PI 3.10.5 Prime Infrastructure

CISCO PI 3.10.5 Prime Infrastructure Instructions

Contents

CISCO PI 3.10.5 Prime Infrastructure

This chapter provides information on migrating data and important points related to migrating Cisco Prime. Infrastructure to Cisco Catalyst Center using the Prime Data Migration Tool Update 06.

Prerequisites for Using Prime Data Migration Tool Update 06
This section lists the prerequisites before using the Prime Data Migration Tool Update 06

- Ensure that you run the Cisco Catalyst Center AURA command line tool. The AURA tool performs a variety of health, scale, and, upgrade readiness checks for the Cisco Catalyst Center and the rest of the Fabric network.
- AURA ensures that Cisco Catalyst Center and its component services are all healthy and available before you start a migration. For more information on using the Cisco Catalyst Center AURA tool, see Enhanced Visibility into the Cisco Catalyst Center using AURA.
- Ensure that you run the Cisco PDART (Cisco Prime Infrastructure Cisco Catalyst Center Assessment &
- Readiness Tool) analyzes a Cisco Prime Infrastructure deployment and assesses whether Cisco CatalystTheThe
- Center supports the current deployment. For more information, see Cisco PDART – A Cisco Catalyst.
- Center Readiness tool for the Cisco Prime Infrastructure.
- Prerequisites for Using PI 3.10.5 Prime Data Migration Tool Update 06

Ensure that

- You install Cisco Prime Infrastructure 3.10.5+3.10.5 System Patch.
- You have Root or Super user access privileges of Cisco Prime Infrastructure.
- You have access credentials oftoisco Catalyst Center.
- Refer to the Cisco Prime Infrastructure and Cisco Catalyst Center Compatibility Matrix, on page 1.
- Prerequisites for Using PI 3.9.x Prime Data Migration Tool Update 06

Ensure that

- You install Cisco Prime Infrastructure 3.9.1 + PI 3.9.1 Update 02 or PI 3.9 (Upgrade) + PI 3.9 Oracle
- Patch + PI 3.9.1 + PI 3.9.1 Update 02 or PI 3.9.x Prime Data Migration Tool Update 05 or PI 3.9.x Prime
- Data Migration Tool Update 05.01 or PI 3.9.x Prime Data Migration Tool Update 05.02.
- If you need support for Catalyst 9800 16.12.x version, you will need to install
- PI_3_9_Oct_Oracle_patch-1.0.8.ubf patch before you install 3.9.1.For instructions to install the Oracle
- Patch, see the Installing Cisco Prime Infrastructure System Patch 3.9 section in the CiscoPrime Infrastructure Administrator Guide.
- You have Root or Super user access privileges of Cisco Prime Infrastructure.
- You have access credentials to the Cisco Catalyst Center.
- Refer to the Cisco Prime Infrastructure and Cisco Catalyst Center Compatibility Matrix, on page 1.
- Prerequisites for Using PI 3.8.x Prime Data Migration Tool Update 06

Ensure that

- You install Cisco Prime Infrastructure 3.8.1 Update 03 or PI 3.8.x Prime Data Migration Tool Update
- 05 or PI 3.8.x Prime Data Migration Tool Update 05.01 or PI 3.8.x Prime Data Migration Tool Update 05.02.
- You have Root or Super user access privileges of Cisco Prime Infrastructure.
- You have access credentials to the Cisco Catalyst Center.
- Refer to the Cisco Prime Infrastructure and Cisco Catalyst Center Compatibility Matrix, on page 1.
- Prerequisites for Using PI 3.7.x Prime Data Migration Tool Update 06

Ensure that

- You install Cisco Prime Infrastructure 3.7.1 update 06 or PI 3.7.x Prime Data Migration Tool Update 05
- or PI 3.7.x Prime Data Migration Tool Update 05.01 or PI 3.7.x Prime Data Migration Tool Update 05.02.
- You have Root or Super user access privileges of Cisco Prime Infrastructure.
- You have access credentials to the Cisco Catalyst Center.
- Refer to the Cisco Prime Infrastructure and Cisco Catalyst Center Compatibility Matrix, on page 1

MigratingData from Cisco Prime Infrastructure to Cisco Catalyst
Center using Prime Data Migration Tool Update 06 This section helps you to migrate your Cisco Prime Infrastructure data from:

