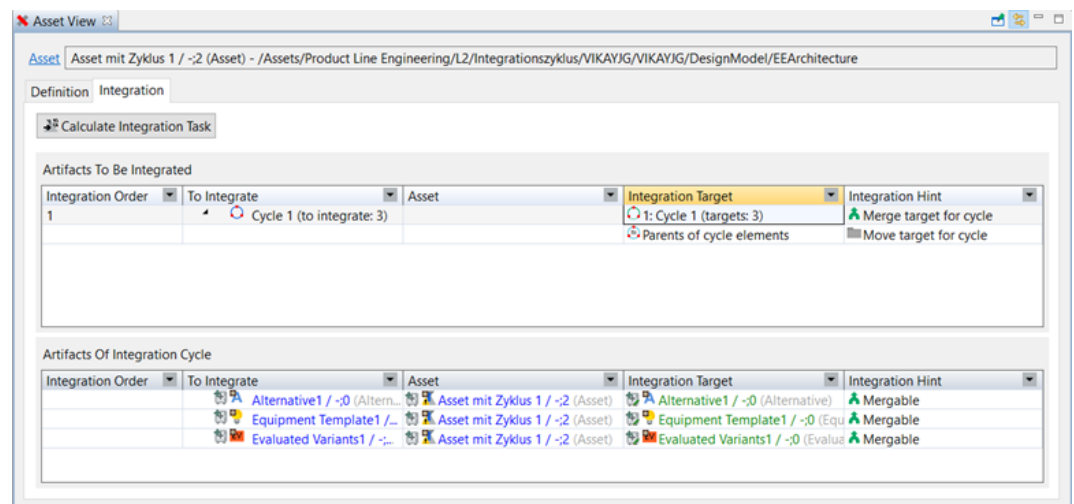


Only *Single Wires* that reference the same *Schematic Connection* are valid. *Cores* or *Shieldings* are not supported.

Asset integration support of model cycles

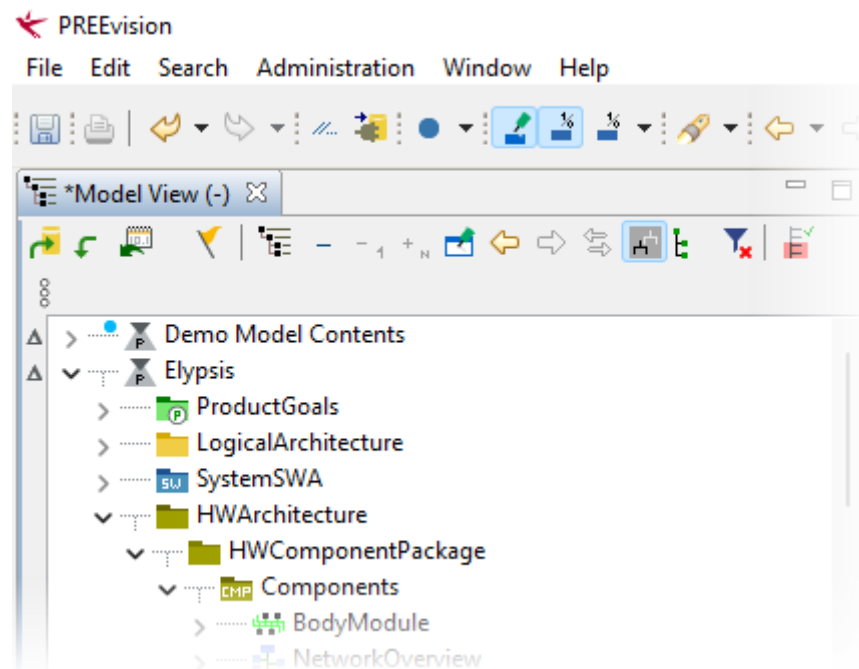
Automatic asset integration has been enhanced for *Assets* containing artifacts that are linked to themselves via a relation cycle in the model. Typical examples are artifacts like variants that represent alternatives which as such are linked by to-1 relations.

As calculated by the integration task, the tables of the redesigned **Asset View** display the cycle and its artifacts in the **To Integrate** columns, and the target cycle and its artifacts for the integration in the **Integration Target** columns. Cycles can be integrated in a similar way to artifacts by using the context menu or the cell action.



Icon facelift

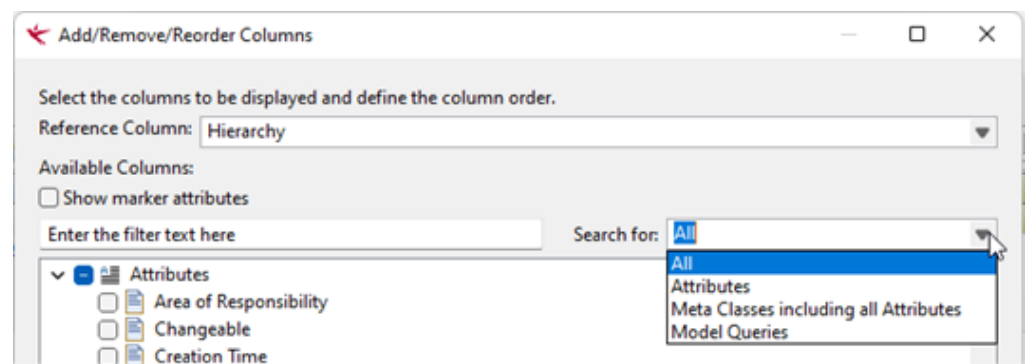
The icons have been converted to flat design for a more modern and fresh appearance of PREEvision. Flat design means no gradients and mostly no outlines around the icons. All icons have also been provided in a higher resolution for high-resolution monitors.



Improvements for tables

The following improvements have been introduced for tables:

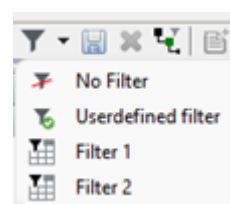
- > In the **Add/Remove/Reorder Columns** dialog, the **Search for** list has been added and helps finding the right content.



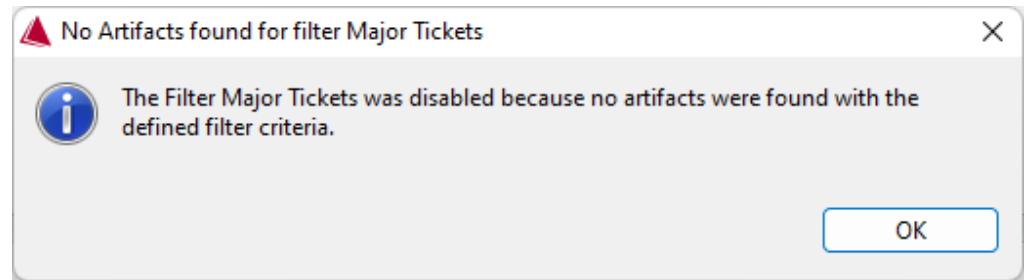
- > The display name of table artifacts is extended by "Proxy" or "Instance" after the name of the table template. In this way, you can quickly identify and characterize the table.

> Requirements (Test Specification Analyzer Proxy)
 > RTE Inst (Requirement Text Editor Instance)

- > New icons have been introduced for table filters.



- > If a table is opened and a filter is applied that does not match any artifacts, a message is displayed informing you that the filter has been deactivated because no artifacts were found with these filter criteria.

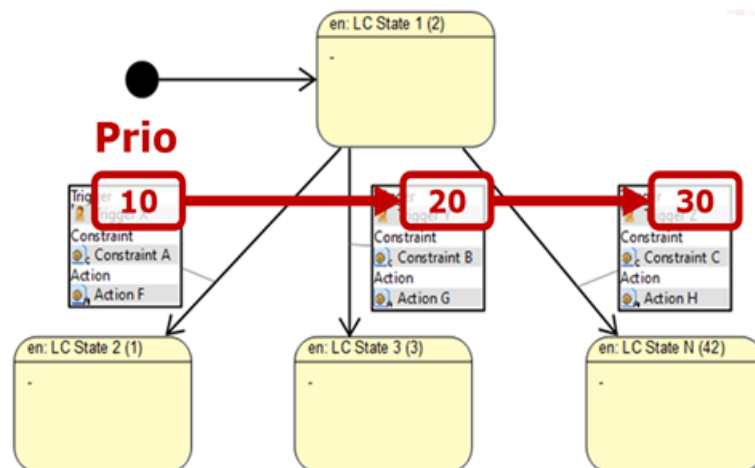


- > When dragging and dropping an artifact in a table, it is now possible to scroll the table vertically even during the drop action.

Improvements for life cycles

The following features have been added to the life cycle framework:

- > Events on custom attributes such as value changes can be used to trigger life cycle transitions
- > Definition of display and execution orders (priorities) of life cycle transitions.
- > Prioritized evaluation of life cycle transitions until a valid target state is found.



- > Initial life cycle state for copied artifacts.
- > Improved reporting of life cycle transition results and errors in the **Information View**.
- > Life cycle transition constraints can be defined directly in the E/E model using metrics and consistency checks.

14.4 Changes

Deprecated metric blocks

The following metric blocks of the product line engineering are deprecated and will no longer be supported with PREEvision 10.8:

- > *Asset Integration Model Calculator*
- > *Asset Integration Model Integrator*
- > *Asset Reverse Integration*

14.5 Fixed issues

Fixed issues in PREEvision 10.7

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Rules](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [License](#)
- > [Backup, restore, and migration](#)

14.5.1 Common

ID	Resolution
8682711554778461918	<i>Attribute Conventions</i> can now be correctly applied to a greater number of checked-in artifacts without an exception.
8682711554645241202	Within the Compare Table , the right side of the table is sorted in the same way as the left side of the table.
8682711554436712051	When filtering attributes in the Compare Table with the Filter Attribute action, UUID and XMIID remain. Opening the Filter Metaclass Dialog overwrites the filtering of the Filter Attribute action.
8682711554653672036	Rules are found correctly within the Label Configuration view when having a different revision. An obsolete warning tooltip as well as warning icon are not displayed anymore.
8682711554395712101	Checks have been added to avoid exceptions when opening portlets.
8682711554525532100	User-defined graphic styles that are also used in the <i>Rich Text Template File</i> are displayed in the Styles and Formatting view.

ID	Resolution
8682711554380242101	When editing formatted texts, the context menu shows sub menu entries again, for example, Paste Special Unformatted Text .

14.5.2 Diagrams

ID	Resolution
8682711554636202083	The size adjustment of multiple objects in a diagram is now done with reference to the first selected element.
8682711554045482083	The creation date and the printing date in the <i>Title Block</i> of a diagram is formatted according to the client language settings. The formatting is depending on the client language when the <i>Diagram Configuration</i> is assigned.
8682711554779991994	The text that is displayed in the diagram <i>Title Block</i> considers the width specified in the header.
8682711554746131030	<i>Software Architecture System Diagrams</i> and <i>Rule Diagrams</i> that contain pictures can be opened again.

14.5.3 Tables

ID	Resolution
8682711553603532111	Dependent columns are refreshed when the suborder changes, even if the column data is provided via search rules.
8682711554258142001	A table scrolls automatically when drag and drop is executed by the user.
8682711553438612049	Showing previously hidden columns triggers data calculation of columns.
8682711554380541914	Metric based filters are working in combined tables.
8682711554421082113	The Add/Remove/Reorder Columns dialog is working for all tables in a combined table editor.
8682711553506812050	The configuration of own filters for relations in the Property View is also possible if only a special filter is available for the drop-down list.
8682711554653783046	Right click in a table cell with <code>TableCellContent</code> no longer loses the selection but correctly opens the context menu.
8682711554773281030	The Excel export of large tables works properly. To improve performance, formatted texts are automatically loaded from the server before the export.
8682711554743592112	Switching the input of an explorer works properly if the explorer is used in a portlet.

ID	Resolution
8682711554536262113	Opening an explorer via the <i>Open Editor in Area</i> metric block with a given explorer category as input no longer reports a cancel message in the Information View .

14.5.4 Requirements

ID	Resolution
8682711554019072106	The settings of the Requirement Text Editor and the Test Specification Editor are changed to immediately react to variant information changes.
8682711554725091877	ReqIF export: Corrupted placeholders which expect a diagram but reference an artifact that is not a diagram (for example a requirement) no longer block the ReqIF export. These corrupted placeholders are skipped during the export.
17938309277132049, 8682711552960532049, 8682711554032522101	Open ReqIF links are only resolved inside the target product line of an import. A refactoring is available for manually resolving open ReqIF links in several product lines.

14.5.5 Logical function architecture

ID	Resolution
8682711554724970000	The selection propagation works properly for artifacts in the <i>Logical Architecture System Diagram</i> .
8682711554725130000	The synchronization of names between port instance and port type works properly in the <i>Logical Function Architecture</i> layer if only one instance is available.

14.5.6 AUTOSAR

ID	Resolution
8682711555022882003	A new consistency check is available that checks for application data types that are not supported by AUTOSAR.
8682711553517101998	The <i>Consistency Rule</i> has been corrected that is checking if artifacts are compliant to AUTOSAR pre-/post-build variant conditions.
8682711555034332051	The AUTOSAR import can handle ARXML files that contain a non-supported port interface. The import will be aborted with a posting in the Information View explaining which interfaces in the ARXML file is not supported by PREEvision.

ID	Resolution
8682711554737861998	AUTOSAR ECU extract: a transformation error when exporting certain configuration of the transport layer has been resolved.
8682711554452501003	AUTOSAR ECU extract: both source <i>Signal</i> und target <i>Signal</i> of signal mappings which corresponds to <i>Signal Gateway Routing Entries</i> are exported.
8682711554640571917	AUTOSAR ECU extract: SYNC-DATA-ID-LISTs for <i>FlexRay Global Time Domain</i> properties are now exported.
8682711554636341917	AUTOSAR ECU extract: the attribute <code>ALLOW-DYNAMIC-L-SDU-LENGTH</code> of FlexRay transmissions is exported.
8682711553505000000	AUTOSAR ECU communication extract: LIN slave configurations are now correctly exported.
8682711554639061998	AUTOSAR Export: the export can handle models containing non-supported application data types.
8682711554733522014	AUTOSAR Export: string literals used as Init Value are exported as <code>APPLICATION-VALUE-SPECIFICATION</code> .

14.5.7 Software architecture

ID	Resolution
8682711554417442013	The required parts for the automatic creation of application data type to implementation data type mapping, which are used for data types in the new <i>Primary Editors</i> are available in a specific non-mandatory <i>Add-in</i> .
8682711554383191029	The required parts for handling initial values are available in a separate <i>Add-In</i> and can therefore be comfortably customized.
8682711554417372014	The required parts for configuring the content assist and content assist with value handling are available in specific non-mandatory <i>Add-ins</i> .
8682711554601843013	A new consistency check is available that checks for an empty Category of an <i>Application Literal</i> .
8682711554724980000	The context menu item to start the Show/Hide Ports dialog is available in <i>Software Architecture System Diagrams</i> .
8682711554685602014	The <i>Add-in</i> Software Design Explorer contains all necessary metrics to show or hide specific table columns.
8682711554725080000	A problem with the Show/Hide Ports dialog in the <i>Software Architecture System Diagrams</i> has been resolved.

ID	Resolution
8682711554440462043	The Selection Dialog which is shown if the option Select artifacts to be populated is activated within the Populate Artifact dialog of a <i>Software Instance Diagram</i> has been resolved.
8682711554383201029	When using the value handling feature, initial values can be properly set in the Property View although the data type might not yet be supported.
8682711554654372014	The new <i>Add-in</i> "Content Assist with Value Handling" allows an enhancement of the combined use cases of setting values more easily and having an additional content assist in Property View fields or cells in a table.
8682711554918441913	The Mapped Implementation Data Types Assignment refactoring does not dereference <code>DataTypeMappingSet</code> with a child <code>ModeRequestImplementationTypeMapping</code> anymore.
8682711554193182051	When dereferencing an <i>Assembly Connector</i> from a port, lower bound violations are now properly recognized for relations which are lower bounded and ordered.
8682711554608382051	A new consistency rule checks if an internal behavior references a software implementation since some attributes of the software implementation are mandatory for the RTE generation.

14.5.8 Diagnostics

ID	Resolution
8682711554951091992	The metric "Create communication infrastructure" in the Diagnostic Communication Explorer creates now TP ECUs while the diagnostic communication for CAN is synthesized.

14.5.9 Communication

ID	Resolution
17938309309891810	The "Create Service Instances" metric is available and executable on all subclasses of the abstract class <i>AbstractECUInstance</i> .
8682711554746241807	The signal router has been fixed to avoid stack overflows when routing a <i>Composition</i> with minimum a receiving port and a delegation port to a child <i>Composition</i> .
8682711554825971825	The signal router has been fixed, so that no exception is thrown, if a <i>Bus System</i> is in a different <i>Product Line</i> as the <i>Bus Connector</i> itself, and the signal router option Artifacts outside the current used product line are also considered is deactivated.

ID	Resolution
8682711554197230000	The signal router creates new <i>Signals</i> in case that signal transmissions for a different <i>Bus System</i> already exist.
8682711554471301913	The signal router better handles must-use conditions: outgoing edges are not blocked in case a must-use condition is set for an incoming edge that is part of current path.
8682711553615190000	For signal-driven communication design, the signal router does not delete signal transmissions with rx/tx associations or signal transmissions that are part of a network management PDU.
8682711553036581807	The overall routing costs of a routing group reflects the sum of the individual routing path costs.
17938309307981810	Hidden artifacts in the VLAN-ECU Allocation table are handled properly.
8682711552912970000	Explanation of the behavior and usage of the Force 1939 Protocol check box has been added in the user manual.
8682711554635631917	DBC export: Very big numbers, such as "4123123123", are supported for signal table values during DBC export.
8682711554194041807	Several metrics and tables in the SOA & Ethernet Explorer have been fixed to support all subtypes of <i>AbstractECUInstance</i> as well as <i>InternalBusConnectors</i> , too.

14.5.10 Hardware architecture

ID	Resolution
17938309312192083	When using the refactoring Synthesis of Cavities for Connector Prototype and Instances on <i>Connector Types</i> , and the assigned <i>Connector Prototypes</i> do already have instances (<i>Wiring Connectors</i>), the <i>Wire Pins</i> connected to the <i>Wiring Connectors</i> are assigned to newly created <i>Contactings</i> . If the pin number of the <i>Wire Pin</i> does not match the cavity number of the <i>Cavity Prototype</i> , a message is reported in the Information View . In case of an empty cavity number of a <i>Cavity Prototype</i> , a message is reported in the Information View as well.
8682711553104622062	In a <i>Wiring Diagram</i> or <i>Wiring System Diagram</i> , a drag and drop of a <i>Schematic Pin</i> which is already represented in the diagram is not possible, independent of whether the <Shift> key is pressed or not. The same <i>Schematic Pin</i> cannot be represented multiple times in the diagram.
8682711554636282083	When connecting two <i>Schematic Pins</i> in a <i>Wiring Diagram</i> or <i>Wiring System Diagram</i> with a <i>Single Wire</i> , and the <i>Schematic Pins</i> already have assigned a <i>Schematic Connection</i> , the <i>Schematic Connection</i> which is selected via Connect with existing Schematic

ID	Resolution
	Connection in the Create or Connect a Schematic Connection dialog is assigned to the <i>Schematic Pins</i> connected by the <i>Single Wire</i> .
8682711554871871918	The electric circuit synthesis creates the additional <i>Schematic Pins</i> for the new <i>Bus Connector</i> and extends the existing <i>Schematic Connections</i> to the new <i>Bus Connector</i> .
8682711554644211795	<i>Pin Type Families</i> can also be assigned to <i>Wire Pins</i> via drag and drop in the Model View and in tables.
8682711554607863084	Note the following hints for influencing the routing behavior of the Wiring Harness Router : > In general, it is sufficient to set one condition to control a routing path. > If there are several possible routing paths and the router is influenced by other conditions, it is possible that the Wiring Harness Router cannot find a route. Then it might be necessary to set another condition to determine the exact desired routing path.
8682711554197151807	In the <i>Network Diagram</i> , the names of <i>Execution Contexts</i> , <i>Backend Servers</i> , <i>Actuator Sensors</i> , <i>Terminators</i> , <i>Diagnostic Testers</i> , <i>Hardware Hypervisors</i> and <i>Software Hypervisors</i> can be initially set.

14.5.11 Geometry

ID	Resolution
8682711553678172062	The refactoring Insert Branch-Off has been removed from the context menu of a <i>Topology Segment</i> in the Model View . On a <i>Topology Segment</i> in a <i>Geometry Diagram</i> , the refactoring can still be carried out via the context menu.
8682711554748981912	<i>Topology Inline Connectors</i> are properly displayed in a <i>Geometry Diagram</i> and are movable after the refactoring Switch from classical representation to type-based representation .

14.5.12 Product line engineering

ID	Resolution
8682711554646142046	The calculation of the <i>Asset</i> cluster also works if the type of the core artifact in the upstream <i>Product Line</i> has been changed.
8682711554631992046	New child <i>Assets</i> that need to be checked out during asset update with substitution are now correctly checked out to the branch of the target <i>Product Line</i> .

ID	Resolution
8682711555191592104	In the Cached Historic Product Lines dialog, for baselines in read-only mode the status display has been corrected.

14.5.13 Rules

ID	Resolution
8682711554200902062	The graphical outline of <i>Rule Diagrams</i> is displayed correctly.
8682711554024192106	Changes in a <i>Rule Diagram</i> , for example renaming an object, are displayed in the Outline view.
8682711554016842012	The new online check "InvalidIterationType" is available for modeling rules. It checks for the iteration type "maximal", which is not supported. If "maximum" is set, the iteration is performed with the setting "normal".

14.5.14 Reports

ID	Resolution
8682711551949032109	User fields created by placeholders are deleted on save if they are no longer utilized in the report.
8682711554440602106	When loading a report with many tables, an algorithm to ensure the uniqueness of table names in a report has been optimized.

14.5.15 Collaboration

ID	Resolution
8682711554778442099	The performance of various collaboration use cases has been improved especially after large commits.
8682711554782112076	Loading the Commit History can only be started once per client.
8682711554740452099	The performance of reading the Commit History of an artifact with many non-versioned child artifacts has been improved.
8682711554773241877	Commit and check-in performance has been improved for use cases that involve a large number of changed artifacts via replace with revision and asset updates.
8682711554458052101	The commit performance has been improved especially for commits with imported artifacts.
8682711554418942023	The number of saved check-in and commit comments has been increased to 25.

ID	Resolution
8682711555114172101	Deleting and moving artifacts no longer leads to an update error.
8682711555153531038	An update error has been fixed that could occur in models with invisible reuses.
8682711555182422196	Moving an open diagram into another package no longer leads to a commit error.

14.5.16 Administration

ID	Resolution
8682711554440621029	The <i>Add-ins</i> installation has been enabled to update reuses with external relations in the target system.
8682711554519351868	An error message is displayed in the Information View when target artifacts of an <i>Add-ins</i> installation are checked out. The artifacts are listed in the error message.
8682711554644941202	In the Add-In Update Table , a context menu entry for the update of a customized <i>Add-in</i> has been added.
8682711554645581003, 8682711554645251202	Context relations between successor artifacts and singleton artifacts are copied during <i>Add-in</i> customization.
8682711554646552203	The number of log messages in the server log file has been reduced in case that a central component is not available.
8682711554685563017	The Add-in Artifacts Without Branch Suffix table can be opened for all types of <i>Add-ins</i> .
8682711554829321993	After a failed login attempt on a remote server in the administration panel, a meaningful error message is displayed.
8682711555023072039	NullPointerException check added to <i>Add-ins</i> installation. The result is logged.
17938309244531030	Events on custom attributes such as value changes can be used to trigger life cycle transitions.
8682711555127692112	Life cycle transition constraints can be defined directly in the E/E model using metrics and consistency checks.
8682711555145012071	Consistent with the client, the API server does not prevent all lifecycle transitions, only those that return errors from constraint metrics.

14.5.17 Installation

ID	Resolution
8682711553650752017	Unused internal properties have been removed from the <code>deploy.properties</code> file.

14.5.18 License

ID	Resolution
17938308083402101	The license selection dialog works properly even if only one named license is assigned to a user.

14.5.19 Backup, restore, and migration

ID	Resolution
8682711555129881806, 8682711554746071036	Several issues have been fixed for backup, restore, and migration for certain model constellations.
8682711554016791036	An incremental backup is now possible without errors even if the model preparation was not executed for all model versions. The model preparation is now executed together with the incremental backup.

14.6 Known issues

Known issues in PREEvision 10.7

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
8682711685314021995	When formatted texts are edited, all <i>Model Contexts</i> below the associated artifact are automatically refactored to <i>Placeholder Contexts</i>. Additionally, orphaned <i>Placeholder Contexts</i>, which are not used as placeholder in the formatted text, are deleted. This may lead to data loss if the <i>Model Contexts</i> are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These <i>Model Contexts</i> are deleted when any formatted text of the artifact is edited. Workaround: For artifacts that contain <i>Model Contexts</i> that are not used as placeholders in formatted texts: 1. Before editing any formatted text of the artifact, move the <i>Model Contexts</i> to another artifact. 2. Edit the formatted text. 3. Move the <i>Model Context</i> back to the original artifact. The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.
8682711554031661036	In rare cases, the restore fails with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." Contact the Vector support for getting instructions on how to proceed with the migration/restore.
8682711554406702203	If the PREEvision administration server is installed under Linux, models cannot properly be initialized via the administration panel. The initialized model does not contain any files. Workaround: Initialize the model via the PREEvision client.
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.

ID	Known issue
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711554636281897	After <i>Add-in</i> installation, in rare cases, the client cache may be broken. Workaround: Close the project, clear the client cache and reconnect.
8682711553529641783	ReqIF export: When manually adjusting the size of a text table in the LibreOffice editor, for example, decreasing the width of the text table, this change in the formatted text leads to a schema violation during ReqIF export, and the formatted text containing the text table is not exported. If the XML schema validation option is activated for the ReqIF export, detailed information on the schema validation is reported in the Information View .
8682711554894201783	ReqIF export: The export of formatted texts containing tables that are aligned right via the table properties leads to a schema violation.
8682711554829312084	ReqIF export: The export of formatted texts containing specific list structures leads to a schema violation. Examples: • if → result - else, → result • some values AND • more • a - b • c { { • d - e • f } - g { • h - i • j } } - k
8682711555127671783	ReqIF export: The export of formatted text containing two following ordered lists leads to a schema violation.
8682711555165912106	ReqIF export: For empty attributes, the string defined in the Text for empty Labels property is exported instead of an empty string. By default, this is "---". Workaround: In the Preferences , under PREEvision General , remove all characters from the Text for empty Labels property.
8682711555150891783	Templates, like report templates, opened with the new LibreOffice version may be shown as changed and can be saved directly, giving the impression that they have not been migrated. This apparent error can be ignored.

ID	Known issue
8682711555133422025	<Ctrl> + click on a preview image in a formatted text may not open the linked <i>File Attachment</i>. Workaround: Use the context menu on the preview image or double click on the <i>File Attachment</i> artifact in the Model View to open the file attachment.
8682711555203942023	If a requirement contains a defective placeholder, the ReqIF Agreement Export aborts with a <code>NullPointerException</code>. Defective placeholders are diagram, table, or chart placeholders that reference an artifact that is no diagram, table, or chart, but, for example, an <i>ECU</i>.
8682711555202122196	The table in the dialog to select a <i>Pin</i> when resolving a new <i>Splice</i> on a <i>Schematic Connection</i> does not show any <i>Pins</i>. To get selectable <i>Pins</i> in the dialog remove the relation between <i>Splice</i> and <i>Schematic Connection</i> before starting the Resolve Splice refactoring.
8682711554888343082	If you select multiple artifacts of different meta classes in the Model View and open them in a table via Open with, the order of the artifacts within the table differs from the order of the artifacts in the Model View.
8682711555191801873	During reinitialization of the authority model an error message may be displayed reporting an unexpected error with the <code>ramc.ser</code> file. Workaround: 1. Delete the authority model. 2. Connect to the authority model. 3. Initialize the authority model.

15 PREEvision 10.6

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15.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.6.0
PREEvision license server	3.0.0
PREEvision database server	10.6.0.02
PREEvision application server	10.6.0

Documentation

Manual	Version number
PREEvision manual	10.6.0
PREEvision configuration manual	10.6.0
PREEvision operating manual	10.6.0
PREEvision system requirements	10.6.0
PREEvision server API	10.6.0

15.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.6 and the migration to PREEvision 10.6, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.6, refer to the PREEvision system requirements.

Deleted model contexts when editing formatted texts

PREEvision 10.6 contains a severe issue which may lead to data loss:

When formatted texts are edited, all *Model Contexts* below the associated artifact are automatically refactored to *Placeholder Contexts*. Additionally, orphaned *Placeholder Contexts*, which are not used as placeholder in the formatted text, are deleted.

This may lead to data loss if the *Model Contexts* are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These *Model Contexts* are deleted when any formatted text of the artifact is edited.

The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.

For detailed information and possible workarounds, refer to the following presentation in the download center: [Information and Workarounds Unwanted Model Context Deletion](#).

Contact the Vector support to provide you with a database script and metric to identify and analyze deleted *Model Contexts*.

System requirements

The following system requirements have been changed:

- > It is recommended to use Apache Tomcat version 9.0.70.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05
10.6.0	10.6.0	10.6.0.02	2023-04-03

Migration and update

PREEvision 9.5 and 10.0 can be migrated to PREEvision 10.6.

For the migration to PREEvision 10.6, it is recommended to update PREEvision 10.0 to the latest version (service pack update) before creating a backup and starting the migration.

Note the following restrictions of the different PREEvision 10.0 versions:

- > PREEvision 10.0 SP13 must not be used for backup, restore, and migration because of an issue regarding the commit information.
- > The model preparation framework, which supports an incremental and final model preparation, is available starting from PREEvision 10.0 SP6. Older PREEvision versions use the previous preparation mechanism, which always prepares all model versions from anew and does not persist preparation information in the database.

An update of PREEvision 10.5 to PREEvision 10.6 requires no data migration and can be performed as minor release update.

An update of PREEvision 10.5 to a following minor release, for example, PREEvision 10.6, requires no update of licenses. PREEvision 10.5 licenses are used for the minor releases following PREEvision 10.5.

For an update of an existing PREEvision collaboration platform environment, all components with a changed version number in the compatibility table must be updated, which includes:

- > PREEvision client
- > PREEvision database server script
- > PREEvision application on the application server
- > PREEvision monitoring server
- > PREEvision broker:
 - > PREEvision messaging server
 - > PREEvision staging server
 - > PREEvision administration server
 - > PREEvision SVN gateway
- > optional: PREEvision API server

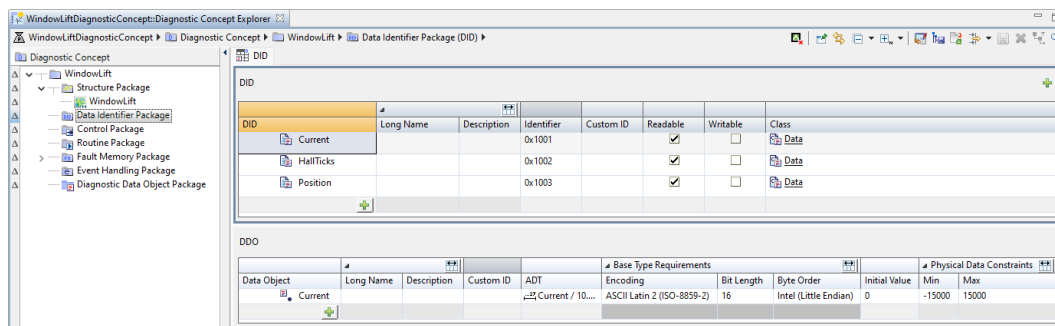


For detailed instructions on how to update a PREEvision collaboration platform environment, refer to the PREEvision operating manual, chapter "Minor release update".

15.3 New features in PREEvision 10.6

Diagnostic concept explorer

For specifying diagnostics, you can now create a diagnostic design independent of software design in early concept phases. In the next stage, the diagnostic concept can then be implemented by different software technologies, for example, AUTOSAR Classic or AUTOSAR Adaptive. For modeling diagnostic concepts, PREEvision 10.6 provides the Diagnostic Concept Explorer. Here you can create and define diagnostic data like *Diagnostic Data Identifiers* (DIDs) or *Diagnostic Routines* with additional design details like application data types, base type requirements or initial values. Therefore, *Data Type Packages* can now be created under *Diagnostics*.

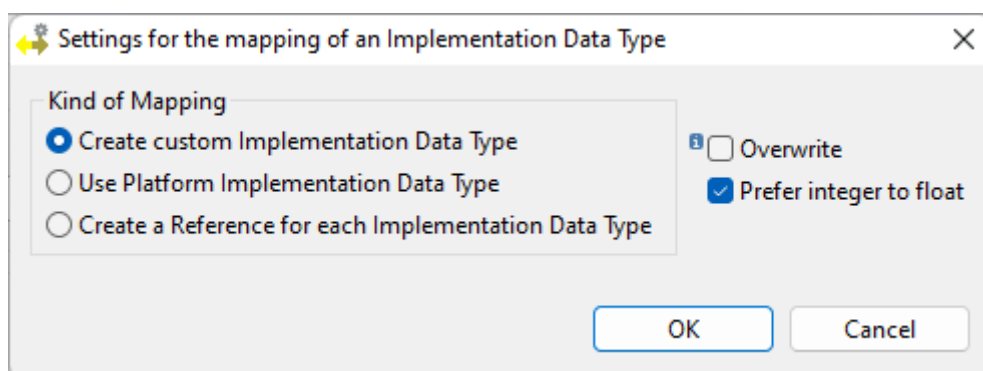


For creating diagnostics for existing software, the existing **Diagnostic Specification Explorer** has been renamed to **Diagnostic Realization Explorer**.

Data type mapping synthesis

Since version 10.5, PREEvision can automatically create the mappings between application data types and the corresponding platform implementation data types. This can be done including the creation of references between mapping and implementation data type with option **Create custom Implementation Data Type**.

PREEvision 10.6 offers a new option in the mapping configuration dialog relevant for complex data types. The option **Create a Reference for each Implementation Data Type** creates additional references for each sub-element of a complex data type.



KBL import and export: using individual configuration files

To support individual use cases and improve the usability for the KBL import and export, it is possible to use individual configuration files, besides the standard configuration files for the import and export. Thus, for example, several users can work on the same model but each of them can use an individual configuration file for the import and export.

The individual configuration files can be selected in the KBL import and KBL export wizard.

For KBL import and export via metrics, the KBL import blocks and the KBL export blocks provide an additional port for the definition of a configuration file.

The selected configuration is applied to the import and export and is persisted during client runtime.

KBL import and export of 3D waypoints

PREEvision supports the KBL import and export of waypoints. The KBL interface supports segments containing wires and connecting nodes. These segments may contain waypoints which describe the approximate routing of these segments in the 3-dimensional way.

The routing path is described in the KBL artifact `Center_curve`. The `Center_curve` contains the `Control_points` which reference `Cartesian_points`.

KBL import of waypoints:

- > `Control_points` in KBL can be imported as *3D Way Points* into PREEvision. The import can be enabled and disabled via an `importControlPoints` setting in the `KBL importer.config` configuration file.

KBL export of waypoints:

- > *3D Way Points* below a *Topology Segment* are exported to KBL.
- > The start node of a *Topology Segment* in PREEvision becomes the first `Cartesian_point` of the `Center_curve` in KBL.
- > The end node of a *Topology Segment* in PREEvision becomes the last `Cartesian_point` of the `Center_curve` in KBL.
- > A *3D Way Point* in PREEvision is treated as an intermediate `Cartesian_point` in KBL.

Auto-layout diagram editing extensions

Auto-layout diagrams for *Wiring Diagrams* and *Wiring System Diagrams* are created in a special read-only view with a clear and easy-to-read layout. Editing in auto-layout diagrams is restricted to pure layout changes, so far. The creation and deletion of artifacts in these diagrams is prevented. Additionally, there are restrictions with respect to the display of specific artifacts:

- > Only wiring harness-specific artifacts are displayed in the auto-layout diagram. Artifacts like documentation artifacts, sheet connectors, or conditions cannot be displayed.
- > The automatic display of cable symbols is not ensured for all *Cables* due to layout limitations. In particular, symbols for the inner *Cables* of nested *Cables* are not automatically displayed.

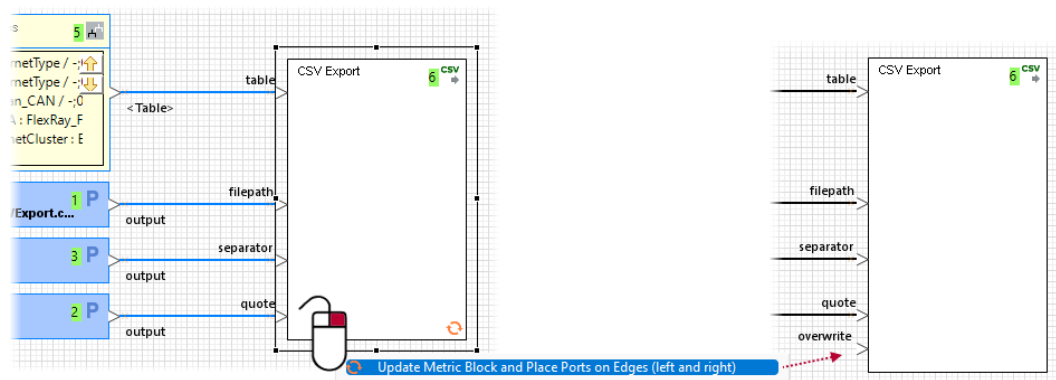
However, an auto-layout diagram may require manual extensions for specific kinds of artifacts to ensure a complete export of a diagram. For this reason, the auto-layout function has been extended in a way that specific artifacts can be created in an auto-layout diagram.

The following artifacts can be manually added to an auto-layout diagram. The diagram palette has been enhanced accordingly.

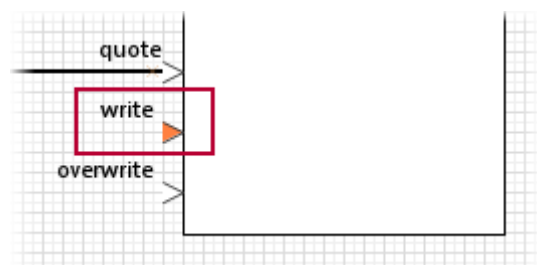
- > Cable symbols
- > Documentation artifacts
- > Conditions
- > Sheet connectors

Highlighting and updating outdated metric block ports

In the *Metric Diagram*, metric blocks for which additional ports are available are indicated by an  icon. The ports can be updated via the context menu **Update Metric Block and Place Ports on Edges (left and right)**.



Ports of the metric block that are not part of its definition, are highlighted by an orange port color.



15.4 Fixed issues

Fixed issues in PREEvision 10.6

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [License](#)
- > [Backup, restore, and migration](#)

15.4.1 Common

ID	Resolution
8682711553043912061	E/E model export: The option for loading configuration diagrams Export all included rule, metric and table configuration diagrams has been removed. The E/E model export now automatically loads all configuration diagrams which are part of the selected artifacts. This improves performance for exporting small parts with no or only a few contained diagrams.
8682711553311962041	An artifact selected in the Model View can be switched again to edit mode by pressing the <F2> once.
8682711554395712101	Checks have been added to avoid exceptions when opening portlets.
8682711553679802071	In the Property View , the performance of the Dereference action has been improved: For tables within the Property View , a refresh is only triggered once for multiple events instead of once per single event.

ID	Resolution
8682711553543442039	It is again possible to set references on the External Manual Links property page.
17938309342081992	In the Search dialog, the content of the User drop-down list is correctly sorted. The wildcard * is the default selection if the usernames are alphanumeric.
17938309315302049, 17938309303512000	In the Compare table, artifacts displayed on the two comparison sides are ordered as displayed in the Model View .
8682711553300842108	The quick search in tables now also works in the Compare table.
8682711553524492041	The <code>MENU-ID</code> in the <i>Context Menu Blocklist Configuration File</i> no longer considers the revision within the UUID of a <i>Context Menu Metric Executor</i> . In this way, it is no longer necessary to change the <code>MENU-ID</code> after a check-in or check-out of the <i>Context Menu Metric Executor</i> .
8682711553554252036	Only <i>Primary Editors</i> that are set as default editor are opened when creating an artifact via an <i>Artifact Creation Template</i> . Other editors are ignored.
8682711554173803043	The LibreOffice editor no longer crashes, when selecting more than one table cell of a text table in the LibreOffice editor via mouse select, and then reducing the selection to one cell and releasing the mouse button.

15.4.2 Diagrams

ID	Resolution
8682711553438402036	In the Label Configuration view, the Select Object dialog for the creation of a new object for a meta class, provides a type-ahead search filter to filter for the proper meta class.
8682711553354300000	LibreOffice now properly starts after using Publish Diagram... in a server API metric.

15.4.3 Tables

ID	Resolution
8682711553989382102	If an explorer configuration references <i>Query Rules</i> that are missing, because of a wrong scope or deleted <i>Query Rule Groups</i> , the missing rules are reported in the Information View . When opening the explorer, a warning is displayed.
8682711553875262105	Tables can be exported to Excel if they contain more than eight hierarchy levels. Hierarchy levels greater than eight are exported like level eight. Additionally, a warning is reported in the Information View .

ID	Resolution
8682711553269641914	The table scope is now properly handed over to the toolbar action enablement metric.
8682711554379941003	Combined tables can be properly refreshed in explorers by pressing <F5>.
17938309341102113	If a <i>Query Rule</i> returns duplicate artifacts, the duplicates are filtered out if the <i>Query Rule</i> results are displayed in a table.
8682711553347942105	When changing the name of an opened <i>Table Proxy</i> , the tab header is updated accordingly.
8682711553460262070	When committing while table cells with formatted text are open, placeholders are properly displayed.

15.4.4 Requirements

ID	Resolution
8682711552487071783	Synchronization of <i>Attribute Definitions</i> and <i>Meta Attributes</i> now works for formatted texts and is correctly displayed in the Property View , in the form editor, and in tables.
8682711554197182084	<i>File Attachment</i> placeholders of PDF files now always show icons as automatic preview image.
17938311392162049	Icons for artifacts which are tagged as deleted are available for safety requirement-related artifacts, like for example, <i>Safety Goal</i> or <i>Functional Safety Requirement</i> . These icons have been added to the PREEvision demo model and the corresponding <i>Add-Ins</i> . The object configuration has also been adapted accordingly.
8682711552635652105	ReqIF export: Mappings without target no longer prevent the ReqIF export. Instead, a warning is reported in the Information View .
8682711553515093059	ReqIF export: The REQ-IF-TOOL-ID and SOURCE-TOOL-ID are set to the current PREEvision version.
8682711553506123059	ReqIF import: In the ReqIF Import wizard, the option for validating the imported model has been adapted concerning capitalization.
8682711553500302106	The Open with context menu now displays table instances and tables templates even if the Open with context menu is opened on an artifact that is displayed in the incoming and outgoing links pop-up of the Requirement Text Editor .

15.4.5 AUTOSAR

ID	Resolution
8682711552994871806	AUTOSAR demo model: Broken tables in the demo model have been removed.
8682711553353451998	AUTOSAR demo model: <i>Runnable Entities</i> have been adapted to be AUTOSAR compatible.
8682711553517091998	AUTOSAR export: <i>Pre-Build Variant Conditions</i> are correctly exported.
8682711552994812051, 8682711552915480000	AUTOSAR export: The attribute Array Size for Literals is now exported to AUTOSAR correctly for all relevant data types based on the attribute Maximum Number of Axis Points of the respective axis object.
8682711553437491002	AUTOSAR export: The AUTOSAR service instance manifest export does not export <i>ServiceInstanceToPortPrototypeMappings</i> anymore.
8682711553501581024	AUTOSAR export: A logic has been added to keep the IDs of <i>SIGNAL-BASED-EVENT-ELEMENT-TO-I-SIGNAL-TRIGGERING-MAPPING</i> stable over multiple AUTOSAR exports if the <i>Event Platform Data Type Mapping</i> does not exist in the PREEvision model.
8682711553631860000	AUTOSAR export: The <i>Consistency Rule</i> "aECUInterface_without_BusConnector" is set to error instead of warning. A violation of this check produces a fatal error in the AUTOSAR export.
8682711553347561998	ECU extract: <i>Global Time Domains</i> that are not relevant are not exported.
8682711553437491002	AUTOSAR service instance manifest: The AUTOSAR service instance manifest export does not export <i>ServiceInstanceToPortPrototypeMappings</i> anymore.
8682711551928661992	AUTOSAR system description: Software ports cannot be exported without their parent software component. Therefore, the parent must also be included in the active variant. The consistency check "AUTOSAR Classic Design" can be executed anywhere in the model and will show such a modeling inconsistency.
8682711553633551913	Software cluster design description: The software cluster design description has been corrected to only export data type maps and data type mapping sets that are associated with a <i>Service Interface</i> .
8682711553597322113	AUTOSAR import: Collections are now imported even if they have long names.

15.4.6 Software architecture

ID	Resolution
8682711554383131992	An error message in the log files of the Provided Port Connection Editor regarding an old configuration has been corrected.
8682711553662172052	For the class <i>Process Design</i> , the entry Executable on Properties property page is now navigable.
17938307005852003	The Data Access property page of <i>Parameter Access</i> has been changed: > <i>Runnable</i> of <i>Parameter Access</i> is displayed. > The relation Local Parameter has been renamed to Parameter. > The relation Shared Axis Parameter is displayed. > The relation Sub Elements displays sub-element reference targets of the application data type and the implementation data type of a Shared Axis Parameter or a local Parameter. The element for a local Parameter will only be shown, if no Shared Axis Parameter is set.
8682711553097541998	The description for the assignment of <i>Parameter Interfaces</i> to ports has been refined in the manual.
8682711554518152051	An error in the manual in the description of service instantiation via AUTOSAR Adaptive Explorer has been corrected.
8682711553521272010	In the Startup Dependencies Editor , the column Kind has been removed, the columns Option and Argument Value have been grouped.
8682711553509361024	For the class <i>Consumed SOME/IP Method Instance</i> , the attributes UDP Collection Trigger and UDP Collection Buffer Timeout have been added to Method Configuration property page.
8682711553632562196	The tables Fires Event Instances and Data Instance Providing State Machines have been added to the State Machine Integration property page of state machine data consumer like, for example, <i>Data Elements</i> , <i>UML Properties</i> or <i>Signal Transmissions</i> .
8682711551799251029	A restriction for setting initial values has been removed. The setting of initial values is now possible without an initial value configuration.

15.4.7 Diagnostics

ID	Resolution
8682711553655412196	The consistency check "aDiagnosticDataIdentifier_without_ReadableWritable" hits only DIDs without readable or writable service.

15.4.8 Communication

ID	Resolution
17938309379541810	Signal router: <i>Socket Connection Ipdu Identifiers</i> for both <i>SOME/IP Events</i> and <i>SOME/IP Notifier Events</i> are now created below <i>Socket Connection Bundles</i> in all cases.
8682711554380232069	Signal router: The attribute Requires LdCom Transmission is now handled correctly for signals that are based on <i>SOME/IP Notifier Events</i> .
8682711554187121003	Signal router: The signal router uses existing signal transmissions regardless of assigned signal ports, adds missing ports, and removes obsolete ones.
8682711553303431810	Signal router: The workspace behavior of the SOA & Ethernet Explorer including the creation of new <i>Layout Packages</i> while signal routing has been corrected.
8682711553506792004	J1939 DBC import: In case <i>Signals</i> are part of a <i>System Signal</i> , port assignments and data mappings are created only for the <i>System Signal</i> .
8682711553543802159	The default behavior of port <code>implementsLegacyStringSerialization</code> of the custom metric block PDU Length Calculation has been corrected.
8682711553644162159	The Frame-PDU synthesis now keeps existing <i>Gateway Routing Entries</i> of container <i>PDU Transmissions</i> that are transmitted independently over the bus.
8682711554007261029	The Frame-PDU synthesis behaves correctly if an ECU interface of a gateway has no assigned <i>Bus Connector</i> .

15.4.9 Hardware architecture

ID	Resolution
17938306904992083	Applying the Populate function on a logical connector in a <i>Network Diagram</i> with the selected option Show Connected Hard-Wired Connectors (With connections) , now shows all components connected to the logical connector. This works regardless of whether the logical connector is contained in a <i>Section</i> or the diagram area.
8682711553162931913	On the Connected Connectors property page of an <i>Internal Bus Connector</i> , the Internal Bus System attribute has been implemented as link which is navigable. Additionally, the Connected Connectors table now properly displays the connected internal connectors.
8682711554092301912	Defining a label configuration for the artifacts <i>Computer</i> and <i>Other Technology</i> in a <i>Wiring Diagram</i> and an <i>Electric Circuit Diagram</i> including their system diagrams is enabled.

ID	Resolution
8682711554028871268	Connections of documentation artifacts (comment, information, Todo) or conditions to components in an autolayout diagram are removed when the documentation artifact or the condition is removed.
8682711553655612036	The wiring harness auto-layout function was not able to process wires from <i>Splices</i> to the same location. Parallel wires from a <i>Splice</i> and to a <i>Splice</i> are now supported by the wiring harness auto-layout function.
8682711553907882062	KBL import: In the Import KBL wizard, all <i>Custom Attribute Profiles</i> for KBL can be selected.
8682711552061922036	KBL export: <i>3D Way Points</i> below a <i>Topology Segment</i> are exported as <code>Control_points</code> to KBL.
8682711553092062036	KBL import and export: In the KBL import and export wizard it is possible to use individual configuration files, besides the standard configuration files for the import and export. For KBL import and export via metrics, the KBL import and export metric blocks provide an additional port for the definition of a configuration file.

15.4.10 Geometry

ID	Resolution
8682711553644161914	The refactoring Insert Branch-Off on a <i>Topology Segment</i> with already routed wires can be properly executed.
17938307855602062	The refactoring Insert Branch-Off on a <i>Topology Segment</i> in a <i>Geometry Diagram</i> adds the created <i>Branch-Off</i> to the <i>Section</i> or the <i>Installation Space</i> which lays below the inserting position.
17938301257112081	The refactorings Insert Branch-Off and Change Topology Segment Point to Branch-Off in a <i>Geometry Diagram</i> now treat <i>Topology Segment Points</i> and <i>Topology Segment Intervals</i> in the same way. They are moved to the new <i>Topology Segment</i> according to their offsets. <i>Topology Segment Intervals</i> that would start in one segment and end in the other segment are split.
8682711553349491268	Several consistency checks have been implemented for the <i>Geometry</i> layer.

15.4.11 Product line engineering

ID	Resolution
8682711553577281995	During automatic integration of <i>Assets</i> , the automatic naming rules are disabled for generating the parent artifact structure.

ID	Resolution
8682711553338671806	In the context of <i>Asset</i> integration, a warning is reported in the Information View when canceling the action to copy or reuse an artifact which has external relations to invisible artifacts due to restricted user permissions.
8682711554536772046	A commit after an <i>Asset</i> cluster update no longer causes incorrect "Reuses do not match" errors.
8682711554483532101	After an <i>Asset</i> update, the <i>Asset</i> external to :1 relations in the foreign <i>Product Line</i> are no longer removed.
8682711554180942012	Drag and drop actions for <i>Assets</i> from the Version History in the Property View to the Model View are no longer allowed.
8682711554093942101	A reuse or copy of a <i>Product Line</i> from history can be created if the <i>Product Line</i> contains an artifact whose meta class has been changed via a refactoring.

15.4.12 Variant management

ID	Resolution
17938307942461801	The Set Content View table is no longer cleared after deactivating a variant.
17938306329891789	It is no longer possible to accidentally add <i>Alternatives</i> to foreign <i>Concept Templates</i> in the <i>Variant Diagram</i> .
8682711553553371825	Documentation artifacts are displayed properly in diagrams when variants are active and highlighted.

15.4.13 Change and release management

ID	Resolution
8682711553028652112	The Change history no longer shows duplicate attribute entries when an artifact or artifacts in relation are checked-out/checked-in.
8682711554193091877	Both the <i>Agreement Task Item</i> and its last comment are considered now to show the right last modification date in the table column.
17938293806029199	An error message concerning the ReqIF Agreement Import is now available in German and English.

15.4.14 Test engineering and test management

ID	Resolution
8682711553339812102	After executing a manual test sequence synthesis, any placeholder in the description of <i>Test Step</i> or <i>Test Procedure</i> artifacts is still functional.

15.4.15 Rules

ID	Resolution
8682711554380412077	The <i>Consistency Rule Group</i> "Metric-Editor" under "Administration" "Rules" "ConsistencyRuleModel" "Product" "L230_Verify_Model" "L233_Metric_Framework" "Javabased Online Checks" "Metric_Editor" can again be used as an online check. It no longer causes the deactivation of the server-side online check framework.
8682711553678392102	The new online check "IllegalFrameworklinkOnRHS" has been added to the rule group "RuleConfigurationChecks". It checks if there are creation rules using invalid framework links.
8682711553169183013	The Progress dialog reports the progress for "Updating UI" after completing the online check calculation.
8682711553559432101	The version number of the MOF model "Inconsistency_metamodel" is now displayed in the correct format. The online check no longer displays the hit "The meta model is outdated".
8682711553655992024	Client-side online checks are now properly initialized.
8682711553049121995	If a <i>Query Rule Group</i> is used as metric block and the option Run as Model Operation is active, then the block is shown in the metric diagram in a different color.

15.4.16 Metrics

ID	Resolution
8682711553677672024	Source codes can now be opened after renaming the metric and changing only letters from upper to lower case or vice versa.
8682711553273942181	Special paste actions are no longer available for source artifacts not adhering to the configured meta class restrictions. The paste was allowed for a mixture of valid and invalid source artifacts. Now, all pasted artifacts must match the meta class restriction.

15.4.17 Reports

ID	Resolution
17938311463042040	In the PREEvision demo model, erroneous placeholders in the "Wiring Harness Comparison" report have been updated.
8682711553438901783	Recursions in included formatted texts of placeholders are detected during report generation and reported in the Information View .

ID	Resolution
8682711554639042025	Reports containing placeholders with <i>Query Context</i> properly display the defined language.

15.4.18 Collaboration

ID	Resolution
8682711552036022049	If a check-out is rejected because of invisible artifacts, a message is reported in the Information View .
8682711553214982106	The Change history context menu entry is now disabled if the client is in the scope definition mode.
8682711553653182034	In the Version History , the Load Revision read-only action can be executed even if the model contains a life cycle trigger metric.

15.4.19 Administration

ID	Resolution
8682711553214862039	The dialog for deleting or initializing the authority model no longer blocks user interface refreshes leading to a client freeze.
8682711553089811993	Logging has been added for most REST calls belonging to remote backup, model preparation, and migration use cases which are started in the administration panel.
8682711553393791993	The information codes MON5004 and MON5005 have been replaced by more precise information codes: > MON5010 : Health Status set(<number>): WARNING: <message> > MON0011 : Health Status set(<number>): ERROR: <message> > MON0012 : Health Status set(<counter>): CRITICAL ERROR: <message> > MON5013 : Health Status recovered from previous state. (State was: <message>) > MON5014 : Health Status recovered from previous state. (State was: <message>) > MON5015 : Health Status recovered from previous state. (State was: <message>)
8682711553505132076	Improved progress error message when database memory runs out during <i>Add-ins</i> installation.
8682711553633321995	The <i>Add-in</i> propagation has been extended to include table icons.
8682711553977682102	The <i>Add-in</i> propagation has been extended to include <i>Metric Executors</i> of Artifact Pickers .

ID	Resolution
8682711554417902011	The creation of an <i>Add-ins</i> delivery model is now canceled if the <i>Add-ins</i> to be deployed contain <i>Assets</i> .
8682711554417912011	The creation of an <i>Add-ins</i> delivery model is now canceled if the <i>Add-ins</i> to be deployed contain reuses under the same parent.

15.4.20 License

ID	Resolution
8682711552451121918	The proxy setting issue that prevented the client from reaching the license server has been fixed.
8682711554535352051	The license selection dialog works properly even if multiple named licenses are assigned to a user.

15.4.21 Backup, restore, and migration

ID	Resolution
8682711554004691036	Restore on top is now also possible if the model preparation has not been completed before. Model preparation information is created if it has not been created before when checking a delta backup entry.

15.5 Known issues

Known issues in PREEvision 10.6

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
8682711685314021995	When formatted texts are edited, all <i>Model Contexts</i> below the associated artifact are automatically refactored to <i>Placeholder Contexts</i>. Additionally, orphaned <i>Placeholder Contexts</i>, which are not used as placeholder in the formatted text, are deleted. This may lead to data loss if the <i>Model Contexts</i> are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These <i>Model Contexts</i> are deleted when any formatted text of the artifact is edited. Workaround: For artifacts that contain <i>Model Contexts</i> that are not used as placeholders in formatted texts: 1. Before editing any formatted text of the artifact, move the <i>Model Contexts</i> to another artifact. 2. Edit the formatted text. 3. Move the <i>Model Context</i> back to the original artifact. The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.
8682711554031661036	In rare cases, the restore fails with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." Contact the Vector support for getting instructions on how to proceed with the migration/restore.
8682711554406702203	If the PREEvision administration server is installed under Linux, models cannot properly be initialized via the administration panel. The initialized model does not contain any files. Workaround: Initialize the model via the PREEvision client.
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.

ID	Known issue
8682711554383191029	Some parts of the new feature for handling initial values are currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554417372014	Some parts of the new feature for configuring the content assist are currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554417442013	Some parts of the new feature for the automatic creation of application data type to implementation data type mapping, which is used for data types in the new <i>Primary Editors</i> is currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554206562068	During <i>Add-in</i> installation, error messages occur due to non-executable metrics. Workaround: To continue the installation, confirm the error messages with [OK] .
8682711554645581003	After customization of an <i>Add-in</i> , context relations between successor artifacts and singleton artifacts get lost. Workaround: Set the necessary relations manually.
8682711554636281897	After <i>Add-in</i> installation, in rare cases, the client cache may be broken. Workaround: Close the project, clear the client cache and reconnect.
8682711554644941202	In the Add-In Update Table , no context menu entry for the update of a customized <i>Add-in</i> is available. Workaround: Use the context menu for the customized <i>Add-in</i> in the Model View .
8682711554645241202	In the Compare table, the order of the displayed artifacts is different on the two comparison sides. The artifacts to be compared with each other must be identified manually.
8682711553529641783	When manually adjusting the size of a text table in the LibreOffice editor, for example, decreasing the width of the text table, this change in the formatted text leads to a schema violation during ReqIF export, and the formatted text containing the text table is not exported. If the XML schema validation option is activated for the ReqIF export, detailed information on the schema validation is reported in the Information View .

16 PREEvision 10.5

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16.1 Version numbers

Version numbers

Application	Version number
PREEvision client	10.5.0
PREEvision license server	3.0.0
PREEvision database server	10.5.1.41
PREEvision application server	10.5.0

Documentation

Manual	Version number
PREEvision manual	10.5.0
PREEvision configuration manual	10.5.0
PREEvision operating manual	10.5.0
PREEvision system requirements	10.5.0
PREEvision server API	10.5.0

16.2 Installation and compatibility information



For detailed information about the installation of PREEvision 10.5 and the migration to PREEvision 10.5, refer to the PREEvision operating manual.



For detailed information about the hardware and software requirements of PREEvision 10.5, refer to the PREEvision system requirements.

Deleted model contexts when editing formatted texts

PREEvision 10.5 contains a severe issue which may lead to data loss:

When formatted texts are edited, all *Model Contexts* below the associated artifact are automatically refactored to *Placeholder Contexts*. Additionally, orphaned *Placeholder Contexts*, which are not used as placeholder in the formatted text, are deleted.

This may lead to data loss if the *Model Contexts* are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These *Model Contexts* are deleted when any formatted text of the artifact is edited.

The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.

For detailed information and possible workarounds, refer to the following presentation in the download center: [Information and Workarounds Unwanted Model Context Deletion](#).

Contact the Vector support to provide you with a database script and metric to identify and analyze deleted *Model Contexts*.

System requirements

The following system requirements are changed:

- > Windows 11 is now supported for the PREEvision client.
- > Amazon Corretto version 11.0.15.9.1 is provided with the PREEvision client installation. It is recommended to use this version on all server components as well.
- > It is recommended to use Apache Tomcat version 9.0.62.
JVM and server settings of all PREEvision server components must be checked. The required settings are documented in the PREEvision operating manual.
- > Subversion 1.9 is no longer supported.
- > The standalone license server is available in the new version 3.0.0.
- > The hardware and software requirements, as well as the installation instructions of all components have been updated.

Installation and operating

The following changes and new features are available for the installation and operating of the PREEvision collaboration platform:

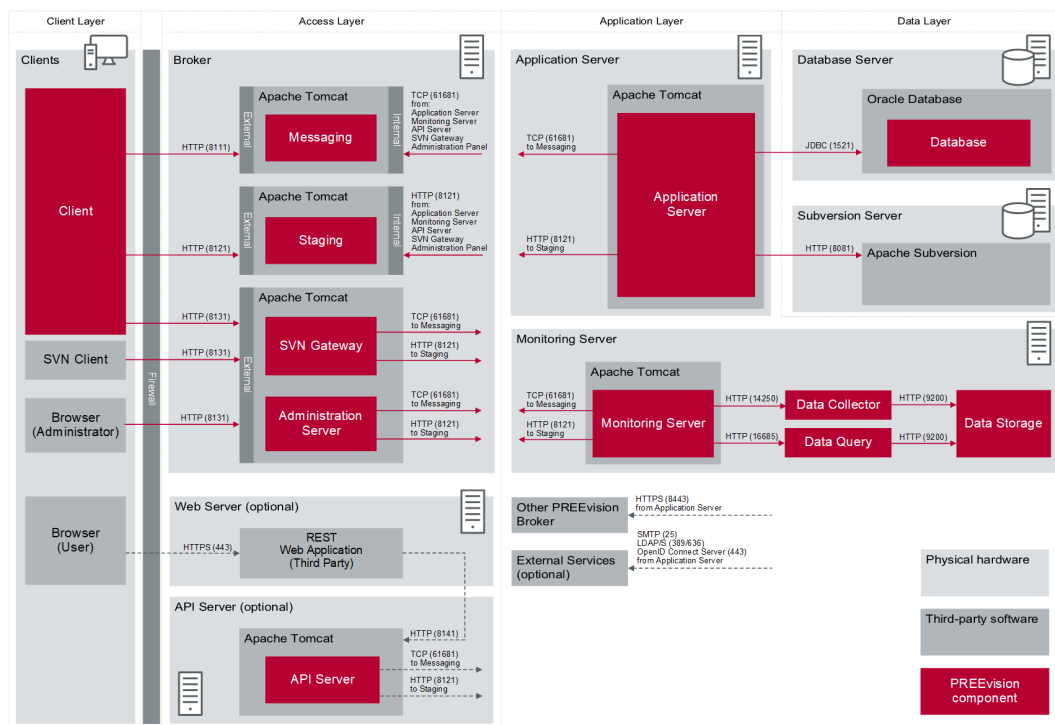
- > A new Collaboration Platform build is available for building server components. The new build provides a possibility to build preconfigured Apache Tomcat instances for all server components having already set the recommended server settings for each component. For the messaging server it is also possible to only build the messaging application without preconfigured Apache Tomcat.
- > The `deploy.properties` for building server components have been reworked and the property names have been aligned according to a consistent naming pattern.
- > The parameter `ModelAccessEnabled` has been removed from the `deploy.properties` since it is no longer needed to build the „vCollab“ application as standalone middleware license server. The standalone middleware license server also requires access to the model.
- > The installation of the monitoring infrastructure service has been simplified.
- > An audit log file is available on the application server to report and monitor security-related actions.

- > New error and information codes are available.
- > New server health status bits have been introduced.

Administration server

For the administration panel (vCollabAdmin), a new server component is available:

- > Direct access to the application server is no longer necessary for the vCollabAdmin web application.
- > A demilitarized zone with corresponding firewall configurations is now possible.
- > The administration server is deployed together with the SVN gateway on a separate Apache Tomcat instance.



Migration

For the migration to PREEvision 10.5, it is recommended to update PREEvision 10.0 to the latest version (service pack update) before creating a backup and starting the migration.

Note the following restrictions of the different PREEvision 10.0 versions:

- > PREEvision 10.0 SP13 must not be used for backup, restore, and migration because of an issue regarding the commit information.
- > The model preparation framework, which supports an incremental and final model preparation, is available starting from PREEvision 10.0 SP6. Older PREEvision versions use the previous preparation mechanism, which always prepares all model versions from anew and does not persist preparation information in the database.

Compatibility

The PREEvision client, the database server and the PREEvision server are only compatible within exactly the same PREEvision version. Using a new client version on a previous server version or a previous client version on a new server version is not supported and may lead to data inconsistencies or data loss.

Client version	Server version	Database server script version	Metamodel change ID
10.5.0	10.5.0	10.5.1.41	2022-10-05

Licenses and license server

For PREEvision 10.5, new licenses are required.

PREEvision workspace and PREEvision.ini

Existing workspaces from earlier PREEvision versions cannot be reused for PREEvision 10.5. Overwriting the `PREEvision.ini` is not allowed as well.

Operating system: character set

Please use an operating system with a full character set of your language. For example, to support Japanese in PREEvision, the Japanese operating system must be installed. An English operating system with Japanese character set might not support all characters. Therefore, this may result in displaying wrong characters in PREEvision.

16.3 New features

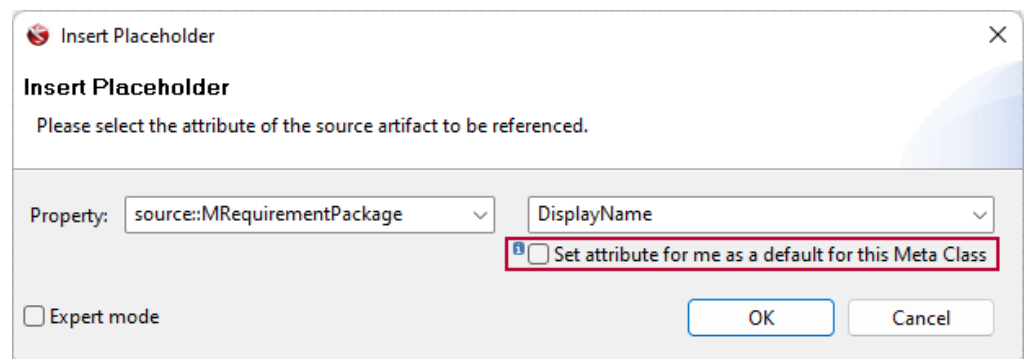
- Further information
- > [Requirements engineering and requirements management](#)
 - > [Test engineering and test management](#)
 - > [Function driven and system design](#)
 - > [AUTOSAR system and software design](#)
 - > [Communication design](#)
 - > [Diagnostics design](#)
 - > [Wiring harness design](#)
 - > [Product line engineering](#)
 - > [Collaboration](#)
 - > [Usability](#)
 - > [Administration](#)
 - > [Configuration](#)

16.3.1 Requirements engineering and requirements management

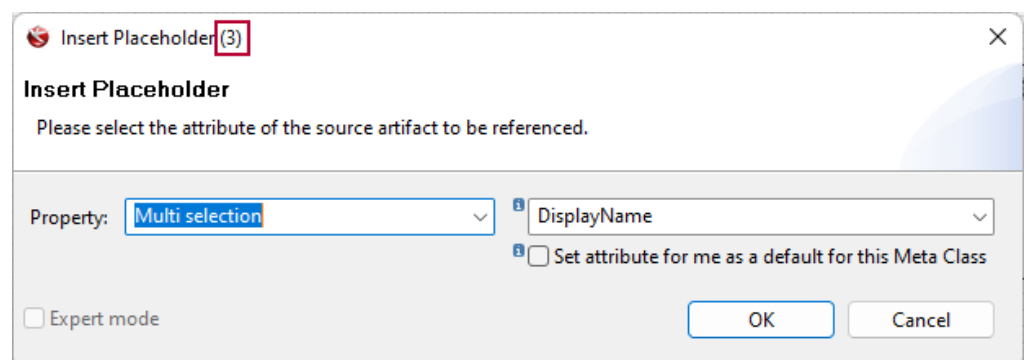
Placeholders in formatted texts

Several usability and performance improvements are available for inserting and updating placeholders in formatted texts.

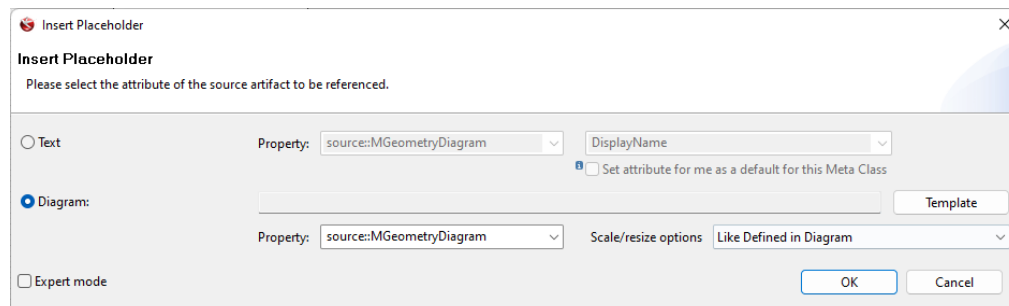
- > Default placeholder attributes can be defined in the **Insert Placeholder** dialog (user default) and in the *Perspective Configuration* (model default). If an artifact with a default placeholder attribute is dropped on a formatted text field, the placeholder is automatically created without displaying the **Insert Placeholder** dialog.



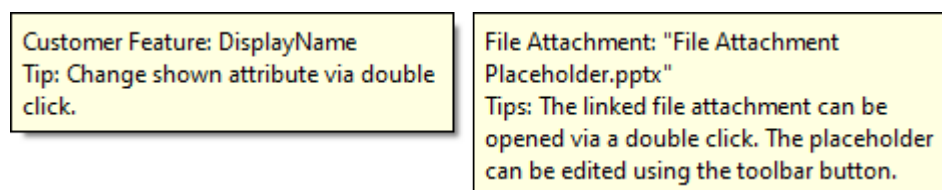
- > Drag and drop of several artifacts into a formatted text field now creates multiple placeholders. For each dropped artifact, a placeholder is created. If the dropped artifacts are of different meta classes, the **Insert Placeholder** dialog offers a list of common attributes that are available for all dropped artifacts.



- > Inserting a different placeholder type in formatted texts is now possible without switching the **Insert Placeholder** dialog to expert mode. The **Insert Placeholder** dialog automatically preselects the corresponding placeholder type and hides the other types. For example, if you drop a diagram into a formatted text, the **Insert Placeholder** dialog, preselects the **Diagram** placeholder type. The **Text** placeholder type is always available.



- > The tooltips displayed for placeholders have been enhanced. For text placeholders, the referenced meta class and attribute is displayed in the tooltip. File attachment placeholders also show the file attachment information.



- > When exporting a table to Excel, for example, during the ReqIF export or when generating reports, the placeholders are now also updated before the export. This ensures that the current values of the placeholders are transferred to Excel.
- > The performance of adding placeholders in formatted text fields has been improved.
- > Undo and redo in formatted texts in combination with creating or deleting placeholders now reliably restores placeholders. This is only possible if the editor is opened and if no PREEvision undo reverts changes applied onto the attribute with formatted text.
Restoring placeholders with undo or redo in formatted texts resets the change-marker as if the placeholder was inserted anew.

File attachments in formatted texts

When inserting files into formatted texts, instead of OLEs, placeholders to file attachments with previews embedded in formatted text are created.

File attachments in formatted text can be created:

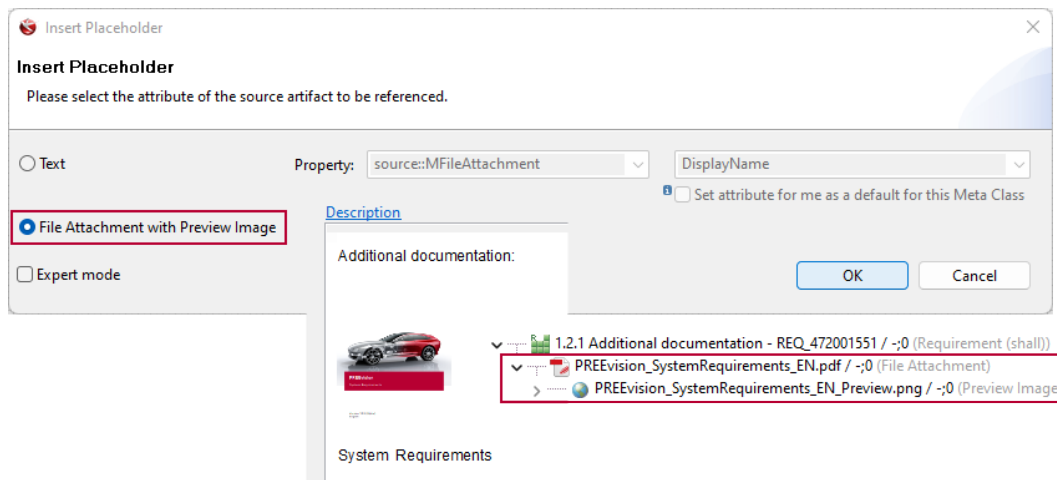
- > by drag and drop or copy and paste of a file from the **Model View** to a formatted text field
- > by drag and drop or copy and paste from the **Windows Explorer** to a formatted text field
- > by drag and drop or copy and paste of a file from a formatted text field to another formatted text field

Images are integrated directly into the formatted text.

- > Via multi selection, the creation of several file attachment placeholders with previews is possible.

If a file is added to a formatted text field, the Insert Placeholder dialog opens, and the new placeholder type **File Attachment with Preview Image** is selected. When inserting the placeholder, a preview image is generated that has a reference to the file attachment.

The preview image is displayed in the formatted text at the position where the placeholder was inserted. Under the artifact, the *File Attachment* and the *Preview Image* are created in the model.



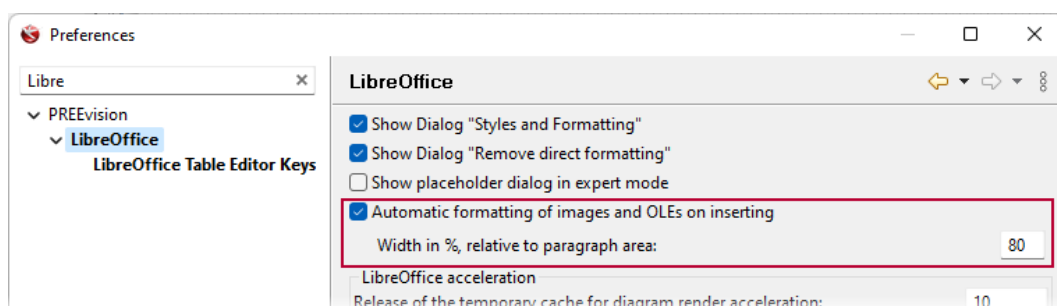
You may manually change and update the *Preview Image* via context menu on the preview in the formatted text.

Automatic formatting of images in formatted texts

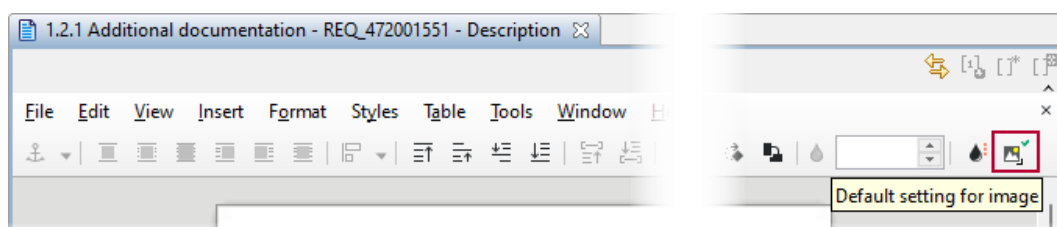
In the preferences, under **PREEvision | LibreOffice** you can activate to automatically format images when they are inserted into formatted texts in PREEvision. The default properties for images are:

- > anchored as character
- > keep ratio and width relative to paragraph area

Additionally, you can define a default width relative to the paragraph area.



Existing images can be set to this default using a new button in the LibreOffice editor toolbar.



Handling of files, images, and OLE objects during ReqIF import and export

During the ReqIF import:

- > File attachments in formatted texts are imported as file attachments. The file attachments are stored in the PREEvision model. The alternative PNG from the *.reqifz file is used as preview image. A preview image with a reference to the file attachment is inserted in the formatted text.

- > OLE objects in formatted texts are imported as before and can be edited in PREEvision.
- > Images in formatted texts are imported and displayed in formatted texts.
- > Reimporting OLEs into PREEvision no longer distorts the preview image.

During the ReqIF export:

- > File attachments in formatted texts are exported as native files and the preview image is exported.
- > Existing OLE objects in formatted texts are retained in their current form and are exported as *.ole file embedded in an *.rtf file. The export of OLE objects remains as in previous versions.
- > Images in formatted texts can be exported as OLEs (for example, for DOORS) or as native files.
- > Diagrams are exported as PDF file attachments.
- > Shapes in formatted texts are automatically converted to images. The resolution for this conversion can be defined in the **ReqIF Export** wizard with the **Resolution for Shape-Conversion** setting.
High resolutions lead to increased file sizes, especially when converting images to OLEs.

Checks for the ReqIF export

Before exporting to ReqIF, you can execute several checks to ensure OLEs and placeholders within formatted texts are complete and can be correctly exported. In the **Files and Files and Formatted Text** context menu the following checks are available and can be started on *Requirements* and *Requirement Packages*:

The **Check OLE objects in rich texts** action now also checks:

- > if an integrated OLE object can be opened on the client by checking whether a suitable OLE-capable program can be found in the Windows Registry with which the OLE object can be edited.
- > if a contained OLE object is completely broken.

During the ReqIF export, the size of the contained OLE objects (serialized) and images is checked, as other tools such as DOORS only support OLEs/images up to a size of 50 MB. If the size of contained OLE objects or images is greater, a warning is reported in the **Information View** after the ReqIF export.

The **Update rich texts** action:

- > refreshes all formatted texts containing an OLE object to update the OLE preview.
- > checks whether integrated OLE objects can be opened.

The **Search defective placeholders** action reports defective placeholders in the **Information View**.

In the **Information View** the corresponding formatted text can be opened by clicking on the link in the **Attribute** column.

Artifact	Attribute	Message
1.3 PH in LWRTAV - REQ_472000047 / -f	Attribute Definition343	The placeholder does not point to a target artifact. Please delete the placeholder and insert it anew.
1.3 PH in LWRTAV - REQ_472000047 / -f	Attribute Definition343	The placeholder does not point to a target artifact. Please delete the placeholder and insert it anew.
1.1 All defect types - REQ_472000045 / -	Description	The name of the placeholder artifact is not unique. Please contact your system administrator for a correction.
1.1 All defect types - REQ_472000045 / -	Description	The placeholder has no placeholder artifact. Please delete the placeholder and insert it anew.
1.1 All defect types - REQ_472000045 / -	Description	The placeholder does not point to a target artifact. Please delete the placeholder and insert it anew.
1.1 All defect types - REQ_472000045 / -	Description	The placeholder refers to several target artifacts. Please contact your system administrator for a correction.
1.4 Same PH in both - REQ_472000048 /	Description	The placeholder does not point to a target artifact. Please delete the placeholder and insert it anew.
1.4 Same PH in both - REQ_472000048 /	Attribute Definition343	The placeholder does not point to a target artifact. Please delete the placeholder and insert it anew.

Defective placeholders are also reported when a report is created.

Metric blocks for ReqIF export checks

Before exporting to ReqIF, you can execute several checks to ensure OLEs and placeholders within formatted texts are complete and can be correctly exported. The actions available in the **Files and Files and Formatted Text** context menu can also be executed via metric.

Therefore, the following metric blocks are available in the **Product Goals** palette category of the *Metric Diagram*:

- > *Check OLE objects in formatted texts* metric block
The metric block checks for defective OLE objects, that are OLEs without a preview image.
The metric block has been extended by the new input port "checkOLEIsOpenable". If set to `true`, the block also checks whether integrated OLEs can be opened. If set to `true`, a longer runtime is required because every formatted text that contains an OLE must be opened in the background.
- > *Update Rich Texts* metric block
The new metric block refreshes all formatted texts containing an OLE object to update the OLE preview.
If the input port "Check OLE" is set to `true`, the block also checks whether integrated OLEs can be opened (like the *Check OLE objects in formatted texts* metric block).
- > *Search defective placeholders* metric block
The new metric block searches in a hierarchy of artifacts in all contained formatted texts for defective placeholders. If the input port "postInfo" is set to `true`, defective placeholders are reported in the **Information View**.

ReqIF import and export configuration

The configuration possibilities of the ReqIF import and export have been extended to enhance compatibility with various third-party tools (for example, DOORS next generation).

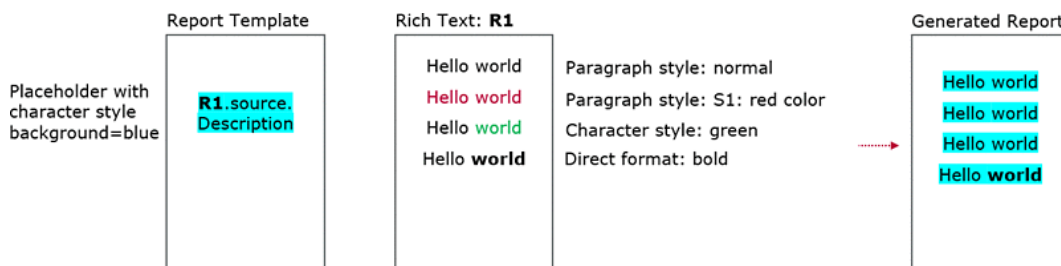
- > A new configuration flag allows to choose between using one `SpecObjectType` or multiple `SpecObjectTypes`.
- > For attribute definitions, the synchronization method can be left empty instead of having to configure a rule that returns the source artifact.
- > Attributes and custom attributes are exported for each `SpecObjectType` and imported individually for each mapped PREEvision meta class. Additionally, attributes can be exported and imported for `SpecificationTypes`. This allows importing and exporting attribute values for requirement packages on specification level.
- > A unified syntax in the configuration file allows a more flexible export of PREEvision-attributes and mapping of attributes during the import.
- > A new configuration flag allows to disable pretty print in the `*.reqif` file, enhancing compatibility with various importing tools.
- > A new configuration flag allows to export *Product Goal Links* having a target outside the exported artifacts.
- > Attribute definitions without data type can be exported.
- > For headings, `isHeading = Heading` is sufficient and can be used as subclass for attribute mappings.
- > Import of test data now always requires a proper class mapping in the configuration file.
- > Identifiers for ReqIF objects are now stable.
- > A new configuration flag allows to define whether images are exported as native image file with a PNG preview or as OLE file.
- > Background color in formatted texts is now exported in accordance with the ReqIF schema. The schema validation can be configured to be stricter than the standard.

The new configuration possibilities come with a new syntax in the configuration file. Therefore, existing configuration files must be adapted during migration to PREEvision 10.5.

Overwrite character styles of text placeholders in reports

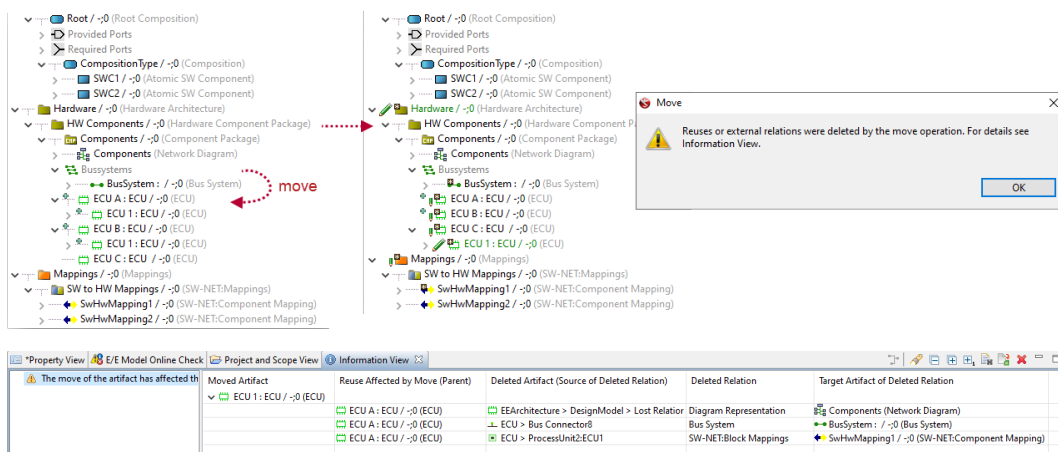
For *Reports*, the new text placeholder option **Overwrite character styles of the included text** is available. If the option is activated, all character styles in the included formatted text are replaced by character styles explicitly set on the placeholder in the *Report*, for example, to format all *Information Requirements* in italic.

All formatting except direct formatting is overwritten. Conflicts with paragraph styles or direct formatting are resolved as defined by LibreOffice. Direct formatting has the highest priority, then character styles, then paragraph styles.



Warning for lost relations

A warning is displayed if moving an artifact leads to lost reuses or external relations. Details are displayed in the **Information View** to analyze the lost relations.



16.3.2 Test engineering and test management

Alignment of test specification editor and requirement text editor

The **Test Specification Editor** has been further aligned with the **Requirement Text Editor**.

Text styles are aligned:

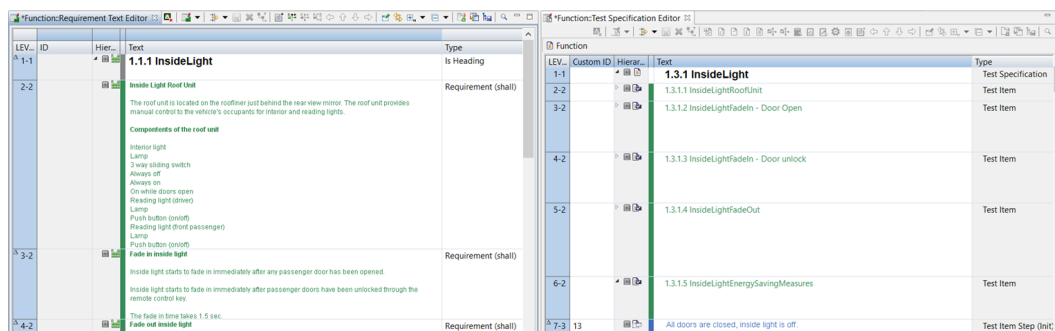
> *Test Data Package, Test Specification, Test Heading, Test Specification Library*

Shortcut actions are aligned:

> **New Test Item as Child** and **New Test Item on Same Level**

Action **New Comment as Child** is now also available in the **Test Specification Editor**.

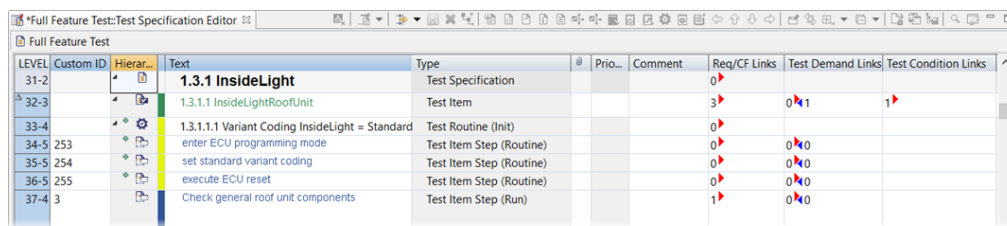
The column **Priority** is added to the **Test Specification Editor**.



Improvements for the test specification editor

The following improvements have been implemented for the Test Specification Editor:

- > A new column **Test Condition Links** is available.
- > The column **Test Links** is renamed to **Test Demand Links**.
- > Drag and drop actions are consolidated on the following columns:
 - > **Text**
 - > **Req/CF Links**
 - > **Test Condition Links**
- > Action **New Test Item (on same level)** is improved:
- > A new *Test Item* is now added directly after selected *Test Item* instead of as last artifact.



Further enhancements

- > *Test Headings*, *Test Informations*, and *Test Routines* can now have *File Attachments*.
- > Responsibles can be assigned to *Manual Test Cases* and *Automatic Test Cases*.
- > *Manual Test Cases*, *Automatic Test Cases*, and *Test Items* can be assigned to view packages.
- > *Subject under Test* and *Device under Test* can be assigned to a *Test Environment*.
- > An online check can check whether *Test Implementations* have been assigned to more than one *Test Task* to avoid double testing.
- > A metric can check whether a *Test Case Run* failed in other *Test Runs* to avoid duplicate creation of tickets.
- > *Test Items* can now be created directly in the test coverage tables **Test Specification Coverage**, **Test Implementation Coverage**, and **Test Execution Coverage**.

16.3.3 Function driven and system design

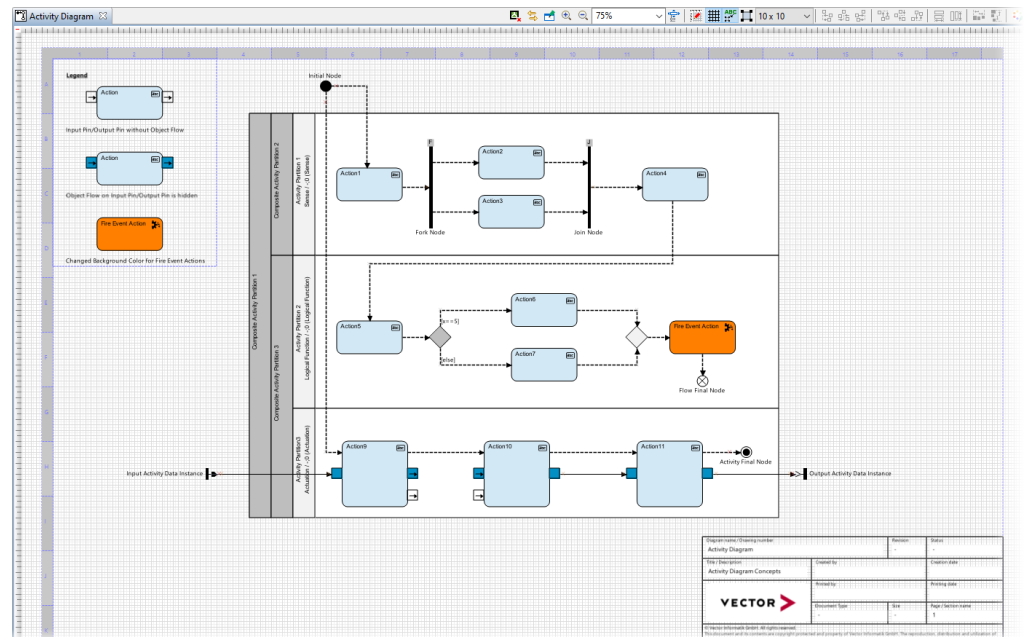
Added value by integrated activity diagrams

PREEvision now offers Activity Diagrams.

Behavior description:

- > The activity supports the development of complex architectures from a behavioral perspective.

- > The integrated modeling of activities enables two main use cases:
 - > deriving the logical architecture from activity diagrams
 - > modeling the detailed behavior of the decomposed system
- > The combined modeling of the structural logical architecture and the corresponding behavior enables the specification of functional requirements as a prerequisite for the SWC code.
- > Coupling of activities and *State Machines*: pass-through of port/data provider/consumer from *Data Instance* of a *State Machine* to an *Activity Data Instance*.
- > Saving as *Condition* or as non-parsable condition for description at an early stage via aligned condition editor for *State Machines* and activity descriptions.



16.3.4 AUTOSAR system and software design

Support of AUTOSAR release 20-11

PREEvision 10.5 supports the AUTOSAR release 20-11. AUTOSAR files of the new AUTOSAR version can both be imported or exported.

Improvements for AUTOSAR Adaptive

Regarding AUTOSAR Adaptive, PREEvision 10.5 provides the following extensions and improvements:

- > The *Adaptive Application*, a modeling element already known in 10.0, is extended to a Software Cluster Design, covering relevant aspects of the AUTOSAR meta class of the same name. The AUTOSAR Adaptive Explorer supports the modeling with multiple tables.
- > The **AUTOSAR Adaptive Explorer** also supports Network Management Design.
- > PREEvision supports Signal to Service Mappings for complex data types.

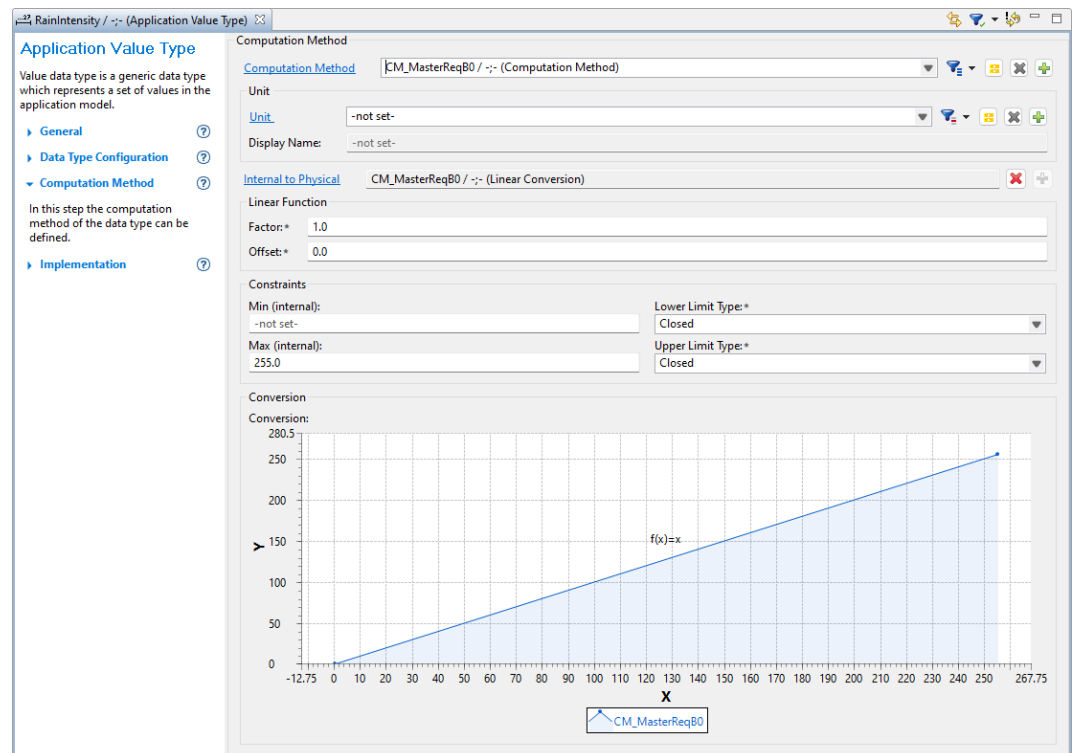
Improvements in the SOA & Ethernet explorer

Editors of the SOA & Ethernet Explorer covering the design workflow steps of the service definition, service interface definition and service interface binding have been optimized rearranged within the explorer.

The categories covering *Services* and *Service Interfaces* are harmonized between the **AUTOSAR Adaptive Explorer** and the **SOA & Ethernet Explorer**.

Usability of data types

For the creation and definition of data types, new data type editors are introduced. The dedicated editors for the most important application data types are based on the **Property View** and provide a user guidance. The data type editors are based on the newly introduced concept of the primary editor.



The step **Implementation** provides a toolbar action that creates and maps an implementation data type (IDT) based on the corresponding application data type (ADT).

The data type editors are based on the newly introduced concept of the primary editor. To better guide the user, configurators can create application-specific primary editors for the configuration of artifacts of a particular meta class. Primary editors:

- > can be configured to simplify the modeling in PREEvision
- > are based on the **Property View**
- > provide a navigation widget that guides through the necessary steps to create or modify an artifact
- > contain a description for every step and show only necessary attributes

Handling of initial values

The setting of initial and invalid values is much easier now:

- > The initial values, for example, for *Sender Communication Specifications* can be set like a direct attribute.
- > Further model and GUI details for the value setting can be configured in a dedicated *Value Handling Configuration*.
- > A new content assist supports the setting of values in fields and cells with configured value proposals.
- > Setting of an initial value in tables with content assist is possible.
- > Initial and invalid values for complex data types can be set with a new dialog.
- > The complex data type of the source artifact is displayed in a tree structure.
- > Values can be set accordingly for the whole structure.
- > The value object structure is created according to the used complex data type by a background synthesis.