- PI 3.10.5+3.10.5 System Patch to Cisco Catalyst Center using PI 3.10.5 Prime Data Migration Tool Update 06
- PI 3.9.1 Update 02, PI 3.9.x Prime Data Migration Tool Update 05, PI 3.9.x Prime Data Migration Tool

- Update 05.01, PI 3.9.x Prime Data Migration Tool Update 05.02 to Cisco Catalyst Center using PI 3.9.x Prime Data Migration Tool Update 06.
- PI 3.8.1 update 03, PI 3.8.x Prime Data Migration Tool Update 05, PI 3.8.x Prime Data Migration Tool
- Update 05.01, PI 3.8.x Prime Data Migration Tool Update 05.02 to Cisco Catalyst Center using PI 3.8.x Prime Data Migration Tool Update 06.
- PI 3.7.1 update 06, PI 3.7.x Prime Data Migration Tool Update 05, PI 3.7.x Prime Data Migration Tool
- Update 05.01, PI 3.7.x Prime Data Migration Tool Update 05.02 to Cisco Catalyst Center using PI 3.7.x
- Prime Data Migration Tool Update 06. Follow this procedure to access the Cisco Prime Infrastructure to Cisco Catalyst Center migration by logging in to Cisco Prime Infrastructure:

Procedure

Step 1
Choose Administration > Settings > System Settings > General > Prime Data Migration Tool, and then click.
Launch Prime Data Migration Tool to open Prime Infrastructure – Prime Data Migration Tool page.

**For 3.9.1, and 3.10.5 you can either**

- Click Prime Data Migration Tool on the Mega Menu page. Or
- Launch the Prime Data Migration Tool on the Getting Started page. Choose Settings > Getting Started > Prime Data
- Migration Tool, and then click Launch Prime Data Migration Tool to open the Prime Infrastructure – Prime Data Migration Tool page.
- Before you launch the Prime Data Migration Tool, click Execute PDART to run the pre-assessment to analyze a Cisco.
- Prime Infrastructure deployment and assesses whether Cisco Catalyst Centers support current deployment.
- To know more information on how to install and run the Cisco PDART, See Install and Run PDART.
- Click Download Report to download the PDART report in PDF format.

Step 2
Click Job History, in the top-right corner of the Prime Data Migration Tool, and the Prime Data Migration Job History window appears.

Step 3
In the Prime Data Migration Job History window, do the following:

- Click Force Sync to view the list of jobs that are force synced and the job details such as Cisco Catalyst Center IP,
- Start Time, End Time, Status, and Info. You can click on the I icon next to the status column of the corresponding. JJobsto view the detailed information. You can also click on the hyperlinked completed or failed status to view the respective job summary in the Job Summary window.
- Click Dynamic Sync to view the list of dynamically synced job details such as Cisco Catalyst Center IP, Start Time, End Time, Status, and Info.
- You can click on the i icon next to the status column of the corresponding jobs to view the detailed information.
- You can search for the job history by choosing a category from the drop-down list such as Groups/Maps, Devices, ISE, CM, X, and Templates, or by using the search box.

- If you choose Devicor ISE or CMX categories, enter the IP address in the search box and click Search to retrieve the job details.

Step 4
Click Download Logs in the top-right corner of the Prime Data Migration Tool, to download the Prime migration logs in the .ZIP format.

Step 5
Click Add Cisco Catalyst Center Server.

Step 6
Enter the following Cisco Catalyst Center server details:

- Server IP Address or Hostname.
- Username.
- Password.
- Confirm Password.

You can integrate only one Cisco Catalyst Center server at a time. When an invalid IP (invalid TOFU certificate) is added in the 'IP Address' field a pop-up will be displayed with the error message 'Invalid Certificate' and "To delete the existing certificate click here". You can remove the invalid certificate directly from the TOFU certification user interface by clicking the click here hyperlink in the error message.

Step 7
Click Save, to check server reachability.

Step 8
(Optional) Click Multi Server Settings, to archive, and restore the data that is migrated from Prime Infrastructure to

Catalyst Center. It is recommended to use this option after Force Sync.
You can use the following options to archive the migrated data:

- List of Cisco Catalyst Center Archives Available – Displays the list of available archives.
- Back-up Current Cisco Catalyst Center Pairing – Back up the currently paired Cisco Catalyst Center server details in the migration tool.
- Back-up Current & Load Cisco Catalyst Center Archive
- The Current Cisco Catalyst Center server and its details are backed up and you are prompted to load any other available archive by entering the IP address.
- Load Catalyst Center Archive Only- Load the Cisco Catalyst Center backed-up server and its details.
- Delete Cisco Catalyst Center Archive – Deletes the selected Catalyst Center archives.