Improved port connector

The port connector works on the logical architecture in the same way as in the software architecture.

Extensions in the show/hide port dialog

Populate and Show/Hide Port dialog is now possible on the diagram background for the following diagrams:

- > *Software Architecture Diagram*
- > *Composition Type Diagram*
- > *Partial Composition Type Diagram*

The Show/Hide Port dialog for drag and drop operation via **Model View** has been improved for the following diagrams:

- > *Software Architecture Diagram*
- > *Composition Type Diagram*
- > *Partial Composition Type Diagram*
- > *Logical Architecture System Diagram*
- > *Logical Architecture Diagram*

The improvements included:

- > The dialog supports multi selection.
- > The dialog can be hidden with **Do not show this dialog anymore** option. This can be undone via the preferences (**PREEvision | Diagram | LA/ SW**).

Extensions in the software design explorer

The Software Design Explorer, introduced with PREEvision 10.0, is further optimized. This includes:

- > improved usability of virtual package assignment via a new category and table in the **Software Design Explorer**
- > modeling of *Mode Switch Interfaces*
- > modeling of (Typed) *Per Instance Memory* via a new category and table
- > easy navigation across categories via the selection propagation

16.3.5 Communication design

Extensions in frame PDU synthesis to support of multiplexed IPDUs

The Frame PDU synthesis now supports *CAN Frames* containing multiplexed IPDUs. The synthesis creates *Frame Transmissions* and *PDU Transmissions* for the multiplexed IPDUs for each *Bus System*.

Gateway routing scenarios and nested combinations of IPDUs using multiplexed IPDUs are also supported.

Further usability improvements:

- > Multiplexed IPDUs can be modeled with *System Signals* in the Frame Layout View.
- > A new table in the Communication Design Explorer displays details of multiplexed IPDUs.

Support of adaptive network management

A new category Network Management Design is added to the AUTOSAR Adaptive Explorer. Its editors **NM Configuration Editor**, **Partial Network Cluster Editor** and **Network Management Handle Editor** allow to create and configure the corresponding elements.

Network Management Handle Editor			
Machine Deployment	Network Management Handle	Partial Network Cluster	ECU Interface (VLAN)
ClientDeployment	NM Network Handle1	Partial Network Cluster1	Client_ETH2
NavigatorDeployment			
TrafficDeployment			

To export these network management elements, a newly implemented export format Machine Design Description Extract is available. The export can be executed on a *Computer* or an *Execution Context*.

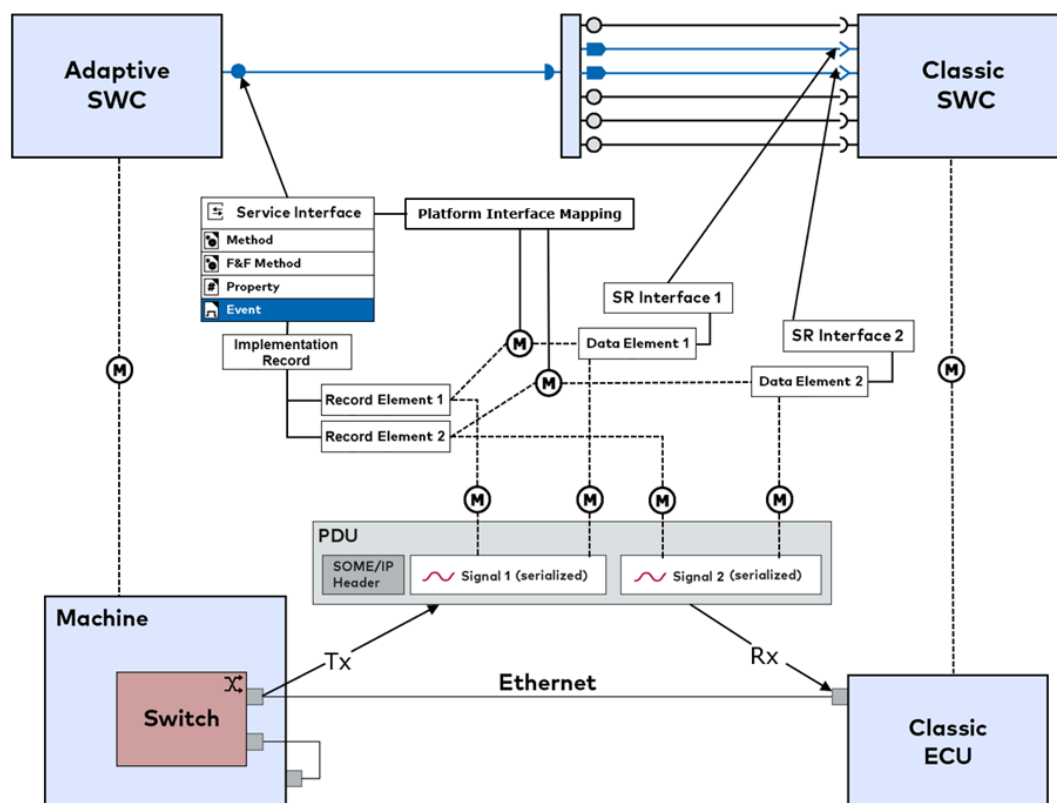
Support of complex signal-to-service mappings

In PREvision 10.5, interface relations are replaced by *Platform Interface Mappings*, which can map a *Service Interface* to fitting interfaces of the AUTOSAR Classic Platform (*Client Server Interfaces*, *Sender Receiver Interfaces* or *Trigger Interfaces*).

Using *Platform Interface Mappings*, mappings can also be created for *Events* and property notifiers, which are composed from *Signals* resulting from several different *Data Elements*.

A new category Platform Interface Mapping Design has been introduced to the **AUTOSAR Adaptive Explorer** and provides detailed editors for the creation of a *Platform Interface Mapping* and the necessary (complex) sub mappings.

Several *Platform Interface Mappings* may exist for a *Service Interface* covering different mapping scenarios, for example, service to signal and SOME/IP. A *Port Adapter* used to model a connection between Classic and Adaptive Software components is always based on a single *Platform Interface Mapping*.



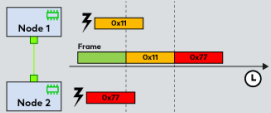
Ethernet modeling in AUTOSAR 20-11

The SOA & Ethernet modeling has been restructured according to release 19-11. PREEvision 10.5 supports AUTOSAR release 20-11. This includes:

- > easier and clearer modeling of service discovery configuration
- > better support of static service discovery
- > one PREEvision EEA Meta Model for both AUTOSAR approaches (4.4 or earlier and 19-11 or 20-11)
- > full support in meta model, import and export, migration, Ethernet tooling (signal router, metrics) and tables

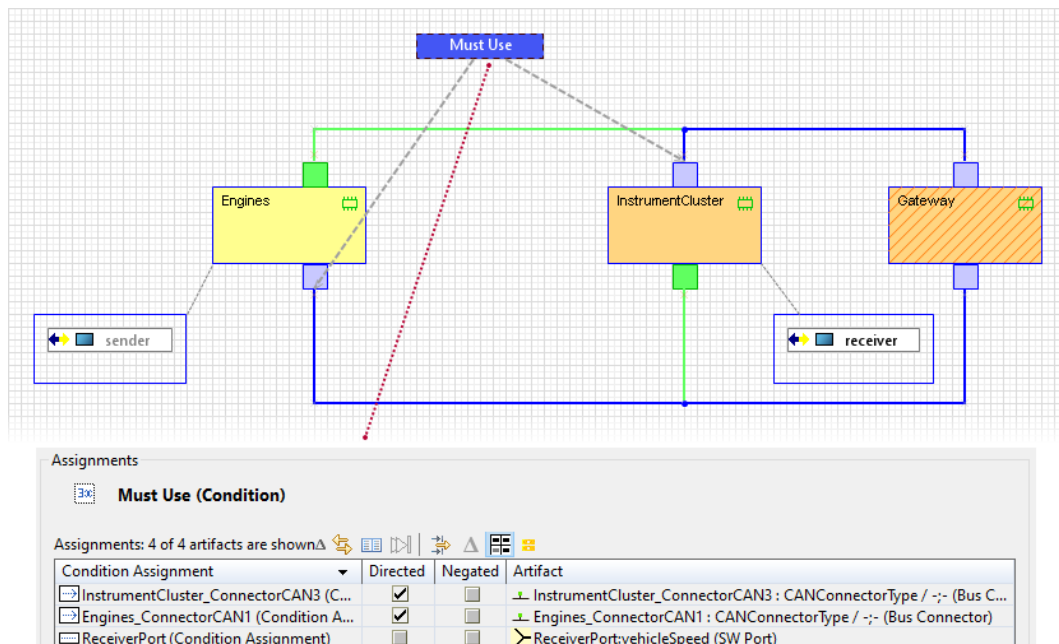
Support of 10BASE-T1S ethernet physical channel

10 Mbit/s Ethernet physical channel (10BASE-T1S) is supported. Ethernet bus systems with tree structure are now possible. PREEvision provides new bus type and new bus connector types as well as a table to support setup of physical layer attributes (PLCA as bus access mechanism).

	CAN / CAN FD	Ethernet 100 / 1000BASE-T1	Ethernet 10BASE-T1S „multi drop”
Baud Rate	up to 5 Mbit/s	from 100 Mbit/s to 1 Gbit/s	10 Mbit/s
Wiring Harness	 UTP	 UTP	 UTP
Medium Access	CSMA/CA 	Not needed	PLCA (CSMA/CD) 
	UTP: Unshielded Twisted Pair	CSMA: carrier sense medium access	CA: collision avoidance

Bus connector as condition for signal router

With PREEvision 10.5 the signal router can be influenced with a "Must use" *Condition* between *Bus Connector(s)* (directed) and *SW Port* (undirected). This allows a more detailed influencing of the routing behavior and enables use cases for mesh and platform reuse.



16.3.6 Diagnostics design

Extended data exchange with CANdelaStudio via PVCDI format

Exchange of Scale Linear Verbal Table Conversions

The data exchange with CANdelaStudio now supports linear conversions. *Scale Linear Verbal Table Conversions* are often used, typically with just one linear conversion.

The linear conversion part out of the overall conversion is now considered in case of:

- > Linear Conversion
- > Linear Verbal Table Conversion
- > Scale Linear Conversion (with just one Linear Conversion)
- > Scale Linear Verbal Table Conversion (with just one Linear Conversion)

The verbal table conversion parts are ignored in the exchange.



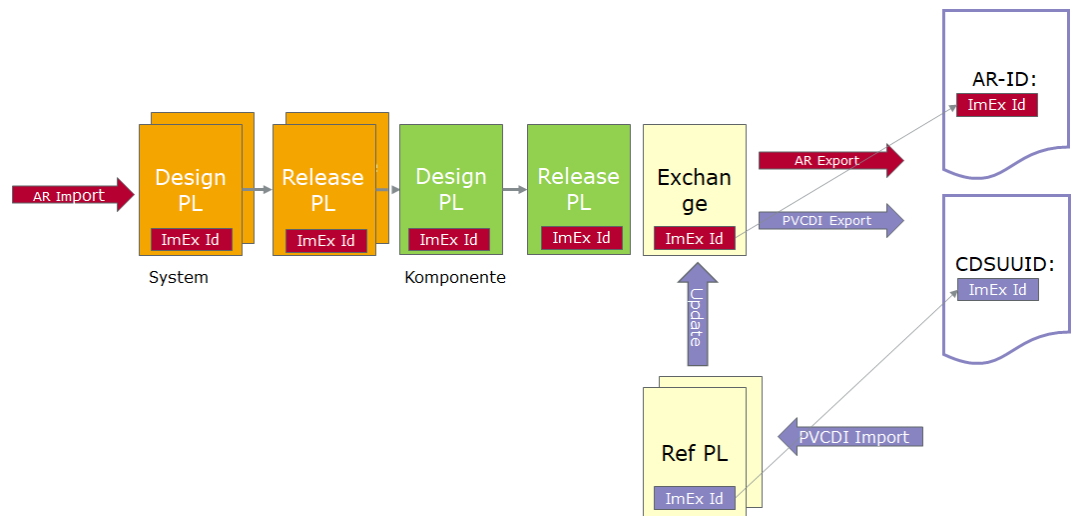
Usage of the ImEx-ID

The attribute **ImEx-ID** is used for different use cases:

- > The **ImEx-ID** can represent the AUTOSAR ID.
- > The **ImEx-ID** can represent the CANdelaStudio UUID.

The CANdelaStudio UUID is persisted in the reference product line.

The diagnostic export via PVCDI only considers the **ImEx-ID** out of reference product line.



Versionless ID

The versionless ID is considered as matching criteria for the updating PVCDI import:

- > The PVCDI file contains UUIDs to identify objects for the updating import (both in PREEvision and CANdelaStudio).
- > The considered ID in PVCDI files is now stable over different branches and versions.
- > The updating PVCDI import is possible now, even if objects do not have the same version anymore.

Support of multi-instantiation scenarios in data exchange

Diagnostic objects with references to different instantiations of the same port type need to be consistent in their details:

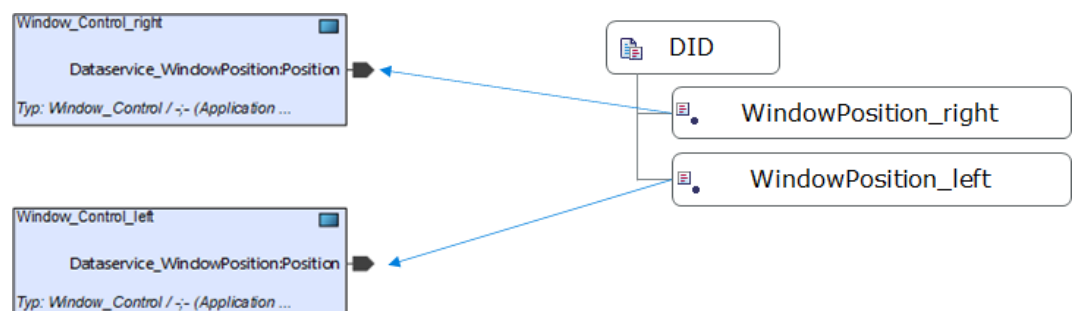
- > Details are derived from *Data Elements* or *Client Server Interfaces*.
- > *IO Controls*, *Diagnostic Data Objects* and *Diagnostic Routines* can be applied.

Updating import detects inconsistencies since PREEvision 10.0.

PVCDI is enhanced with the information about dependencies:

- > Export is writing this information.
- > Import ignores it, available mechanism based on UUIDs is continued.

CANdelaStudio gets the information about dependencies and can now prevent the user from changing any details.



New PVCDI export options

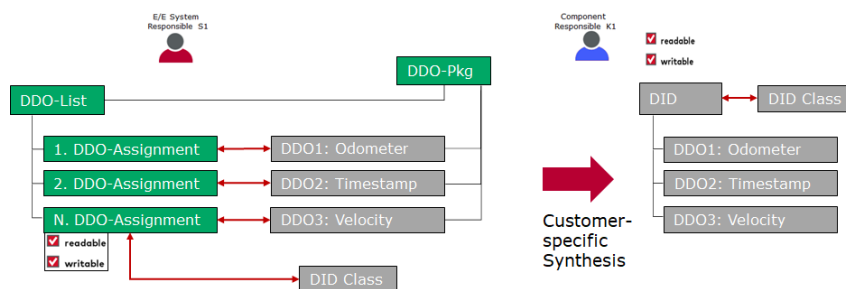
The diagnostic exchange now prioritizes software over logical architecture.

- > It is possible to model diagnostics without a concrete software realization or with a realization in logical architecture.
- > If just one software realization is available, this realization is considered for the data exchange with CANdelaStudio.

Extensions for initial DID specification steps

The DID independent modeling of Diagnostic Data Objects by system responsables is now supported:

- > *Diagnostic Data Objects* can be defined in dedicated packages (without DIDs as parents).
- > Diagnostic Data Object Lists provide a possibility to bundle *Diagnostic Data Objects*. It is possible to define an order, required services, and assign diagnostic classes.



new existing



This concept is not relevant for PVCDI data exchange.

- > Also, the Diagnostic Specification Explorer provides various new tables.

16.3.7 Wiring harness design

New wiring harness explorer

A Wiring Harness Explorer is available for schematics and wiring harness. The **Wiring Harness Explorer** primarily provides all tables which are required for the specification and handling of wiring harness inline connectors, especially *Wiring Harness Multi Inline Connectors*. Additionally, the explorer provides further relevant tables used in the context of the overall wiring harness design workflow.

Name	Alias Name	Context Abb.	Long Name	ID	Reference	Standard	Abbreviat	Kind of	Branch	Revision	Mod. Time
Motor Up/down	M1		Motor Up/down	M1				Actuator	-	0	5/19/2023, 3:42 AM
Battery	G1		Battery	G1				Battery	-	0	5/19/2023, 3:42 AM
MotorController	A1		Electronic Motor C...	ECU1	A1			ECU	-	0	5/19/2023, 3:42 AM
F-Multi Fuse Box	Instance_MotorHo...	MFB Outer	Multi Fuse Box Out...	MFB_Motor	F-MFB-1	MFB	MFB_Out	Fuse Relay Box	-	0	9/2/2024, 10:25 AM
F-Main Supply	MSB	MainSupplyBox	Main Supply Fuse B...	MSB_Motor	MSB4712		MSB_4711	Fuse Relay Box	-	0	9/2/2024, 10:25 AM
F-Multi Fuse Box	Type	MFB Inner	Multi Fuse Box Inn...	MFB_Inner	F-MFB-T		MFB_Inner	Fuse Relay Box	-	0	5/19/2023, 3:42 AM
Groundpoint	W1		Ground Spot Chassis	W1				Ground Point	-	0	5/19/2023, 3:42 AM
Switch Down	B1		Switch Up	B1_ID	B1			Sensor	-	0	5/19/2023, 3:42 AM
Switch Up	B2		Switch Up	B1_ID	B2			Sensor	-	0	5/19/2023, 3:42 AM
Control Panel Up	N1		Upper Control Panel	N1				Sensor/Actuator	-	0	7/9/2024, 5:31 PM
Control Panel Low	N2		Lower Control Panel	N2				Sensor/Actuator	-	0	7/9/2024, 5:31 PM
USB-Port	X2		USB-Port	X2				Sensor/Actuator	-	0	6/25/2024, 5:40 PM

The **Wiring Harness Explorer** provides the following categories:

- > **Component Overview**
- > **Schematic Connection Overview**
- > **Wiring Connection Overview**
- > **Header Connector Design**
- > **Wiring Connector Design**
- > **Plug-in Location Design**
- > **Inline Connector Design**

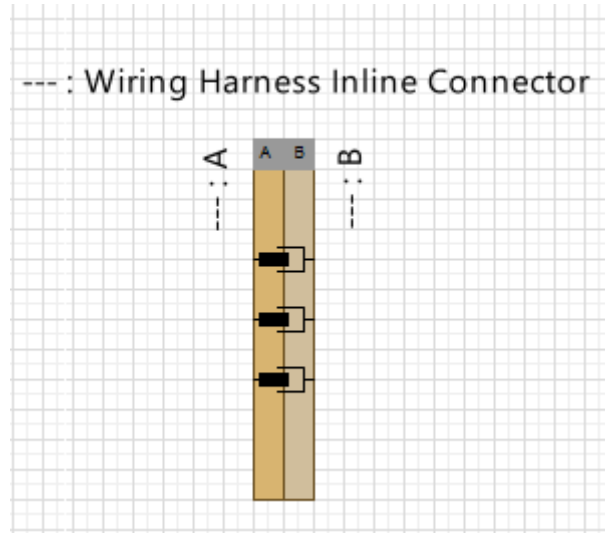
Classic and complex wiring harness inline connectors

In wiring harness design, different kinds of inline connectors can be distinguished:

- > *Wiring Harness Inline Connectors*
- > *Wiring Harness Multi Inline Connectors*

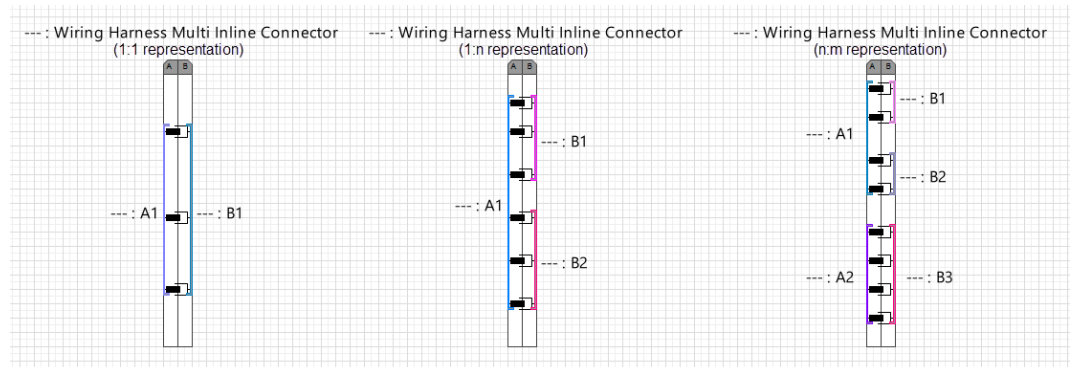
Classic wiring harness inline connector

The classic *Wiring Harness Inline Connector* consists of two connector sides and has exactly one *Wiring Connector* for each of its connector sides.



Complex wiring harness multi inline connector

The new complex *Wiring Harness Multi Inline Connector* may contain more than one *Wiring Connector* on each of its connector sides. The assignment of the *Wire Pins* to the *Wiring Connectors* is represented by the *Wiring Connector* brackets. For *Wiring Harness Multi Inline Connectors* different representations with respect to the contained number of *Wiring Connectors* can be distinguished.



For the creation and specification of *Wiring Harness Multi Inline Connectors*, the **Wiring Harness Explorer** is recommended. The explorer provides all necessary tables for comfortably specifying the complete inline connector design, comprising the creation of the inline connector itself, the definition of *Wiring Connectors* and the creation and assignment of *Schematic Pins*.

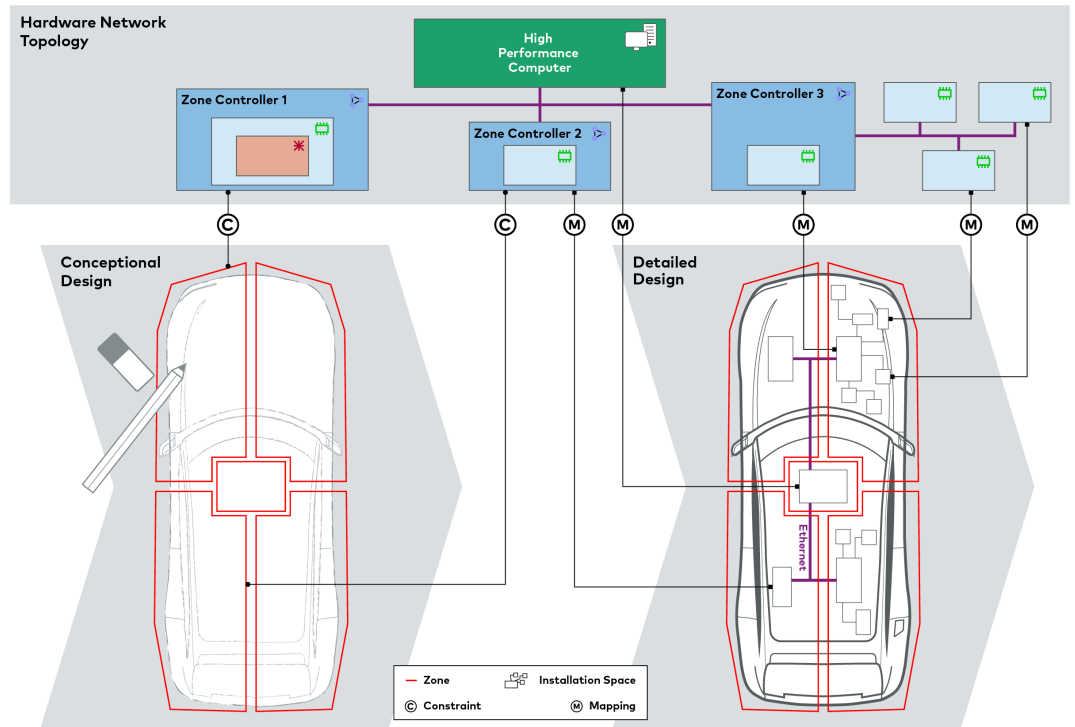
The following functions have been adapted, extended, or newly implemented to support the design and handling of complex *Wiring Harness Multi Inline Connectors*:

- > The Show/Hide Pins dialog for pin assignment has been extended and adapted for *Wiring Harness Multi Inline Connectors*.
- > New pin sorting functions for *Wiring Harness Multi Inline Connectors*.

- > Extended existing pin sorting functions for inline connectors.
- > New and extended refactorings for complex *Wiring Harness Multi Inline Connectors* as well as classic *Wiring Harness Inline Connectors*.
- > New object configuration for the color of a *Wiring Harness Multi Inline Connector* and its *Wiring Connectors*.
- > Implementation of various validity checks for *Schematic Pins / Wire Pins*.

Design of zonal architectures

A zonal architecture design for the geometry based on the zonal design of the network architecture has been introduced.

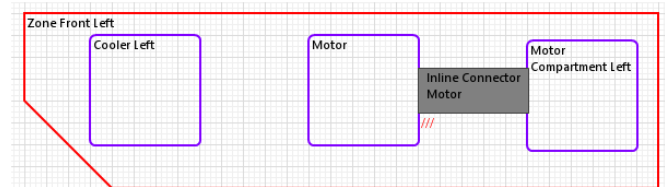


- > The network components grouped and clustered into network zones provide the basis for the zonal architecture design of the vehicle geometry.
- > The zonal architecture design approach groups vehicle functions according to their location in the vehicle by dividing the overall vehicle topology into separate zones and defining interzone connections.

Extensions for installation spaces

Installation Spaces can now be modeled as nested *Installation Spaces*. Inner *Installation Spaces* have a different frame color in the *Geometry Diagram*.

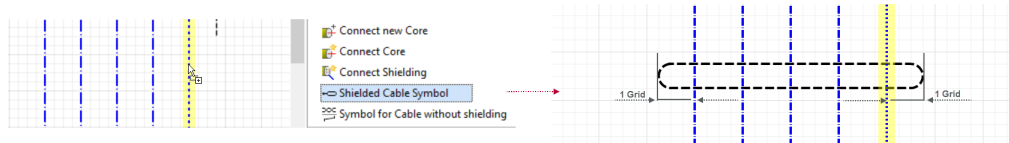
- Installation Spaces
 - Zone Front Left / -;0 (Installation Space)
 - Cooler Left / -;0 (Installation Space)
 - Motor / -;0 (Installation Space)
 - Motor Compartment Left / -;0 (Installation Space)



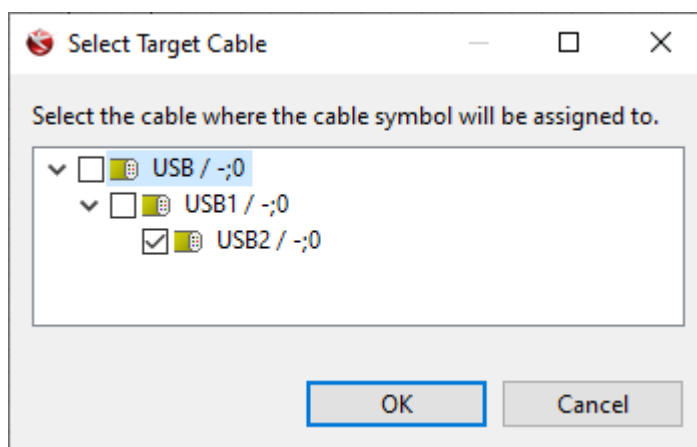
Cable symbols in wiring diagrams

The creation and handling of cable symbols in *Wiring Diagrams* has been adjusted and improved.

- > During the creation of a cable symbol, the cable symbol is automatically sized and positioned across all *Cores* belonging to the *Cable* with one grid overlapping at the outermost *Cores* or *Shielding*.



- > When creating a cable symbol for a nested *Cable*, a dialog opens via which you can determine if the cable symbol shall be created on the top *Cable* or a subordinate *Cable*.



Limitations for automatic size and position adjustment of cable symbols:

- > If a maximum distance between the *Cores* or *Shielding* of a *Cable* is exceeded, the *Core* or *Shielding* is not covered by the cable symbol.
- > For foreign wires or objects which are not part of a corresponding *Cable*, an error highlight is displayed on the cable symbol as well as on the foreign wire. Error highlights are reliably activated and removed and are also displayed for nested *Cables*.

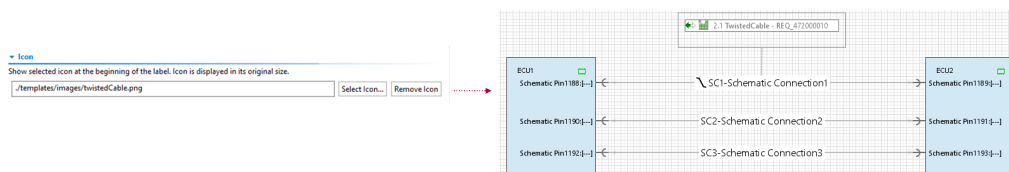
Further improvements:

- > The deletion of a section in a *Wiring Diagram* without removing the content does no longer remove the cable symbols.
- > Cable symbols snap to grid while moving and changing the size.

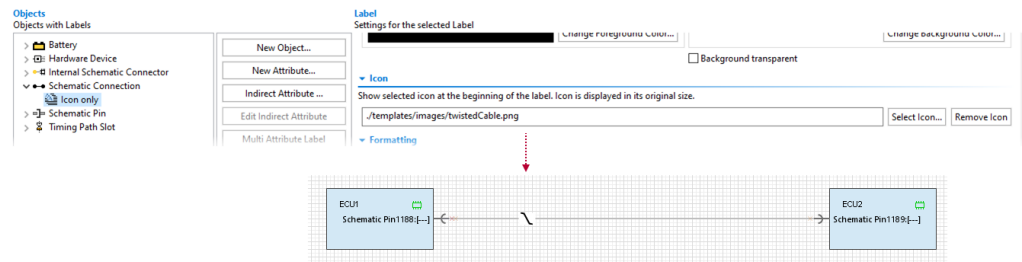
Icons in labels

External labels on all artifacts can display an icon in front of the label text:

- > For each label and each condition on the label, an icon can be configured.



- > Labels only consisting of icons can be defined as well.

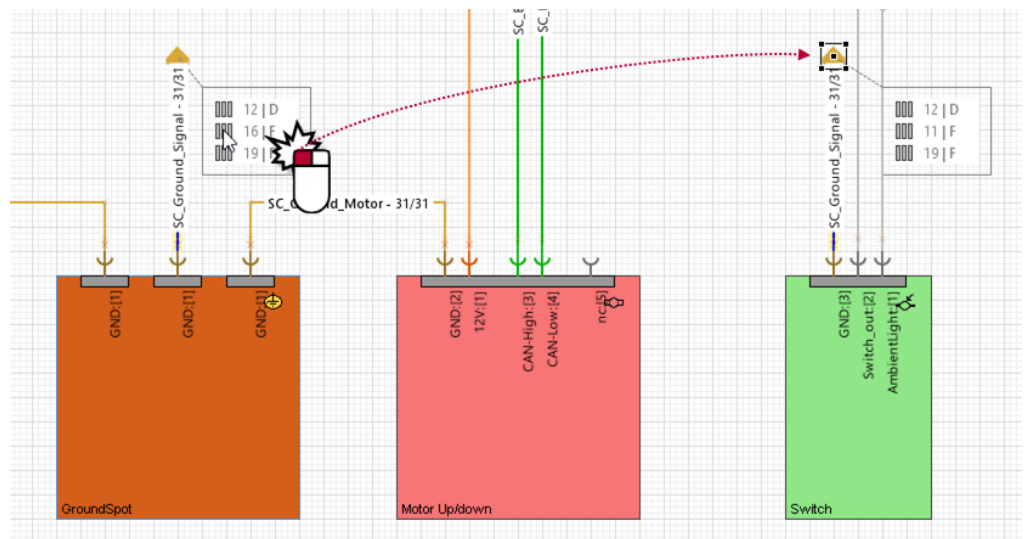


Sheet connectors

New and improved functions have been implemented for Sheet Connectors.

Sheet Connectors with displayed links can be used across different diagrams such as:

- > Network Diagram
- > Electric Circuit Diagram
- > Wiring Diagram



The usability of working with *Sheet Connectors* for split connections has been improved. Thus, *Sheet Connector* link boxes allow you to navigate to the corresponding targets of a split connection. Navigation to the targets is possible for targets located in another diagram, targets located in diagram sections, or within a diagram area.

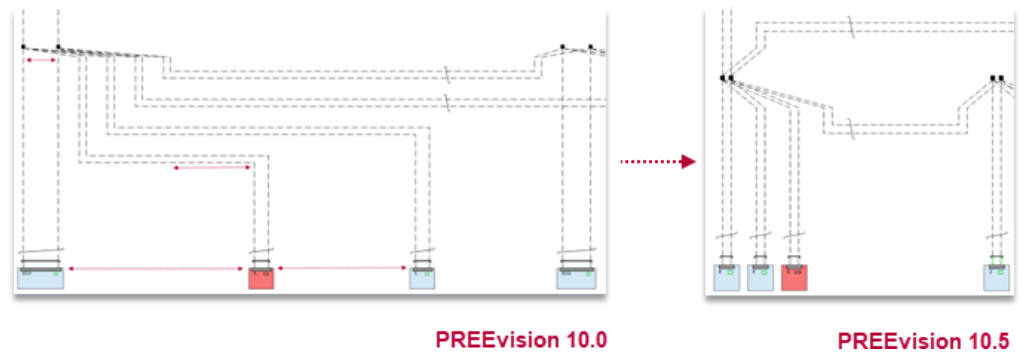
Sheet Connectors are customizable via object configuration with respect to the content and the orientation of their link boxes and the style of *Sheet Connectors*.

Wiring harness auto-layout improvements

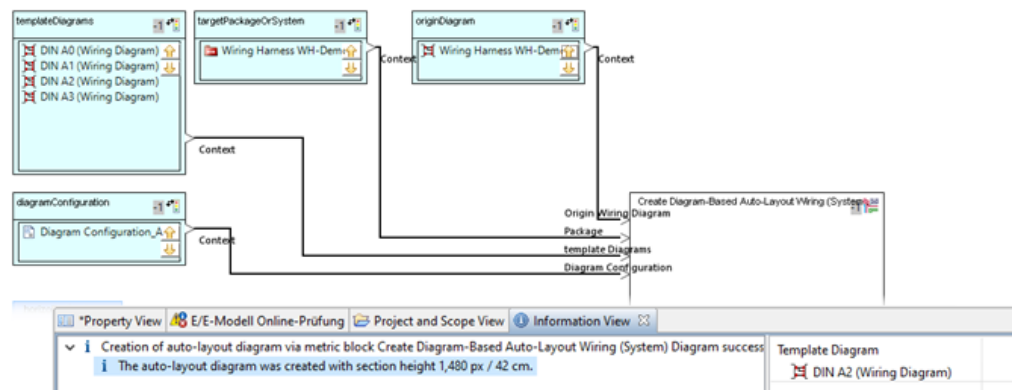
Improved existing auto-layout functionality for *Wiring Diagrams*:

- > Optimization concerning the layout of the target diagrams

- > Support of nested components: the uppermost component is displayed in the auto-layout diagram



- > When creating auto-layout diagrams via the Create Diagram-Based Auto-Layout Wiring (System) Diagram block and the Create Model-Based Auto-Layout Wiring (System) Diagram block, you can handle the paper format and paper settings of the target diagram. There is the possibility to provide a set of templates with possible section heights and a fallback mechanism to create an auto-layout with calculated height.

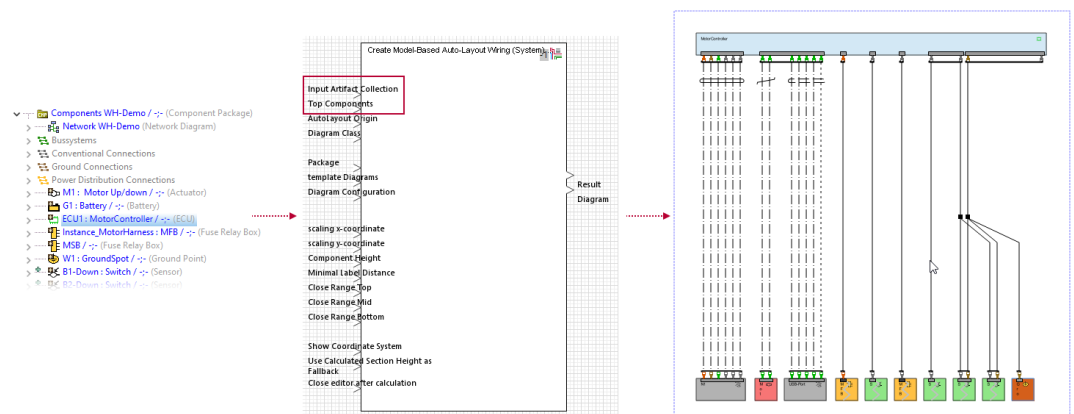


Model-based wiring harness auto-layout

A read-only *Wiring (System) Diagram* can be created automatically, based on a part of the E/E model by using the Create Model-Based Auto-Layout Wiring (System) Diagram metric block.

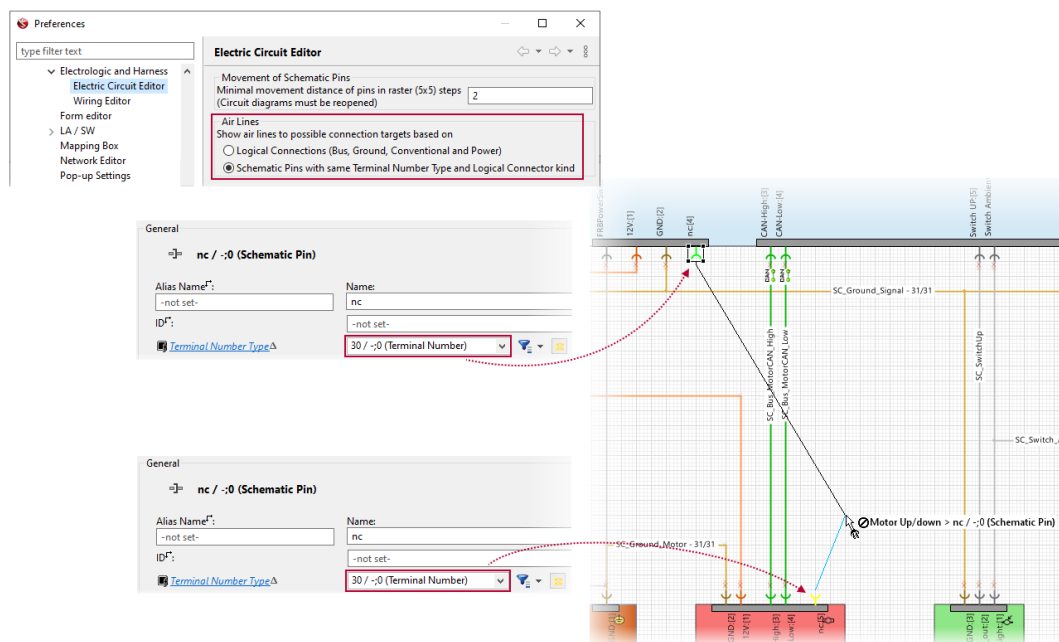
An auto-layout *Wiring (System) Diagram* is created based on a set of artifacts you can define as input. The given artifacts are arranged in a clear way.

Example: Starting at a component, displaying its functional network, that is, all connected components.

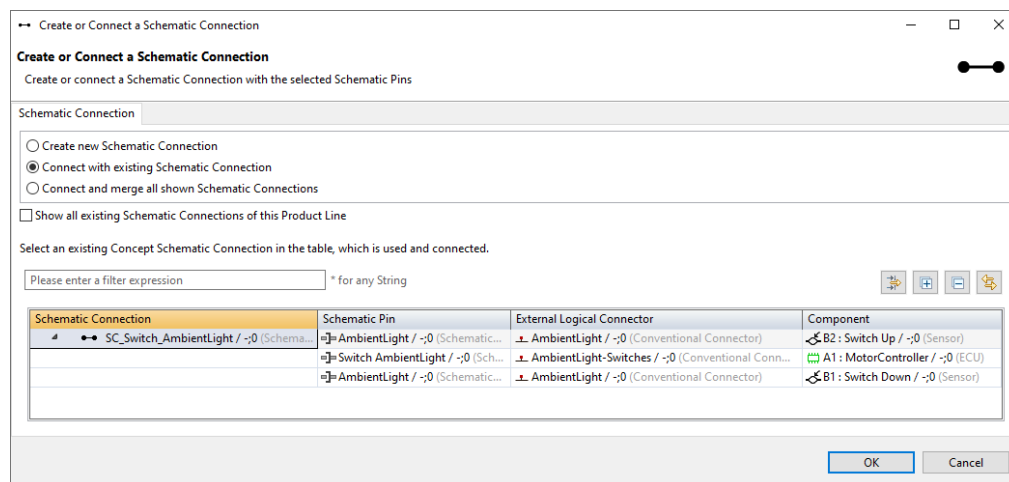


Ground point and fuse relay box handling

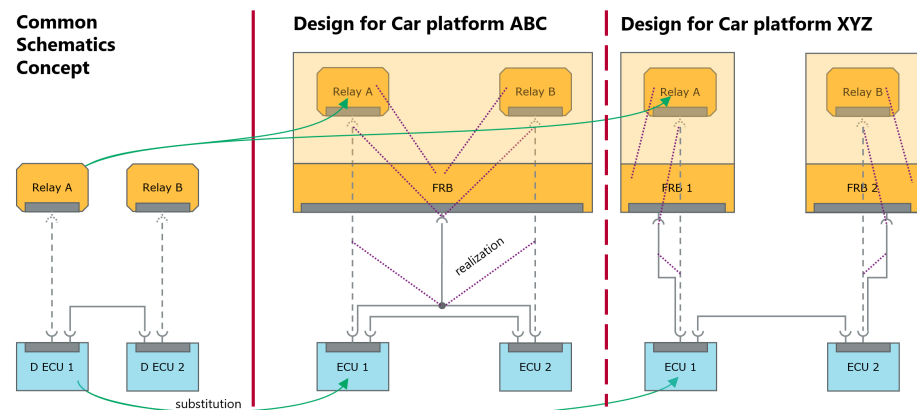
Airlines in an *Electric Circuit Diagram* are now displayed if *Schematic Pins* of the same logical connector kind do have the same *Terminal Number* types assigned.



> The Schematic Connection dialog has been improved and aligned.



- > New concept artifacts for *Fuse Relay Box*, *Schematic Pin* and *Schematic Connection* are available.



16.3.8 Product line engineering

Extensions for product line engineering

The following product line engineering extensions and improvements are available in PREEvision 10.5:

- > *Asset* change cluster: calculation and *Asset* cluster update
- > Substitution: Improvements and extensions for component substitution in wiring harness design
- > Robustness improvements
- > Usability and performance improvements

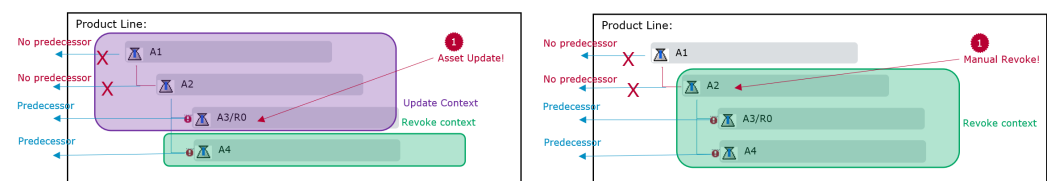
Asset update improvements: revoke context and update context

The two technical terms "update context" and "revoke context" have been implemented to handle which artifacts to be displaced to which *Asset* after an *Asset* update. This means, which artifacts and relations between artifacts will be protected in the *Assets* if the updated *Asset* causes a conflict with other *Assets*.

Whether an *Asset* has a predecessor is important for the definition of the revoke context. The revoke context can be different if:

- > an *Asset* is revoked manually
- > an *Asset* is revoked due to a conflict with an updated *Asset* (displacement)

The parent *Asset* of the revoke context is always checked-out when an artifact in the revoke context is revoked. A checked-out artifact cannot be revoked. Checking-in an *Asset* with non-integrated artifacts is prohibited.

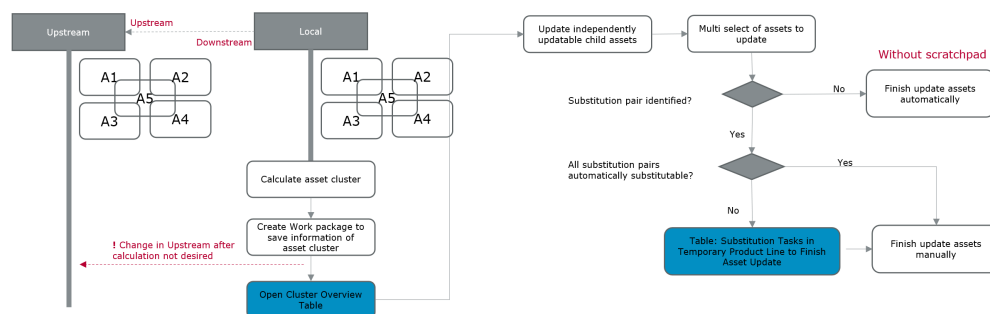


Asset cluster calculation and asset cluster update

When an *Asset* is updated, the foreign *Assets* that conflict with the updated *Asset* are revoked. In some product line engineering use cases, the revoke operation or displacement is not always necessary to handle the conflict, especially if all *Assets* shall be updated simultaneously. To update multiple *Assets* without a revoke, the following two extensions are implemented:

- > Calculating the *Asset* cluster

> Performing an Asset cluster update considering a substitution use case

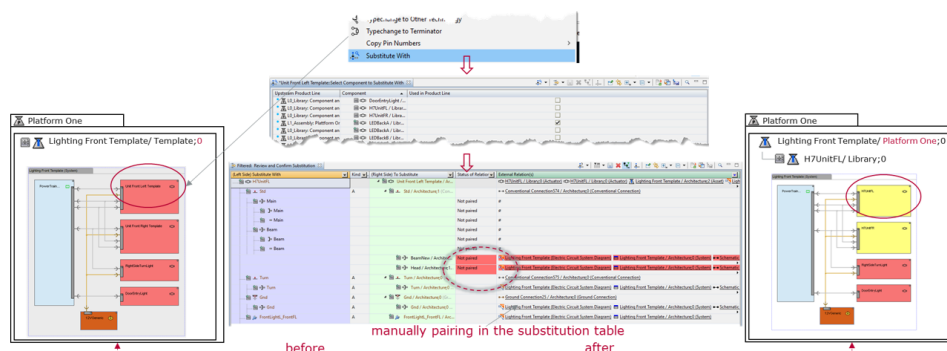


Improvements for substitution

The substitution is improved to support more use cases:

- > New meta model substitution link "substitutedOrigins--substitutedUsages" as new substitution marker to replace the old marker "abstraction link with different objectUUID"
- > Transferring the template component to the downstream *Product Line* and substituting it in the local *Product Line*.
- > Transferring the library component to substitute to the downstream *Product Line* and substituting it again in the local *Product Line*.
- > the component in the local *Product Line* is substituted, and after transferring it to the downstream *Product Line* again it is substituted in the downstream *Product Line*

The artifact from upstream to substitute is reused in the local *Product Line* only after confirming the substitution.



Information output in case of non-synchronous reuses

If a reuse-out-of-sync scenario occurred during an action, for example, an *Asset* update due to an error in the merge algorithm, the commit was rejected without providing detailed information.

For reuse-out-of-sync scenarios, detailed and transparent information output regarding the affected artifacts and corresponding reference artifacts is provided, now. Additionally, an integrated compare table for comparing the artifacts with specific representation of the asynchronous content, is available. The information reported in the Information View has been significantly improved, in case of illegal *Asset* states.

Ground point and fuse relay box handling in the product line engineering wiring harness design workflow

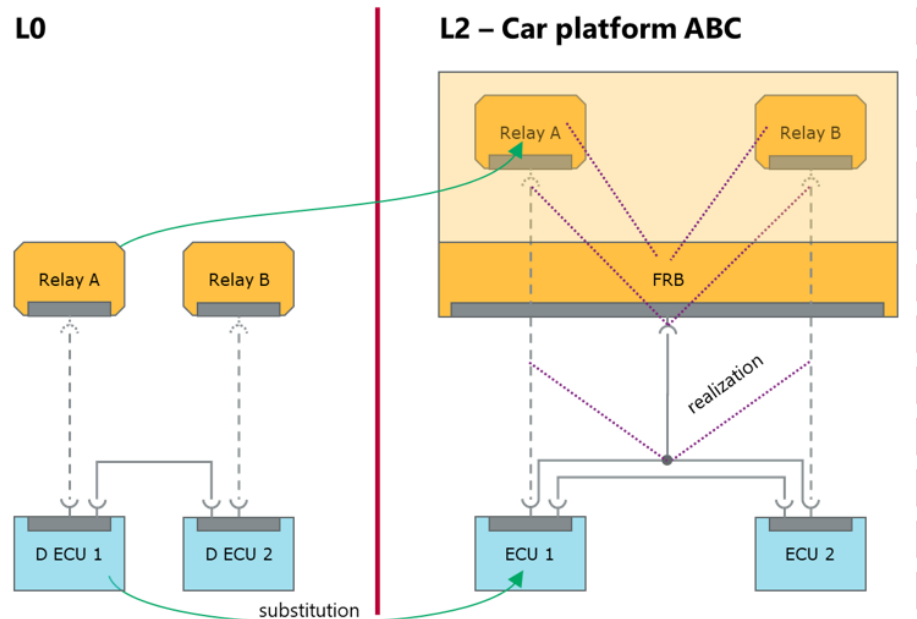
A new modeling concept in the product line engineering wiring harness workflow has been implemented.

- > No *Ground Point* template will be modeled, and will not be propagated as boundary to the system *Asset*.
- > The terminal number type at the *Schematic Pin* is used to represent a *Ground Point*.

- > A *Concept Fuse Relay Box* has been implemented to support the following use case:
 - > n *Fuse Relay Boxes* realized by one library *Fuse Relay Box* in a specific platform

The following use cases are not supported:

- > One *Ground Point* from an upstream *Product Line* substituted with n library *Ground Points*
- > n *Fuse Relay Boxes* from an upstream *Product Line* substituted with one library *Fuse Relay Box*



Further improvements

The following further improvements have been implemented.

Substitution:

- > Only one template component within one *System* is allowed to be substituted with one library component.
 - > Refactoring
- Substitute With** table: new column for *Asset* and status of the *Asset*.

Upstream Product Line	Component	Component Asset	Ready for Substitution	Used in Product Line
L0_Library: Component an	DoorEntryLight / ...	DoorEntryLight / Library:1 (Asset)	Asset not checked-in	☐
L0_Library: Component an	H7UnitFL / Librar...	H7UnitFL / Library:0 (Asset)	Asset not unique	☐
L1_Assembly: Platform Or	H7UnitFR / Libra...	Copy of H7UnitFL / Library:0 (Asset)	Asset not unique; Asset not checked-in	☐
L0_Library: Component an	H7UnitFR / Libra...	H7UnitFR / Library:0 (Asset)	Component may only have one substituted origin	☒
L0_Library: Component an	LEDBackA / Libra...	LEDBackA / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LEDBackB / Libra...	LEDBackB / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LEDBackC / Libra...	LEDBackC / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LEDBackD / Libra...	LEDBackD / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LightBackA / Lib...	LightBackA / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LightBackB / Lib...	LightBackB / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LightBackC / Lib...	LightBackC / Library:0 (Asset)	Yes	☐
L0_Library: Component an	LightBackD / Lib...	LightBackD / Library:0 (Asset)	Yes	☐
L0_Library: Component an	RightSideTurnLi...	RightSideTurnLight / Library:0 (Asset)	Yes	☐
L0_Library: Component an	XenonUnitFL / L...	XenonUnitFL / Library:0 (Asset)	Yes	☐
L0_Library: Component an	XenonUnitFR / L...	XenonUnitFR / Library:0 (Asset)	Yes	☐

New columns

- > New column in the **Review and Confirm Substitution** table.

(Left-hand Side) Substitute With	Kind of...	(Right-hand Side) To Substitute	Type of Relation(s)	Status of Relation(s)	External Relation(s)
H7UnitFL / Library0 (Actuator)		Unit Front Left Template / ...			Lighting Front Template / Arch
Park / Library0 (Conventional Connector)	A	Park / PlatformOne0 (...)		Not paired	
Park / Library0 (Schematic Pin)	A	Park / PlatformOne0 (...)			Schematic Connection41 / Ple
Park / Library0 (Header Pin)	A	Park / PlatformOne0 (...)			
Park / Library0 (Wire Pin)	A	Park / PlatformOne0 (...)			
Std / Library0 (Conventional Connector)	A	Std / Architecture0 (...)			Conventional Connection574 /
Turn / Library0 (Conventional Connector)	A	Turn / Architecture0 (...)			Conventional Connection575 /
Gnd / Library0 (Ground Connector)	A	Gnd / Architecture0 (...)			Ground Connection25 / Arch
FrontLightL_FrontFL / Library0 (Header)	A	FrontLightL_FrontFL / ...			Lighting Front Template / Arch
H7UnitFL_ProcessUnit / Library0 (Process)	A	H7UnitFL_ProcessUnit / ...			

Automatic integration of *Assets*:

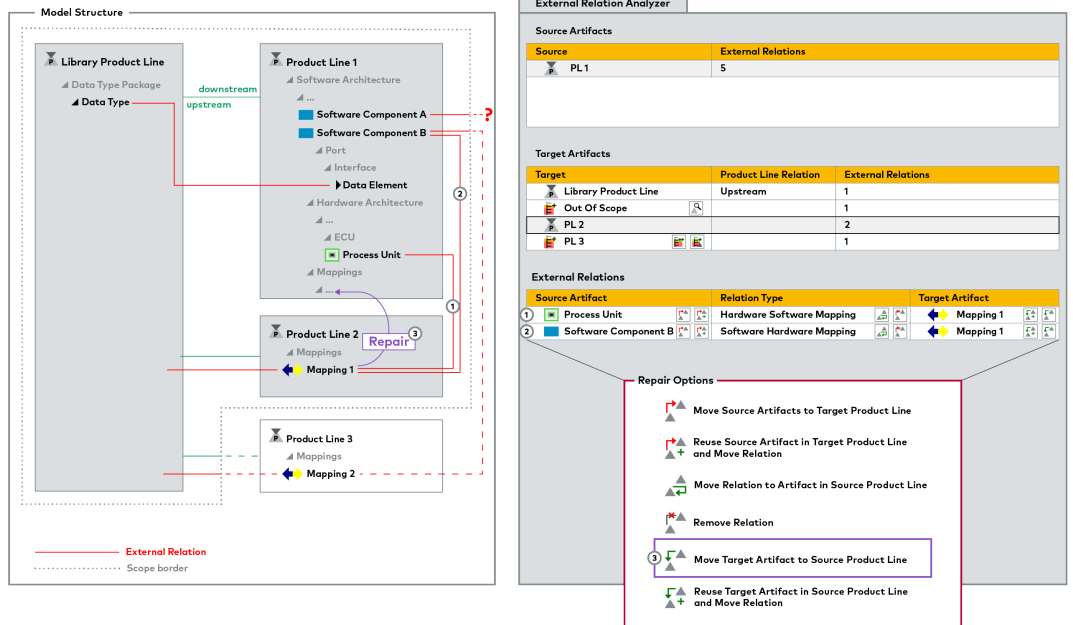
- > No integration via move if a merge integration is not possible
- > If no unique and mergeable integration target can be identified, a manual integration via the **Asset View** is required.

External relation analyzer

The External Relation Analyzer can be used to identify and resolve external relations:

- > Relations to artifacts of other *Product Lines*
- > Relations to artifacts of model layers like, for example, the global *Administration*, the global *Library*, or the *Plan* layer
- > Relations to artifacts out of the currently active scope

The **External Relation Analyzer** supports in identifying and resolving model inconsistencies to ensure consistent model structures.



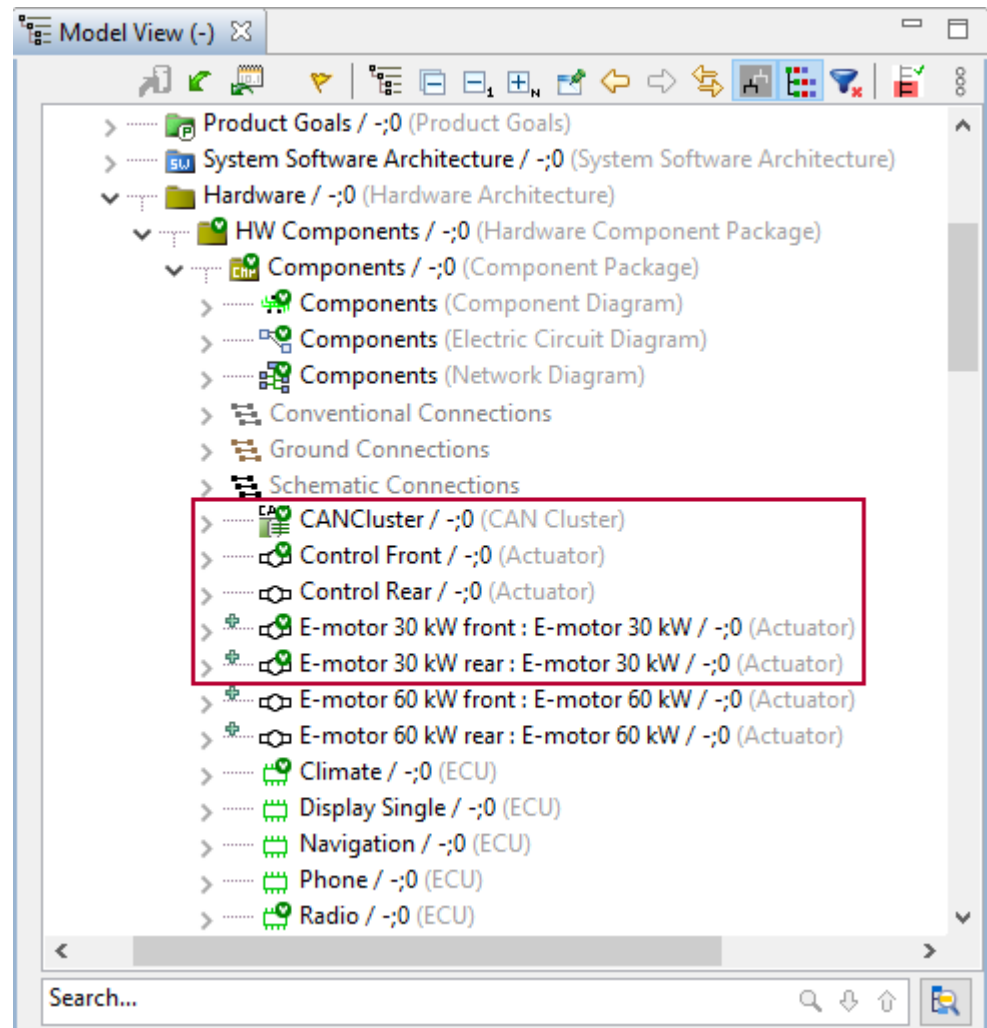
Performance improvements for variant activation

Current situation:

- > The activation and deactivation of a variant/set took a lot of time (for example, several minutes, depending on the loaded artifacts).
- > Different indicators were used for artifacts which are not part of the active variant (blue exclamation mark) and for those artifacts which are excluded from the active variant (grey exclamation mark).

PREEvision 10.5:

- > The performance for the activation, deactivation, and switch of a variant/set has been significantly improved.
- > Common indicator for all artifacts which are part of the active variant (green V).



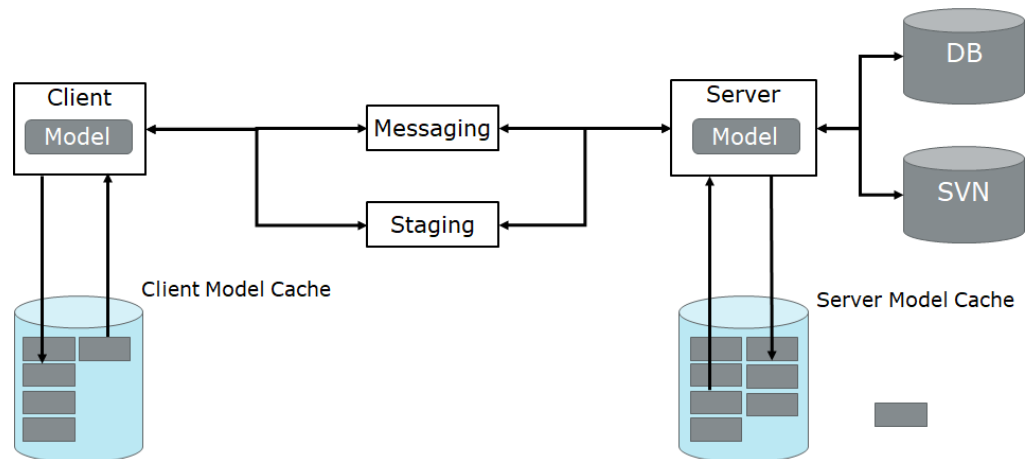
16.3.9 Collaboration

Performance improvements with new model cache

A new model cache improves the performance:

- > faster loading of the model during startup of client and server because of parallelization
- > faster *Scope* calculation and *Scope* delivery to the client and therefore faster initial login

- > faster shutdown of PREEvision because the model cache is always up to date



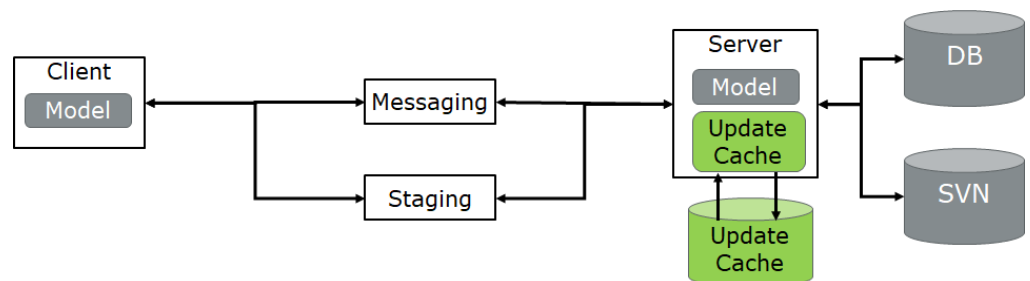
Update and commit improvements

The update cache is now stored on the hard disc:

- > updates are still available after server restart
- > large updates which are out of scope for the user will not trigger a reload of the model
- > reduced update time and less memory need for an update
- > the size of update cache on the hard disc can be larger than in memory and can be configured

Improvements for commits:

- > Commits can now always be cancelled as long as writing into the data base has not been started.
- > For a large commit, a warning dialog is displayed to the user. The limits for the large commit can be configured.

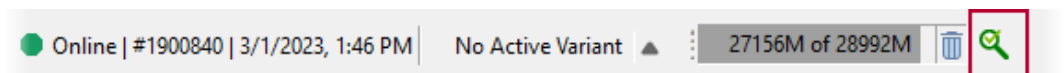


Online check calculation

Server-side online checks are now calculated in parallel and asynchronously after completing the commit, which reduces the duration of commits.

The number of available threads for the online check calculation can be configured.

The state of the online check calculation is displayed in the status bar.

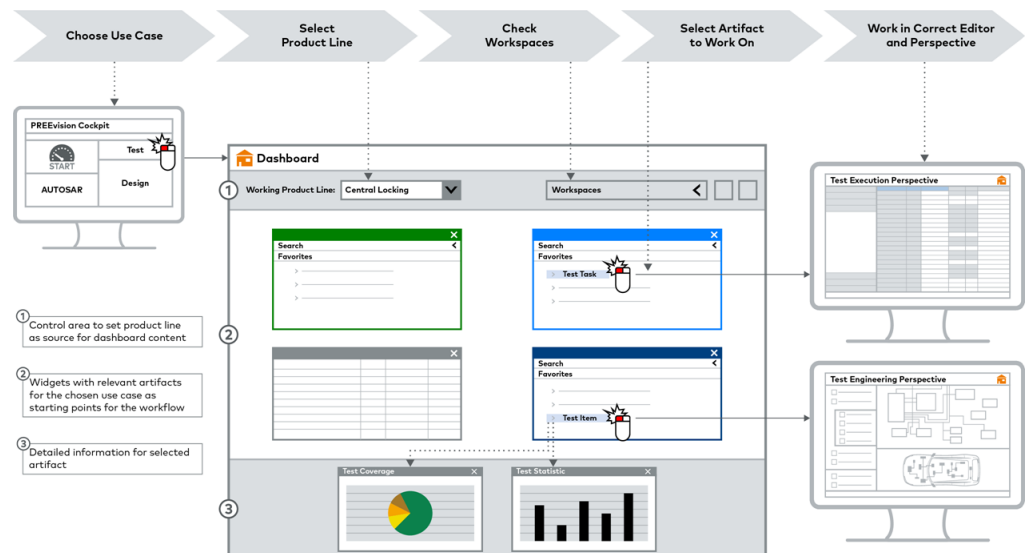


16.3.10 Usability

Dashboard and entry points

Dashboards offer personalized entry points for users, present the artifacts that are relevant for the use case and provide direct access to the associated editors and perspectives. Hence users are introduced to their use case and can focus on the relevant artifacts without being overwhelmed by the complexity of the model and the multitude of editors.

- > Personalized entry points are set via user specific favorited artifacts.
- > Directly from the *Dashboard* users can easily trigger metrics which open the right editor and perspective for their artifacts.
- > *Dashboard Widgets* can be configured to contain *Charts* and *Tables* to gain more detailed information and insights in one look.
- > The Complexity is further reduced by selecting one *Product Line* in the *Dashboard*. The artifacts displayed in the *Dashboard* are limited to the selected *Product Line*.
- > A workspace metric can be configured to automatically set workspaces for the selected *Product Line*. The metric is automatically triggered upon selecting a *Product Line* which reduces a common source of error, as users who are not familiar with the workspace concept no longer need to worry about.



Checking workspaces

A workspace check icon in the toolbar of every editor displays if the set workspaces correspond with the *Product Line* of the artifact users are currently working on. Users can open a **Workspace Editor** via click in the icon to get more information on the currently set workspaces.

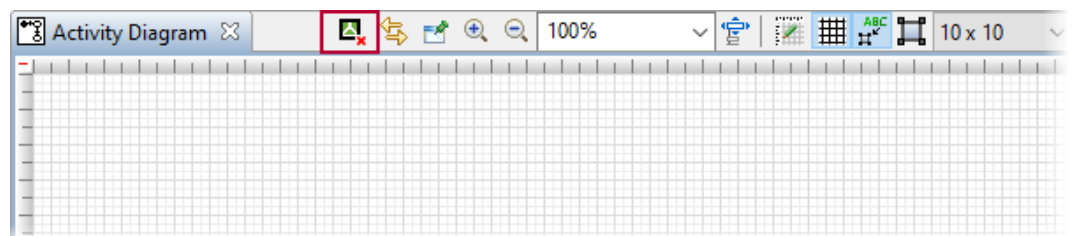


Diagram palette search Elements and artifact entries of the diagram palette can now easily be found via the palette search function using a type-ahead filter and then directly be added to a diagram.

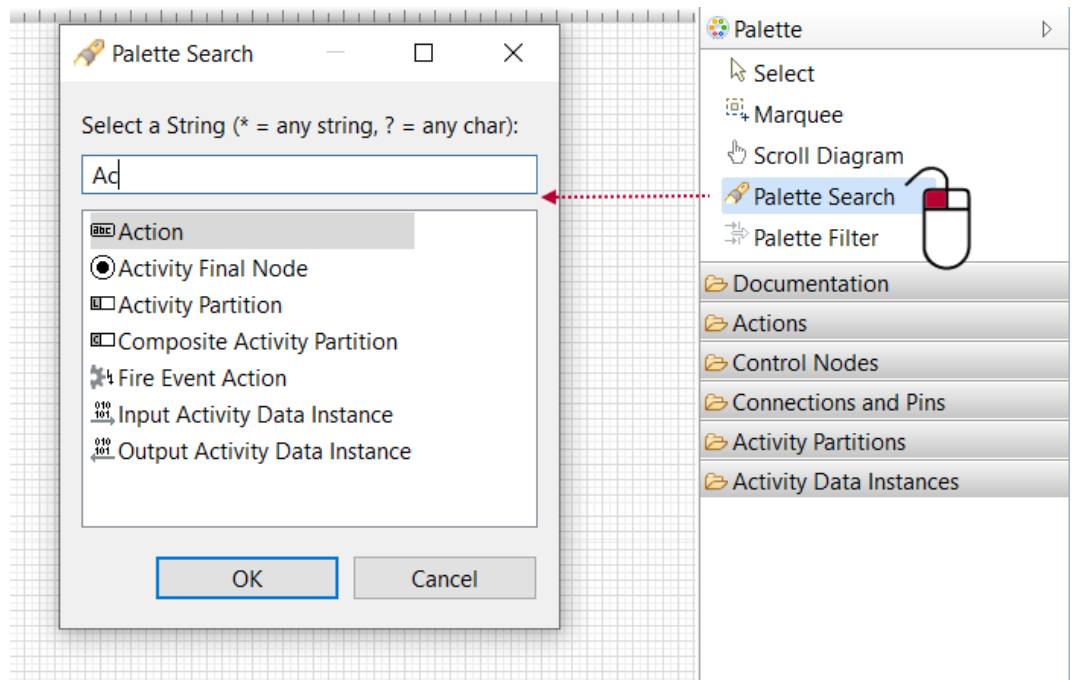
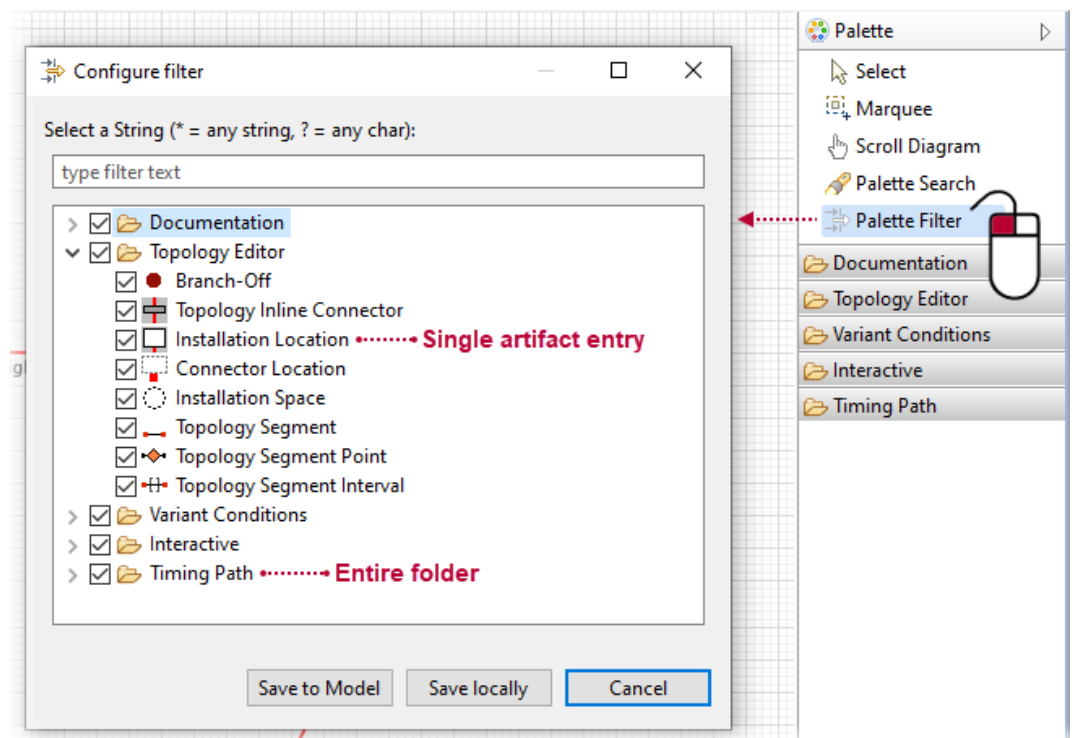


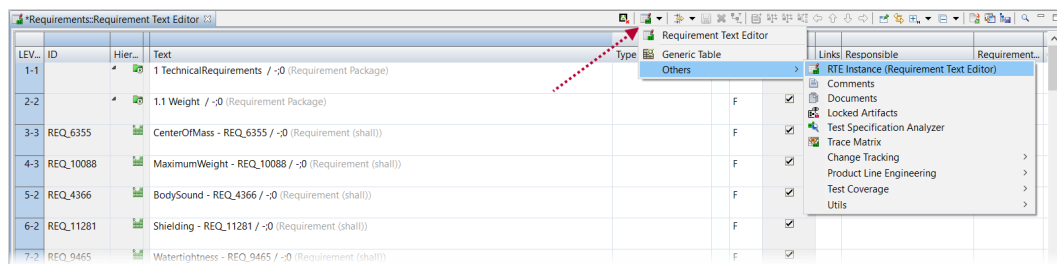
Diagram palette filter Elements and artifact entries of the diagram palette can now easily be filtered out from the palette. Entries to be filtered out can be easily searched for via the type-ahead filter. Either single artifact entries can be filtered out or even entire folders. The palette filter can be saved to the local workspace or to the model.



Aligning artifacts in diagrams The behavior of the diagram toolbar actions for aligning artifacts has been changed. The artifacts are now aligned to the first selected artifact instead of the last selected artifact.

Switching tables

The performance of switching between *Tables Proxys* and *Table* instances via the table toolbar has been improved. The PREEvision client remains operable, even when switching large tables.



High DPI support in PREEvision

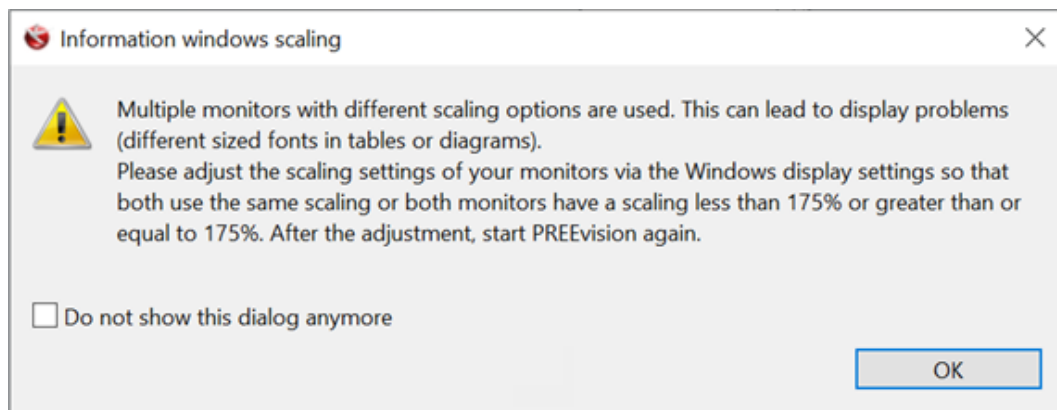
When using high-resolution monitors, the user interface of PREEvision may show an unwanted display behavior, for example, different font sizes in tables or diagrams. This problem can be experienced especially when using multiple monitors where each display has a different scale factor.

For example, the primary monitor has a scale factor equal to/higher than 175% and the secondary monitor has a scale factor lower than 175%.

A scaling equal to/higher than 175% is set to 200%. A scaling lower than 175% is set to 100%.

If PREEvision is run on the secondary monitor (scale factor 100%), most settings are taken over from the primary monitor (scale factor 200%). This leads to display problems since formatted text uses the settings of the active monitor where PREEvision is run, the secondary monitor.

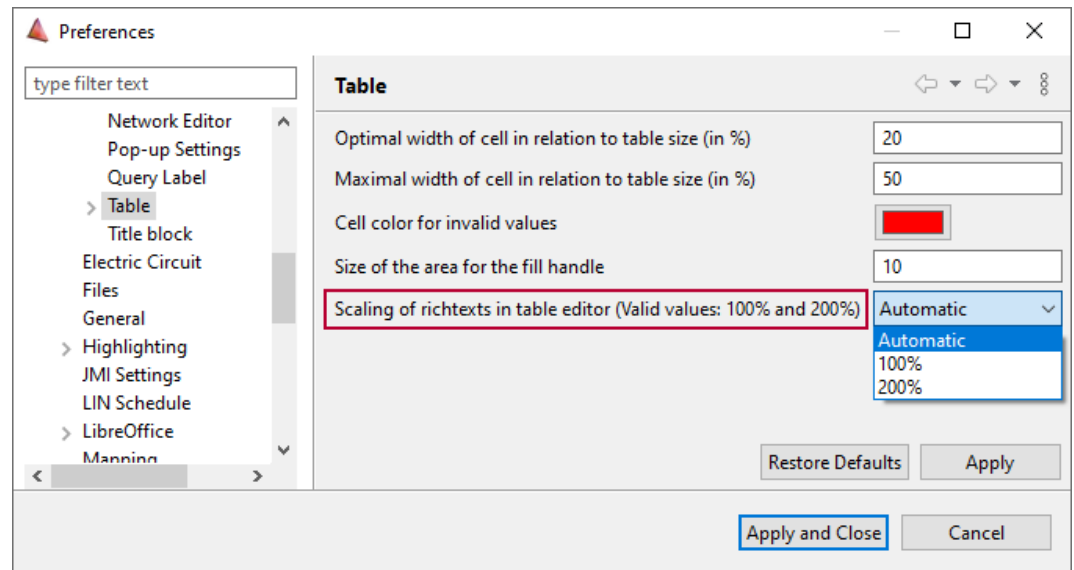
During the start of the PREEvision client, the scaling settings are checked. If the used monitors use different scaling settings, an information message is displayed.



It is recommended to adjust the scaling settings as follows:

- > The monitors should use identical Windows scaling options.
- > Alternatively, the monitors should use scaling options which are scaled to the same value (either scaling lower than 175% or scaling equal to/higher than 175%).

Alternatively, a manual scaling of formatted text in tables can be defined (100% or 200%) via a table setting in the PREEvision preferences.



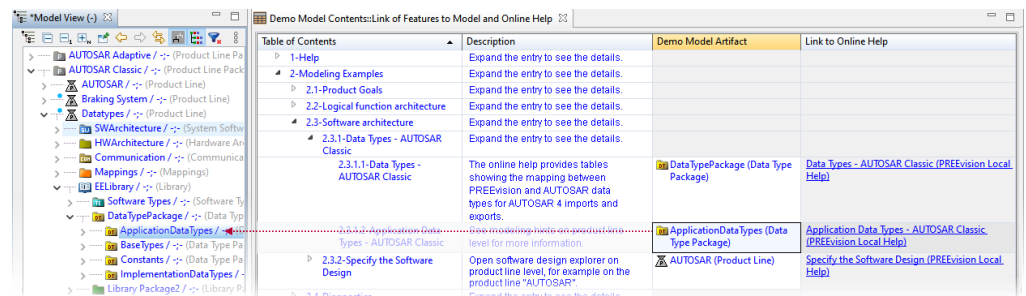
In some cases, restarting PREEvision on the target monitor can help to apply the right scale factor.

Exploring the demo model

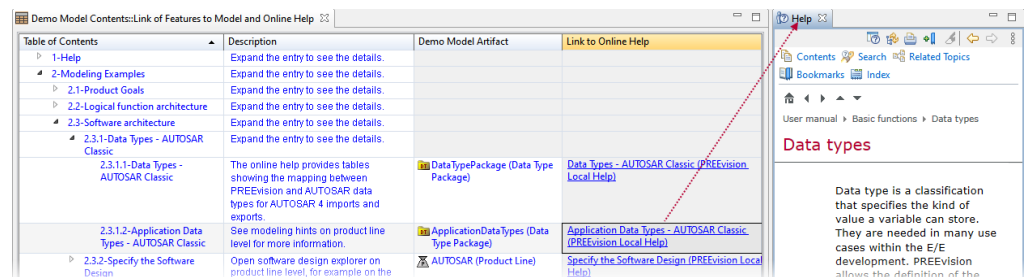
The PREEvision demo model now includes a Demo Model Contents table and perspective.

Benefits of the new perspective:

- > Easy navigation to the instructive modeling and configuration examples of the demo model in the Model View:



- > The corresponding manual entry can be opened with one click in the online help:



16.3.11 Administration

Add-ins for configuration and customization

Add-ins cover the complete PREEvision configuration:

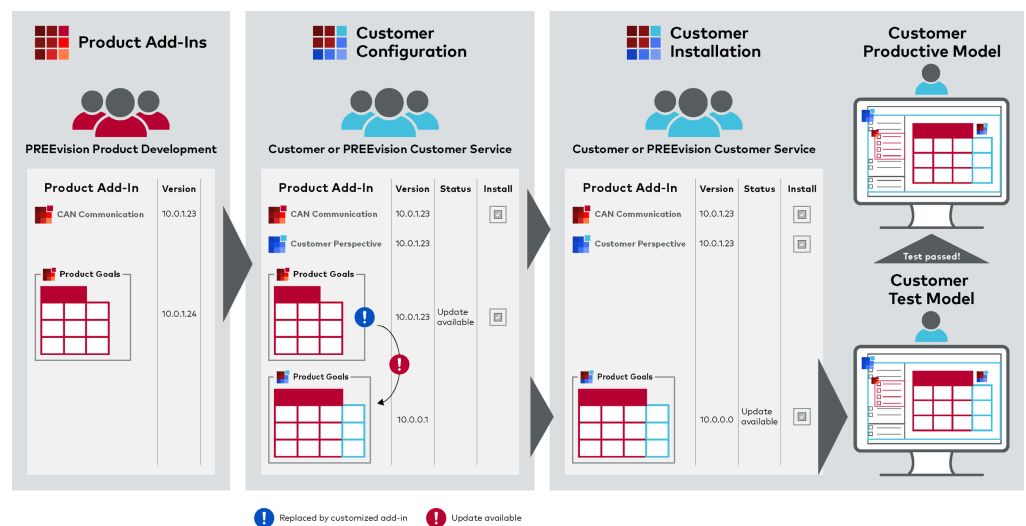
- > Product configurations are delivered by product Add-ins.
- > Installed Add-ins are updated version-safe and automatically.
- > Add-ins can be easily adapted and extended.
- > Add-ins replace **Factory Reset**. From PREEvision 10.0. **Factory Reset** is no longer supported.

Add-ins enable easy customization of PREEvision configurations:

- > The **product Add-ins**, that is all *Add-ins* provided by the product development, are delivered with the PREEvision client.
- > To configure installations at the customers, **customer Add-ins** can be added.

There are two types of customer-specific *Add-ins*:

- > dedicated **customer Add-ins** that are newly created
- > updateable **customized Add-ins** derived from customer or product *Add-ins*



Migration from PREEvision 10.0 to 10.5

Migration preparation is significantly improved:

- > less storage and runtime required
- > migration preparation can be done as a separate step or during backup/migration
- > incremental migration preparation (resume is supported)
- > enables faster migration time slot and therefore less downtime of the system

Administration package replaced by new package types

The "generic" *Administration Package*, which could contain configurations for various use cases, can no longer be created in the *Administration*. The following new package types are available in the *Administration* to replace the existing *Administration Packages*:

- > *Categorization Model* and *Categorization Package*
- > *Diagram Configuration Model* and *Diagram Configuration Package*
- > *Hardware Classification Configuration* and *Hardware Classification Package*
- > *Property Editor Configuration Model*
- > *Uniqueness Cache Package*

Existing *Administration Packages* shall be replaced. A metric is available to transform existing *Administration Packages* into the new structure.

16.3.12 Configuration

Dashboard

Dashboards are perspectives that help you to navigate as fast and easy as possible to the data and the editors you need for your work in PREEvision.

Dashboards and their contained *Dashboard Widgets* can be configured according to the customer's use case.

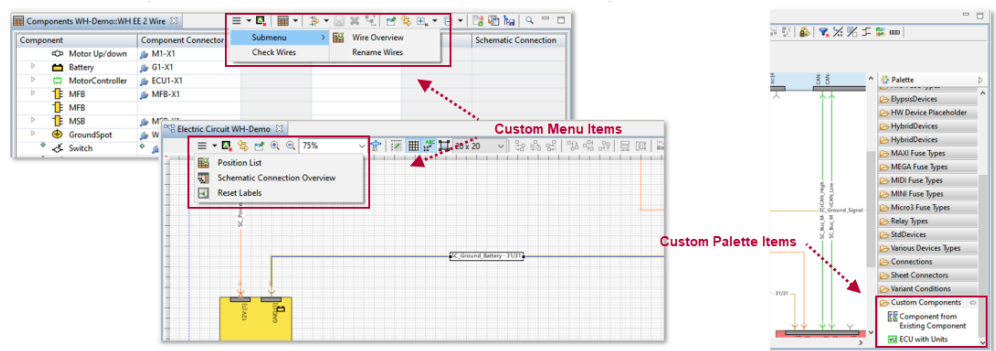
Primary editor

To better guide the user, you can configure application-specific Primary Editors for the configuration of artifacts of a particular *Meta Class*. *Primary Editors* are based on the property pages presented in the generic **Property View**.

Custom diagram palette tools and custom menu items

Two new configuration features are available which enable the user to focus on working in a diagram or table and avoid switching to other views or editors:

- > Customized diagram palette tools can be added to a diagram. It is possible to directly call custom metrics to create new artifacts with additional information or to open the **Artifact Picker** for creating new artifacts based on indirect information.
- > Menu items can be opened directly from within a diagram, table, or primary editor, other tables or can call custom metrics directly with the same source artifact to modify content of the table.



Relations filters in the property view

Relation Filters allow you to configure use case-specific filters for property page drop-down lists. By using such filters, the origin of the entries in a drop-down list can be narrowed down to a specific product line, library, or package, for example.

Value handling for initial and invalid values

A value handling mechanism can be configured to set initial and invalid values in the **Property View** like they are direct attributes. Value handling can be configured under *Administration | Property Editor Configuration Model | Value Handling Configuration Package | Value Handling Configuration*.

Content assistance for text fields and cells

A content assist can be configured for text fields of the **Property View** and table cells to propose valid values. The content assist can be configured under *Administration | Property Editor Configuration Model | Content Assist Configuration Package | Content Assist Configuration*.

Table configuration diagram

The *Table Configuration Diagram* has been improved. You may need to check and adjust the layout of existing diagrams. Column actions implemented by query or metric can now have inputs from other columns.

Drag and drop actions in tables

The configuration of drag and drop actions in tables has been changed. For standard drag and drop action you can now define which actions are listed in the drag and drop menu in tables.

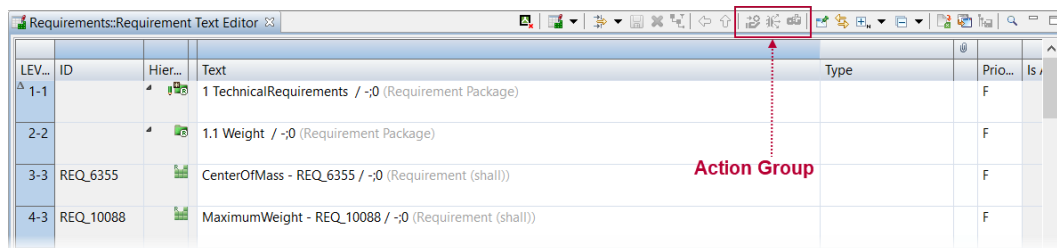
Two new meta classes are available for the configuration:

- > *Allowed DnD Standard Action* for programmed standard drag and drop actions
- > *Allowed Configured DnD Standard Action* for configured standard drag and drop actions

Other standard drag and drop actions are disabled in a table, if one of the new meta classes is configured for a column of the table.

Toolbar action groups in tables

For the table toolbar, the order of *Action Groups* can be configured.



Configuration of variant-sensitive tables

If variant-sensitive *Query Rule Groups* are used to obtain data within tables, you must activate the **Table Regards Variant Activation** option to activate variant support in the table configuration:

With the help of the metric **Metrics | Migration Support | Migration 10.5 | Search for Variant Sensitive Tables**, you can analyze whether your tables would require the option:

Enablement of column actions in tables

In previous PREEvision versions, the meta class of the source column artifact had to be assigned to enable column actions in tables.

Now, the meta class of the current cell must be assigned to enable column actions in tables. This also applies for enablement metrics of column actions.

Additionally, the source port of the column action gets the cell artifact instead of the row artifact. If needed, the row artifact can be retrieved using an additional port "rowObject".

Update of hidden table columns

The default update behavior of hidden table columns has been changed. Hidden table columns are only updated if the new option **Force data acquisition if column is hidden** is activated on the hidden table column. Per default, the option is deactivated.

The new behavior has impacts on cell actions of other cells if those actions have an input from a hidden table column. Impacts include:

- > Metrics accessing data from a hidden column only get the latest/updated info from the hidden column/cell if the option is activated on the hidden column.
- > The dereference action icon (gray x) is not displayed on a visible cell in a column, if the corresponding deletion query has an input from a hidden column on which the option is deactivated.

Selection propagation for table columns

The automatic selection propagation can be deactivated for a table column by activating the new option **Automatic Selection Propagation**. By default, the option is active.

If the option is deactivated:

- > selecting a table cell no longer propagates the selection to other view, for example, the **Model View**.

- > the selection propagation can be executed manually via the  cell action button.

Schematic Connection Overview			
Schematic Connection	Schematic Pin	Connector	Component
	= nc	Conventional Connector	MotorController
SC_Bus_MotorCAN...	= CAN-High	Bus Connector	Motor Up/down
	= CAN-High	Bus Connector	MotorController
SC_Bus_MotorCAN...	= CAN-Low	Bus Connector	Motor Up/down
	= CAN-Low	Bus Connector	MotorController

Context menu configuration

Prioritized perspective elements or default editors can be displayed at the top-level in the context menu. This can be configured via perspective-specific setting and is applied to the **Open With** and the **New** context menu. Non-prioritized artifacts are display in the **Others** context menu.

The configuration possibility is available for:

- > metric executors
- > tables
- > primary editors
- > explorers
- > reports

New menu configuration files

The configuration files under *Administration | Configuration File Container | New Menu File Package* are now managed files contained in the E/E model and must be added to each model in which they shall be used:

- > *New Menu Creation Properties File*
- > *New Menu Creation Properties Delta File*
- > *Scratchpad New-Menu Configuration File*
- > *Scratchpad New-Menu Configuration Delta File*
- > *Scratchpad New-Dialog Configuration File*
- > *Scratchpad New-Dialog Configuration Delta File*

Renamed consistency/online check views

The following views have been renamed:

- > The **E/E Model Online Check** view has been renamed to Online Check Results
- > The **Inconsistencies** view has been renamed to Consistency Check Results

Online check handling during add-ins installation

The handling of *Add-ins* has been optimized with regard to online checks and consistency checks:

- > Online checks can be active during installation or update of *Add-ins*.
- > The severity of checked-in *Consistency Rules* can be changed.
- > In the Add-ins dialog, in the **Advanced settings**, the new option **Update consistency and online check properties** is available. If deactivated, the *Add-ins* update no longer overwrites the **Online Check** and the **Directly executable** options of a *Consistency Rule Group*.

Consistency rule group configuration

The new Configure Consistency Rule Groups table is available on the *Consistency Rule Model* and on *Consistency Rule Packages*.

The table provides a more convenient configuration possibility of *Consistency Rule Groups* by displaying all relevant settings in one table.

Consistency Rule Group	Active	Online Check	Directly Executable	Assigned Perspective	Add-ins	Directly referenced rules
REQ_ConsistencyCheck / ->0 (Consistency Rule Group)	☒	☒	☒	Requirements Engineering / ->0		C1103_TextAfterHeading / ->0 (Consistency Rule)
REQ_OnlineCheck / ->0 (Consistency Rule Group)	☒	☒	☒			C1101_emptyRequirementPackage / ->0 (Consistency Rule)
						C1105_HasDirectFormats / ->0 (Consistency Rule)
						C1102_TextUnderText / ->0 (Consistency Rule)
						C1104_HeadingUnderText / ->0 (Consistency Rule)
ReqIF / ->0 (Consistency Rule Group)	☒	☐	☒	E/E Expert / ->0 (Perspective Co...		ReqIF_02_AttrDefWithInvalidDataType / ->0 (Consistency Rule)
						ReqIF_01_AttrDefWithoutDataType / ->0 (Consistency Rule)

Rule names must not contain space characters

To improve the rule execution, rule names are no longer allowed to include space characters. If existing rules have names with space characters, correct them manually.

Online checks must not use metrics

A *Consistency Rule* that is used as online check must not use a metric, except for *Consistency Rules* that are used for *Uniqueness Caches*. The online check framework cannot be activated if metrics are wrongly used.

Number format in object configuration

The **Number Format** setting is no longer available in the object configuration. The number format can be configured via tags in the **Customized Label** setting.

Attribute values of attribute owner no longer ordered

The meta model has been changed. The composition from `AbstractAttributeOwner` to `AbstractAttributeValue` (role "ownedAttributeValues") is no longer order relevant.

Metric diagram palette

The Metric Diagram palette has been cleaned up and restructured. Most of the metric blocks have been renamed according to a unified naming convention. The categories in the diagram palette have been restructured and new categories have been introduced. You may use the new **Palette Search** to quickly find a metric block.

Removed metric utilities

The following utilities must no longer be used within metrics:

- > TableSelectionUtil
- > SelectionUtil
- > SelectionHelper
- > CommitObjectCollector

Metrics progress monitor

The progress monitor was improved to make it possible to use sub progresses in metrics. The following methods have been removed:

- > createSubTask()
- > workSubTask()
- > getProgressMonitor()

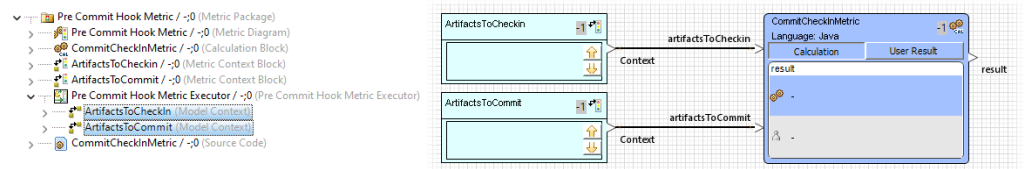
Instead, the following methods can be used:

- > createChildProgress()
- > createChildProgressWithDelay()

Example:

```
IProgressMonitor progressMonitor = createChildProgress();
//beginTask(<NameOfTheTask.String>,<Steps.Int>)
progressMonitor.beginTask(sendingChangeRequestMessage(), 50);
// Set progress counter worked(<Step.Int>)
progressMonitor.worked(5);
progressMonitor.done();
```

- Removed library** The library `org.joda.time` has been removed and should be replaced in metrics by `java.time`.
- External JAR files** External JAR Files are now managed files contained in the E/E model and must be added to each model in which they shall be used.
- Pre commit hook metric executor** The *Pre Check-in Hook Metric Executor* is deprecated and can no longer be created. Existing *Pre Check-in Hook Metric Executor* are not executed and must be manually migrated to *Pre Commit Hook Metric Executors*.
Therefore, the *Pre Commit Hook Metric Executor* is now executed on commit and on check-in. When implementing the metric, create two *Model Contexts* to distinguish between a commit or check-in:
- > *Model Context "ArtifactsToCommit"*
 - > *Model Context "ArtifactsToCheckin"*



It is recommended to activate the *Consistency Rule Group* "Product" | "L310_Administration" | "316_Add-ins" | "ConfigurationChecks" | "Metrics" | "MetricConfigurationOnlineChecks" as online check to check the configuration of the hook metric executors.

- Label metric executor** Metric-based labels must only be configured via the *Label Metric Executor*. Other metric executors are no longer supported. Existing metric executors can be refactored via the context menu **Refactoring | Typechange to Label Metric Executor**.

- Displaying hyperlinks in tables** Metrics that are used to display hyperlinks in tables must use the new class `aquintos.generictable.renderers.hyperlink.ProtocolBasedHyperlink` to create the hyperlink.

Example:

```
new ProtocolBasedHyperlink(externalLink.getExternalLink(),
externalLink.getName());
```

- New metric blocks** In the **Common** palette category of the *Metric Diagram*, the following new metric blocks are available for handling workspaces:
- > *Get Workspace* metric block
 - > *Get Workspace Categories* metric block
 - > *Set Workspace* metric block
 - > *Reset Workspace* metric block

In the **Tables** palette category of the *Metric Diagram*, the *Open Editor in Area* metric block is available. The block opens an editor in a defined client area. For example, a table can be opened directly below the currently opened diagram.

The *Open Editor in Area* metric block can be used to open the following editors:

- > tables

- > explorers
- > charts
- > primary editors
- > form editors

Optionally, the editor can be opened together with a perspective.

Changed metric blocks The Consistency Rule Group metric block has a new optional input port "postResultToInconsistencyView".
If set to `true`, the consistency check results are posted in the **Consistency Check Results** view.

The *Check OLE objects in formatted texts* metric block has a new input port "checkOLEIsOpenable".
If set to `true`, the block also checks whether integrated OLEs can be opened. If set to `true`, a longer runtime is required because every formatted text that contains an OLE must be opened in the background.

The following metric blocks have new or changed ports:

- > *Signal Router* metric block
- > *Create Diagram-Based Auto-Layout Wiring (System) Diagram* metric block
- > *Create Wiring System Diagram* metric block
- > *Create Wiring Diagram* metric block
- > *KBL Import Transformation* metric block
- > *KBL Reader* metric block
- > *Finish Asset Update After Substitution* metric block
- > *Asset Update with Embedded Substitution* metric block
- > *Asset Variant Extractor* metric block
- > *Establish Abstraction After Shaped Replace* metric block
- > *AUTOSAR Export* metric block
- > *Add-ins Install/Update* metric block
- > *Replace* metric block
- > *Artifacts Touched by Replace* metric block

The following metric blocks have been renamed:

Old name	New name	New category
Loop Block	Loop	Components
ReqIF Export Block	ReqIF Export	Product Goals
ReqIF Export Identification TestRoutines	ReqIF Export Identification Test Routines	Product Goals
ReqIF Export TestRoutines	ReqIF Export Test Routines	Product Goals
ReqIF REQ-LA-Mapping targets	ReqIF REQ-LA-Mapping Targets Export Extension	Product Goals
ReqIF Specific Export	ReqIF Model Based Specification Export	Product Goals
ReqIF Writer Block	ReqIF File Writer	Product Goals

Old name	New name	New category
ReqIF Identity Detector Block	ReqIF Identity Function	Product Goals
ReqIF Import Block	ReqIF Import	Product Goals
ReqIF Import TestRoutines	ReqIF Import Test Routines	Product Goals
ReqIF Reader Block	ReqIF File Reader	Product Goals
RIF Import Block	RIF Import	Product Goals
LA Delegate Contained Open Ports	Logical Architecture Contained Open Ports Delegator	Logical Architecture
LA DelegatePorts	Logical Architecture Ports Delegator	Logical Architecture
AUTOSAR (Source defines ImExId matching) Identity Function	AUTOSAR Identity Function (Source defines ImExId matching)	Software Architecture
AUTOSAR Import/Update Deletion Function	AUTOSAR Deletion Function	Software Architecture
(Re)Assign Mapped Implementation Data Types	Mapped Implementation Data Types Assignment	Software Architecture
SWA Delegate Contained Open Ports	Software Architecture Contained Open Ports Delegator	Software Architecture
SWA Delegate Ports	Software Architecture Ports Delegator	Software Architecture
Create/Update SOMEIP interface deployment	SOME/IP Interface Deployment Synthesis	Software Architecture
Arrange IPDUs	Arrange PDUs	Communication
AUTOSAR Export Block	AUTOSAR Export	Communication
AUTOSAR Identity Function	AUTOSAR Identity Function	Communication
AUTOSAR Import Block	AUTOSAR Import	Communication
AUTOSAR Import with Merge Block	AUTOSAR Import with Merge	Communication
AUTOSAR Reader	AUTOSAR Reader	Communication
AUTOSAR SW Component Update	AUTOSAR Software Component Update	Communication
AUTOSAR Transformer	AUTOSAR Import Transformation	Communication
Communication Path Router	Communication Path Router	Communication
COM-Synthesis	Communication Synthesis	Communication

Old name	New name	New category
Convert To Enumeration	AUTOSAR Import Application Enumeration Converter	Communication
Com Lengthcalculation	Communication Length	Communication
Create / Update SOMEIP/ TP Synthesis	SOME/IP Transport Protocol Synthesis	Communication
Create Network Management for Cluster	Synthesize Network Management for Cluster	Communication
Create PDU-Transmission Structure	PDU Transmission Structure Synthesis	Communication
Dereference Secured IPDU from IPDU	Dereference Secured IPDU from IPDU	Communication
DBC Export Block	DBC Export	Communication
DBC Import Block	DBC Import	Communication
FIBEX Export Block	FIBEX Export	Communication
FIBEX Import Block	FIBEX Import	Communication
LIN (LDF) Export Block	LDF Export	Communication
LIN (LDF) Import Block	LDF Import	Communication
Manual Communication Router	Manual Communication Router	Communication
Service Instances Creator	Create Service Instances	Communication
Frame DLC Calculation	Calculate Frame Data Length Code (DLC)	Communication
Dissolve PDU FanInFanOut	PDU Fan-In/Fan-Out Dissolver	Communication
FUP-Export-Transformation	FUP Export Transformation	Communication
FUP Export Writer	FUP Writer	Communication
FUP Import Identity Function	FUP Identity Function	Communication
FUP Import Reader	FUP Reader	Communication
FUP Import Transformation	FUP Import Transformation	Communication
PlmXml Document Creator	PLM XML Document Creator	Communication
Software Library Relevance Function	Software Library Relevance Function	Communication
FlexRay Scheduling Core	FlexRay Scheduling	Communication
Reference Secured IPDU to IPDU	Reference Secured IPDU to IPDU	Communication

Old name	New name	New category
Diagnostic DefinitionSet Assignment and Creation of Attribute Profiles	Diagnostic Definition Set Assignment and Creation of Attribute Profiles	Diagnostics
Diagnostic Lib Identification Function	Diagnostic Library Identification Function	Diagnostics
Diagnostic Library Creator		Diagnostics
Diagnostic PL Selection	Diagnostic Product Line Selection	Diagnostics
Diagnostic Ref Identification Function	Diagnostic Reference Identification Function	Diagnostics
Compare PVCDI with ECU extract	PVCDI with ECU Extract Comparison	Diagnostics
Nested Values Presenter	Record/Array to String Converter	Diagnostics
Execute Circuit Synthesis	Circuit Synthesis	Electrologic and Harness
Optimization Manager Block	Splice Optimization	Electrologic and Harness
KBL Export Block	KBL Export	Electrologic and Harness
KBL Import Block	KBL Import	Electrologic and Harness
Create Standard Catalogue	Create Splice or Inline Connector	Electrologic and Harness
Wiring Autolayout Diagram	Create Diagram-Based Auto-Layout Wiring (System) Diagram	Electrologic and Harness
Change Variants Block	Change Variants	Variant Management
Variant Propagation Block	Variant Propagation	Variant Management
Artifact Substitute plus Asset Factory	Artifact Substitute Plus Asset Factory	Product Line Engineering
Asset Analysis for Automatic Integration	Asset Integration Model Calculator	Product Line Engineering
Asset Delete with Clean Up	Asset Delete With Clean Up	Product Line Engineering
Asset Update and Reattach continue	Finish Asset Update After Substitution	Product Line Engineering
Asset update with embedded substitution	Asset Update With Embedded Substitution	Product Line Engineering
Autointegrate Asset	Asset Automatic Integration	Product Line Engineering
Automatic Reattach for Non-Conflict	Automatic Substitution if Non-Conflict	Product Line Engineering
Compare and Reattach	Review and Confirm Substitution	Product Line Engineering

Old name	New name	New category
Create Replace Configuration for Compare and Reattach	Create Replace Configuration for Substitution Table	Product Line Engineering
Create replace configuration for compare table	Create Replace Configuration for Compare Table	Product Line Engineering
Execute Analysis based Asset Integration	Asset Integration Model Integrator	Product Line Engineering
Get Assets from upstream to convert foreign relation	Get Assets From Upstream To Convert Foreign Relation	Product Line Engineering
Integrate	Integrate Artifact via Asset Reuse	Product Line Engineering
Preparation for second reattach of boundary in L2	Prepare Boundary Artifact for Added Substitution	Product Line Engineering
Root Finder	Search Outermost Parent Artifact	Product Line Engineering
Transfer external relations	Transfer External Relations of Artifact	Product Line Engineering
Unintegrate Asset	Revoke Asset	Product Line Engineering
Use Asset	Use Asset	Product Line Engineering
Add artifact to Set/System	Add Artifact to Set/System	Product Line Engineering
Compare Table Export Block	Compare Table Export	Change Management
Compare Artifacts	Artifact Comparision	Change Management
Create OEM Agreement Task Items	OEM Agreement Task Items Creator	Change Management
Requirement Coverage	Requirement and Test Specification Coverage	Test Engineering
Check-In Block	Check-In	Collaboration
Commit Block	Commit	Collaboration
API Server Calculation Block	API Server Calculation	Collaboration
Delegator Calculation Block	Delegate Calculation	Collaboration
Server Calculation Block	Server Calculation	Collaboration
ModelContext Migration	Model Context Migration	Administration
Placeholder Cleanup Block	Cleanup Placeholder	Administration
Add-ins Delivery Export	Add-ins Delivery	Administration
Add-ins Install/Update	Add-ins Installation/Update	Administration
Customize Add-ins	Add-ins Customizing	Administration

Old name	New name	New category
Prepare Customizing	Add-ins Customizing Preparation	Administration
Propagate Add-in Block	Propagate Add-in Content	Administration
Enumeration Result Block	Enumeration Result	Common
Evaluation Hub Block	Evaluation Hub	Common
Lights Block	Lights	Common
Scale Block	Scale	Common
Sort and Filter Block	Sort and Filter	Common
Validator Block	Validate	Common
CSV Export Block	CSV Export	Common
Excel Export	Excel Export	Common
CSV Import Block	CSV Import	Common
Excel Import Block	Excel Import	Common
Application Context Block	Application Context	Common
Artifact Creation Template Instantiation Creator	Artifact Creation Template	Common
Code Generator Block	Code Generator	Common
Collector Block	Flat List	Common
Compare Product Lines	Product Lines Comparison	Common
Consistency Check Findings Collector	Online Check Findings Collector for Quick Fix View	Common
Create Outermost Package	TempModel Creation	Common
Directory Chooser	Open Directory Dialog	Common
File Chooser	Open File Dialog	Common
File Chooser Export	Save File Dialog	Common
Finde Relation	Search relation of virtual Folder	Common
List Block	List	Common
Load all Rich Texts	Load rich texts	Common
Metrik executing Block	Metrik executing	Common
Model Connection Block	Model Connection	Common
Naming Convention	Attribute Convention	Common
Velocity Template Block	Velocity Template	Common
VerbalTable2TempTableBlock	Verbal Table to TempTable Converter	Common

Old name	New name	New category
Assert Block	Configuration Test Assert	Configuration Test
Compare Model Tree	Model Tree Comparison	Configuration Test
CSV Compare	CSV Comparison	Configuration Test
Stimulus Container Block	Stimulus Container	Configuration Test
Table2CSV	Table to CSV Converter	Configuration Test
Compare Table to Reference	Table to Reference Comparison	Configuration Test
Create Table Reference	Table Reference Creator	Configuration Test
Debug Rule	Open Rule Debugger	Configuration Test
JUnitRunner Block	JUnitRunner	Configuration Test
Write Table Reference	Table Reference Writer	Configuration Test
Diagram Artifacts Block	Diagram Artifacts Collector	Diagrams
Change Diagram Configuration Block	Diagram Configuration Changer	Diagrams
Create Datasource	Data Source Creator for Calculated Labels	Diagrams
Diagram Publish Block	Publish Diagram	Diagrams
Diagram Render Block	Render Diagram	Diagrams
Labels in diagrams (reset)	Reset Labels in Diagrams	Diagrams
Labels in diagrams (update)	Update Labels in Diagram	Diagrams
Remove graphical representation	Remove Graphical Representation	Diagrams
Chart Block	Chart	Reports and Charts
Chart Property Block	Chart Properties	Reports and Charts
Chart Renderer Block	Chart Renderer	Reports and Charts
Chart Report Block	Chart Report	Reports and Charts
Report Result Block	Report Result	Reports and Charts
Model Object Extractor	Table Selection List	Tables
Table Export Block	Table Export	Tables
Open Table Editor	Open Table	Tables
Table Render Block	Publish Table	Tables

Removed metric blocks The following metric blocks are no longer available:

- > *Delete Artifact if no relevance to asset*
- > *Asset Update and Reattach*
- > *Set abstraction relation*

- > *Compare and Reattach Post Processing*
- > *Update from Predecessor*
- > *Update from Predecessor (multi)*
- > *ID Control Function AGR*
- > *Product Lines Comparison, use the block Compare Model Tree instead*

16.4 Changes

Deprecated features

The following features are no longer supported by PREEvision 10.5:

BTV View

- > This undocumented feature is used in a few customer projects.
- > The complete configuration possibilities are removed.
- > Similar use cases can be implemented with the new primary editor in PREEvision 10.5.

RIF import and export

- > RIF is an outdated method and procedure to transfer requirements.
- > RIF is completely replaced by ReqIF.
- > The complete functionality is no more available with PREEvision 10.5.

OLE in attributes with formatted text (such as description fields)

- > The insertion of OLE files into formatted text attributes is removed and existing OLEs are longer be maintained.
- > The complete functionality is no more available with PREEvision 10.5.
- > Instead of OLE files, embedded files with previews must be used.
- > The ReqIF import and export are still supporting OLEs.

Several PLE custom metric blocks

The following blocks are no more available with PREEvision 10.5 and 10.0:

- > set abstraction relation (ID: SetAbstractionRelationID)
- > asset update and reattach (ID: UpdateReattachedAsset.ID)
- > delete artifact if not in asset (ID: ReattachDeleteObsoleteArtefactsID)
- > compare and reattach post processing (ID: ReattachPostProcessingID)

Multiplexed IPDU Viewer

- > The table **Multiplexed IPDU Viewer** is replaced by the table **Multiplexed IPDU Overview** in the PREEvision **Communication Design Explorer**.

J1939 library use case

- > The metrics for the J1939 library use case are not supported anymore and are removed with PREEvision 10.5.

Name correction algorithm after creation of AUTOSAR artifacts

- > An outdated name correction algorithm that runs after creation of AUTOSAR related artifacts will be removed. This algorithm is redundant to the SHORT-NAME correction algorithm that is applied on the AUTOSAR export. The algorithm at the export side completely replaces the other one offering a better performance and completeness.

Some concepts for AUTOSAR Adaptive modeling

- > Several references and attributes are removed or replaced following the changes in the AUTOSAR Adaptive release R20-11.
- > Notably, the *Adaptive Application* is replaced by the *Software Cluster*.

Some concepts for modeling of combined systems

- > Interface relations, used to connect elements of *Service Interfaces* and interfaces of the AUTOSAR Classic platform are replaced by dedicated platform interface mappings of the same purpose.
- > This transformation is supported by the migration.

16.5 Fixed issues

Fixed issues in PREEvision 10.5

You will find the important fixed issues in the following tables. Please note that some issues depend on specific configurations, views, or models.

Further information

- > [Common](#)
- > [Diagrams](#)
- > [Tables](#)
- > [Requirements](#)
- > [Logical function architecture](#)
- > [AUTOSAR](#)
- > [Software architecture](#)
- > [Diagnostics](#)
- > [Communication](#)
- > [Hardware architecture](#)
- > [Geometry](#)
- > [Product line engineering](#)
- > [Variant management](#)
- > [Functional safety](#)
- > [Change and release management](#)
- > [Test engineering and test management](#)
- > [Rules](#)
- > [Metrics](#)
- > [Reports](#)
- > [Collaboration](#)
- > [Administration](#)
- > [Installation](#)
- > [License](#)
- > [Backup, restore, and migration](#)

16.5.1 Common

ID	Resolution
17938308307242099	The form editor now refreshes after editing, for example, in the Property View or the Model View .
17938307793732203	The language of the PREEvision client has been preset to English (United States).
17938308060401036	The information on failed E/E model exports has been improved.
17938309199152050	If the display of the Graphics Device Interface (GDI) information in the status bar has been deactivated on the client, this setting is retained: changing the perspective does not reactivate the display.

ID	Resolution
17938308865552101	A more descriptive text has been added to the progress bar that appears after clicking the Finish button in the New Project wizard.
17938308756822034	If the user attempts to add a selection of artifacts to a <i>Set</i> that already contains some of the selected artifacts, the artifacts not already included in the <i>Set</i> are added to it.
8682711552963422106	The start of LibreOffice shows and information if it fails and, in general, is faster.
8682711553262941791	Inconsistencies in the PREEvision demo model have been fixed.
8682711553509512041	Correct <code>MENU-ID</code> output in the Status view by using <code><Alt>+<Ctrl>+<F6></code> .

Property view

ID	Resolution
12113	The client problem (client freeze) which was caused by an infinite loop in the Property View has been resolved, and the client performance improved.
8682711552409011037	Property pages with dynamic entries are shown again after being filtered out.
8682711552928032034	When clicking on an empty space within a Property View table, the Artifact Picker is opened on the "Content from Property View" page. This resolves the problem of a wrongly loaded Artifact Picker .
17938309365222052	In the Property View , sporadic problems with drag and drop actions have been resolved.
17938308840042051	During a drag and drop action of an artifact from the Model View or Artifact Picker into an already selected property page, the selected target property page remains active.
8682711551922932105	When selecting multiple artifacts in a Property View table via <code><Shift></code> + arrow key, all selected artifacts are also selected in the Model View .
17938308224841875	When changing the selection in the Property View , the selection change is properly propagated to the Model View .
17938305558022039, 8682711552764792039	When using the Locale <code>en_GB</code> in the <code>PREEvision.ini</code> , the formatting of dates in the Property View now works according to the current Unicode standard of Java 11. For the Locale <code>en_GB</code> , the date now also uses 4-digit years. Entering years is only allowed with 4-digit notation and entering dates before 1.1.1970 is no longer possible.
17938309118222092	To allow specification of the package type, a Package Type field has been added to the General property pages of the <i>Customer Feature Package</i> , <i>Variant Package</i> , <i>Asset Package</i> , and <i>Layout Package</i> artifacts.

ID	Resolution
8682711551998992045	In the Property View , the correct value of <i>Light Weight String Attributes</i> is displayed, with leading zero, if defined.
8682711552948732050	A configured <i>Generic Table Artifact Picker</i> that displays <i>Diagram Configurations</i> can be opened from the Property View without displaying an error.
17938308145971032	A verification has been implemented in the Property View for the <i>Table Value</i> artifact class, which ensures that only integer type values can be entered for the X-Index and Y-Index attributes.
17938311517902108	A problem with displaying property pages that occurred on <i>Application Axis Types</i> has been resolved.

Model view

ID	Resolution
17938307534153017	File attachments are correctly displayed in the Model View .
17938307564392001	The performance has been improved, when working with a pinned Model View .
17938309315242101	The selection of artifacts in the Search result view is propagated to the Model View .
8682711552288902099	If the Model View is pinned, the automatic navigation and selection propagation is suppressed even on drag and drop actions.
8682711553334332111	When opening a new Model View instance, the new Model View is opened expanded up to the selected artifact on which it has been opened. The new Model View opens next to the Property View so that both Model Views are visible.
17938311467381204	In a large-scale tree, the selection of an artifact is kept after a drag and drop.
17938311467391204	In a large-scale tree, the selection of an artifact is kept after a drag-and-drop, even if the tree has been partially collapsed.
17938311473392049	Large-scale trees are now displayed below diagrams, containers, or packages to improve the usability for artifact navigation.
8682711552406681806	Ordering in large-scale trees uses the label instead of the artifact names.

Context menu

ID	Resolution
17938307499612070	For artifacts with virtual folders containing many artifacts (more than 1000 artifacts), all relevant context menu entries are available now.

ID	Resolution
17938307669632106	The special paste action Paste as copy without external relations is now only available if the exact meta class of the source artifact is copyable. In particular, this prevents unintended copying of diagrams below <i>Requirements</i> .
17938299596052090	Since the meta class <i>Naming Convention</i> was renamed to <i>Attribute Convention</i> , the icon of the <i>Attribute Convention</i> has been changed. In the Refactoring context menu, the entries have been renamed to Apply Attribute Conventions .
17938307799872111	Submenu entries are no longer displayed twice in context menus.
17938311319481030	Submenus in the context menu are properly displayed.
8682711552342101995	The New context menu no longer displays duplicate entries for creating <i>Conditions</i> .
17938308936151037	Prioritized tables and explorers of a perspective are correctly displayed in the context menu.
17938311600272049	All types of metric executors that are not prioritized for a perspective are displayed in the Others context menu.

Information view

ID	Resolution
8682711551930992102	The preferences for setting the maximum number of entries in the Information View are saved and applied after a new client start.
8682711553067011992	The content of the Information View is now properly exported to Excel, even if the Information View results are reported via a metric.
8682711553095012111	The selection propagation from the Information View to the Model View works correctly.
8682711553114182159	When the Clear contents action is executed in the Information View , all contents on both sides of the view are removed.

Object and label configuration

ID	Resolution
17938307380242112	Switching the Positioning of a label in the Label Configuration view between midpointlabel, endpointlabel, or embeddedlabel is now possible without losing the information of the label being a calculated label.
17938307443012111	Change markers are now correctly updated for localized attributes. Object configurations are properly displayed in tables.

ID	Resolution
17938307513201031	Object configuration artifacts are now displayed in the Model View if the corresponding parameters in the <code>PREEvision.ini</code> file are set.
17938308952172081	In the Label Configuration view, the drop-down list for choosing a <i>Query Rule Group</i> now provides auto-completion. The entry "default" is displayed as first entry and is initially selected.
8682711552995261918	For an enablement of an embedded name label configuration, embedded name labels must exist and therefore, this is no longer offered in the Object or label configuration dialog. To change external labels, use the Label Configuration view, instead.
17938311658381030	When working in multi-user mode, images can be replaced in the object configuration.

Comparison and merge

ID	Resolution
17938307767972042	When merging artifacts, artifacts of different meta classes are not merged in case that only their names match. The artifact merge does not change the meta class of an artifact and does not consider the Alias Name .
17938309314692049	When configuring the artifact comparison and filtering all relations of an artifact, all relations of an artifact are filtered – including the relations to its children. This setting is configured per meta class.
17938309315242049	The default colors for displaying comparison results in the Property View , have been changed and can be defined in the Preferences .
8682711551964921914	After an artifact merge of reused artifacts, the commit works correctly.
8682711552271132101	The Model merge wizard always displays zero artifacts to be deleted if no reference model is selected.
8682711552593571999	When comparing artifacts/models, the Show equal option can be activated to display all relations and attributes of the comparison sides even if they are equal.
17938311439532050	Comparing creation times no longer causes a <code>NullPointerException</code> .

16.5.2 Diagrams

ID	Resolution
24491912	When renaming an artifact in a diagram, for example via the shortcut <F2> , labels which are invisible due to constraints in the label configuration are ignored. As a result, the text control for editing is always open for one visible label with the corresponding label formatting.
17938308756452034	The text of a <i>Title Block</i> now scales with the Windows scaling.
17938308756832034	Zooming no longer cuts off strings in diagrams. The text is now scaled proportionally.
17938309359252041	The fan waypoints are now moved correctly again when two pins are swapped to avoid overlapping routing results.
17938308053831992	The duration of the multiselect option in diagrams has been improved.
17938311660752041	The context menu entry Open all Diagrams on an artifact works properly again.
8682711552491832041	The text in comment fields now ignores HTML tags and shows the text as it was entered.
8682711552055372039	Sections are now ignored by the variant highlight.
8682711553188042041	The calculation of the modifiable state of the <i>Software Architecture Diagram</i> and other projected diagrams has been corrected. If a diagram contains invisible artifacts, the red frame around the diagram is now correctly displayed.
8682711552500331995	Trying to add a composition to a type diagram now reports the correct error in the Information View instead of displaying a black box.
8682711552714812081	During automatic creation of a diagram via metric, all required connections on ports are created, including bus connections with more than two ends.
17938308850881861	Checks have been added to prevent an <code>IndexOutOfBoundsException</code> in diagrams.
8682711551958071030	Formatted texts of <i>Comment</i> and <i>Information</i> artifacts are available again in diagrams.
8682711553067840000	The performance of calculating or displaying the severity of online checks has been improved when opening a diagram. Online check icons are only refreshed if the status of the severity changes.
8682711553369973071	The tooltip of the alignment actions in all diagrams now contains the information that the first selected artifact is used as reference.
8682711553547742041	Labels in diagrams do no longer draw an unintended white background.

ID	Resolution
17938309408412046	The new line tag <code></n></code> for labels can be used in metrics to create a line break and properly display labels in diagrams.
17938308850441861	If multiple diagrams are open in read mode, redundant asynchronous refreshes are avoided.
8682711552398361914	The refresh of mapping boxes has been improved. Internal mapping boxes in locked diagrams now refresh immediately.
8682711553353002100	An error that occurred when moving objects in a diagram has been resolved.

Diagram configuration

ID	Resolution
17938311642322112	Figures which are set to invisible by the object configuration, label configuration, or filters, are no longer reset to visible by other settings. This prevents that labels briefly appear while opening a diagram.
17938311323242073	Calculated labels consider configured rule constraints in the label configuration.
8682711552652071038	To improve performance, connections only once regard the object configuration.
17938309328882044	The Local filter for displaying artifacts of the current <i>Product Line</i> works for <i>Meta Class Artifact Pickers</i> that are used in diagrams via a <i>Diagram Configuration</i> .
17938309329522044	<i>Metric Artifact Pickers</i> can be used in the <i>Diagram Configuration</i> .
8682711553171381806	When assigning the <i>Diagram Configuration</i> to a diagram it is now correctly applied. The behavior of publishing a diagram was changed. Labels set as invisible by the object configuration are not displayed when publishing the diagram.
17938309342502101	Object configurations for artifacts that have certain properties set, like for example a start node of a <i>Topology Segment</i> , can be saved, now. An object configuration is only modified (locked and possibly checked-out) if a modification has been carried out.

Exporting and publishing diagrams

ID	Resolution
17938309312192102	A printed diagram now only has a red background if the diagram contains invisible artifacts.
8682711552491502041	The corners of the rounded rectangles in diagrams are correctly connected to their lines even on high zoom levels in the PDF export.

ID	Resolution
8682711553056422042	When a diagram which contains transparent artifacts is published as diagram file via context menu Publish diagram... , multiline labels of these artifacts are now properly displayed in the published diagram file.
17938309366281038	When exporting a diagram as report or PDF labels ending with empty lines are now aligned properly in positions lists.
8682711552433822045	Font sizes in diagrams are the same independent of whether the diagram is displayed in PREEvision or exported as PDF or ODG.
8682711552451732041	The Use maximum resolution option has been removed from the Page/Print Settings preferences.

Tables in diagrams

ID	Resolution
17938309032261912	Tables in diagrams are displayed at the correct position regardless of the screen resolution.
17938308107701038	Tables in diagrams are no longer highlighted when navigating to an opened diagram from the Model View .
8682711553092362159	Tables can be displayed in a diagram on an artifact with the Show Table dialog. If the artifact is shown multiple times in different sections and/or the diagram area, the table can be displayed for each occurrence independently. The Show Table dialog now correctly recognizes if a table for a specific artifact is already displayed in this section or diagram area.
8682711552683152001	The context menu entry Delete from Model has been removed for tables that are displayed in a diagram.
17938308166022099	When displaying tables in diagrams, the error in the calculation of the table size of a table with multiple columns due to a maximum table height is fixed. The calculation now also works if the table size is determined by the last column.
17938307717622050	When displaying tables in diagrams, the context menu action Show Table now considers the localized names for tables in the Show Table dialog.

16.5.3 Tables

ID	Resolution
17938307506972112	A double click on an artifact now only opens tables which are defined as default editor and are associated to the meta class. If the current perspective has defined prioritized default table editors, only these are opened.

ID	Resolution
17938307778561992	Names of software types and prototypes are synchronized when the name is edited in tables.
17938309242941027	A selection propagation between <i>Combined Table Proxy</i> artifacts works properly again.
17938307554012106	A validation check for drag and drop actions in tables has been implemented to avoid invalid drop operations.
17938311331272098	Copy and paste of a multi-selection into direct attribute columns works properly.
17938311441763039	A check box within a table column in read-only mode cannot be edited anymore.
8682711551845231992	The gray area inside a table cell which usually displays, for example, a drop-down functionality, is only displayed if such a functionality is available for the active table cell.
8682711552860642102	It is now possible to cancel the printing of a table.
8682711553163282001	The selection column in tables only considers selections in the table but not from outside the table, for example, by selection propagation from the Model View .
8682711552430302045	When activating the table search in combined tables, the search field is writable for all child tables.
17938305535212106	Pinning in tables is still active after embedded formatted text cells have been opened.
17938307557592105	Moving a table tab of a table which is not in the foreground has led to an operation in progress which did not terminate. This issue has been resolved.
17938308025761806	A table cell that has set a width of zero pixels does no longer cause display errors. The table is properly displayed.
17938308772882045	No system crash occurs anymore when temporarily adding an artifact to a scope while a table is open.
8682711553039172105	Tables are no longer collapsed after executing a commit.
8682711553105783013	Within tables, the selection is kept after collapsing and expanding.
8682711553258912106	Table rows are expanded on table updates if the option Show expanded is activated.
8682711553081023042	A double click on an artifact in a read-only column no longer leads to losing the selection. The table cell keeps the selection.
17938307956621025	An error dialog is displayed again when copying cell values of different columns with gaps between the selected cells.
17938311633421810	It is now possible to copy values from cell metrics and paste them into another cell.
17938308048812113	The Delete artifact button for table cell entries in tables is now also displayed if multiple cells are selected.

ID	Resolution
17938311331162102	For tables with charts, the incorrectly displayed error message in the Information View concerning a missing life cycle color is no longer displayed.
17938311473772113	Custom attributes having set no value no longer cause an error message on opening a table in which they are displayed.
17938311514852113	Table cell actions are only displayed if the table cell is selected and focused.
17938311345712106	The performance of selecting artifacts in table cells has been improved.
17938307782281045	The performance for working in tables has been improved, when calculating the cell sum for tables.
17938308102982104	Action buttons for table cell entries in tables are now only visible if the corresponding table is also visible.
17938307554002106	When changing from one table to another already opened table while there are pending updates, the Progress Information dialog shows a text which informs the user about updating table contents.
8682711552040552104	The copy and paste behavior in tables has been corrected in case the selected cell has no label configuration.
8682711553288322101	The Excel export of a table works if the table contains headers with the same name.
17938307511243017	No exception occurs anymore for tables for which cell content is calculated via a metric.
17938305494192106	The column width is persisted when saving a table into the model.
17938309241212065	Table editors opened as a temporary table via a <i>Table Proxy</i> or Open with ... context menu may not change the table model. Therefore, all context menu entries which would lead to changing the originating table have been removed.
17938311665222113	Searching in combined tables also works with collapsed or hidden columns.
8682711552765201806	The selection is set to the correct artifact in the Model View also if columns are hidden in the table.
8682711552925843042	Changing the sort order of the first table column no longer leads to hidden values in the last table row.
17938311421722101	For tables with hidden columns, active column filters work properly after refresh.
17938311524072106	Pasting clipboard content into tables that contain hidden columns works properly, now.
17938311682752101	If columns of tables are set as hidden, the content of columns with check boxes is kept and displayed.

ID	Resolution
17938308307252099	After a refresh in a table, the active filters are applied again, and the table shows the correctly filtered content.
8682711553161912099	When filtering a table, the currently selected artifacts/elements are removed from the selection if they are no longer visible in the table.
8682711553105713013	The expand state in front of subtrees within tables is correctly displayed after filtering the table.
8682711552769572112	When a table is opened on multiple selected artifacts, the Artifact Picker now displays the correct scope of artifacts depending on the set filter.
8682711552331152106	A sporadic problem with copy and paste in filtered tables has been resolved. Cells are now copied in the correct order into cells of another table column.
17938309273602036	Drag and drop actions work with prototype columns.
17938311473792049	The refactoring Create Table Instance to convert a <i>Table Proxy</i> into a table instance is now also possible if the <i>Table Proxy</i> contains prototype columns.
17938308088892105	The correct column in tables is now filtered when the table is opened for a <i>Table Proxy</i> and the column to filter is a prototype column with a table element source.
8682711552971133042	The toolbar action enablement state is updated when the selection is changed in a Portlet .
8682711553095042102	To better support selecting elements from a link column overlay menu, the tooltip is now closer to the mouse pointer.
8682711553462092041	For table rows that are displayed as help lines in tables, artifact icons are displayed again.
8682711554010272100	Within tables, pasting artifacts is also allowed on columns that display several artifacts in one cell.
8682711553352342106	The Predefined filter option is available on a column even if preceding columns are hidden and following columns use a formatted text renderer.

Explorer

ID	Resolution
17938309365052106	When switching the table in an explorer, the selection is maintained.
17938311391031804	When using the Navigate to Artifact action in an explorer, the active explorer category is maintained, if the target table is set as default table for this explorer category.
17938311631412102	The submenus of the navigation bar are correctly displayed in explorers.

ID	Resolution
8682711552705982048	Explorers can now also be opened on artifacts for which no direct Name attribute can be set but which receive their name from the corresponding prototype, like for example, on <i>Compositions</i> .
17938307747931992	In explorers and portlet views, the Open With context menu entry is correctly displayed depending on the selected artifact.
17938311538352113	When opening the context menu in an explorer, Open With is displayed as first entry of the context menu.
17938311444403039	In explorers, meta classes are correctly filtered including virtually displayed artifacts.
8682711551860041038	The [Save] button, which allows a commit in a multi-user environment, is now available and active in an explorer and in the Favorites view if there are model changes.
8682711552087682044	Explorer categories of meta class <i>Explorer Category (ModelView Filter or Query)</i> use artifacts from the scope root query as category roots even if no content provider query is available.
17938309342301810	The Status view no longer displays error messages when opening an explorer. The errors were caused by an outdated <code>filter.xml</code> file containing references to old meta classes.
8682711553388601992	Creating artifacts in explorers does no longer lead to displaying duplicates of these artifacts in the Model View and the categories of the explorer.
17938307379292108	If the last selection in an explorer category shall be stored, can be defined with the attribute Take Over the Last Category Selection of the <i>Explorer</i> in the <i>Administration</i> .

Table configuration

ID	Resolution
8682711552552802083	When using the table column configuration Horizontal-Alignment = "right" the icon is still rendered on the left side of the text. The icon and the text are together aligned to the right edge of the table cell.
8682711552561772106	The formatting tag <code><dec></code> <code></dec></code> has been implemented for the Customized Label configuration to force a decimal format representation of numbers, for example, for numbers in tables.
17938307946942102	It is now possible to open editors under a <i>Table Editors Package</i> .
17938309386412049	Adding an already associated table column that displays a custom attribute multiple times to a table is no longer possible.
17938311685172101	Moving a table column does no longer result in hiding other columns or prototype columns.

ID	Resolution
8682711552539621220	The initial state of column group elements in the Add/Remove/Reorder Columns dialog is now visualized correctly.
8682711552708592106	Hiding selected prototype columns is now possible in tables.
8682711553038071032	Cell metrics used in tables now show the returned string as plain text without style range formatting.
17938308315432041	<i>Embedded Metric Executors</i> that are assigned as action query to a table column are only executed if the dropped artifact has a suitable meta class.
8682711553964471027	For <i>Direct Attribute Table Columns</i> , the column configuration works properly.
8682711553269731914	In the Property View of tables, the Toolbar Actions property page has been added to the Characteristics category.

16.5.4 Requirements

ID	Resolution
17938308131332101	Changing the type of a checked-in <i>Requirement</i> that has a life cycle without changing its reuses no longer leads to a class cast exception.
8682711552337612107	Attributes that are read-only due to meta rights are now correctly set when copying between models.
8682711553140751030	The online check "Requirement attribute value is incorrect" correctly checks multi-attribute definitions with an enumeration data type. The individual enumeration literals are now checked for correct values.
8682711553170902101	Copy and paste of <i>Requirements</i> no longer changes their order.
8682711552944241791	An error in the <i>Identity Function Abstraction (Custom ID for Requirements)</i> metric block has been corrected: <i>Plan</i> artifacts which are direct children of the root <i>Product Lines</i> are now matched between source and target model.
17938308996852105	In the Property View of <i>Requirements</i> , cut and paste actions between property pages are possible now. The corresponding property pages are properly displayed.

Requirement text editor

ID	Resolution
17938291663539243	In the Requirement Text Editor , the Open With context menu on <i>Product Goal Links</i> contains the same entries as the context menu in the Model View .

ID	Resolution
17938306651292105	After moving an artifact via the move button in the Requirements Text Editor and then carrying out the undo operation, the table is properly refreshed.
17938309369442106	Switching between tables of the Requirement Text Editor via the toolbar button is possible again.
8682711552104362105	When deleting <i>Requirements</i> in the Requirement Text Editor , no empty table rows are displayed anymore.
8682711552418141030	In the Requirement Text Editor , the font color in formatted text table cells is now rendered correctly according to the object configuration.
8682711553027022105	During an export from the Requirement Text Editor to Excel, placeholders are updated, and the correct placeholder information is exported.
17938306401202105	The performance of filtering in the Requirement Text Editor has been improved.
17938307537762101	Pasting the first cell of the Requirements For column of the Requirements Text Editor into all other cells of this column via multi select, now finishes with good performance.

Formatted text and placeholders

ID	Resolution
17938311460702105	When displaying the preview of formatted texts in table cells, lines indented by tabulators in the formatted text are now also displayed as indented lines in the preview.
17938311512092105	Formatted text containing OLE objects can now be edited directly in table cells of the Requirement Text Editor .
17938311666232106	Pasting formatted text with placeholders into custom attributes is possible now.
8682711551847412106	Sporadic problems with rendering formatted text in tables have been resolved.
8682711552341902105	A performance problem has been resolved that occurred in tables when copying formatted texts containing placeholders.
8682711553181462105	The previews of formatted texts within tables are now correctly rendered when they contain tables with vertically merged cells.
17938307539672023	The Check OLEs in Formatted Texts action no longer displays hidden artifacts in the Information View results.
17938307553992106	Placeholders in formatted texts can now be properly restored using the redo or undo functionality of the integrated editor for formatted texts.
17938307564382001	Pasting formatted text into a table cell which is only selected without opening the Libre Office editor is enabled. The pasted text is inserted as plain text.

ID	Resolution
17938307671152023	The Check OLEs in Formatted Texts action now uses the configured localizations for attribute definitions in the Information View message.
17938307683663017	Inserting images into formatted texts via drag and drop now works properly if the filename contains Unicode characters.
17938308107832023	Frame styles are now displayed in the Styles and Formatting view when using the <i>Rich Text Template File</i> in the PREEvision demo model.
17938308840082070	The performance of auto updates has been improved by caching the information whether the formatted text workspace directory exists in the file system.
17938308865672040	Shapes are now disabled in the formatted text editor since they cause rendering errors in the preview of formatted texts.
17938308926362113	If preferred placeholder attributes are configured for a perspective, only the assigned (configured) attributes are available for selection in the Insert Placeholder dialog, again.
17938308931662106	In a sporadic constellation, newly created placeholders in formatted texts were displayed as <undefined>. The error has been resolved.
17938309056902025	The messages that are reported when executing the Update Rich Texts metric block have been improved.
17938309197172106	Formatted text placeholders which reference other formatted texts are no longer resolved when creating a preview. A text note is displayed instead. The placeholders are still resolved when creating reports or when they are exported, for example to ReqIF or Excel.
17938309198032106	Placeholders which reference out of scope artifacts now display <artifact out of scope> instead of <undefined value> as content in a generated report or a ReqIF export.
17938309237292106	Recursively embedded placeholders in formatted texts now reflect the current model state when viewed in tables.
17938309359282105	An error in the LibreOffice editor has been resolved. OLE objects in artifacts are now accessible and can be opened with read-only rights.
17938311364202106	To prevent errors during formatted text handling, the tool state is reset after a model compare.
17938311391022106	Formatted text without available HTML previews no longer causes error messages when opening the Change history view for an artifact.
17938311519132104	The sporadic loss of OLE object previews has been resolved. OLE objects are correctly displayed in reports again.

ID	Resolution
17938311530392106	Several problems have been resolved concerning formatted text of meta classes which do not support placeholders at all.
17938311674121783	Editing placeholders in formatted texts no longer produces empty spaces at the end of a line.
8682711552081441030	Line breaks in formatted text previews created via ReqIF import are now displayed correctly.
8682711552419472106	If loading formatted text from the server fails due to network problems, an additional attempt to reload the formatted text is executed when accessing the formatted text again.
8682711552495132106	Creating placeholders works properly if a save action is triggered.
8682711552759542023	The editor for formatted texts now allows inserting images via drag and drop at positions which are already occupied by images. The new image is then inserted left of the existing image.
8682711553066032105	EMF graphics can now be inserted into PREEvision formatted texts without rendering errors.
17938300517172105	Images and OLEs exported by PREEvision are no longer distorted when imported again into a PREEvision model.
17938306022802107	LibreOffice has been updated to resolve problems with OLE objects in IBM Doors.
8682711552050411030	When creating nested placeholders, no misleading warning is displayed.
17938307341861806	With incomplete formatted text, LibreOffice could not process the input and the editor could not be opened. Now, missing information is synthesized, and the LibreOffice editor opens.

ReqIF import and export

ID	Resolution
17938305319212106	ReqIF import: The preview of OLE objects that are imported via the ReqIF import could increase in size after editing the object. The ReqIF import now prevents the creation of such corrupted objects.
17938306878892084	ReqIF import: OLE objects with the MIME type "application/rtf" are correctly imported.
17938309340622049	ReqIF import: The performance of the import has been significantly improved for very big scopes.
17938311461882040	ReqIF import: Importing the same ReqIF file twice no longer leads to changes in the model due to instable list IDs.

ID	Resolution
17938311651362105	ReqIF import: Default values for the Object type attribute are now properly interpreted for the class matching during when using this mode.
8682711552275772023	ReqIF import: Unnecessary model tree locks for new artifacts created during a ReqIF import are no longer required.
8682711552720992105	ReqIF import: The content of CDATA sections is no longer ignored when importing ReqIF-XHTML.
8682711552922323059	ReqIF import: The import reads REQIFZ files which link the same file attachment multiple times in the same XHTML attribute.
8682711552929783059	ReqIF import: The german message text reported in the Information View for ReqIF files that are not compliant to the schema has been corrected.
17938306709112105	ReqIF import: A "Multiple roots" error has been resolved, which was caused by an import of comment artifacts for <i>Test Specification Libraries</i> . In case of an import of such comments, an error message is reported in the Information View , including the <code>SourceID</code> of the object causing the error. The import of supported artifacts is continued.
17938307396702023	ReqIF import: The file choosing dialog of the ReqIF import metrics now offers to filter the shown files by compatibility.
8682711552015482106	ReqIF import: The attribute Custom ID is updated correctly during the import.
8682711552442692049	ReqIF import: When updating existing artifacts with a ReqIF import, reuses of these artifacts that are checked-in are not changed.
8682711552683701859	ReqIF import: The ReqIF configuration files in the PREEvision demo model are updated to use the correct attribute names precondition and postcondition instead of <code>preCondition</code> and <code>postCondition</code> .
8682711551893672106	ReqIF agreement import: For supplier comments, unnecessary space characters are no longer set.
17938306022842107	ReqIF export: Shapes in formatted texts are automatically converted to images or OLEs.
17938311661192105	ReqIF export: Bookmarks in formatted texts are no longer exported to avoid schema validation errors.
8682711552510132098	ReqIF export: Images and OLE objects with vertical or horizontal spacing in formatted texts no longer cause schema validation errors.
17938305543782065	ReqIF export: An error message is reported if the export is started with the option Active variant only and no <i>Requirement Package</i> or <i>Customer Feature Package</i> is part of the active variant.

ID	Resolution
17938307225372113	ReqIF export: Exporting formatted texts containing block quotes no longer causes schema validation errors.
17938307570112107	ReqIF export: Correct previews are displayed for exported Visio OLE objects.
17938307810772023	ReqIF export: In the PREEvision demo model, a typo has been corrected in the documentation block of the ReqIF export metric.
17938308140791807	ReqIF export: The export no longer contains unwanted line breaks for plain text.
17938308161942105	ReqIF export: Custom attributes for which no attribute values are set, are filtered out during the export executed via metric, and the schema validation is successful.
17938308177661806	ReqIF export: <i>Attribute Definitions</i> without data type can be exported.
17938308192542104	ReqIF export: The reliability of the ReqIF export performance has been improved.
17938308756822107	ReqIF export: Exporting nested lists no longer causes a schema validation error.
17938309047742023	ReqIF export: An error message has been improved that is reported during the export for large images/OLEs.
17938311460762105	ReqIF export: elements in the exported ReqIF XHTML file are properly closed if they wrap multiple paragraphs.
8682711551829472107	ReqIF export: Attributes with localization are correctly exported.
8682711551881482105	ReqIF export: Non-printable characters in formatted texts are properly handled during the export.
8682711552283401783	ReqIF export: Tables with background colors in formatted texts no longer cause schema validation errors.
8682711552292512104	ReqIF export: If diagrams with conflicting names are correctly exported to OLE objects, without causing an endless loop.
8682711552337552065	ReqIF export: For requirement links with multiple targets only the first target is exported. The relevant requirement links are shown in the Information View .
8682711552458671783	ReqIF export: In the PREEvision demo model, an example for referencing a description has been added to the example report for specific ReqIF exports.
8682711552458681783	ReqIF export: Using the ReqIF export via report, formatted texts containing only an OLE, image, or table can now be exported.
8682711552462962101	ReqIF export: The performance has been improved for ReqIF exports containing a lot of variant information.

ID	Resolution
8682711552495812101	ReqIF export: The ReqIF export of structures with reuses with different branch or revision is now aborted with an appropriate error message.
8682711552500681783	ReqIF export: Using the ReqIF export via report, artifacts without name can now be exported.
8682711552542202105	ReqIF export: Custom attribute values containing only non-textual content are now correctly exported.
8682711552553813059	ReqIF export: Text sections in formatted texts no longer cause schema validation errors.
8682711552560653059	ReqIF export: Defective OLE objects embedded in formatted texts no longer cause schema validation errors.
8682711552561273059	ReqIF export: OLE objects with broken previews in formatted texts no longer cause schema validation errors.
8682711552650413059	ReqIF export: The outdated metrics "ReqIF import classic" and "ReqIF export classic" have been removed from the PREEvision demo model.
8682711552721861783	ReqIF export: The PREEvision demo model has been updated and contains valid example <i>Attribute Definitions</i> compatible with the changes of the ReqIF export.
8682711552732302105	ReqIF export: The export is aborted if the conversion of a formatted text to ReqIF XHTML fails and an error message with hints for solving the problem is displayed.
8682711552921932111	ReqIF export: The LibreOffice restriction evaluation of the authority model is ignored while executing the ReqIF agreement export. Thus, the placeholder highlighting is always exported.
8682711553316031783	ReqIF export: Tables with vertically merged cells no longer cause schema validation errors.
8682711553316061783	ReqIF export: Attributes of the normal HTML export were created for table cells styled in a specific way. Since these information are not part of the ReqIF XHTML specification, their synthesis is excluded during the ReqIF export.
17938307705401859	ReqIF export: Changes made by the <i>ReqIF Export TestRoutines</i> metric block are now executed inside a model operation per default. This only affects newly created blocks, existing blocks in existing metrics are unchanged.
8682711552275612049	ReqIF export: The ReqIF export of test data no longer exports spec relations without source or target.
8682711552442692023	ReqIF export: In the PREEvision demo model, entries which are only relevant for requirement exports or imports have been removed from the ReqIF TDM configuration files.

ID	Resolution
8682711553047162101	ReqIF export: Relations are no longer lost between <i>Test Item Steps</i> and <i>Test Routines</i> if there are reused <i>Test Routines</i> outside the <i>Product Line</i> from which the export was started.
8682711553181472105	ReqIF export: Centered tables in formatted texts no longer cause schema validation errors.
8682711553655572107	ReqIF export: During synthesis of the supplier comment attribute definition, the name was taken as part of the representing ReqIF identifier. ReqIF identifier may not contain space, which were contained in the name. These spaces are removed for the ReqIF identifier. In the PREEvision demo model, the ReqIF Agreement import metric has been updated to work with changed attribute definition names for the supplier status and comment.
8682711553517132049	ReqIF export: The check for standard ReqIF profiles now only considers profiles, which are children of the <i>Custom Attribute Profile Container</i> under the global <i>Administration</i> . Profiles of test data in metrics are not considered.
8682711552419192065	ReqIF import and export: In all example ReqIF import and export configuration files, a comment concerning the class mapping has been updated.
8682711552442742023	ReqIF import and export: ReqIF import and export configuration files are uniformly formatted.

16.5.5 Logical function architecture

ID	Resolution
8682711551969802062	Missing translation for <i>Service Required Port Groups</i> and <i>Service Provided Port Groups</i> have been added.
8682711552516761030	An issue with incomplete interface generalizations has been resolved. Now the superior interfaces will be also represented in the Property View with its available <i>Data Elements</i> .
8682711552635661875	<i>Signal Transmissions</i> inside a <i>Transmission Frame</i> in a <i>Concept Diagram</i> snap to the grid.
8682711553353022100	Selection and highlighting of ports is now calculated after opening a <i>Logical Architecture Diagram</i> with Open With .
8682711553353032100	The entries in the Open With menu at a logical architecture port have been consolidated.
8682711553074502101	Assemblies with more than one <i>Assembly Connector</i> will not be deleted when hiding the corresponding <i>Bus Connection</i> .
17938308061641806	When moving blocks into <i>Building Blocks</i> either in the Model View or in a diagram, assemblies are now treated similarly. Assemblies between a moved block and

ID	Resolution
	delegation ports of the <i>Building Block</i> are deleted and new assemblies within the <i>Building Block</i> are created so that the moved block is still connected to the delegation ports but from within the <i>Building Block</i> .
8682711553353012100	A new group has been added to the Open With menu to harmonize menu structures.

16.5.6 AUTOSAR

AUTOSAR export

ID	Resolution
17938311595502051	AUTOSAR export: the message 'Artifact doesnt have name' appears only for relevant artifacts.
8682711552495711825	Implementation data types referenced by <code>KeyTemplateArguments</code> and <code>ValueTemplateArguments</code> of <i>Implementation Associative Maps</i> are now exported to AUTOSAR correctly.
8682711551972432003	For the following AUTOSAR exports, initial values of <i>NV Data</i> are now exported correctly: > AUTOSAR ECU extract > AUTOSAR SW component description > AUTOSAR system description
17938307346762000	<i>Sender Receiver To Signal Mappings</i> are now properly exported.
17938311611322000	The AUTOSAR Cluster Extract export now correctly exports the <i>So Ad Routing Groups</i> .
8682711553044011825	AUTOSAR package structure is now stable for consecutive exports.
17938307707902040	<code>Secure-Communication-Props</code> for AUTOSAR version 4.2.2 have been implemented and are now imported and exported.
17938308103662003	On export, AUTOSAR <code>ApplicationArrayElement.ShortName</code> is in every case taken from Name of the <i>Application Array</i> .
8682711552070592053	The AUTOSAR export will now correctly export the relation Mode DeclarationAccess and Target ModeDeclarationAccess on the artifact <i>Mode Switch Event</i> in regard of their order. This means that the relation ModeDeclarationAccess will always be on the first position and the relation Target Mode Declaration Access on the second position in the resulting ARXML file for the AUTOSAR artifact <code>SwcModeSwitchEvent</code> .
8682711553123311912	The AUTOSAR export does not export empty <i>Multi Value Attribute Definitions</i> of type "Enumeration" anymore.

ID	Resolution
8682711553545952052	The Update Indication Bit Position of <i>Signal IPDU Assignments</i> will be now exported in case the <i>Signal IPDU</i> has no <i>PDU Frame Assignments</i> as well.
8682711552005871992	Symbols and Japanese characters are now properly handled during AUTOSAR export.
8682711552492321806	The attribute <code>CATEGORY</code> of <code>ClientServerInterface</code> is now imported and exported.
8682711552539441917	For the AUTOSAR import and export, the attribute Approval Status of an <i>Evaluated Variant Set</i> is now considered.
17938309027902051	The AUTOSAR export with model query-based propagation, for example, cluster extract, ECU communication extract or SW component extract now displays an entry with a link in the Information View . Via this link the artifacts that are out of scope but are required for the propagation can be temporarily added to the scope.
17938309273472042	The following new AUTOSAR consistency checks have been implemented: "p1172_Ipv4Configuration_with_invalid_Ipv4Address" "p1172_Ipv6Configuration_with_invalid_Ipv6Address" The AUTOSAR export is canceled if the AUTOSAR export version is 4.2.2 or lower, and the export includes an artifact like <code>IPV-4-CONFIGURATION</code> or <code>IPV-6-CONFIGURATION</code> with the attribute <code>IPV-4-ADDRESS</code> or <code>IPV-6-ADDRESS</code> and value <code>ANY</code> .
17938311405181792	<i>DataIDs</i> are now only exported to AUTOSAR if the Data ID attribute value is set. <i>DataIDs</i> are exported in the same order as modeled in PREEvision, except for the Sync Data ID List of a CAN Global Time Domain and FlexRay Global Time Domain .
17938311513152108	For the AUTOSAR software component description, <i>SWC Implementations</i> are now correctly exported.
17938311631452052	A memory leak has been fixed which was caused by holding the AUTOSAR model after transformation and not releasing it after writing the ARXML file.
17938311673342108	Unused <i>Calibration Parameter Record Layouts</i> can now be exported using a custom export and the option No Datatype Restriction .
8682711552262711030	AUTOSAR admin data for <i>SOME/IP Transformation Properties</i> with multiple usages are properly exported now.
8682711552341932014	The default setting of the flag "DBC2AR" have been changed from "true " to "false " in the file "autosar_import_export.properties". Otherwise, the signal start position is converted during the AUTOSAR export, and this is not the expected default behavior.

ID	Resolution
8682711551967072051	The <i>Virtual Package</i> structure which was activated for an AUTOSAR export in the export dialog, remains activated for further exports and the <i>Virtual Package</i> structure is exported properly during AUTOSAR as well as diagnostic exports.
8682711552082781913	UUIDs created for implementation data types during AUTOSAR export are now stable on every consecutive export.
8682711552396242051	The value <code>HEADERTYPE_NONE</code> for the attribute Header Type of <i>Container IDPUs</i> is now imported and exported.
8682711552421080000	<i>So Ad Routing Groups</i> are now properly exported in cluster extracts.
8682711552475061029	An ECU communication extract is now possible while using a Function Designer license.
8682711552866322004	ECU communication extract now exports implementation data types.
8682711552947280000	The import and export now support the <code>INTRODUCTION</code> of an <code>I-PDU-MAPPING</code> which is represented by the Description attribute of a <i>PDU Gateway Routing Entry</i> .
8682711553125792003	<i>Data Constraints</i> that are referenced multiple times are now correctly exported as single artifact to AUTOSAR.
8682711553171531825	The attribute Constraint Level of data constraint rules is now properly exported.
8682711553346541998	SW component descriptions now export the initial value of constant memory.
17938309299042040	Importing <i>Associative Maps</i> in AUTOSAR Classic files is disallowed. Exporting implementation data types without <code>CATEGORY</code> is avoided.
8682711552647131024	<code>End To End Transformation Com Spec Props</code> are now imported from AUTOSAR and exported to AUTOSAR properly.
8682711553356011024	<code>CPP Implementation Data Types</code> are now exported with correct Type Emitter and Header File values automatically set for the Adaptive platform types "bool", "int8_t", "int16_t", "int32_t", "int64_t", "uint8_t", "uint16_t", "uint32_t", "uint64_t", "float", and "double" if one of these <code>shortNames</code> is used for an <i>Implementation Value</i> .
8682711553487001024	Name and option value of a <i>Startup Option</i> are now both exported as <code>Process Arguments</code> to AUTOSAR. The order name - option is always maintained.
8682711553114132159	A new property page Ports has been introduced that replace the two pages Logical Ports and Software Ports . The new page gives an overview over the meta classes <i>Signal</i> , <i>System Signal</i> , <i>Signal Group</i> , and <i>System Signal Group</i> .

ID	Resolution
17938307707902040, 17938307710382003	<i>Secure-Communication-Props</i> for AUTOSAR version 4.2.2 have been implemented and are now imported and exported.
8682711553547751024	Minimum and maximum limit values of generic constraints are now exported without any conversions and rounding.

AUTOSAR ECU extract

ID	Resolution
8682711551967081806	AUTOSAR ECU extract: now correctly propagates and exports the relation <i>targetModeDeclarationAccess</i> on the artifact <i>Mode Switch Event</i> .
8682711553098930000	AUTOSAR ECU extract exports the Addressing Method for <i>Parameters</i> of <i>Parameter Interfaces</i> correctly.
8682711551972032003	During an AUTOSAR ECU extract Addressing Methods of the following artifacts are correctly propagated now: > <i>Constant Memory</i> > <i>Data Element</i> > <i>Instantiation Properties</i> > <i>Inter Runnable Variable</i> > <i>Memory Section</i> > <i>NV Data</i> > <i>Operation Argument</i> > <i>Parameter</i> > <i>Runnable Entity</i> > <i>Static Memory</i>
8682711552494842052	IDENT of the <i>TpConnection</i> , <i>LinSlaveConfig</i> and <i>PncMapping</i> is now always exported.
8682711551942991913	For an AUTOSAR ECU extract, <i>Generic Physical Data Constraints</i> for <i>Application Curve Types</i> , <i>Application Map Types</i> , and <i>Application Cube Types</i> are now properly exported.
8682711552942822107	From some special model configurations, not-used <i>Signal IPDUs</i> have been exported via ECU extract. That has been fixed.
17938309311881914	Referenced invisible artifacts from the global <i>Administration</i> do not abort the ECU extract anymore.
17938307711722003	During the export of an ECU extract, no foreign payload PDUs (payload PDUs of foreign ECUs) are exported anymore.
8682711552299811917	The export of an ECU extract can be properly executed if the data to be exported contains mapped <i>Logical Functions</i> .
17938311454432004	Data IDs of end-to-end Profiles are now propagated and exported in ECU extract and system extract.

ID	Resolution
17938308170251032	Implementation data types connected to <i>Signals</i> will no longer be exported.
17938306059752088	Data mappings and signal ports are not exported anymore in the case the contained multiplex PDU is transmitted over the gateway.
17938307558851024	The ECU extract now exports <i>TransformationComSpecProps</i> .
17938309250770000	For an AUTOSAR ECU extract, several changes in the propagation and export of <i>Global Time Domains</i> and related artifacts have been implemented: > <i>Global Time Master</i> and <i>Global Time Slaves</i> are no longer propagated and exported based on the containment of the <i>Global Time Domain</i>. <i>Global Time Master</i> and <i>Global Time Slaves</i> are now propagated and exported based on the reference from the ECU Interface. > <i>Global Time Gateways</i> are no longer propagated based on the reference from <i>Global Time Master</i> or <i>Global Time Slaves</i>. A <i>Global Time Gateway</i> is now propagated and exported based on the reference from the <i>Electric Electronic</i>, for example <i>ECU</i>, <i>Sensor</i>, <i>Execution Context</i>, etc.
8682711551958391913	For an ECU extract, the physical values of <i>Axis Literals</i> are now correctly exported.
8682711552287352014	In the ECU extract, the payload of <i>Secured IPDUs</i> is now properly exported.
17938308264691825	A transformation error which occurred during the export of an ECU extract has been resolved.
17938308170241032	In the ECU extract, the data type of a <i>Typed Per Instance Memory</i> is properly exported.

AUTOSAR system description

ID	Resolution
8682711551833761024	For an AUTOSAR system description, <i>SEC-OC-CRYPTO-SERVICE-CONFIGURATION</i> is now correctly exported.
17938311321502040	<i>Service Interfaces</i> are no longer exported via AUTOSAR System Description. The mixing Classic and Adaptive contents is not supported by any PREEvision AUTOSAR export.
8682711551895991825	A system description with Adaptive contents is not supported. A check has been added in the export wizard to recognize Adaptive content and reject the export.
8682711553067141909	An error which occurred during the export of a system description, and which was caused by a missing relation between an <i>ECU Interface</i> and a <i>Bus Connector</i> has been resolved.

AUTOSAR adaptive exports

ID	Resolution
17938307437292010	<i>Process to Machine Mappings</i> are now fully exported to AUTOSAR within the execution manifest.
17938307763071024	<i>Cores</i> of a <i>Microprocessor</i> are now also exported in the software cluster design description if they are not assigned as Shall Run or Shall Not Run to a <i>SW-NET:Component Mapping</i> .
17938307941152088	The references of an interface mapping to <code>VARIABLE-DATA-PROTOTYPES</code> and <code>CLIENT-SERVER-OPERATION</code> are exported as open references in the Adaptive application description.
17938308210710000	For the AUTOSAR application description, the defined <i>Namespace</i> hierarchy is considered now.
17938308224821025	The suffix automatically generated for <code>RootSwComponentPrototype</code> names during AUTOSAR export has been removed.
17938308321812040	<i>Base Types</i> assigned to <code>CPP-IMPLEMENTATION-DATA-TYPES</code> are no longer exported.
17938309287992010	<i>SOME/IP Transformation Properties</i> and <i>User Defined Transformation Properties</i> are now also propagated to the service interface description.
17938309365152010	For the AUTOSAR Adaptive import and export, the name of an <code>AP-SOMEIP-TRANSFORMATION-PROPS</code> in AUTOSAR is now derived from the name of the corresponding <i>SOME/IP Transformation Properties</i> in PREEvision.
17938309378680000	The propagation of process execution dependencies has been added to the software cluster design description.
17938311323312052, 17938311323322052	<i>Application Errors</i> referenced to <i>UML Methods</i> via <i>Application Error Groups</i> are now also propagated to the software cluster design description.
17938311394732052	For the AUTOSAR software cluster design description, <i>Namespaces</i> which are referenced by <i>Application Error Packages</i> are now exported.
17938311724772052	The AUTOSAR software cluster design description has been adjusted to handle several cases of faulty open references in the exported AUTOSAR files.
8682711551904770000	The timeout set for a <i>Machine Deployment</i> are now correctly exported into a <i>Machine Manifest</i> .
8682711552446501913	Template arguments are now also exported when the Long Name is set.
8682711552484981913	<code>ApplicationErrorDomain.value</code> is now correctly imported and exported. The reference between <code>ApApplicationErrors</code> and <code>ApApplicationErrorSet</code> is now correctly imported as well.

ID	Resolution
8682711552510112051	References from application data types to <i>Computation Methods</i> are now exported in AUTOSAR software cluster design descriptions and service interface descriptions.
8682711552640342051	The import and export of TLV data IDs for application and implementation record elements has been fixed.
8682711552688542010	If none of the attributes UDP Collection Buffer Timeout or UDP Collection Trigger is set for <i>Consumed SOME/IP Method Instance</i> , <i>Provided SOME/IP Method Instance</i> , and <i>Provided SOME/IP Event Instance</i> , no COLLECTION-PROPS are exported anymore for the corresponding SOMEIP-METHOD-PROPS and SOMEIP-EVENT-PROPS.
8682711553161901024	AUTOSAR export now exports <i>Application Errors</i> assigned to own <i>Virtual Packages</i> or default <i>Virtual Packages</i> correctly. Assigning an artifact to more than one <i>Virtual Package</i> that are all exported, the export will be aborted, because this is not allowed.
8682711553295471024	A bug has been fixed which caused multiple references between the same <code>ApApplicationError</code> and <code>ApApplicationErrorSet</code> if the set was referenced by multiple users.
8682711553437491002	The AUTOSAR service instance manifest export does not export <code>ServiceInstanceToPortPrototypeMappings</code> anymore.
8682711553454391024	<i>Key Template Argument</i> is now correctly exported as <code>CPP-TEMPLATE-ARGUMENT</code> with <code>CPP-TEMPLATE-ARGUMENT.category == ASSOC_MAP_KEY</code> , value <i>Template Argument</i> as <code>CPP-TEMPLATE-ARGUMENT</code> with <code>CPP-TEMPLATE-ARGUMENT.category == ASSOC_MAP_VALUE</code> .
17938307379383010	<i>Service Interfaces</i> are not exported to the service instance manifest anymore.
17938307756770000	For the AUTOSAR service instance manifest, a <i>Consumed Service Instance</i> and a <i>Provided Service Instance</i> with the same <i>Data ID</i> can now reference the same <i>End To End Transformation Properties</i> .
17938307822191024	Adaptive internal behavior and its service dependency is now propagated and exported in the Software Cluster Design Description (formerly Adaptive Application Description).
8682711553501581024	A logic has been added to keep the IDs of <code>SIGNAL-BASED-EVENT-ELEMENT-TO-I-SIGNAL-TRIGGERING-MAPPING</code> stable over multiple AUTOSAR exports if the <code>EventPlatformDataTypeMapping</code> does not exist in the PREEvision model.
8682711552994941792	<i>Signal IPDUs</i> are always exported with complete <code>ISignalToPduMappings</code> , even in signal-to-service scenarios, when some <i>Signals</i> are of no interest.

AUTOSAR import

ID	Resolution
8682711553462111024	Software cluster designs without category can be now imported- It will be considered as <code>ROOT_SOFTWARE_CLUSTER</code> .
8682711553553362052	The import of <code>IMPLEMENTS-SOMEIP-STRING-HANDLING</code> has been corrected for AUTOSAR 4.4 and lower.
17938308165762101	On AUTOSAR import, for <code>COLLECTIONS</code> without <code>CATEGORY</code> it is assumed that the <code>CATEGORY=SET</code> (fallback defined in the standard).
17938308183582051	During AUTOSAR import, the model transformation error which occurred during the merge of an <code>APPLICATION-VALUE-SPECIFICATION</code> of <code>CATEGORY=MAP</code> has been fixed.
17938308952171992	The import identifies the inconsistent reference <code>GLOBAL-TIME-DOMAIN.MASTER</code> used in lower versions than the AUTOSAR_00046 schema and stops the import reporting an error message in the Information View .
17938309215602108	AUTOSAR import with merge/replace: The identity function for <i>Application Type Implementation Type Mappings</i> has been modified to use the related <i>Data Type Mappings</i> package, application type and implementation type for identification. No ImEx IDs are imported for <i>Application Type Implementation Type Mappings</i> .
17938309286952108	During AUTOSAR import with replace, <i>Addressing Methods</i> are updated, now.
17938309312311792	AUTOSAR import with merge/replace: <code>COM-SPECS</code> of <code>PR-Port-PROTOTYPES</code> are now updated correctly.
17938309322152108	During AUTOSAR import with replace, the "Replace" block correctly outputs processed roots if artifacts change their meta class during replace.
17938311478870000	During AUTOSAR import with merge, inconsistencies between types, prototypes, and instances due to <i>Assemblies</i> with missing UUIDs no longer lead to errors.
8682711551928361030	During an AUTOSAR import with merge, imported data types are no longer merged with globally defined data types, for example, data types from the global <i>Library</i> .
8682711552942720000	AUTOSAR Classic files containing AUTOSAR Adaptive machines can be imported again.
8682711552918202003	<code>APPLICATION-VALUE-SPECIFICATION</code> whose value is stored in a <code>Vt</code> object will also be correctly imported
17938307437571792	<code>SomeIpDataTransformationProps</code> for primitive <code>ArgumentDataPrototype</code> are now imported for AUTOSAR Adaptive.

ID	Resolution
17938307443551024	During AUTOSAR import, application to implementation data type mappings are created for <code>CPP-Implementation-Data Types</code> , too.
17938309304732052	During AUTOSAR import with merge, the <i>DataID</i> sequence of an E2E profile is now updated.
17938309312321790	The Property View for <i>Data Constraints</i> no longer highlights the values "INF", "-INF" or "NaN" entered in Min or Max as an error.
17938309330302040	The import of AUTOSAR files with the following inconsistencies is not supported: > No <i>Machine</i> assigned to <i>Machine Design</i> > More than one <i>Machine</i> assigned to <i>Machine Design</i>
17938311664551024	<i>SecOC Service Configuration</i> is now correctly imported. The <i>SecOC Service Configuration</i> receives a name based on "SecuredIpdu.name" and the suffix "_SecOcConfiguration".
8682711551924621840	During AUTOSAR import with merge, <i>UdpTp</i> , <i>TcpTp</i> and <i>HttpTp</i> elements are merged if all their attributes have set the same values.
8682711552709282064	For AUTOSAR import with merge the messages have been improved to indicate changes in custom attributes.
8682711553029582005	The AUTOSAR import has been adapted, so that transformation errors due to preconditions are shown in the Information View together with all other AUTOSAR relevant information.
8682711553029101825	The performance for calculating ImEx-IDs during AUTOSAR import with large tree structures of AUTOSAR parent hierarchies significantly has improved.
8682711553191072052	AUTOSAR software component updates can now be started on all classic software component types via context menu.
8682711553551321825	The import of the attribute <code>txMask</code> and <code>rxMask</code> of the <code>CAN-FRAME-TRIGGERING</code> has been corrected. Large integer values are not converted to negative values anymore.
17938311660911998	Improved update handling of large model trees during AUTOSAR or DBC import.
8682711553553362052	The import of <code>IMPLEMENTS-SOMEIP-STRING-HANDLING</code> has been corrected for AUTOSAR 4.4 and lower.
17938307618971874	Software component update: During a software component update, the automatic model update performed when locking the artifacts needed for the update is handled properly.

ID	Resolution
8682711552446662043	If a port type is deleted during the AUTOSAR import, incomplete mappings without source or target are deleted.

16.5.7 Software architecture

ID	Resolution
17938309286651995	<i>Definitions Sets</i> for defining custom attributes can be assigned to <i>Software Deployment</i> and <i>Software Partition Package</i> .
17938305258342108	Delegation ports can now be populated on the background of <i>Composition Type Diagrams</i> , <i>Partial Composition Type Diagrams</i> , and <i>Software Architecture Diagrams</i> .
17938307564532052	The Connect Ports with Identical Interfaces refactoring now correctly connects only ports with identical interfaces.
17938307939282010	In the SOME/IP Service Instance TP/IP Editor of the AUTOSAR Adaptive Explorer , the Service ID column has been renamed to Service Instance ID .
17938308089032051	The automatic figure completion DnD operations can now be deactivated via a toolbar button in <i>Partial Composition Type Diagrams</i> .
17938308195152113	The refactoring Change Type To Enumeration Type for <i>Application Integer Types</i> is corrected and child artifacts of <i>Application Integer Types</i> are correctly converted.
17938308928020000	Creating new ports for a Port Adapter via the Split Port refactoring is not possible anymore. The refactoring has been removed from the context menu.
17938309524372004	In the Ecu Definition table of the SOA & Ethernet Explorer the metric for the synthesis of MAC addresses has been improved and can now handle new types of <i>ECUs</i> correctly.
17938311341171843	In <i>Interface Assignment Diagrams</i> , Adaptive ports for <i>Composite Types</i> can now be added via palette.
17938311480253039	The performance to open the Port Configuration dialog with large number of ports has been significantly improved.
8682711552088162108	Usability and performance have been improved for the Convert SW Component Type dialog. The dialog now provides additional filtering options.
8682711552692141913	All valid port types of a software component are shown for the events <i>Sender Receiver Received Events</i> , <i>Sender Receiver Receive Error Events</i> , <i>Operation Events</i> , <i>Mode Switch Events</i> , <i>Mode Manager Error Events</i> , and <i>Mode Manager Ack Events</i> in the Events Design category of the Software Design Explorer , and in the Property

ID	Resolution
	View. The visibility of the <i>Mode Declaration Group</i> and the <i>Target Mode Declaration Group</i> of the <i>Mode Switch Event</i> in the Property View depends on the mode activation kind.
8682711553044042013	In the Software Design Explorer , category Events Design , the tables Sender Receiver Received Events and Sender Receiver Receive Error Events now display the <i>Data Elements</i> of the assigned interfaces in the Data Element column.
8682711552915332052	The <i>Consistency Check</i> „Data type consistency“ has been removed.
17938306043741029	In the English NLS, the word component "type" has been appended to the names of the application data types <i>Application Enumeration</i> , <i>Application Union</i> , and <i>Application Record</i> .
17938307004132040	To avoid broken data type mappings, <i>Mode Request Implementation Type Mappings</i> and <i>Application Type Implementation Type Mappings</i> are deleted if one of their associated application data type, implementation data type, or <i>Mode Declaration Group</i> artifacts is deleted or if they are dereferenced by one of the associated artifacts.
17938294355789393	The relation between <i>Implementation File Proxy</i> , <i>SWC Implementation</i> and <i>Code Descriptor</i> artifacts is now properly represented in the Property View of the class <i>Implementation File Proxy</i> . Relations between the artifacts can now be set.
17938305951031912	The Start Position of <i>Signal-IPDU-Assignments</i> via drag and drop in the Model View is calculated correctly.
17938311317882042	For <i>SOME/IP Communication Connector Assignments</i> , the dereference action in the table on TpIp Configuration property page.
17938311390142107	The Property View of <i>Bus Connectors</i> shows additional information about PDUs, signals, and frames.
17938311445712049	An error on Timing property page of <i>Port Communication Requirements</i> has been corrected.
8682711552764452108	Minimum and maximum values in read-only mode have been added to the X-Axis , Y-Axis and Z-Axis property pages axis data types.
8682711553281571998	A menu entry to create a <i>Constant Memory</i> on <i>Internal Behavior</i> is now available.
17938306961981806	The move ports action via <F7> in <i>Software Architecture Diagrams</i> and <i>Logical Architecture Diagrams</i> now places the moved delegation ports on the grid.
8682711552398361914	The refresh of mapping boxes has been improved. Internal mapping boxes in locked diagrams now refresh immediately.

ID	Resolution
8682711552433472052	If an existing port is connected to a component, a new port will be created. Now the port names (type, prototype, instance) and assigned interface from the existing port are taken over to the new port.
8682711552716432013	The <i>Software Architecture Diagram</i> displays the right icon for <i>Compositions</i> .
17938307342772052	Both references Internal to Physical and Physical to Internal on <i>Computation Methods</i> are represented read-only but navigable in the Property View . The add and delete buttons are still active.
17938307443662108	In the Property View of an axis (<i>X-Axis</i> or <i>Y-Axis</i>), the drop-down list for the assignment of a <i>Base Type</i> to an axis on the Configuration property page has been replaced by a table because multiple Base Types can be associated. The drag and drop functionality is supported in the table.
17938307538882108	On the Service Needs Configuration property page of <i>Supervised Entity Needs</i> , relations between <i>Supervised Entity Needs</i> and <i>Supervised Entity Checkpoint Needs</i> have been adapted as follows: > <i>Supervised Entity Checkpoint Needs</i> can now be assigned via drag and drop in the corresponding table. > A new filter for the Artifact Picker has been integrated to show only <i>Supervised Entity Checkpoint Needs</i> and <i>Supervised Entity Needs</i> of the current <i>Internal Behavior</i>.
17938308234112104	A customized drop action for the Property View of <i>Assembly SW Connectors</i> has been added. The action ensures that all instances of the <i>Assembly SW Connector</i> receive the assigned port instances.
17938309213622113	The Property View has been adjusted regarding the assignment of a Validity for data constraints. A drop-down list has been added for assignment.
17938309386102052	In the Property View of an <i>Application Error</i> , a drag and drop of an <i>Application Error Group</i> is possible now.
8682711552495032051	The Property View of <i>Composition Prototypes</i> now correctly displays the connected ports.
8682711552867692108	For <i>Axis Literals</i> , the Array Size attribute has been added to the Constraints property page of the Property View .
8682711552982362003	On General page of implementation typed artifacts in the Property View , Implementation Data Type has been removed.
17938311629282088	On General page for <i>Application Error Packages</i> in the Property View , the attribute Value has been added.

ID	Resolution
8682711552101931825	Resizing a column in the Conversion Parameter table of the Property Editor is now possible by simply dragging the column separator while holding down the left mouse button.
17938309033632159	During Show Path operation, a message is shown if a connection cannot be displayed caused by a missing connection in the current diagram.
17938311515452113	In tables, minimum and maximum values of <i>Generic Physical Data Constraints</i> can be properly set.
8682711553140721806	In the Property View of an <i>Atomic SW Component</i> , <i>Application Partitions</i> can be dereferenced from software instances.
8682711553281631998	In the Property View of a <i>Constant Memory</i> , the initial value can be set.
8682711553343442043	The Property View displays the <i>Unit</i> of relevant literal artifacts.
8682711553285641917	Conditions in <i>State Machines</i> and <i>Activities</i> can be included in reports out of the box. A <i>Condition</i> has a customized label {\$condition} as an object configuration which shows the resolved boolean expression. Dropping a <i>Condition</i> into a report as a placeholder and choosing the DisplayName as attribute, displays the resolved boolean expression in the report.
17938307566901918	In <i>State Machine Diagrams</i> , the <i>Condition</i> label can be reseted. Also, the labels defined in the object configuration can be displayed.

AUTOSAR Adaptive

ID	Resolution
17938308156011810	<i>Execution Contexts</i> are now displayed in the SOME/IP Service Instance Editor .
17938308279211280	<i>Computers</i> , <i>ECUs</i> , <i>Sensor/Actuators</i> , and <i>Execution Contexts</i> underneath a <i>Component Composite</i> are now also displayed in the Service Instance Editor .
17938306286902010, 17938311481711810	The column name in SOME/IP Consumed Service Instance SD Editor has been changed from Service ID to Service Instance ID .
17938308923200000	In the Provided Port Connection Editor and Required Port Connection Editor the action button for the creation of ports is now disabled for <i>Port Adapters</i> .
17938309117622003	Toolbar buttons for the creation of <i>Service Instances</i> were removed from the SOME/IP Service Instance TP/IP Editor , SOME/IP Provided Service Instance SD Editor , SOME/IP Consumed Service Instance SD Editor , and Service Instance to Port and Process Editor .

Franca import and export

ID	Resolution
8682711552726982010	In the AUTOSAR Adaptive Explorer , the drop-down menu in the column Process Unit of the Process To Machine Editor has been replaced by an Artifact Picker that by default shows all <i>Process Units</i> of the current <i>Product Line</i> .

ID	Resolution
17938308264962040	Franca export: All available <i>Data Type Packages</i> are displayed as possible export data in the Franca IDL Export wizard. Additionally, the error that not all referenced data types were propagated during the export has been resolved in the Franca source-based propagation.
17938311342742040	Franca export: The exact order of method parameters is maintained during the export.
17938311378662040	Franca export: Due to an invalid schema the export is aborted if it contains <i>Application Cases</i> of an <i>Application Union</i> with no application data types assigned.
17938311394782048	Franca import and export: Getter , Setter , and Notifier attributes of a <i>Property</i> are now considered.
17938311394792048	Franca export: The order of <i>Application Enumeration</i> literals is maintained during the export.
8682711552515761807	Franca export: It is now possible to export data types of <i>Data Type Packages</i> contained in the local <i>Library</i> of the <i>Product Line</i> . Additionally, the name of the <i>Product Line</i> is taken over for the exported package.
17938311484132040	Franca export: The export cannot contain package names with spaces or other invalid characters anymore.
17938309053212040	Franca import: Imports of incorrect FIDL files will now be aborted and an error message will be displayed in the Information View .

16.5.8 Diagnostics

ID	Resolution
17938307506632005	The diagnostic export provides a correct <i>AsrDataElementRef</i> for <i>Diagnostic Data Identifier</i> parameters of a <i>Diagnostic IOControl</i> .
17938305189392105	The Quick Search now allows to directly search for the ID of diagnostic objects, for example, the Routine Identifier of <i>Diagnostic Routines</i> , and others.
17938307004182113	Deletion of a <i>Diagnostic Data Object</i> does not remove IDs of other <i>Diagnostic Data Objects</i> of the same <i>Diagnostic Data Identifier</i> anymore.

ID	Resolution
17938307370192012	The Select Workspace dialog for <i>Port Interfaces</i> now allows to select the <i>Software Types</i> container as workspace. If both the <i>Software Types</i> container and a <i>Software Types Package</i> are set as workspace, the latter will be preferred.
17938307544492113	Moving <i>Diagnostic Data Objects</i> does not delete IDs anymore.
17938307571432113	The drag and drop menu Move before/after <specific diagnostic data identifier> between <i>Diagnostic Data Identifiers</i> is removed.
17938307740312007	Software ports with <i>Sender Receiver Interface</i> are collected again by the <i>Propagate Definition</i> "R100_DiagMaster_DetailedEE".
17938308161532005	<i>Sender Port Types</i> which are prepared for DID services in the category SW Type Preparation of the Diagnostic Specification Explorer are not listed anymore as prepared for IO control services in the category SW Instance Referencing .
17938308185752007	A suborder is properly created for <i>Diagnostic Data Objects</i> created in the DID table of the Diagnostic Specification Explorer .
17938308272772007	When creating a <i>Sender-Receiver Interface</i> or <i>NV Data Interface</i> for <i>Diagnostic Data Objects</i> , the attribute isService is set to false.
17938309053312007	The attribute Diagnostic Value Access of a <i>Diagnostic Service Need</i> is not set when creating the <i>Service Dependency</i> of a diagnostic port. For details see AUTOSAR [constr_1363].
8682711551930692108	During the software type preparation via the IO Control table of the Diagnostic Specification Editor , now an <i>Application Record Type</i> is created and assigned to the data services port representing the actual data of the <i>Diagnostic IOControl</i> .
17938308185752007	A suborder is properly created for <i>Diagnostic Data Objects</i> created in the DID table of the Diagnostic Specification Explorer .
8682711551998222005	During the software type preparation via the IO Control table of the Diagnostic Specification Editor , now an <i>Application Record Type</i> is created and assigned to the IO operation request.
8682711552726661875	Improved performance for opening and switching tables in the Diagnostic Specification Explorer .
8682711553277282196	When creating a <i>Sender Port Type</i> in the DID or IOControl tables of the Diagnostic Specification Explorer , now a <i>Sender Communication Specification</i> is additionally created. Also, the <i>Data Element</i> in its <i>Sender Receiver Interface</i> is linked to that <i>Sender Communication Specification</i> .

ID	Resolution
17938308763181038	The performance for diagnostic consistency checks which use metrics has been improved.
8682711552713681995	<i>Diagnostic Trouble Codes</i> can now be set in the formats HEX, DEC, OCT, and BIN.
17938309056882040, 17938309334922040	When executing the "Create Communication Infrastructure" metric, improved feedback is provided in the Information View .
8682711553303411909	The Diagnostic Communication Explorer and the path creation now work with <i>Internal Bus Connectors</i> and all relevant detailed kinds of <i>ECUs</i> .

Diagnostic import and export

ID	Resolution
17938308029872113	Diagnostic import: The import only considers the CANdelaStudio UUID in the reference <i>Product Line</i> (as ImEx-ID), the ID is not taken over to the <i>Product Line</i> , where the import was started.
17938311484122005	Diagnostic import: The name of the reference <i>Product Line</i> is now set to "RefPL_" + <code>PREEvisionCANdelaDiagnosticData.ShortName</code> .
8682711552417771875	Diagnostic import: The import of not supported model versions of the diagnostic exchange format is denied.
53751837, 17938308176852005	Diagnostic export: The export results of diagnostic models are the same regardless of whether started by wizard or context menu.
17938307384882113	Diagnostic export: If the diagnostic export cannot be performed due to problems in model transformation, the status is changed from cancel to error and an error message is displayed.
17938307956582100	Diagnostic export: A diagnostic export is now possible for models with software <i>Compositions</i> without software components.
17938308030652113	Diagnostic export: In the diagnostic export, the ImEx-ID is considered as CANdelaStudio UUID if an ImEx-ID is set for an artifact on its corresponding artifact in the reference <i>Product Line</i> . An ImEx-ID on the artifact itself is not considered as it might represent the ID of a different use case, that is an AUTOSAR ID.
17938308048312005	Diagnostic export: Incorrectly modeled <i>Operation Arguments</i> of <i>Client Server Interfaces for Diagnostic Data Object</i> will not be exported, for example, if several <i>Operation Arguments</i> have the name "data".
17938308050832007	Diagnostic export: Different application data types, for example, <i>Application Integer Types</i> , are considered for export even if the diagnostic information is collected via software-hardware mappings.

ID	Resolution
17938308187512007	Diagnostic export: <i>ContextPortReference</i> (CPR) have been removed from <i>AsrServiceDependencyRefs</i> that are created during export.
17938308192372007	Diagnostic export: The <i>NV Data</i> and <i>Client Server Interface</i> related to <i>Diagnostic Data Object</i> and <i>SW Port</i> and their data types are considered for the export.
17938308205162100	Diagnostic export: The diagnostic data exchange with CANdelaStudio now also supports the <i>Linear Conversion</i> of a <i>Linear Verbal Table Conversion</i> and <i>Scale Linear Verbal Table Conversion</i> , in case of only one <i>Linear Conversion</i> .
17938308264692007	Diagnostic export: <i>Scale Linear Verbal Table Conversions</i> are not supported in the diagnostic exchange format and therefore excluded from the export.
17938308325512007	Diagnostic export: If unsupported data types are modeled in the context of a diagnostic export, these data types are ignored for the export.
17938311629832005	Diagnostic export: Diagnostic objects that are no children of the <i>Diagnostic Master</i> are properly considered for the export to CANdelaStudio depending on their software realization on the related <i>ECU</i> .
8682711553277502005	Diagnostic export: Default values of attributes, like 0, are now written to PVCDI if set explicitly in PREEvision.

16.5.9 Communication

ID	Resolution
17938304993491003	The toolbar action Create Service Discovery creates an additional <i>Udp Tp</i> for the client ("ANY") socket.
17938286082770455, 17938300527352040	The Frame-PDU synthesis now also supports <i>Multiplexed IPDUs</i> .
8682711552939001917	A hint for a mandatory port of the <i>LDF Export</i> metric has been added to the manual.
17938307783892004	On the Coupling Port Configuration property page of <i>Coupling Ports</i> , the unit bit/s has been added to the Coupling Port Speed attribute.
17938305543132107	A null pointer exception at the FlexRay Bus Load Table has been resolved.
8682711552651461917	In the Frame Layout View , an error message reports when PDU alternatives could not be created due to missing configuration.
17938307811552040	In the Secured PDU Editor an error when adding an element been resolved.

ID	Resolution
17938307811702040	In the Secured PDU Editor the naming of columns has been correct.
17938305809042040	Under an end-to-end profile, <i>Data IDs</i> can be ordered.
8682711552692181913	The alignment in tables with several <i>Data Elements</i> and the corresponding communication specification has been corrected.
17938307161232108	The refactoring Connect Ports (Identical Interface) works again.
8682711552262722004	Metrics for the J1939 library use case and the J1939 catalog option in new menu have been removed.
8682711552553711998	The Property View of an <i>ECU Interface</i> now displays <i>Signal Groups</i> in the Selected I-Signals table. Additionally, drag and drop actions are supported.
8682711552929780000	For a PDU Gateway Routing Entry , some changes have been implemented for the Routings property page in the Property View . The Routings property page has been moved below the General property page. It now contains the Pdur TP Chunk Size attribute and the Out Default Value table with the option to create new <i>PDU Out Default Values</i> .

Signal router

ID	Resolution
17938308088182088	Signal router: The signal router does not create <i>Generic Controller Configurations</i> for Ethernet interfaces anymore.
17938299783622040	Signal router: If the results of signal routing are not directly applied but reported in the Information View , the results are highlighted correctly, for example, in <i>Network Diagrams</i> .
8682711552720781917	Error messages reported by the signal router have been extended and improved. This applies to a software component or logical component which is source or target of a signal which is not mapped to a hardware component.
8682711553125511995	PREEvision user manual now provides a more detailed description for the usage of constraints to influence the signal router.
8682711553653852043	The signal router uses correct data types to calculate the signal length when routing complex data types to multiple receivers using system signals.
8682711552558131909	<i>Execution Contexts</i> , <i>Active Stars</i> , and <i>Computers</i> which do not contain <i>Execution Contexts</i> can now also serve as gateways and are therefore considered for gateway creation by the signal router.

ID	Resolution
8682711552726050000	In case of multiple mapped <i>Signals</i> , the signal router limits ambiguous signal checks to <i>Signals</i> that are not attached to any port at all or to at least one port (sender or receiver port).
8682711553338801029	An error in the signal router has been fixed which did not allow synthesizing <i>PDU Transmissions</i> for <i>Container IPDUs</i> .
8682711553062110000	The signal router now does not create <i>Signals</i> for composition ports (delegation ports) which are no communication end points.
8682711553262391807	The signal router is now using (instead of deleting) <i>Signal Transmissions</i> of <i>SW Ports</i> which are associated with software components that are not directly mapped to hardware components (indirect composition mappings exist and are considered).
8682711553076021807	The signal router now creates all <i>Signals</i> for end point delegation ports of <i>Compositions</i> . The signal router only routes external client-server communication of Ethernet <i>Bus Systems</i> or internal <i>Bus Systems</i> but it does not route external client-server communication over CAN, LIN and FlexRay anymore.
8682711553048351807	The signal router has been improved in so far that the signal routing is not aborted in case a new/cheaper path is found, especially in complex network architectures.
8682711552997071807	The signal router does not consider <i>PDU Transmissions</i> for non-Ethernet busses. Potentially <i>obsolete PDU Transmissions</i> are only cleaned up for ethernet channels.
8682711553075471807	When routing <i>System Signals</i> and checking for existing and usable <i>Signals</i> , the signal router prefers <i>Signals</i> that are already routed for a current bus or cluster.
342088	The relations between <i>Signal Transmissions</i> and the signal output port are now updated properly after running the signal router.
8682711553338801029	An error in the signal router has been fixed which did not allow synthesizing <i>PDU Transmissions</i> for <i>Container IPDUs</i> .
17938306994952004	The signal router now considers "must use" conditions on <i>Bus Connectors</i> if they are applied on the outgoing and receiving <i>ECU</i> (and its bus connectors).
17938307210601024	If several <i>VLANs</i> are available, the signal router now handles them in a deterministic way.
17938307369951030	The signal router does not require any locks for temporary existing artifacts, including marker and flag changes on related artifacts.
17938307557601794	Highlighting of transmissions now considers <i>ECU</i> interfaces for highlighting their corresponding <i>Bus Connectors</i> .

ID	Resolution
17938307769411024	The signal router now updates complex data type signals/mappings for signal groups with set data transformer.
17938307769711030	The signal router now considers the following artifacts as variant settings for an active variant: > <i>Set</i> > <i>Variation Point Set</i> > <i>Alternative</i> > <i>System</i> > <i>Predefined Variant</i> > <i>Architecture Variant</i>
17938307940771024	In combined routing scenarios with AUTOSAR Classic and Adaptive communicating via a <i>Port Adapter</i> , the signal router considers available <i>Signals</i> for connected UML <i>Data Elements</i> , even if the <i>Signals</i> are only mapped to classic <i>Data Elements</i> .
17938307948341807	In case signal routing is possible for multiple <i>VLANs</i> , signal routing always provides in a deterministic routing result.
17938307959191807	The signal router considers the preferred <i>VLAN</i> for routing. If no preferred <i>VLAN</i> is available, the signal routing provides a deterministic routing.
17938308161762005	In case multiple <i>Signals</i> are set as transmittable signal for a sender or receiver port, the signal router only checks whether the receiver can receive all relevant signals. This allows to use the signal router for update use cases even if multiple senders send the same signal.
17938308174511807	The signal router now considers and reuses existing transmissions for <i>Fire and Forget Methods</i> .
17938308245522040	The signal router does not fail when called via custom block and misconfigured ports on <i>Port Adapters</i> are recognized during routing.
17938308763412040	Signal router considers existing <i>System Signals</i> and <i>Signals</i> in mixed (Classic/Adaptive) routing scenarios that were partially routed before.
17938308898421807	If a software component with a <i>Service Consumer</i> is used to call another <i>Service Provider</i> at the same time, the signal router now creates a warning in the Information View .
17938308926091807	The signal router removes unused <i>PDU Transmissions</i> of type <i>Signal IPDU</i> which do not contain <i>Signal Transmissions</i> anymore.
17938308926121807	The signal router identifies removed <i>Fire and Forget Methods</i> and considers all transmitted <i>Signal Transmissions</i> from the consumer port. All unused transmissions are removed by the signal router.

ID	Resolution
17938309273581807	For models with a <i>Port Adapter</i> , the signal router provides similar results for initial routing and later updates.
17938309273601807	For models with <i>Fire and Forget Methods</i> , the signal router provides similar results for initial routing and later updates.
17938309277122040	If the signal router is called via metric, the currently used router configuration is now displayed in the error message.
17938309281082040	The signal router now creates method instances for getter and setter functions of <i>SOME/IP Properties</i> in <i>Service Instances</i> .
17938309294661807	The routing of <i>Methods</i> and <i>Properties</i> now leads to two <i>Signals</i> per port pair, one call <i>Signal</i> and one return <i>Signal</i> .
17938309294751807	The signal router now properly handles routing scenarios in combined systems with Adaptive and Classic software components, even if classic software components send data to both classic and adaptive software components. The routing results are deterministic.
17938309296461807	The signal router considers update scenarios in combined systems with Adaptive and Classic software components.
17938309296631810	For AUTOSAR Adaptive communication with <i>Events</i> , the signal router creates one <i>Signal Transmission</i> for multiple receivers (instead of one per receiver).
17938311324841810	The signal router properly handles update routing scenarios in combined systems with classic and adaptive software. <i>Port Adapters</i> in combined classic and adaptive systems are considered when validating transmittable <i>Signals</i> during signal routing pre-processing and after signal routing. Additionally, in case of <i>Fire and Forget Methods</i> , existing <i>Signals</i> are considered when sent from Adaptive in combined systems.
17938311341932005	The signal router properly handles update routing scenarios if the first signal routing is executed in a pure Classic system, and if for a second signal routing an Adaptive software component is added. If no interface mappings have been manually created for the added Adaptive software component, new <i>Signals</i> are created to cover Classic to Classic and Classic to Adaptive systems. The <i>Signal Transmissions</i> are consolidated.
17938311341942005	The signal router properly handles update routing scenarios if the first signal routing is executed in an Adaptive to Classic system and the second signal routing is executed in an Adaptive to Adaptive and Adaptive to Classic system. Existing <i>I-Signals</i> for client-server ports in mixed Adaptive to Classic scenarios are handled correctly.

ID	Resolution
17938311391581025	In case the signal router is started for a required port, now the connected provided port(s) are considered instead. This enables proper reuse of available <i>Signal Transmissions</i> instead of creating new <i>Signal Transmissions</i> .
17938311430352051	For signal routing, the Information View provides additional information about deleted <i>PDU Transmissions</i> and <i>Signal Transmissions</i> .
17938311457761810	The signal router does not create <i>Signal Groups</i> for <i>Data Elements</i> with complex data types and with assigned <i>SOME/IP Method</i> anymore. A <i>Signal</i> or <i>System Signal</i> is created instead.
17938311637001825	During signal routing, the Name of an <i>Adaptive Service Instance Port Mapping</i> is now derived from the Name of the <i>Adaptive Service Instance</i> and the Name of the <i>SW Port</i> .
8682711551703241810	If the signal router is forced to create new <i>Signals</i> , it now does not consider existing data type signal mappings for complex data types. This leads to consistent update behavior for <i>Fire and Forget Methods</i> .
8682711551793001810	The signal router now creates dedicated <i>Signals</i> for fire and forget ports by default. Router options regarding multiple senders are only considered if explicitly set.
8682711551802241030	The signal router now reuses existing artifacts, like <i>PDU Transmissions</i> , <i>Socket Addresses</i> etc., when routing with option „IgnoreVariantForReuse“ enabled. In case of Ethernet routing, reused artifacts are added to the current variant.
8682711551832901787	When routing complex data types in combined Adaptive/Classic scenarios, existing <i>Signals</i> that are not useable for the current ports are not reused anymore.
8682711551834421810	The Signal router now always creates dedicated <i>Signals</i> for <i>Fire and Forget Methods</i> . The routing order is optimized so <i>Signals</i> reflecting pure Classic to Classic communication are created correctly.
8682711551926742051	After setting up the Tx/Rx design in the Communication Design Explorer and using the signal router, no duplicate artifacts are created anymore.
8682711551940022052	The signal router now properly creates <i>Event to Signal Mappings</i> as well as <i>Method to Signal Mappings</i> for a serialized service.
8682711552499302159	The signal router now calculates all possible routing paths when using the "BruteForce" algorithm in a deterministic way.
8682711552540651998	When looking for existing <i>Signals</i> during <i>System Signal</i> routing, the signal router now prefers <i>Signals</i> that already have <i>Signal Transmissions</i> on the current bus or have <i>Signal Transmissions</i> for current sending and receiving ECU interfaces.

ID	Resolution
8682711552545052069	In Ethernet, the signal router now creates names for <i>PDU</i> s and <i>PDU Transmissions</i> in a deterministic way.
8682711552760992010	The signal router does not clean up transmissions for <i>General Purpose PDU</i> s.
8682711552920011998	The signal router now creates Adaptive service instances also in case of communication via multiple busses.

Ethernet
communication

ID	Resolution
17938292522079239	In the SOA & Ethernet Explorer , postings in the Information View have been improved for the metric Calculate Header ID .
17938307666912040	The calculation of the Message ID in the SOME/IP Interface Deployment Editor has been corrected.
17938307801331807	The metric for the AUTOSAR Classic technology mapping has been corrected. Interface relations are now set by creating or updating data types.
17938307832182040	Data types of <i>Data Elements/Arguments</i> are now updated when classifiers of service or adaptive data types are changed. Application and implementation data types are considered: if one is set, the other is reset.
17938308850462040	The AUTOSAR Classic technology mapping in the SOA & Ethernet Explorer has been improvements for update use cases: data types get updated now and <i>Operation Arguments</i> will not be deleted anymore.
17938309338122040	A duplicate consistency check "DefPCPassPrioNotSet" has been removed.
17938311661050000	In the category Data Serialization of the SOA & Ethernet Explorer , all <i>Layout Packages</i> that are contained in <i>Communication</i> are displayed recursively.
17938311667691810	The Service Deployment Editor and the Service Socket Deployment Editor of the SOA & Ethernet Explorer are now enabled for all subtypes of <i>Detailed Electric Electronic</i> like, for example, <i>Computers</i> .
8682711552092072042	The metric for service discovery subscription has been corrected to create <i>So Ad Routing Groups</i> for services with properties only.
8682711552421100000	The signal router now takes over data of <i>Services</i> from abstract UML level to concrete <i>Service Instances</i> in the <i>Communication</i> layer.
8682711553103332051	The threshold for usage of SOME/IP TP has been adjusted to a payload size bigger than 1400 byte according to AUTOSAR SOME/IP Protocol Specification.
17938306277222050	Filtering functions in the Network Topology Editor have been improved.

ID	Resolution
17938306277642050	The ECU Definition table supports IPv6 addresses.
17938306642042050	Information about IP configuration has been added to the ECU Definition table.
17938309264311810	Generic Communication Explorer : The performance of the Artifact Picker used to display and assign the communication participant artifacts in the Communication Participants has been improved.
17938309247681810	The performance of the Artifact Picker used in the Service Deployment Editor to display the services has been improved.
17938306962612003	The software deployment synthesis of the SOA & Ethernet Explorer now builds separate <i>Client Server Interfaces</i> for every <i>Property</i> and one dedicated interface for all <i>Methods</i> defined in the <i>Service Interface</i> .
8682711553215501998	On the Identifier Parameters property page for <i>Socket Connection IPDU Identifiers</i> , the attribute Collection Semantics has been added.

DBC import and export

ID	Resolution
17938311322921032	DBC export: Custom attributes like, for example, <i>GenSigInactiveValue</i> and <i>GenSigStartValue</i> , are now properly exported in case the communication artifacts are distributed over multiple <i>Product Lines</i> .
8682711553089142065	DBC export: A consistency check identifies incorrect modeling of nodes, based on subtypes of the abstract class <i>ElectricElectronic</i> in PREEvision.
17938308185511032	DBC import: After import of a DBC file that contains multiplexed messages with a <i>Static Part</i> , the <i>Signal Transmission</i> of the selector signal only references the <i>PDU Transmission</i> of the <i>Dynamic Part</i> .
17938308195872004	DBC import: The merge behavior for the DBC import has been corrected. Two <i>Signals</i> with the same name inside different frames are not merged anymore.
17938309243111032	DBC import: Multiplexed IPDUs defined with DBC notation "SG_MUL_VAL_" are supported for the DBC import.
8682711553302121030	DBC import: For every DBC <i>Signal Group</i> also a <i>Signal Transmission</i> is created in PREEvision.

Frame PDU synthesis

ID	Resolution
17938305201232092	<i>Gateway Routing Entries</i> created by the Frame-PDU synthesis are now also displayed in the Information View .

ID	Resolution
17938307943551913	The Frame-PDU synthesis now keeps existing the <i>PDU Transmissions</i> of long I-PDUs handled by a transport protocol.
17938309236962024	Extended Information View content to point out missing and mismatching <i>Bus Types</i> during Frame-PDU synthesis.
17938309237092024	The Package Selection dialog of the Frame-PDU synthesis supports the deletion packages via the "Delete" key.
17938309303511917	The Frame-PDU synthesis completely ignores <i>PDU Transmissions</i> and <i>Frame Transmissions</i> for multiplexed IPDUs to support manual modeling.
8682711552287142014	The Information View now shows the complete results of the Frame-PDU synthesis.
8682711552401662014	Contained <i>PDU Transmissions</i> of multiplexed <i>PDU Transmissions</i> will not be assigned to <i>Frame Transmissions</i> by the Frame-PDU synthesis anymore.
8682711552419241917	The Frame PDU synthesis has been adapted to handle frames without <i>PDU Frame Assignment</i> but existing <i>Frame Transmissions</i> . That means that <i>Frame Transmissions</i> of special <i>LIN Frames</i> , <i>LIN Sporadic Frame Multiplexer</i> and <i>LIN Event Triggered Frame Multiplexer</i> are not deleted, even though they do not have PDUs assigned and therefore no <i>PDU Transmissions</i> can be created.
8682711552431992003	The Package Selection dialog in the Frame-PDU synthesis shows all labels and icons of artifacts.
8682711552432612003	For XCP PDU modeling, the warning message for the Frame PDU synthesis result reported in the Information View has been adapted.
8682711552435892003	<i>Nm PDUs</i> , both with and without assigned <i>Signals</i> , are considered during Frame-PDU synthesis.
8682711553096202004	The Frame-PDU synthesis does not create unnecessary <i>Frame Transmissions</i> for J1939Tp-PDUs anymore.
8682711553138491807	The Frame-PDU synthesis now keeps existing <i>PDU Transmissions</i> and <i>Frame Transmissions</i> if new <i>Signal Transmissions</i> are added.
17938311661601995	Behavior of the package selection has been harmonized between Frame-PDU synthesis started in the Model View or via signal router.
17938301216491992	The Frame-PDU synthesis now also supports multiplexed IPDUs.

Signal and PDU length calculation

ID	Resolution
17938307167352042	The length calculation for communication artifacts has been adapted for transformer-based communication: The length of a transformer header is only added to the PDU length and not to the <i>Signal</i> length.
17938309279962159	The length calculation has been improved to support <i>Implementation Union</i> data types.
17938309373292159	The length calculation for communication artifacts now correctly handles <i>Implementation Data Pointers</i> for strings on implementation data type side.
17938309408382159	The length calculation for communication artifacts now adds the correct padding for already aligned arrays.
17938309408392159	The length calculation for communication artifacts can now handle a string length attribute from the <i>SOME/IP Transformation Properties</i> .

LDF import and export

ID	Resolution
8682711552729751917	LDF Import: Scalar initial values of <i>Signals</i> are now always imported as integer.
8682711552611791998	LDF export: During LDF export the following checks are performed: > Missing <i>LIN Controller Configurations</i> for bus participants are detected. > A missing LIN master on the specific <i>Bus System</i> is detected. > Checking missing <i>Signal Transmissions</i> for a communicated <i>Signal</i> is limited to the specific bus.
8682711552061911917	LDF import and export: The handling of LIN configurable frames has been adapted. It is now possible to either order the configurable frames alphabetically during the export or they are ordered according to the order which was found during the import (configurable via a configuration properties file <code>ldf_import_export.properties</code>).

16.5.10 Hardware architecture

ID	Resolution
17938307760502050	When creating a <i>Header</i> on a <i>Component Combination</i> , the behavior depends on whether the <i>Component Combination</i> already contains child components or not. If there are no child components, a new <i>Electric Electronic</i> with contained <i>Header</i> is created. Otherwise, the <i>Header</i> is created as child artifact of the <i>Component Combination</i> .

ID	Resolution
8682711552640442102	Relocating a wire without a <i>Schematic Connection</i> from one pin to another one has caused an error. Now a dialog opens where the missing <i>Schematic Connection</i> can be created if such a wire is relocated.
17938307941342041	The default behavior of <i>Internal Input Types</i> and <i>Internal Output Types</i> has been corrected. If the attribute Contact Direction is not defined, <i>Internal Input Types</i> open to the left, and <i>Internal Output Types</i> open to the right. In this way the appearance of previous <i>Hardware Device Template Diagrams</i> and thus the appearance of <i>Hardware Devices</i> in regular diagrams is not changed. If no contact direction is set, newly routed <i>Internal Schematic Connections</i> are brought from the left side to an <i>Internal Input Type</i> and from the right side in case of an <i>Internal Output Type</i> . For <i>Internal In-/Output Types</i> , the contact direction of <i>Internal Schematic Connections</i> is determined based on their position in the <i>Hardware Device Template Diagram</i> .
17938309341102083	The calculation of the length and weight of wires and <i>Cables</i> was updated and now also considers <i>Shieldings</i> of <i>Cables</i> . The displayed results of the <i>Cores</i> and <i>Shieldings</i> are only for information and are not taken into consideration for the total sum.
8682711552432812083	Various online checks and model tree extension rules have been implemented. They now work with direct assignment of a <i>Wire Pin</i> to a <i>Wiring Connector</i> as well as with assignment via <i>Contacting</i> .
8682711553529001037	In large models containing numerous <i>Schematic Connections</i> , for example, in the Electric Circuit or Wiring Harness, the complex <i>Java Based Consistency Rule</i> "Connection between different types of logical connectors" has caused performance issues. The rule is still available but has been removed from the "Wiring Harness" <i>Consistency Rule Group</i> and is no longer executed as online check.
8682711552945132010	In the New context menu of a <i>Sensor</i> , <i>Actuator</i> and <i>Sensor/Actuator</i> , the context menu item Hardware and all submenu items are available now.
8682711553461271994	For <i>Wiring Harness Inline Connectors</i> and <i>Wiring Harness Multi Inline Connectors</i> , <i>Wire Pins</i> can be assigned to a <i>Wiring Connector</i> , and a <i>Wiring Connector</i> can be assigned to <i>Wire Pins</i> via drag and drop in the Model View .
17938294625869051	External connectors can be copied without external relations via drag and drop in the Model View .
17938307619951806	After assigning a <i>Header</i> or <i>Wiring Connector</i> to a pin, the drop-down list of the connector in the Property View is immediately refreshed. The drop-down list to select the <i>Header</i> of a <i>Header Pin</i> has received a special filter which offers the <i>Headers</i> in a recursive way.

ID	Resolution
17938307570122112	When selecting multiple <i>Schematic Pins</i> , the pin numbers of the <i>Wire Pins</i> of the <i>Schematic Pins</i> can be changed simultaneously in the Property View .
8682711552578201994, 8682711552578351994	A <i>Core Prototype</i> or a <i>Shielding Prototype</i> can be assigned to a <i>Core</i> or <i>Shielding</i> in the Property View . A drop-down list and a special filter have been added to select a <i>Core Prototype</i> or <i>Shielding Prototype</i> if the corresponding <i>Cable</i> has set the origin <i>Cable Prototype</i> .
17938309381191868	In the Property View on the Material property page, the Material Assignment table to assign and modify a <i>Material</i> is editable for a <i>Connector Type</i> . For a <i>Header</i> and <i>Wiring Connector</i> the table is read-only.
17938311321961995	The attribute Long Name was added to following meta classes and is editable in the Property View : > <i>Conventional Connector</i> > <i>Electric Power Distribution Input</i> > <i>Electric Power Distribution Output</i> > <i>Ground Connector</i> > <i>Internal Logical Connector</i>
17938286989688157	In the Property View , the General Connection Type Parameters property page has been renamed to General Type Parameters for the artifact classes <i>Case</i> , <i>CPU Type</i> and <i>Hardware Module Type</i> .
17938309371221995	The Select Connector Prototype dialog now provides a filter which supports the filtering of <i>Product Lines</i> (Local , Local and upstream , and Global).
17938308273591877	In the Create and connect new Core dialog, a new column, the Product Line column, is added to be able to select the proper <i>Core Prototype</i> . The column filter persists.
17938309327662083	In the Assign Pins to Contactings table via which pins can be assigned to cavities of <i>Plug-in Locations</i> , a dereference button has been added for the Hardware Device Pin column.
17938311665181037	In the Assign Pins to Cavities table, the check box in the Wire at Contacting column can now be activated and deactivated with a single click.
17938311697332083	In the Assign Pins to Cavities table for <i>Wiring Connectors</i> and <i>Headers</i> , a dereference button has been added for the Wire Pin and Component Pin columns.
8682711552654382112	When working with <i>Concept Fuse Relay Boxes</i> , the creation of the realizing <i>Schematic Connection</i> in the Assign Fuse Relay Box to Concept Fuse Relay Box table is now possible in the Realizing Schematic Pin column.
8682711553306161038	No performance problems occur anymore when opening the Assign Fuse Relay Box to Concept Fuse Relay Box table due to the performance improvements of the

ID	Resolution
	Artifact Picker. This especially improves the loading time of the Artifact Picker which does not interfere the performance of the Assign Fuse Relay Box to Concept Fuse Relay Box table anymore.
17938309340592083	The "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model has been enhanced with new content: > Diagram configuration with <i>Title Block</i> > Special diagram configuration with <i>Title Block</i> for <i>Electric Circuit Diagram</i> > Icons on <i>Schematic Connections</i> having distinguished bus types assigned to a <i>Bus System</i> > Added <i>Wiring Harness Multi Inline Connector</i> which separates the Motor Harness from the new Switch Harness > Added logical connection types for <i>Power Connections</i>, <i>Ground Connections</i>, and <i>Conventional Connections</i>. > Resolved the reuse of the <i>Sensors</i> "B1" and "B2" to separate artifacts. > Additional <i>Cable Types</i>
8682711552738522083	The model tree extension rules in the "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model have been reorganized and completed.
8682711553076072083	The newly implemented feature of displaying icons in labels in a diagram has been added to the "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model. This new feature is available at all bus system connections in the "Electric Circuit WH-Demo" <i>Electric Circuit Diagram</i> .
8682711553342602083	The labels of <i>Conventional Connections</i> , <i>Ground Connections</i> and <i>Power Connections</i> use the same label configuration as the <i>Bus System</i> in the "Wiring Harness Demo Model" <i>Product Line</i> in the PREEvision demo model.
17938307556552034	When importing an EPDM file containing a pin without a <i>ContactType</i> , <i>no Material</i> is created, and none is assigned to its <i>Pin Type</i> . If a pin neither has a <i>Pin Type</i> nor a <i>Material</i> , no <i>Pin Type</i> is created and assigned.
8682711552039102034	The handling of renamed connectors with identical IDs of different versions of the same component has been adapted and corrected for a custom-specific import into an import library <i>Product Line</i> .

Diagrams of the
hardware architecture

ID	Resolution
17938308152221037	When connecting a wire in a <i>Wiring Diagram</i> , the performance with respect to finding possible connection targets and displaying airlines has been improved.

ID	Resolution
1792439489051	In a <i>Wiring Diagram</i> the overlapping distance of a <i>Header</i> in a component is equal on both sides when displaying <i>Schematic Pins</i> via the Show/Hide Headers and Pins dialog. If only one <i>Schematic Pin</i> shall be displayed in a diagram with a grid of 10x10, the overlapping distance is unequal. This is caused by the 30 pixels default size of a <i>Header</i> in a <i>Wiring Diagram</i> . Unintended separating of a <i>Header</i> on one component edge and moving <i>Schematic Pins</i> when adjusting the <i>Header</i> size does not longer happen.
17938307262231804	Applying the function Split Connection on a checked-in <i>Wiring Diagram</i> correctly results in a check-out and the application of the function.
17938308923242112	In a <i>Wiring Diagram</i> , a <i>Single Wire</i> can be split when a <i>Schematic Pin</i> is dropped on it. If a naming convention is available, this naming convention is used after the drag and drop action, otherwise the suffix "_2" is added to the newly created <i>Single Wire</i> .
17938311629832081	In <i>Wiring Diagrams</i> , the pop-up bar is displayed again when selecting a <i>Splice</i> or a <i>Schematic Pin</i> .
8682711553146062099	<i>Wiring Diagrams</i> which contain a wrong label on a cable symbol, can be opened again. Creating a wrong label on a cable symbol is not possible anymore.
17938308054452083	The error highlight for cable symbols in a <i>Wiring Diagram</i> is now instantly calculated and therefore activated or deactivated.
8682711552639693065	When selecting a <i>Cable</i> (with active highlighting), the highlight behavior in the <i>Wiring Diagram</i> is equal to selecting a <i>Cable Type</i> . The pins of the <i>Core</i> and <i>Shielding</i> are highlighted as well.
8682711553124341912	<i>Wiring Diagrams</i> containing a cable symbol with a constraining object configuration can be opened without displaying an error.
8682711553270132046	Relocating a wire in a <i>Wiring Diagram</i> from one <i>Schematic Pin</i> to another which has the same <i>Schematic Connection</i> does not lead to an error anymore.
17938307169912112	<i>Wiring Connectors</i> of <i>Wiring Harness Inline Connectors</i> are properly displayed in a <i>Wiring Diagram</i> via the populate function <F8>.
17938309118222045	The error in the context of opening <i>Wiring Diagrams</i> which has caused a deadlock, has been resolved.
17938309315761037	In a <i>Wiring Diagram</i> , a component can be removed from the diagram via the shortcut <Del>.
17938301235711025	After applying the function Split Connection in a <i>Network Diagram</i> , <i>Electric Circuit Diagram</i> or <i>Wiring Diagram</i> , both parts of the split connection will show the updated connection label.

ID	Resolution
17938308840512112	In <i>Wiring Diagrams</i> and <i>Wiring System Diagrams</i> it is checked whether pins of <i>Wiring Harness Inline Connectors</i> are displayed according to their assignment to the <i>Wiring Connectors</i> of the <i>Wiring Harness Inline Connector</i> . If the pin assignment to the <i>Wiring Connectors</i> is changed, for example, as a result of the refactorings Change Wire Pins or Reflect Wire Pins , the display is repaired in diagrams as well. <i>Schematic Pins</i> with inconsistent assignment of the <i>Wire Pins</i> to the <i>Wiring Connectors</i> are removed from the diagram. The repair mechanism works temporarily. To persist the changes in the model, diagrams must be locked.
8682711553265912034	The diagram framework has been improved to correctly remove corrupt connections from the <i>Wiring System Diagram</i> .
17938307606732112	Figures for <i>Shieldings</i> are now automatically removed from system diagrams if the reference to the <i>Cable</i> or the <i>Cable</i> itself was removed, and the diagrams can be opened properly again.
17938309412512041	In the <i>Wiring Diagram</i> or <i>Electric Circuit Diagram</i> the Create or Connect a Schematic Connection dialog is not directly shown again after a <i>Schematic Connection</i> was already selected in the dialog.
8682711552335141843, 8682711552335151843	In the <i>Wiring Diagram</i> or <i>Electric Circuit Diagram</i> , a <i>Schematic Pin</i> cannot be dropped from the Model View into the diagram anymore, if the <i>Schematic Pin</i> is already displayed in the diagram or <i>Section</i> where its component is located.
8682711552437741994	Moving <i>Schematic Pins</i> on a <i>Header</i> in a <i>Wiring Diagram</i> or <i>Electric Circuit Diagram</i> is more tolerant. Even if the diagram feedback shows the edge of the component, the <i>Schematic Pin</i> is correctly dropped on the <i>Header</i> . An unintentional moving of other pins does not happen anymore.
8682711552588051843	When connecting pins in a <i>Wiring Diagram</i> or <i>Electric Circuit Diagram</i> , the airlines to possible targets also show the label of the applicable target pin. Thus, the default label is preferred if one exists. Otherwise, the first available label is displayed.
8682711553162301268	The New Component Circuit Diagram wizard and the Change Input Configuration and Change Output Configuration dialog for the <i>Component Circuit Diagram</i> now have been adapted to each other concerning the Selection of the initially displayed inputs and the Selection of the initially displayed outputs . Deselecting the check boxes of the <i>Schematic Pins</i> does not deselect the check box of the logical connector anymore. In addition, only selected elements will be displayed in the diagram.
17938307942442041	Using reference lines to enlarge components does not interfere with the routing as long as the reference line does not intersect the axis of the <i>Schematic Pin</i> or its fan

ID	Resolution
	area. In the second case, waypoints on fans and the connected segments are preserved to provoke as few changes as possible in the line routing.
8682711552502922112	Checked-in diagrams are not checked-out anymore when reusing and committing them.
17938308161071037	Canceling a previous drag and drop action prevented a committed <i>Wiring Diagram</i> from being edited. The cancel state is now correctly reset so that canceling a previous action does not affect the execution of further actions.
17938309300511877	The diagram synchronization mechanism has been corrected. Now, performing a populate action on a checked-in diagram does no longer lead to model inconsistencies. The populate action is performed successfully.

Wiring harness
autolayout diagram

ID	Resolution
17938307398262112	The mechanism behind the refactoring Create Autolayout Diagram has been improved. The algorithm can now correctly handle <i>Splices</i> that are connected by several <i>Single Wires</i> .
17938307704641914	Improved auto-layout refactoring regarding <i>Splice</i> networks connected via <i>Single Wires</i> .
17938308754632109	When creating an autolayout diagram, the <i>Section</i> in the target diagram is enlarged to the right in such a way that configuration artifacts like, for example, the Positionlist table or a <i>Title Block</i> , are positioned on the right end without causing any overlaps with the contained diagram artifacts. This behavior is independent of whether the original diagram is checked-in or not.
17938308754652109	Creating an autolayout diagram for a checked-in diagram works properly now, particularly for diagrams with <i>Title Blocks</i> containing images.
17938308772892081	When creating an autolayout diagram all labels (embedded, midpoint and endpoint labels) are displayed instantly.
17938307568522073	If referenced metrics in a label configuration could not be found or multiple metrics with matching names were found, a corresponding message is reported in the Information View .
8682711552101902036	The geometric graph algorithm within the metrics to create a model-based autolayout <i>Wiring Diagram</i> has been improved. Exceptions do not occur anymore. Other error messages have been improved.
8682711552376552036	The algorithm of handling <i>Splices</i> in an autolayout <i>Wiring Diagram</i> has been improved in case the model-based metric block has been used.

ID	Resolution
8682711552510132036	In the context of model-based autolayout <i>Wiring Diagrams</i> an error has been resolved in case wires were connected to a <i>Splice</i> on both sides of a <i>Wiring Harness Inline Connector</i> .
8682711552540612036	The autolayout <i>Wiring Diagram</i> algorithm has been modified in a way that no exception occurs anymore in a certain constellation of artifacts.
8682711552544622036	The autolayout <i>Wiring Diagram</i> algorithm is now able to process multiple connected wires and to rejoin <i>Schematic Connections</i> . Especially if wires are modeled multiple times due to variant reasons (LHD and RHD).
8682711552545162036	For the creation of autolayout <i>Wiring Diagrams</i> only propagated artifacts are taken into consideration. This is relevant for a <i>Splice</i> with only one propagated wire, for example.
8682711553036282036	In an autolayout <i>Wiring Diagram</i> the placement of fan way points of the bottom area has been corrected. New generated diagrams are correct by default. Existing diagrams need to be newly created.
8682711553036512036	In an autolayout <i>Wiring Diagram</i> an exception has been added for object configuration artifacts. This allows a refresh of, for example, <i>Title Blocks</i> if a layout restricted diagram requests a lock due to a change.
8682711553036562036	<i>Splice</i> sorting has been improved for an autolayout <i>Wiring Diagram</i> . This results in fewer unnecessary crossings of wires.

Refactorings

ID	Resolution
17938308312161029	The Set a Type from the current Product Line refactoring does no longer delete the local instance artifacts of a <i>Plug-in Location</i> if they are still in line with the newly assigned prototype.
17938309328881037	The Change Type to Shielding refactoring for a <i>Single Wire</i> into a <i>Shielding</i> prevents the selection of a <i>Cable</i> which already contains a <i>Shielding</i> in the Select Cable dialog.
17938311670362081	Sorting <i>Schematic Pins</i> via refactoring only affects the artifact on which the action was executed. Other representations, for example, in another <i>Section</i> or diagram area of the artifact are not affected by the sorting.
8682711552409022062	When executing the pin sorting refactorings on a <i>Header</i> , <i>Wiring Harness Inline Connector</i> , or <i>Wiring Harness Multi Inline Connector</i> in an <i>Electric Circuit Diagram</i> , <i>Electric Circuit System Diagram</i> , <i>Wiring Diagram</i> , or <i>Wiring System Diagram</i> , the corresponding diagram is locked now to preserve the changes.

ID	Resolution
8682711552486221868	When merging different <i>Bus Systems</i> via the Merge Bus refactoring, the assigned <i>Schematic Connections</i> are all represented by the surviving <i>Bus System</i> after the merge operation.
17938311484662112	The Reflect Wire Pins refactoring on a <i>Wiring System Diagram</i> resets the labels of the <i>Wire Pins</i> according to the label configuration of the <i>Wiring System Diagram</i> .
17938307349782112	Wires are now correctly displayed in <i>Wiring System Diagrams</i> after a refactoring from an <i>Electric Circuit System Diagram</i> .
17938293419069328	When refactoring a <i>Network Diagram</i> or <i>Network System Diagram</i> to an <i>Electric Circuit Diagram</i> or <i>Electric Circuit System Diagram</i> , an Information View entry displays all logical connectors which cannot be displayed in the newly created diagram.
17938307713042041	The refactoring of <i>Wiring Diagrams</i> and <i>Wiring System Diagrams</i> to <i>Electric Circuit Diagrams</i> and <i>Electric Circuit System Diagrams</i> has been improved regarding the size and positioning of components and their inner artifacts. Moreover, when applying this refactoring, the positioning of <i>Schematic Pins</i> was improved so that the position of pins remains the same, if possible. This ensures that the routing behaves in a similar way like in the source diagram.
17938307572791912	The synthesis of slots and cavities at a <i>Connector Type</i> no longer considers the pin numbers of <i>Wire Pins</i> . The first created cavity always starts with the cavity number 1.

Synthesis

ID	Resolution
17938307688011877	During wiring harness synthesis, the missing relation between <i>Bus Connectors</i> and the existing <i>Bus System</i> is created to prevent the creation of obsolete <i>Schematic Pins</i> .
17938307697031877	When synthesizing new <i>Cables</i> during wiring harness synthesis, the correct <i>Cable Prototype</i> is considered to create <i>Cores</i> based on the same <i>Cable Prototype</i> .
17938307570302034	A circuit synthesis on a connection with a <i>Splice</i> works properly, now.
17938308925201914	An error during a circuit synthesis which caused a concurrent modification has been resolved. The error occurred when a wire had no connection to a <i>Schematic Connection</i> and the circuit synthesis was triggered multiple times.
8682711552971212083	The settings in the Circuit Synthesis dialog are now persisted for the current session.

Object and label configuration

ID	Resolution
8682711552291062039	Labels for hardware types are now working via an object configuration. Previously, empty strings were displayed at the placeholder positions if an object configuration was present on the label.
17938311408472041	When adding <i>Hardware Devices</i> to a <i>Wiring Diagram</i> or <i>Electric Circuit Diagram</i> , or creating <i>Hardware Devices</i> in the diagrams, the labels for the <i>Hardware Devices</i> are displayed according to the label configuration defined in the Label Configuration view.
17938308131271992	Missing artifact classes for hardware artifacts have been added to the label configuration of a <i>Network Diagram</i> . A switch does not have its own object entry since it has the same meta class as <i>Active Star</i> .
8682711551845672112	Labels on <i>Single Wires</i> in a <i>Wiring System Diagram</i> are created according to the configuration in the respective <i>Object and Label Configuration Delta File</i> .

Wiring harness router

ID	Resolution
8682711552944961031	Wiring harness router: A <i>Cable</i> containing wires with different start and end pins and ending at different <i>Connector Locations</i> have caused an error during wiring harness routing. Now, the routes are checked by comparing the first branch based on the start topology artifact. If there is a mismatch, the start and end pins are swapped, and the wiring harness router can run without error. Furthermore, the variant check has been added.
8682711553142191782	Wiring harness router: In the wiring harness router wizard, the drop-down lists to select the target mapping packages have been replaced by a [Select] button to open a package selection dialog. The selected mapping packages are displayed with their corresponding paths in the model.

Variants

ID	Resolution
17938308932291038	When opening the context menu Set Workspace on a <i>Harness Variant Package</i> , the context menu now only contains the Set Workspace Harness Variant Package context menu entry.
8682711552944951031	Parallel wires in different variants lead to faulty variant propagation in the wiring harness router. If the option Identify existing artifacts which could be used multiple times without considering the variant is activated, the wire in the active variant is routed instead of a wire which is not in the active variant.

KBL import and export

ID	Resolution
17938309232772036	KBL import: When importing a KBL file, contained <i>Control points of a Center curve</i> are imported into PREEvision as a <i>3D Way Point</i> below a <i>Topology Segment</i> .
17938309368462083	KBL import: <i>Materials</i> with the same <i>Material_key</i> of the KBL class <i>Part</i> are merged during the KBL import. <i>Materials of Pin Types</i> with the key <i>Plating_material</i> are considered separately, and are not merged with the others from <i>Material_key</i> .
17938311409241806	KBL import: The KBL import is properly executed although the KBL attribute <i>Logistic_control_information</i> is longer as 10.000 characters. In such a case, a warning is reported in the Information View .
8682711552693651204	KBL import: When importing a KBL file with <i>Fuse Relay Boxes</i> not every <i>Connector_occurrence</i> creates an own <i>Fuse Relay Box</i> anymore. Related <i>Connector_occurrences</i> of one <i>Component_box_occurrence</i> do only create one <i>Fuse Relay Box</i> in PREEvision. The mappings are set properly.
17938308184671912	KBL export: The <i>Material</i> with the usage "Plating" which is assigned to a <i>Pin Type</i> , is exported to the attribute <i>Plating_material</i> of a <i>General_terminal</i> in the KBL export file. The first <i>Material</i> found with another usage is exported to the attribute <i>Material_key</i> .
17938307522901031	KBL export: <i>Wire Types</i> are properly exported during a full model export to KBL (<i>General_wires</i>), now. They are also exported if they have multiple instances of <i>Single Wires</i> , conductors and <i>Shieldings</i> but none of the <i>Single Wires</i> is contained in the export model.
17938308035221995	KBL export: During KBL export, temporary artifacts (<i>NotParsableFormulas</i>) were created for all <i>Wiring Modules</i> , <i>Harness Configurations</i> and <i>Variation Point Sets</i> in the current model scope. If one of these variant artifacts was within a write protected <i>Product Line</i> , the KBL export was aborted with an error. The KBL export now creates these temporary artifacts only for propagated variant artifacts, and it is assumed that the user does have write rights.

16.5.11 Geometry

ID	Resolution
11912	Tables and combined tables can now be moved freely within <i>Sections</i> and also into and out of <i>Sections</i> . They are now both ignored by the check that prevents artifacts to be shown twice in the same <i>Section</i> .

ID	Resolution
17938309342182036	The workspace defined on a <i>Geometry Package</i> is now considered when creating topology artifacts inside an <i>Installation Space</i> within a <i>Geometry Diagram</i> .
17938309312032083	The refactoring Set Topology Coordinates , which can be started on a <i>Geometry Diagram</i> , now also works with <i>Connector Locations</i> .
17938307346571037	The click target within a <i>Geometry Diagram</i> is now determined correctly. If a table is in the upper left corner of the diagram, it is not always selected when clicking somewhere else.
17938309328932083	The bundle diameter calculation of <i>Topology Segments</i> was improved. In addition, a new calculated label was added to the demo model.
8682711551829572039	Formatting of numbers via label configuration is possible again.
8682711551971991914	The logging of changes in a <i>Geometry Diagram</i> was improved. Commit errors caused by rearranging artifacts in the diagram are not displayed anymore.
8682711553066032036	The Show Topology Placement Condition in Component Package table can now be opened on a <i>Hardware Component Package</i> .

16.5.12 Product line engineering

ID	Resolution
17938308928012068	The creation of hierarchical <i>Assets</i> only adds the root of a tree to an <i>Asset</i> if artifacts below the root are included as well. This prevents invalid artifact assignment to <i>Assets</i> .
17938308928022068	The creation of hierarchical <i>Assets</i> now provides a detailed error message if non-versioned artifacts are assigned to an <i>Asset</i> . This eases error identification and fixing propagation rules.
17938307942792108	During a refresh operation of an <i>Asset</i> , where an already removed child <i>Asset</i> was tried to be removed again, an exception occurred. This issue has been resolved.
17938309232782082	During the revocation of an <i>Asset</i> , no exception occurs anymore if some artifacts of the revoked artifact are out of scope.
17938309246722082	A merge no longer changes the checked-in parent reuses.
17938307954151855	Non-versioned artifacts are excluded from <i>Propagate Definitions</i> to show rule modelers that these artifacts can be assigned themselves to <i>Assets</i> .

ID	Resolution
17938309365222112	The check-in validator for the <i>Asset</i> hierarchy now only checks the core/boundary artifacts of a hierarchy path, not of the sibling path.
17938311451952049	Localized attributes retain their value after delivery via <i>Asset</i> .
8682711552943021917	A new error message is provided when copying <i>Product Lines</i> via a copy/reuse clone operation where types are copied but their instances are reused.
8682711552436172108	After replacing an instance with the latest revision, the type of the instance is not referenced with a type that is located in the downstream <i>Product Line</i> .
17938307718062034	A repeated import of the same import file containing the same import data, does not check out any <i>Propagated Assets</i> anymore.
8682711552049021825	After an import with model merge operation, which has caused the name change of a core artifact, the corresponding <i>Asset</i> is checked-out.
17938309309402049	Refactoring a <i>Table Proxy</i> now also works if the <i>Table Proxy</i> is reused as an effective core artifact of an <i>Asset</i> .
17938307381192108	Metric class files are correctly loaded after several <i>Metric Packages</i> have been moved.
17938309213672101	The check-in block in the metric now returns a correct error message when the check-in validator of the <i>Asset</i> is triggered.
17938308077601877	The exception error after removing a non-existing save point when using the customized block "Update from Predecessor (multi)" has been fixed.
8682711553454762108	The cache management of the Asset Factory has been improved. The removal of <i>Assets</i> as part of an <i>Asset</i> update could have led to an exception.
8682711552015141914	In a system <i>Asset</i> , the <i>Slot Prototype</i> , <i>Slot Type</i> , <i>Cavity Prototype</i> , and <i>Cavity Type</i> for a <i>Wiring Connector</i> are propagated.
17938307739972012	The data type of primitive specifications is now included in software component type <i>Assets</i> .
8682711552410962003	During the <i>Asset</i> creation, the <i>Mode Request Implementation Type Mapping</i> and the mapped implementation data type are now propagated for the <i>Mode Declaration Group</i> . Top-level <i>Assets</i> can be built now for <i>Mode Declaration Groups</i> .
17938307304442108	<i>Asset</i> propagation of application data types includes <i>Calibration Parameter Record Layouts</i> (CPRT). This means to include the <i>Data Type Package</i> as well, as CPRTs are only versionable by a parent.
17938308077882012	<i>SWC Implementations</i> are versionable themselves. The parent is not collected anymore by the propagation rule. This prevents the unnecessary check-out of packages.

ID	Resolution
17938308194691995	Value specifications of <i>Implementation Data Types</i> , for example, for initial or invalid values, are now included in <i>Assets</i> containing the data type because they are part of the data type definition.
17938308050132012	<i>Assets</i> for software instances now pick up existing <i>Assets</i> for <i>Diagnostic Trouble Codes</i> and <i>Diagnostic Data Identifiers</i> .
17938308061592012	The <i>Diagnostic Trouble Code</i> propagation definition propagated artifacts which belong to <i>Diagnostic Event</i> . This part has been moved to the <i>Diagnostic Event</i> propagation definition.
17938308272822112	The navigation to non-integrated artifact in the Model View is now possible from the Information View , tables, or diagrams.
17938308319502112	The navigation to <i>Assets</i> via model queries, tables, diagrams, or Information View is possible now.
17938309365232112	Detailed information and improved messages are provided in the Information View in case of invalid constellations of core or boundary artifacts in <i>Asset</i> hierarchies during check-in of <i>Assets</i> .
8682711552023842023	The message in the Information View has been enhanced for the "Extract Asset to Product Line for Agreement" use case.

Asset update

ID	Resolution
17938306339461877	The incorrect revocation of the integration in foreign <i>Assets</i> during <i>Asset</i> update has been corrected.
17938307232182100	The instance which is not referenced with the <i>Asset</i> as core or boundary is not changed to the reused type after <i>Asset</i> update when the type is referenced in the <i>Asset</i> .
17938307302222052	During <i>Asset</i> update, when a child <i>Asset</i> is deleted, the parent of the updated <i>Asset</i> , for example an <i>Asset Package</i> , gets a shared lock instead of an exclusive lock like before.
17938307453881877	After an <i>Asset</i> update, too many artifacts in the foreign <i>Asset</i> were revoked unnecessarily. This problem has been resolved.
17938307469321877	The wrong check-out of foreign <i>Assets</i> after <i>Asset</i> update due to neutral changes of boundary artifacts has been corrected.
17938307555342112	The parent <i>Asset</i> is no longer considered as foreign <i>Asset</i> for the child <i>Asset</i> being updated. Thus, there is no revocation of the parent <i>Asset</i> when an artifact is referenced in both, the parent <i>Asset</i> and the child <i>Asset</i> being updated.

ID	Resolution
17938307556592082	The identification of conflicts of updated artifacts in foreign <i>Assets</i> during <i>Asset</i> update has been improved through technical optimization, for example, avoiding unnecessary hash map generation.
17938308048642101	An instance is not checked-out anymore if the type was not changed during <i>Asset</i> update.
17938309243282112	An <i>Asset</i> update problem has been fixed for the case the parent <i>Asset</i> of the <i>Asset</i> being updated has an incorrectly located core integration or boundary integration.
17938309246122082	An <i>Asset</i> update from predecessor is now possible if reused types, and their reused instances are also referenced in the <i>Asset</i> .
17938309247292082	An <i>Asset</i> update now works properly when dereferencing the type from the new revision of the <i>Asset</i> , but the instance is always referenced with the <i>Asset</i> .
17938309300481030	Updating a structural type-of instance after an <i>Asset</i> update now works correctly when multiple ports of the type were removed during the update.
17938309309392049	The replace from history logic of an <i>Asset</i> update with type change now correctly handles order-relevant composites of non-versionable child artifacts.
17938311466212112	Moving core artifacts from a deleted child <i>Asset</i> to another parent or child <i>Asset</i> is now supported by <i>Asset</i> update if the artifact is not integrated in the <i>Asset</i> to be deleted during the update.
17938311466432112	The missing check-out status of a <i>Propagated Asset</i> during the <i>Asset</i> update in the migration use case is now fixed.
17938311552722049	An <i>Asset</i> update now keeps the local reuse sequence for child artifacts of newly added core/boundary artifacts of the <i>Asset</i> .
8682711553258601030	The unintended loss of a type-of relation during <i>Asset</i> update has been resolved.
8682711553315951030	An <i>Asset</i> update can be carried out properly now, if a change refactoring to a new meta class has been carried out for a contained artifact and the related type has undergone a version change during the update.
8682711553356001806	An <i>Asset</i> update now correctly considers the tag "deny relation copy context" for <i>Product Line</i> external relations.
17938311642222049	External relations of hidden artifacts are now transferred to targets during <i>Asset</i> update.
17938308210251877	The incorrect revocation of the integration in foreign <i>Assets</i> during <i>Asset</i> update has been resolved.
8682711552632661995	The abstraction link is the only matching criterion for the core artifact of the <i>Asset</i> during <i>Asset</i> update from predecessor.

ID	Resolution
8682711552635422101	The correct error message is displayed if the user does not have the required permissions for some core artifacts during the <i>Asset</i> update.
8682711552922532113	An <i>Asset</i> cannot be updated if there is an incorrect type-of relation between the <i>Asset</i> to be updated and the updating <i>Asset</i> . In this case the <i>Asset</i> update is interrupted providing a correct error message.
8682711552964651913	After <i>Asset</i> update, an integration via move is interrupted, if the target parent artifact is checked-in or is protected as core artifact in an <i>Asset</i> .
8682711553135811806	Inconsistencies in the model have been corrected, which required a forced restart of the client, after an Undo all own Locks operation has been carried out after an <i>Asset</i> update.
8682711553770092113	During <i>Asset</i> update unnecessary artifacts have been added to the scope which has caused a long waiting time. This problem has been resolved.
8682711553548563043	During <i>Asset</i> replace from history unnecessary artifacts have been added to the scope temporarily. This problem has been resolved.
17938309028792082	Replacing <i>Assets</i> on the Version History property page via the [Replace with selected version] function or via the customized block "Asset Update from Predecessor" now sets the correct predecessor for the child <i>Assets</i> .
8682711553148011029	The relations between upstream and downstream <i>Product Lines</i> are now correctly handled during <i>Asset</i> update.
17938306638582112	Update indicators for <i>Assets</i> (exclamation mark icons) are correctly displayed on the successor <i>Assets</i> even if the successor <i>Asset</i> is out of scope.
8682711554187901030	An <i>Asset</i> update could not be executed properly, if for the predecessor artifact a meta class change has been carried out and the relation of the changed artifact has been deleted. This error has been resolved, and the <i>Asset</i> update can be executed successfully.
8682711551960381914	During the calculation of update indicators for core artifacts of <i>Assets</i> , possible abstraction cycles are identified, and no abstraction loops are created anymore.

Asset integration

ID	Resolution
17938307469611877	The conflict detection for a manual integration merge for an <i>Asset</i> with respect to an <i>Asset</i> composition has been enhanced.
17938307710392040	Improved performance for <i>Asset</i> reuse and automatic integration.

ID	Resolution
17938309246102082	Integration merge during automatic integration of an <i>Asset</i> with a checked-in <i>Asset</i> model or <i>Asset</i> package is possible, now.
17938311323391868	In case of a <i>Propagated Asset</i> the parent is checked for integration objects.
8682711552486242100	Multiple reuses of an artifact in different <i>Product Lines</i> as propagated artifacts in the <i>Propagated Asset</i> can now be integrated automatically after <i>Asset</i> update.
17938311530121029	The problem of non-synchronous reuses of <i>Asset</i> contents during <i>Asset</i> integration, which was caused by to:n type-of relations, has been resolved.

Substitution

ID	Resolution
17938309196642082	The <i>Identity Configuration</i> of the <i>Compare Configuration</i> is now correctly considered for pairing artifacts during a substitution.
17938309198152112	The memory leak problem when substituting artifacts containing many child artifacts is now solved by cleaning up the substitution cache.
17938309330402082	A substituted artifact and its <i>Asset</i> are now always deleted after substitution.
17938293430318157	An <i>Asset</i> is used from an upstream <i>Product Line</i> only if the user confirms the substitution. If the user cancels the substitution, no <i>Asset</i> is used in the downstream <i>Product Line</i> .
8682711552015412045	For an unsupported substitution of artifacts with structural type-of relations, an error message is displayed, and detailed messages provided in the Information View .
17938311553721877	In the Review and Confirm Substitution table, a matching by abstraction link has a higher priority than a matching by name.

Performance

ID	Resolution
17938307765692012	Major performance improvement for keeping the selection in large tables upon a table refresh.
17938307920221877	The performance for calculating the matching pairs for a component substitution has been improved.
17938308032222104	A severe performance issue related to detecting conflicting relations during <i>Asset</i> updates has been fixed.
8682711552337792100	The <i>Asset</i> update performance has been improved by optimizing artifact visibility checks.

ID	Resolution
17938308312202070	The performance for refreshing the Asset/Add-in drop-down list within the Asset/Add-in View after a model change, for example, an <i>Asset</i> update, has been improved.

16.5.13 Variant management

ID	Resolution
17938311664562102	Fixed, clarified, and internationalized the error messages for the translation of formulas. The error message appears for artifacts in table columns with the described object configuration if they lack the necessary relation to a <i>Pre Build Variant Condition</i> .
17938307945391801	The deletion of an active variant is now properly deactivating the variant. Also, the user interface is refreshed.
17938308086021874	The active variant decorator is now also refreshed for members of virtual folders.
17938308131472011	The meta class name of active variants is not displayed in the status bar anymore.
17938308157062039	The progress dialogue for variant activation provides more detailed information.
17938309328802011	Due to improved performance, the warning dialogue has been removed for switching active variant while diagrams are opened.
8682711552494743071	Changing the alias name of Object LHS does not affect the execution of <i>Variant Propagation Rules</i> .
8682711553111582039	Conditions that have no assignment are not considered in the guard calculation of <i>Variant Propagation Rules</i> anymore.
17938308048301875	In the VM Architecture View , the Concept Space combo box is refreshed now when opened.
17938307437301804	In the VM Template View , the content in the Alternative column is now sorted in ascending, alpha-numeric order by default.
17938307811612011	A drag and drop of an <i>Integer Literal</i> from the Artifact Picker into a <i>Post Build Variant Criterion Value Set</i> in the VM Explorer creates a reuse instead of moving it to a new parent.
17938311515802039	A tooltip on deactivated variant selection combo box in Set Content View hints to use the Artifact Picker .
17938293833629393	Checks for the AUTOSAR compliant variant management are now correctly described as <i>Consistency Rules</i> in the manual.

ID	Resolution
17938306914162107	The function Add to Active Set is consistently named in contexts menus as well as toolbar actions and tooltips.
17938311586971884	An error message informs that the function Evaluate Customer Feature to Values Map is executed on a <i>Customer Feature to Values Map</i> that is not located in a <i>Product Line</i> .

16.5.14 Functional safety

ID	Resolution
8682711551958091030	<i>FMEA Ticket</i> artifacts no longer refuse the reuse of reusable parent artifacts.

16.5.15 Change and release management

ID	Resolution
8682711552487071918	In a previous PREEvision version, the Planning Editor was renamed to Project Plan . The screenshots in the user manual have been updated.
17938307544922111	The Change history view now properly displays multi-lined strings.
17938308185512040	Artifacts that contain <i>Light Weight Attribute</i> values without an <i>Attribute Definition</i> can be opened in the Change history view without error.
17938307953401030	The Change history view now displays the life cycle state which was active when a change was made.
17938307822621030	Changes of placeholder attributes are now also displayed in the compact display mode of the Change history view.
8682711552262362100	The widget for settings dates, which is available in tables and in the Property View , now correctly saves directly typed-in changes.
8682711553143622102	When a <i>Change Profile</i> exists for a meta class, <i>Tickets</i> on which the changes are tracked are offered during the commit. It is now possible again to provide a preselection of <i>Tickets</i> depending on the meta class of changed artifacts.
8682711552270921030, 8682711552439121030	For the Comment and Chat View , hidden table columns are now handled correctly. Comments are now properly displayed.
8682711552761161918	For displaying the time frame of the Project Plan , the start and end dates of the contained <i>Work Packages</i> is considered. The displayed time frame is limited to two weeks after the latest end date of a contained <i>Work Package</i> .

ID	Resolution
8682711552985021918	In the Gantt view of the Project Plan , the end date and the length of <i>Work Packages</i> is displayed according to their spent effort and the remaining effort and is calculated based on the start date.
8682711552487061918	The resources view in the Project Plan correctly calculates the effort of <i>Work Packages</i> if <i>Backlog Items</i> are used.
8682711552944961918	The actions in the Project Management context menu work if multiple <i>Work Packages</i> or multiple <i>Planable Artifacts</i> are selected.
8682711551900442023	The German naming for <i>Artifact for Agreement</i> has been improved.
17938307536742080	In the Review Table , comments can now be added via copy and paste into the New Comment dialog.
17938307698362101	When changing a voting status, the Review Table structure is not changed. Only the visible table properties are updated.

16.5.16 Test engineering and test management

ID	Resolution
8682711551986743043	<i>Manual Test Sequences</i> can be copied and pasted in the Model View .
8682711553292981859	In the PREEvision demo model, the synchronization metrics for ASIL and ASIL Decomposed have been adjusted.
8682711551903952039	Test coverage metrics are no longer listed in the context menu of the meta class <i>Customer Feature</i> .
17938311673682023	The Test Item Coverage table has been renamed to Test Specification Coverage table. The Test Run Coverage table has been renamed to Test Execution Coverage table.
17938305542692039	The Test Explorer has been removed as default editor for <i>Product Lines</i> and is now the default editor for the <i>Test</i> artifact. Additionally, it is now listed in the context menu in the category Test .
17938311470021995	In the Test Increment Editor , the Artifact Picker , which opens in the column Planned Increment Content , only lists <i>Test Data Packages</i> that have been linked with the corresponding <i>Test Project</i> .
17938305083912110	In the Test Specification Editor , when dragging a <i>Test Condition</i> onto a <i>Test Item</i> , the proper link actions are now offered.
17938307693752049	In the <i>Test Implement Editor</i> , <i>Test Environment Property</i> artifacts can be linked with <i>Manual Test Cases</i> via drag and drop and are then listed in the editor.

ID	Resolution
17938308204822049	In the Test Engineering and Test Management perspective, the default behavior of the Test Conditions View now correctly links <i>Test Conditions</i> via drag and drop to <i>Test Items</i> .
17938309210342049	In the Test Engineering and Test Management perspective, in the Test Conditions View , <i>Test Conditions</i> linked with <i>Test Items</i> can be dereferenced by a cell action button.
17938308758952008	In the Test Specification Editor , the column with the wrong name Test Links has been corrected to Expected Result .
17938311471392049	The Artifact Picker for <i>Test Conditions</i> lists artifacts in the alphabetic order of the <i>Test Specification Library</i> name and then in the alphabetic order of the <i>Test Condition</i> name. The Artifact Picker for <i>Test Routines</i> lists artifacts in the alphabetic order of the <i>Test Specification Library</i> name and then in the alphabetic order of the <i>Test Routine</i> name.
17938311469981995	Creating a <i>Test Task</i> after deleting a <i>Test Task Package</i> is now possible without an exception.
8682711552719442102	The <i>Manual Test Sequence Synthesis</i> metric block now supports the update mode.
8682711553175121030	During the import of <i>Test Cases</i> from vTESTstudio, the links to <i>Test Items</i> is now created independently from the PREEvision project name.
17938309307872102	Missing formatted text fields have been added for <i>Test Procedure Run</i> : > Description of <i>Test Procedure</i> > Precondition of <i>Test Procedure</i> > Actions of <i>Test Procedure</i> > Expected Result of <i>Test Procedure</i> > Postcondition of <i>Test Procedure</i>

16.5.17 Rules

Consistency checks
and online checks

ID	Resolution
17938309360882112	The severity is now correctly displayed in the Consistency Check Results view if a <i>Consistency Rule Group</i> is executed via a metric.
17938307558342035, 8682711552297551918	The consistency check framework is less error-prone in case of incorrect configurations. <i>Consistency Rule Groups</i> can be executed even though empty or defective rules are included in them.
17938308324861837	Consistency checks now also support the use of localized attributes (classifier: M2MLocale).

ID	Resolution
8682711553262742113	All actions for ignoring meta classes for online checks are now hidden and can be enabled with the <code>PREEvision.ini</code> flag <code>-DshowConfiguration=true</code> .
8682711553335512102	Selecting a message in the Consistency Check Results view no longer leads to an error in the Property View .
17938307670791994	An error has been fixed that occurred after executing a commit while a diagram is open that includes online check overlays.
17938308101252101	An error which occurred during online check calculation on the server has been resolved. If locally missing class files cannot be downloaded from SVN, no empty local file is created anymore. This avoids the follow-up error "truncated class file".
17938292067722709	In the Add-ins dialog, in the Advanced settings , the new option Update consistency and online check properties is available. If deactivated, the <i>Add-ins</i> update no longer overwrites the Online Check and the Directly executable options of a <i>Consistency Rule Group</i> .
8682711553145052039	The Active option on <i>Consistency Rule Groups</i> is now considered. <i>Consistency Rules</i> are only executed if the <i>Consistency Rule Group</i> has activated the Active option.

Modeling and executing rules

ID	Resolution
17938306906001031	The context menu action Generate all/changed Rules and Logic Classes only considers rules and logic classes that are already checked-out or can be checked-out. This means, that rules that are part of an installed <i>Add-in</i> are now ignored and the customized rules can be generated via the context menu on the rule model.
17938307782272102	Rule names are no longer allowed to include spaces to improve the performance of the rule execution. The names of the existing rules must be manually corrected.
17938308953092070	The performance for a rule execution has been improved in case the same rule is used multiple times.
17938311422942102	The online check "Error in MeDeLa attributes" has been deleted.
17938311422952102	The online check "Attribute of the Object does not exists in the MetaModel" was adjusted and Java expressions in the LHS will no longer be checked.
17938311422992102	The online check "Type mismatch by attribute assign. Argument wrong." was adjusted to correctly evaluate the usage of <code>NULL</code> in enumerations.
8682711552764782039	The rule utility "AdaptivConsistentLinkUtil" is obsolete and has been removed.

ID	Resolution
8682711551987551806	The Find Suitable Superclasses action can be executed without error for objects connected via <i>FWLink</i> .
17938309409862106	An error has been fixed regarding removed rule <i>Objects</i> which could cause errors when trying to undo model changes.
17938309232552102	A double click on a <i>Propagate Definition Group</i> in the Model View opens the <i>Propagate Definition Diagram</i> of all its associated <i>Propagate Definitions</i> .
8682711552939002102	The Connect Rules to Metamodel action has been extended to also work for renamed meta classes in rules.
17938311553601810	<i>Consistency Rules</i> and <i>Query Rules</i> now also consider attribute values that are set via custom meta attribute default values.

16.5.18 Metrics

Metric framework

ID	Resolution
17938307198122101	To prevent client freezes when navigating between different explorers, canceled metric executions are no longer logged in the error log file, in the Status view, and in the Information View .
17938309247802070	The performance of metric calculations within customized tables has been improved.
8682711553052751995	The automated metric execution via ANT script now supports that both "selectedElements" and "parameters" are set simultaneously as input. If both are set, the metric is only executed once instead of twice. If both "selectedElements" and "parameters" are set, "selectedElements" overrides the first metric block below the metric executor that matches one of the following criteria: > The block is a <i>Primary Model Context</i> block. > The block is an overwriting <i>Model Context</i> block with the name "source".
17938306401312039	The error which prevented the automatic execution of a metric remotely via a batch job has been solved.
17938307556532035	Save points created by another metric block can now be used in a metric block with activated option Run as Model Operation without any error.
8682711553032622106	If a metric that is not allowed to change the model (Run as Model Operation is deactivated), attempts to change the model, an error is reported.

Metric blocks

ID	Resolution
8682711553189241914	The <i>Application Context</i> metric block works correctly if the workspace path contains spaces.
8682711553300771994	If an exported artifact has a space as the first character and the "quote" port in the <i>CSV Export</i> metric block is not used, unnecessary quotation marks are no longer added.
8682711552470462102	The <i>Open Diagram</i> metric block can now open configuration diagrams that have not yet been loaded.
17938307398282035	The <i>Render Diagram</i> metric block can now be executed with the port "renderInBackground"= <code>true</code> and integrated in a loop without producing a deadlock.
8682711552337421875	The <i>Consistency Rule Group</i> metric block no longer writes results to the Information View if the input port "postResultToInconsistencyView" is set to <code>false</code> .
17938308918662092	The <i>AUTOSAR Import</i> metric block checks if the internal loop ports are connected before executing the loop.
17938309291541792	Replace roots are correctly considered by the given deletion function of the <i>Replace</i> metric block.

Calculation blocks

ID	Resolution
17938305543852036	If a cancel status is used in a metric <i>Calculation Block</i> , the message and icon of the cancel status is now correctly shown in the Property View and in the Information View .
17938308137352036	The case of a metric <i>Calculation Block</i> 's name can now be changed without an error that prevented the user from editing the source code afterwards.
17938309196662101	The performance of the <code>deleteRefObjects</code> metric framework method used in <i>Calculation Blocks</i> has been improved.
8682711551987531806	The method <code>AttributeDefinitionUtility.setValueOfLightWeightAttribute</code> has been modified so that a new <code>OpaqueReference</code> is only created if none exists for the specified <code>Owner</code> and <code>AttributeDefinition</code> . If an <code>OpaqueReference</code> already exists, the specified value is added to the list of context artifacts (if not already included).
8682711553050722009	The utility class <code>TableSelectionUtil</code> is deprecated and should no longer be used in custom metric code.
8682711552729682106	A new method <code>getPlainTextWithUpdatedPlaceholders()</code> can be used in metrics. For more information see the javadoc.

ID	Resolution
17938311513392021	On the Implementation property page of <i>Calculation Blocks</i> , the Language is now read-only since the implementation language cannot be changed.

Metric executors

ID	Resolution
17938309379001030	The metric enablement block now correctly considers only the source context metric block of the metric executor and ignores metric context blocks that belong to the associated metric. This prevents unintentional opening of dialogs.
8682711552082621804	The <i>Source Model Context</i> is set for enablement blocks of <i>Collaboration Referable Metric Executors</i> .
8682711552654182102	Icons configured by the object configuration for import and export metric executors are now displayed in the context menu.
8682711553169792108	<i>Pre Commit Hook Metric Executors</i> can now delete artifacts that are part of the checked-in artifacts.
8682711553351132046	<i>Pre Delete Hook Metric Executors</i> are now also triggered if a connection is deleted in a diagram.
8682711551859882111	<i>Collaboration Metric Executors</i> now properly work with <i>Categorizations</i> (submenus in the context menu).
17938311333542046	If an icon has been added to the object configuration of a metric executor, it is properly displayed in the context menu entry of the metric executor.
8682711553165123054	<i>Collaboration Metric Executors</i> can now be hidden from context menus by entering their unique IDs in the Blocklists of the respective <i>Perspective Configurations</i> .
17938311685162101	<i>Collaboration Referable Metric Executors</i> can now be assigned to <i>Actions</i> via the Metric Executor drop-down list, via drag and drop, and via the Artifact Picker .

Configuration test framework

ID	Resolution
8682711552080332102	The performance has been improved for opening the Java stack trace console of <i>Configuration Tests</i> results via the Information View .
8682711552865241786	Executing an empty <i>Configuration Test Suite</i> shows an empty result in the Information View instead of no feedback.
8682711553283122041	<i>Configuration Tests</i> that change the active variant while the model includes external JAR files can now be executed without a <code>NoClassDefFoundError</code> .

16.5.19 Reports

ID	Resolution
17938306649991225	When generating a report, the default suggestion for the file name is now the name of the report.
8682711553154553071	The size of the Generate Report dialog with dynamic parts has been optimized.
17938289992398454	With the enhanced support for file attachments, pictures from the model tree can be inserted into formatted texts and be integrated into reports.
17938308047371058	No empty pages are generated in PDF reports if the report contains a table of contents larger than one page.
17938308077602101	Modifying report footers with multiple tables does not corrupt the footer after editing.
17938308273482084	The report generator now correctly inserts the content of placeholders, if the placeholder is directly preceded or followed by text.
17938309032312025	If formatted texts starting with lists are included in a report, the reports generator preserves the list order.
8682711551949012109	Reports with headings are now generated correctly if the heading is directly next to a diagram.
8682711552420042113	An error message has been improved that is displayed in case of startup problems with the report render engine.
8682711553034122105	Generated reports no longer contain an unnecessary empty space between rows if a table contains images which are anchored at a character.
17938306981511783	Large diagrams scaled to fill the whole page are now completely visible in generated reports.
17938306401312109	Report generation with diagram placeholders that have the Scale/resize option "Complete Diagram on Separate Fitting Page" as first parts in a loop now works properly.
17938309210541992	Diagrams in reports are now printed without selection highlight.
8682711552442803059	The error message "Diagrams on separate fitting pages are contained in not supported segments of the report" has been corrected.
8682711553265062034	Diagrams are now shown correctly in reports if inserted on a separate page directly after a table
17938311350701875	The lock behavior has been optimized for editing reports without active lock. Now, a lock is requested before saving the report.
17938311615982109	Application contexts in reports, that display the active variant are now able to handle if there is no active variant set.

ID	Resolution
17938311667612084	Including a <i>Report Module</i> with option Handle Empty Value set to No Value inserts the text contained in the <i>Report Module</i> without error.
8682711551701492023	When inserting a placeholder for including a <i>Report Module</i> into a report, the Include report module option report module is preselected Insert Placeholder dialog. The other options are deactivated.
8682711552088162060	<i>Model Contexts</i> are created when a placeholder is copied and pasted from a formatted text into a report.
17938311670361783	If a <i>Parameter Context</i> or another non valid context is dropped into a Report, a dialog informs the user that the context is not suitable.

16.5.20 Collaboration

Lock and commit

ID	Resolution
17938307499452049	A commit error was fixed that could occur after deleting all children of a checked-in artifact in one operation.
17938307619002035	Searching for deleted artifacts in a commit also works when many artifacts (> 25) have been deleted.
8682711551924672051	The error which occurred during a commit operation including localized attributes, has been resolved.
17938307542752101	The commit error which occurred after modeling a diagram in the <i>Logical Function Architecture</i> has been resolved through an adjustment in the synchronization between LibreOffice and PREEvision.
17938307558902035	An error that occurred after a successful commit in association with open diagrams has been solved.
17938307569122104	Canceling a commit operation works reliable. If a transaction cannot be canceled, the [Cancel] button is inactive.
17938307570102106	The cancel of a commit is now supported at any time as long as no data is written into the database.
17938307709952040	The server-side check for missing locks has been improved.
17938307850402052	A commit error in the context of the creation of a <i>Timing Path Slot</i> and an open diagram has been resolved.
17938307952991038	The commit error which has led to a subsequent forced restart of the PREEvision client has been resolved.
17938308765391029	A commit error in the context of a restart of the client and a subsequent commit has been fixed.
17938308926412106	The error handling during a commit has been improved.

ID	Resolution
17938309056901037	If no commit comment is entered in the Commit dialog although it is required as defined in the <code>PREEvision.ini</code> file, a commit via shortcut <Ctrl>+<Enter> is no longer possible.
17938311565771877	A commit error in the context of invisible reuses has been fixed.
8682711551703562106	The error handling in the context of lost commit answers from the server has been improved.
8682711551904332105	A memory problem in the context of a commit error could be fixed.
8682711552341682105	The Commit dialog can now be closed with <Ctrl>+<Enter> in case that the comment field has the focus.
8682711552398431030	A commit error in the context of an asset update has been fixed.
8682711552488831998	A bug in the context of a diagram operation and a commit has been fixed.
8682711553114101992	A commit error in the context of multiple imports of DBC files has been fixed.
8682711552770312105	Pressing [Cancel] during commit does not lead to an error message if the server is already writing into the database.
8682711552051061994	After an import, the locked artifacts outside the scope are correctly listed in the Model View .
17938307542222101	Committing after deleting an artifact of a checked-in <i>Ticket</i> is now possible without error.
8682711552636762106	In the case of an error and a necessary restart of PREEvision, the commit and update buttons are now disabled in the toolbar.
8682711552948712101	A restore does no longer cause problems during later commits.
8682711552540632107	Upon an editing conflict that causes the rollback of a changed formatted text, the respective error message now clearly states where the reverted content can be found in the Information View .
8682711552591551993	Canceling a transaction only closes the transaction dialog immediately if the transaction has not yet started running on the server. If it is already running, the client waits for the server to process the cancel request and only then close the transaction dialog.
17938308195822107	An error in the context of an OpenID Connect authentication issue and a subsequent commit has been fixed.
17938307511281031	In the case of an error during the Undo all own Locks action, no consecutive errors are produced, and the error is correctly handled.

ID	Resolution
17938311325821914	A commit error which only occurred in certain use cases has been fixed.
8682711551942702045	Deleting a <i>Product Line</i> and a subsequent commit does no longer cause a misleading and wrong error message.
17938307950681806	The validation has been corrected when committing file artifacts of an imported model that keeps revision and check-in status from the import model.
17938311316432042	A <code>NullPointerException</code> in the Commit dialog has been fixed, which occurred in a certain use case.
17938308898392109	The model is no longer inconsistent when undoing all own locks after adding a localized value to a previously unlocalized attribute.
17938308928042068	During model import, the Create new UUIDs option now keeps branch names, preventing data loss and commit errors.

Model update

ID	Resolution
17938309406321993	The administratively forced deletion of model cache files during update requests is now faster.
8682711553060562101	The client is not restarted during a model update if this is not necessary.
17938311429192105	A progress informs the user if an update cannot be delivered because someone is currently updating the update cache.
17938288852362687	Large updates requested by many users does no longer lead to memory problems.
17938309307861993	During the update of the model cache file on the server, the old model cache file is deleted after the new model file is created completely.
8682711552770262049	Update errors have been fixed that were caused by updates that contain type changed artifacts which also have been checked in.
8682711553259651914	The update of local copies of managed files is now working for every update use case.
8682711553162912099	The localization cache is initialized when loading a server model for the first time.
8682711552539532107	An automatic model update ends the editing mode in the Model View , for example, when editing a name. The value entered so far is maintained and a message is reported in the Information View .
8682711551924392049	The behavior has been improved for updating many artifacts to the latest revision.
8682711553661701896	Managed files are correctly updated when merging a model update during server-side model search.

Check-out and check-in

ID	Resolution
17938311668152106	The context menu texts of the lock and the check-out actions have been unified.
17938300811081037	A check-out operation which requires loading missing artifacts to the active scope can now be executed properly.
8682711552760301027	The check-out of two reuses does not lead to a check-out into the same branch anymore.
17938309028792099	A bug has been fixed in the context of disappearing <i>Title Blocks</i> in diagrams during check-out.
8682711552417741914	A problem in the context of a check-out of <i>Sender Receiver Interfaces</i> and reuses has been fixed.
17938307685382111	The undo operation for branch name changes of a <i>Product Line</i> has been corrected.
17938308767312111	It is now possible to use a <i>Uniqueness Cache</i> to set the attribute of a new artifact to a unique value while executing a check-in without a prior commit of the artifact.
8682711552914332034	The check-out of one diagram does not trigger the change of the life cycle of a reused diagram.
8682711551844802100	The automatic check-out during editing an artifact now works even if the artifact has invisible reuses.

Change history and replace from history

ID	Resolution
8682711551986711045	A Replace from history action of checked-in artifacts will no longer block other users from locking.
8682711551986751045	Checked-in reuses are no longer locked after restoring them during a Replace from history action.
17938311715842101	Performing a distinct database query for each artifact is avoided now, which was created during a Replace from history action. One call for the root of the replaced tree is sufficient.
17938311670622106	When types are deleted during replacing with another version, all artifacts that use that type are now automatically checked out as well.
17938311512842101	Opening the Change History on an artifact no longer reports errors in the Information View .
8682711552982462049	The Change History correctly displays changes for artifacts that only changed a specific relation.

Life cycles

ID	Resolution
17938307377652109	The life cycle is correctly created during the creation of a diagram even when the parent artifact is checked-in.
17938309273772106	The life cycle of an artifact can be changed via the life cycle icon displayed in table cells.

Scopes

ID	Resolution
8682711553135471994	If a scope activation is canceled, then the client goes back to the scope definition mode. If a scope change is performed and canceled, then the client tries to reactivate the last scope or otherwise goes into the scope definition mode.
17938309312332106	If objects outside the active scope must be loaded as part of a delete operation, this no longer fails even if the objects are read-only.
17938309409852106	An update error in the context of invisible artifacts which are out of scope has been fixed.
8682711553114101998	Fixed an issue, so that the highlighting in the Property View works properly for artifacts out of scope.
8682711553662561030	With the <code>PREEvision.ini</code> setting <code>-DInstallationMode=true</code> , partial model support is deactivated.
8682711552656332079	Artifacts do no longer appear as out of scope when they are newly created under parents that have been moved inside the scope.
17938308311612070	Visibility checks for scopes have been optimized.
17938308312192070	The performance for filtering out-of-scope artifacts in update use cases has been improved.

Client startup, login, shutdown, and cache

ID	Resolution
17938307701242098	Closing the client has been improved, so that an auto-update is not executed during closing the client, which could have led to errors during the operation.
17938307670771994	The login into the PREEvision client has been optimized. No unusually long waiting times occur anymore after closing a project and clearing the client cache.
8682711551970842106	In case of a failed login when starting the PREEvision client, the error message displayed has been improved.
17938309285451993	If client and server are incompatible, no further reconnects of the client are executed to avoid a server overload.
17938309381451026	Appropriate error messages are displayed if the client cache cannot be cleared.

ID	Resolution
17938309339172036	Fixed an issue which might have been occurred due to client cache corruption after clients heap limit had been reached.
8682711553062122077	The performance has been improved for the very first PREEvision startup.

Historic model versions

ID	Resolution
17938311667422203	Model comparison and loading a historic model version now also requires that the client has set the flag <code>-DloadCompleteHistoric</code> <code>ModelVersionAllowed = true</code> . This prevents to unintentionally start these operations, which cause a high CPU and memory load on the application server.
17938309376442101	To avoid loading historic models during commit and to improve performance, the default value of the historic sub model cache size property has been raised from 100 MB to 2000 MB.
17938309247792101	A compare with historic versions that have changed "type of" artifacts is possible now.

Error handling

ID	Resolution
17938309359511026	When opening the Search dialog while the UQR model is being initialized by another user, only a single error dialog is shown.
17938309311002049	The message that is displayed for missing external relations during copy or reuse has been improved.
17938307707912040	The error handling during network problems has been improved.
17938309312412106	An error in the context of a delete operation of a subtree with contents of an invisible <i>Asset</i> has been fixed.
17938307697002107	Creating mappings is now allowed if one of the mapping participants is writeable.
17938309375802076	If client and application server are incompatible, no further reconnects of the client are executed to avoid a server overload.
17938311623422049	The logging has been improved to obtain more information in case that an error due to a branch UUID and an undo operation occurs again.

Performance and memory improvements

ID	Resolution
17938308245502070	The performance of collaboration operations has been improved.

ID	Resolution
17938305534681806	The performance has been improved for loading the version history and replacing with the latest revision for multiple artifacts.
17938307402541037, 17938308084021038, 8682711552709492106, 8682711553092412106, 8682711551998181877	The performance of loading the version history has been improved.
17938307682631045	For a better performance during export, all needed formatted texts are now loaded with one server call.
8682711552494802052	The performance of modifying hidden artifacts has been improved.
17938308936031995, 17938309379732034	The performance of commits with many reuses has been improved.
17938309054681993	The performance of calculating artifacts belonging to a scope has been improved.
17938309373521993	A performance problem with updates after very large commits has been resolved.
17938308312542070	The performance of large commits and updates has been improved.
17938309373611993	The upload of data to the staging server has been improved.
8682711552430311993	The performance has been improved for the case that many clients must reload missing artifacts from the server, for example, because of changed scopes.
17938311331251045	The performance of a data check in the database has been improved.
17938309325392101	The performance of the Remove Locks... action has been optimized.
17938311379901858	The performance of unloading temporary scopes has been improved.
17938308054592108	The performance of checking for foreign locks has been improved.
17938307789452108	The performance of the selection propagation in the Check-out view has been improved by only selecting the first occurrence.
17938307692052108	The performance of check-out and lock operations that require an update has been improved.
17938309307121993	The memory usage has been reduced by avoiding the allocation of unnecessary memory during iteration through the model.
17938309325521993	The memory need when acquiring many locks has been reduced. In addition, a corresponding warning dialog is displayed.

ID	Resolution
17938309336512070	The memory need on the application server has been reduced.
17938311350731045	The performance of filtering out-of-scope artifacts from update deltas has been improved.

Server API

ID	Resolution
8682711552919282203	Error codes and messages have been updated in the operating manual.
8682711553356442203	In the API server logfile, the misleading log output "The contextId is null!..." is suppressed if no error occurred.
8682711552516602076	When accessing artifacts via the server API, the following attribute names in the JSON response have been renamed: > "Branch Name" to "branchName" > "Branch UUID" to "branchUUID" > "Revision" to "revision"
8682711553135662203	The logging has been extended with error messages to indicate the cause why an HTTPS connection from the API server to the staging server fails.
8682711551999032203	For use with the API server, the standalone license server version 2.0.8 or 3.0.0 must be used.

16.5.21 Administration

Authority model

ID	Resolution
8682711553103513013	The Model View in the authority model uses the same sorting as the Model View in the E/E model.
17938307614921806	Local changes in the authority model invalidate and refresh the local authority-related caches of the client.
17938307688261029	In the authority model, <i>Projects</i> with the same name can only be created once, independently of the case-sensitivity. For example, if "EEA_MODEL" exists, "EEA_model" cannot be created.
17938309243351806	In the <i>Administration</i> , artifact permissions can be set on all packages via the Security... action in the context menu.
17938311633293043	Changes to client super roles in the authority model are now correctly recalculated when the authority model changes.
8682711552451332048	The Excel Export action has been assigned to the "Excel Export" <i>Authority Group</i> in the authority model.
8682711552770381992	Import and export actions are removed from the "All Contributions" <i>Authority Group</i> .

ID	Resolution
8682711553215302039	All rules in the default authority model are compilable and generated.
8682711553052091806	The last modification date and the last modification user are not updated if the user has no access rights on the affected artifacts.

User, model, and license administration

ID	Resolution
8682711551851241993	The client-side execution time of the function and performance test has been reduced.
8682711551851261993	The "Update" test case, which is executed during the function and performance test, is executed without error.
8682711552946321030	During the model initialization, the file IDs of reused <i>File Attachments</i> are regenerated correctly.
8682711552716941993	When anonymizing a model, commit comments with a size over 2000 bytes can be handled correctly.
17938311716372203	Removing the Administrator option of the technical PREEvision user is no longer possible.
17938309386342076	In the User Management view, the new column Authentication type is available.
8682711553521872101	Creating a <i>Resource</i> in the <i>Administration</i> no longer displays a metric error.

Administration panel

ID	Resolution
8682711552404062076	The "Server Control Panel" has been renamed to "Administration Panel".
17938311723321993	A performance problem in the graphical user interface of the administration panel during backup has been resolved.
17938309348801993	The administration panel can now be used in combination with WebSEAL.
8682711552680791036	With the administration panel, remote operations are possible on all PREEvision 10.0 versions.

Operating

ID	Resolution
17938311659832106	Bug report errors are now reported to the Information View instead of via pop-up error dialog.
8682711553019971993	The start-up of the application server is stopped if the database server is incompatible.
8682711552868691993	The server startup error which occurred after preparing the model for migration has been resolved.

ID	Resolution
8682711551845172054	The configuration of ElasticSearch has been changed so that backup and restore of the data is possible.
17938309285461993	An exception in the server log file is prevented in context of the monitoring functionality.
17938309325131993	The logging on the application server has been improved and reduced for the use case that a large update shall not be delivered to the client.
17938307346702105	Several log level severities have been reduced to "trace" for the staging server log. In this way, administrators can reduce the size of the log file by increasing the log level.
8682711553356001993	The <code>NullPointerException</code> that was reported in the server logfile during model initialization has been fixed.
8682711553103513013	The critical security gap (Log4Shell), which has been reported for the Log4j Java library, is closed. The Log4j Java library, which is used in the PREEvision client, has been updated to version 2.17.1. For further security information, refer to www.vector.com/security-advisories/log4j .
8682711553334321995	During start-up of the PREEvision client, the <code>ClassNotFoundException</code> for the class <code>IntegerHexVerifier</code> is no longer reported in the client log file.

Add-ins

ID	Resolution
17938306701441804	<i>Add-in</i> propagation has been extended to cover the path from table through row and cell calculation to metric executor.
17938307281452101	Perspectives are contained in <i>Demo Add-ins</i> .
17938307345131031	A client freeze has been fixed that occurred when the Lock dialog was displayed during <i>Add-in</i> installation.
17938307348671036	Product <i>Add-ins</i> have been updated to use a new type of value for <code>FRAME_LINE_PATTERN</code> in the object configuration.
17938307435652023	After deinstalling <i>Add-ins</i> , empty packages are also removed from the <i>Administration</i> .
17938307511381031	The check for conflicting overlapping in <i>Add-ins</i> during check-in is now only applied to <i>Add-ins</i> that are in the "ready for delivery" state.
17938307708432101	The <i>Add-in</i> propagation has been extended for internal metric loops. In this case, the <i>Add-in</i> propagation propagates the metric blocks inside the internal metric loop logically in backward and forward direction, while the standard propagation for metrics only propagates backwards.

ID	Resolution
17938307747942011	The installation of <i>Add-ins</i> is also possible now if there are still source codes in the target model which are not checked-in.
17938307763321028	Metric source codes are no longer compiled during <i>Add-in</i> installation.
17938308161532039	For the installation of <i>Add-ins</i> with <i>Diagram Configurations</i> , a cache has been added for the evaluation of <i>Life Cycle</i> transitions, and the filter evaluation for <i>Diagram Configurations</i> has been improved.
17938308176611028	The performance of calculating locks has been improved when many artifacts are checked-in during an <i>Add-in</i> installation.
17938308189782039	If metrics are compiled when creating an <i>Add-ins</i> delivery file, code attributes of the source codes are initialized before. (Same behavior as when a compilation is triggered manually).
17938308224501036	When the database storage is full, PREEvision does not retry to apply statements but give the user feedback that the changes were rolled back.
17938308279222040	Out of memory exceptions during <i>Add-in</i> installation are now handled with a dialog (default handling).
17938308314832040	The [Install Add-Ins] button is hidden when a non-administrator license is selected.
17938308324721837	The <i>Add-in</i> propagation now includes result metrics of rules.
17938308763401031	During <i>Add-in</i> installation, the property of files is correct when updating existing files to a newer version.
17938308938691995	When installing default <i>Add-ins</i> , no test data is installed anymore.
17938309027981031	When installing <i>Add-ins</i> , technical suffixes in branch names are not corrected.
17938309281081036	Artifacts that are marked as read-only/write-protected do not cause an abortion of the <i>Add-in</i> installation anymore.
17938309283122011	Two <i>Add-ins</i> with the same class files (source code or rules) can now be customized together.
17938309359001028	Reuses, that cause problems in the <i>Add-in</i> installation, are reported in the Information View , and detailed information on debugging is written to the log file.
17938309360932011	Uninstalling customized <i>Add-ins</i> is possible now. No external relations are copied anymore while customizing an <i>Add-in</i> .
17938311324841806	When creating an <i>Add-in</i> delivery file, it is checked whether <i>Add-ins</i> reference incorrectly reused <i>Assets</i> .

ID	Resolution
17938311350741995	The <i>Add-in</i> propagation has been extended for multi-valued attribute definitions.
17938311369191025	If customized rules and metrics need an update after an <i>Add-ins</i> installation, appropriate information for the relevant rules and metrics is reported in the Information View .
17938311481501806	Demo content has been removed from the "Diagnostic Design" <i>Add-in</i> .
17938311608391036	For the installation of <i>Demo Add-ins</i> , the branch label for artifacts mapped by the model structure during the installation is correctly adapted, for example, source <i>Sets</i> contained in the <i>Rule Models</i> .
17938311608441036	Obsolete <i>Add-ins</i> are ignored when checking for foreign branch suffixes.
8682711551905512039	For refused check-in of <i>Add-ins</i> , the reporting in the Information View has been improved. Errors / warnings on artifacts remaining in the "To-integrate" virtual folder of an <i>Add-in</i> can be customized.
8682711551929232039	<i>Add-ins</i> get the correct <i>Add-in</i> branch name when they are checked-out alongside their parent artifact instead of taking the branch name of their parent.
8682711551944152039	<i>Add-ins</i> which have lost their branch name in the <i>Add-ins</i> model are not uninstalled.
8682711551967801865	Rules in customized <i>Add-ins</i> can be updated again.
8682711551969021992	After an <i>Add-in</i> installation, all installed files are contained in the saved E/E model.
8682711552087942102	Branch and revision are ignored when propagating files using Property- or XML-file links.
8682711552442492039	Versionless UUIDs are now used to refer to <i>Query Rules</i> and the object configuration of metric executors.
8682711552473182023	The Customize and Update actions are only offered in the context menu of <i>Add-ins</i> if the installation mode flag is set on the client.
8682711552591633046	The check-out dialog is shown instead of an exception when a checked-in <i>Perspective Configuration</i> is customized.
8682711552611802041	If the option Compile Metrics when creating an Add-Ins delivery file is selected and the creation of an <i>Add-ins</i> delivery file fails due to uncompileable source codes, an error message is posted, and the error is reported in the Information View .
8682711552656692011	The <i>Add-in's</i> check-out status has been included in the <i>Add-in's</i> installation information reported in the Information View .
8682711552708981808	The Add-ins installation wizard displays an error when a check-in is terminated due to missing trace assignments.

ID	Resolution
8682711552708991808	<i>Add-ins</i> and artifacts referenced by <i>Add-ins</i> do not get checked-out to the default branch if their current branch name contains an index.
8682711552721302102	When adding a <i>Diagram Configuration</i> as core artifact to an <i>Add-in</i> , the constraints of a <i>Legend</i> are propagated.
8682711552942042039	The error information during <i>Add-ins</i> installation has been improved to identify the artifacts which have caused the problem.
8682711552942141225	When customizing an artifact affects just one <i>Add-in</i> , the Add-in selection dialog gets skipped.
8682711552945131999	Versioning such as "Customizing-1.2" can now be used in the branch suffix of <i>Add-ins</i> . For this purpose, when checking out <i>Add-ins</i> , the branch suffix check ignores numbers and special characters.
8682711553036271808	Customized metrics with wrong relations between <i>Source Code</i> and <i>Calculation Block</i> have been removed from the model.
8682711553138523013	The <i>Add-ins</i> installation commits with the comment "Add-in Installation/Update".
8682711553142392078	For artifacts that are moved to an <i>Obsolete Add-in</i> , all relations are dereferenced from the artifacts that are part of the original <i>Add-in</i> . Relations to singletons and type-of relations are not dereferenced.
8682711553171832041	<i>Add-ins</i> which contain other <i>Add-ins</i> as core artifacts, are not deleted during an <i>Add-ins</i> update.
8682711553175122101	Update of customized <i>Add-ins</i> now detects moved children under root core artifacts during on all hierarchy levels, not just direct children.
8682711553183212101	During an update of a customized <i>Add-in</i> , singleton artifacts are not reused but just referenced by its core/propagated core. If singletons contained in the core/propagated core of the customized <i>Add-in</i> are not part of the predecessor <i>Add-in</i> , they are dereferenced by the update.
8682711553215373046	While updating a customized <i>Add-in</i> without a propagated <i>Add-in</i> , a propagated <i>Add-in</i> is created on-the-fly if required.
8682711553350992039	Improved robustness during <i>Add-ins</i> installation: reuses are repaired during the installation.
8682711553352382039	Improved robustness during <i>Add-ins</i> installation: reuses are repaired during the installation.
8682711553559431031	The Add-ins dialog has been extended by an additional column that displays the currently installed version and build number of <i>Add-ins</i> .
8682711553569842039	The initial value of the Update consistency and online check properties flag of the Add-ins installation wizard can now be specified.

ID	Resolution
8682711553603002101	The performance of merging models has been improved. This also improves the performance of the <i>Add-in</i> installation and other imports like ReqIF.
8682711553632561202	Installing customized <i>Add-ins</i> no longer causes a reuse repair error.
8682711553743272039	The Build Number of an <i>Add-in</i> is only incremented if the <i>Add-in</i> is allowed to be checked out in model.
8682711553977732068	Default markers for attributes are considered during <i>Add-in</i> installation.
8682711553977802068	Fixed handling of reuses when an <i>Add-in</i> installation changes parts of reuses and adds new parts to reuses.
8682711553986332068	During <i>Add-in</i> installation, model consistency checks for reuses are correctly applied.
8682711554045542023	An inconsistency in the "Test Data Management" and "Test Analysis" <i>Add-ins</i> that could cause errors when customizing or installing these <i>Add-ins</i> has been fixed.
8682711554395792068	A false positive error that could occur during <i>Add-in</i> installation has been fixed.
8682711553437962036	A new entry in an object configuration of an <i>Add-in</i> is written to delta object configuration and no longer changes the default object configuration.

OpenID Connect

ID	Resolution
17938307346581993	During OpenID Connect authentication, better feedback is provided to the user via the progress dialog.
17938307346591993	It is now possible to log into a middleware license server using OpenID Connect authentication when the middleware has disabled model access.
8682711553462021993, 17938307662891993	Login to the administration panel via OpenID Connect is supported, now.
17938307664061993	In the <code>deploy.properties</code> file, a bug has been fixed in context of the <code>openid.access_token.verifcation_interval</code> parameter, which defines the time interval in seconds after which the access token on the server is verified against the identity provider.
17938307953051993	The logging for OpenID Connect has been improved: > Logs are now printed correctly. > If OpenID Connect debug is activated, information on successful token refresh is added.
17938309286771993	In case the OpenID Connect login is not possible via the administration panel, it is possible to log in with a username and password if Simple Authentication allowed is activated for the user.

ID	Resolution
17938309342351026	A client with a system time that is ahead the server system time by up to ten minutes can use OpenID Connect authentication again. A system time delay of 5 seconds or more is logged in the client and server log files.
17938311326001993	A sporadic problem in the context of a login with OpenID Connect has been resolved.
8682711552052592020	In the administration panel, simple authentication can also be used for connecting to the remote server to perform remote checks, backups, and migrations.

16.5.22 Installation

PREEvision client

ID	Resolution
8682711553296521993	Registering a PREEvision client in the Windows registry is now possible without Windows administrator rights. The <code>register_locally.bat</code> can be executed to register PREEvision in the local registry.
8682711552274692017	In the PREEvision client, the file <code>jre\lib\security\cacerts</code> is no longer deleted. Instead, a password is set for this keystore.

PREEvision server components

ID	Resolution
8682711553279432017	In the <code>deploy.properties</code> , most properties have been renamed according to a unified naming scheme.
8682711552762882054	The <code>Monitor.DataStorage.Transport.Port</code> of the monitoring server has been changed to a single port 9300, instead of a range 9300-9400.
17938307711702203	The default port of the monitoring data storage can be configured in the <code>deploy.properties</code> .
8682711552942592017	Apache Tomcat settings are adapted and configurable by the <code>deploy.properties</code> .
8682711553279622017	The <code>MessageBrokerJdkPath</code> property was removed from the <code>deploy.properties</code> . Instead, the <code>tomcat.jdkhome</code> property is used also for the messaging application.
8682711553279652017	The unused properties <code>webapp.disp.name</code> and <code>webapp.descr</code> were removed from the <code>deploy.properties</code> .
8682711553338922017	Starting Apache Tomcat as a service may cause crashes of the Java Virtual Machine. By default, a heap dump is created if the JVM crashes, which may lead to large amounts of data on the server.

ID	Resolution
	The following parameter should be set for the startup of Apache Tomcat to deactivate the creation of a heap dump when the Java Virtual Machine crashes: <pre>-XX:-CreateCoredumpOnCrash</pre> The parameter is automatically set in the <code>setenv.bat</code> and <code>setenv.sh</code> when building preconfigured Apache Tomcats.
8682711553518902203	For security reasons, you should deactivate that Apache Tomcat shows too much server information. In the <code>server.xml</code>, within the <code><Host></code> definition, add the following line: <pre><Valve className="org.apache.catalina.valves.ErrorReportValve" showReport="false" showServerInfo="false" /></pre> When building preconfigured Apache Tomcats, these parameters are automatically set in the <code>server.xml</code>.
8682711553147990000	To avoid security vulnerabilities, dependencies to Jetty have been removed in all server components.

16.5.23 License

ID	Resolution
8682711552970552203	The connection data to the license server defined in the <code>PREEvision.ini</code> file is completely and properly taken over in the Choose a license from server dialog.
17938307762112076	Connecting to a standalone license server with enabled OpenID Connect authentication is working properly now.
8682711553292351993	License server connection data is logged correctly in the log file.
17938311333222054	The license dialog no longer freezes while the license check is performed. The license dialog provides a progress bar with which running actions can be canceled.
8682711551701471918	Users with the "Requirements and Test Manager" license can now use explorers.
17938309310072101	The Administration actions Create Performance/Benchmark Report... and Network Performance Test are now license-independent and are available for all users.
8682711553089582203	With a PREEvision viewer license, access to the General preference pages is possible.
8682711552553541998	When importing a model, artifacts that are children of artifacts, that are not available because of license restrictions are now ignored
8682711553140731030	When using a PREEvision viewer license, the highlight for write-protected artifacts in a diagram is disabled.

ID	Resolution
	With this license type write-protected artifacts are no longer highlighted (background color + alpha value). In addition, the highlight option was removed from the highlight toolbar menu and the section for this highlight was disabled in the preferences. Other license types are not affected by this change.
17938308314432040	An incorrect behavior of importing invisible artifacts that occurred with restricted licenses has been fixed.

16.5.24 Backup, restore, and migration

ID	Resolution
17938308273601036	For server-side restore in the administration panel, migration-relevant information is cleared to release the memory after the migration.
17938311512221036	Missing backup directory configurations in the administration panel do not lead to failed remote migrations anymore.
8682711553591561036	In the administration panel, determining the model versions for model matching during migration has been improved.
8682711553591551036	In the administration panel, if the user is forced to log out during model migration, the user can log in again and proceed at the same page from which he was logged out.
8682711552763881993	In the administration panel, remote model preparation can be executed without string limitation of 2 GB.
8682711553175121036	If Finalize Model Preparation is executed via the administration panel on a remote 10.5 or 10.0 server, the maintenance mode is automatically activated.
8682711553339781036	In the administration panel, the Job Details display the correct model preparation information.
17938307545591036	A server-to-server migration problem was resolved. The migration is executed with disabled authority management.
8682711552038941036	An error has been fixed which caused aborting a server-side restore.
17938307953192076	A backup is possible now, even if the SVN gateway is not available.
17938311667532076	In the PREEvision client, backup and restore actions are only possible with a PREEvision Architect license. If no PREEvision Architect license is used for backup or restore, an error dialog is displayed.
8682711552472461036	The restore is processed properly without aborting, which was caused by an unusual model constellation.

ID	Resolution
8682711554032111036	Incremental migration no longer causes a <code>NullPointerException</code> .
8682711553092622020	The performance of the restore has been improved for restoring large commits.
8682711553122222020	The performance of the restore has been improved for certain model constellations.

Data migration

ID	Resolution
8682711553575302070	The error which has caused a missing commit history after a remote backup or remote restore has been fixed.
8682711552631431806	Fixed migration of <i>Perspective Configuration Models</i> containing <i>Tables</i> .
8682711553613911993	An error in the context of restoring formatting texts of an anonymized model has been fixed.
8682711553554171036	An error in the migration has been fixed where incorrect UUIDs were calculated for <i>SOME/ IP SD Server Event Group Timing Configurations</i> .
8682711553632432020	An error has been fixed where a newly created <i>Application Endpoint</i> , <i>Socket Address</i> and <i>SOME/IP SD * Event Group Timing Configuration</i> might cause a migration to fail.
8682711553145911024	During migration, the relation between <i>Process Design</i> and <i>Process</i> is set.
8682711553500611036	<i>Socket Connection Bundles</i> contained in generic packages are correctly migrated.
8682711553509502041	Blocklist entries of <i>Perspective Configurations</i> of a PREEvision 10.0 installation work after migration to PREEvision 10.5.

16.6 Known issues

Known issues in PREEvision 10.5

You will find the important known issues in the following table. Please note that some issues depend on specific configurations, views, or models.

ID	Known issue
8682711685314021995	When formatted texts are edited, all <i>Model Contexts</i> below the associated artifact are automatically refactored to <i>Placeholder Contexts</i>. Additionally, orphaned <i>Placeholder Contexts</i>, which are not used as placeholder in the formatted text, are deleted. This may lead to data loss if the <i>Model Contexts</i> are not used as placeholders in formatted texts, but, for example, to define relations between model artifacts. These <i>Model Contexts</i> are deleted when any formatted text of the artifact is edited. Workaround: For artifacts that contain <i>Model Contexts</i> that are not used as placeholders in formatted texts: 1. Before editing any formatted text of the artifact, move the <i>Model Contexts</i> to another artifact. 2. Edit the formatted text. 3. Move the <i>Model Context</i> back to the original artifact. The issue has been resolved in PREEvision 10.8. Therefore, it is highly recommended to perform a minor release update to PREEvision 10.8.
8682711554031661036	In rare cases, the restore fails with the following error message: "Error while executing model version <version>: Newly created reuses do not match existing reuses." Contact the Vector support for getting instructions on how to proceed with the migration/restore.
8682711554406702203	If the PREEvision administration server is installed under Linux, models cannot properly be initialized via the administration panel. The initialized model does not contain any files. Workaround: Initialize the model via the PREEvision client.
8682711554380412077	The <i>Consistency Rule Group</i> "Metric-Editor" under "Administration" "Rules" "ConsistencyRuleModel" "Product" "L230_Verify_Model" "L233_Metric_Framework" "Javabased Online Checks" "Metric_Editor" must not be used as an online check. It can lead to an error causing the deactivation of the server-side online check framework. On the online check status icon in the status bar of the client, the following tooltip is displayed: "Error during online check calculation on the server. Please contact an administrator."
17938307791212069	The AUTOSAR export is interrupted if artifacts to be exported are identified which are out of scope. The artifacts out of scope must be added to the scope temporarily. The export cannot be properly finished until all required artifacts which are out of scope are added to the scope. This means, adding artifacts to the scope

ID	Known issue
	must be repeated several times until all artifacts are added to the scope. It may be very time consuming until the export can be finally executed.
8682711552649222003	In the import wizard for an AUTOSAR import with merge, the aggregation of changed and deleted artifacts is not always feasible. The filter settings for the model merge do not always work reliably, and the selection of artifacts in the model trees does not have an effect on the update mechanism.
8682711554383191029	Some parts of the new feature for handling initial values are currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554417372014	Some parts of the new feature for configuring the content assist are currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554417442013	Some parts of the new feature for the automatic creation of application data type to implementation data type mapping, which is used for data types in the new <i>Primary Editors</i> is currently located in a product <i>Add-in</i> . This prevents a customizing of the feature. In case the default configuration is not suitable for a specific project, contact the Vector support for a workaround.
8682711554173803043	When selecting more than one table cell of a text table in the LibreOffice editor via mouse select, and then reducing the selection to one cell and releasing the mouse button, the LibreOffice editor crashes. Workaround: Instead of reducing the selection via the mouse, use another selection method, for example, via keyboard.
8682711553529641783	When manually adjusting the size of a text table in the LibreOffice editor, for example, decreasing the width of the text table, this change in the formatted text leads to a schema violation during ReqIF export, and the formatted text containing the text table is not exported. If the XML schema validation option is activated for the ReqIF export, detailed information on the schema validation is reported in the Information View .
8682711554639042025	When defining placeholders with <i>Query Context</i> for reports, the defined localized language is not displayed in the report.



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