Step 9
In the Sync Settings window:

- You can check for the Supported or Available Limits of the Cisco Catalyst Center server for the Site Groups/Site
- Maps, Devices, and Templates. Supported or Available Limits of Cisco Catalyst Center varies based on the Cisco.

- Catalyst Center server model.
- The Supported/Available limits are specified in the following table:

Table 1: Supported/ Available limits for Catalyst Center

Catalyst Center Model	Site Groups/ Site Maps	Devices	Templates
DN2-HW-APL DN3-HW-APL	2500	2000	1000
DN2-HW-APL-L DN3-HW-APL-L	2500	4000	1000
DN2-HW-APL-XL DN3-HW-APL-XL	2500	8000	1000

Table 2: Supported/Available Limits for Catalyst Center on Esxi

Catalyst Center on Esxi	Site Groups/Site Maps	Devices	Templates
32vCPU/256G	2500	2000	1000

- Check the Enables automatic synchronization of data integrated with Cisco Catalyst Center check box to automatically synchronize any updates to the set of migrated Groups, Devices, and CMX from Cisco Prime Infrastructure to Cisco Catalyst Center.
- Select the Include newly added data during dynamic synchronization check box to automatically migrateAnyaa new addition to the set of migrated Groups, Devic, es, and CMX from Cisco PrimeInfrastructure to Cisco Catalyst Center.

Note
Dynamic Synchronization does not support add, up, date, or delete operations for the already migrated data and will not synchronize the data automatically for the following components:

- Maps
- CLI Templates
- ISE Server

Maps, CLI templates, and ISE server migrations are achieved only by Force Sync.

- This check box is enabled only if you select the Enables autosynchronization of data integrated with the Cisco Catalyst Center check box.
- During force synchronization, if the Enables automatic synchronization of data integrated with Cisco.
- The Catalyst Center check box is enabled, and any modifications that are made through force synchronization to the Location Group and Devices entities are dynamically synced in the Cisco Catalyst Center.

- If the Enables automatic synchronization of data integrated with the Cisco Catalyst Center check box is selected, CMX is dynamically assigned to Cisco Catalyst Center floor groups, when CiscoPrime Infrastructure imports maps to CMX.
- If you select the Enable CMX settings check box, CMX will be pushed with floor groups.
- If you do not select the Enable CMX settings to check box, CMX data will not be pushed to the Cisco Catalyst Center server.
- If you select the Enable ISE settings check box, ISE server details will be pushed. If you do not select the Enable ISE settings check box, ISE data will not be pushed to the Cisco Catalyst Center server.
- Select the Migrate User Defined CLI Templates check box to migrate the user-defined CLI and/or Composite Templates to the Cisco Catalyst Center.
- Choose the Migrate CLI System Templates check box to migrate the CLI System Templates to the Cisco Catalyst Center.

Step 10
Click Next to go to the Select Groups page.

Step 11
In the Select Groups window:
Expand the Usage Details section to view a summary of the site and device count details such as Recommended, Selected for Migration, and Available.

- Check the only new selection checkbox to migrate only the newly selected groups for migration. If you click
- Force sync, only newly selected groups will be migrated to Catalyst Center.
- Uncheck the Sync only new selection checkbox to migrate only the newly selected groups and groups which is already migrated.
- If you want to delete only the mapping from Prime data migration to Cisco Catalyst Center and retain the instances of migrated sites in the Catalyst Center for the current force sync, uncheck the Delete sites in Cisco Catalyst Center for the current Force Sync check box.
- Check the Delete sites in Cisco Catalyst Center for the current Force Sync check box to delete the sites from Cisco Catalyst Center and remove the mapping from prime data migration to Cisco Catalyst Center for the current force sync.
- Uncheck the Delete sites in the Cisco Catalyst Center for the current Force Sync check box to remove the mapping from Prime Data Migration Tool to the Cisco Catalyst Center for the current Force sync.
- If you want to move an entire group hierarchy to the Cisco Catalyst Center, check the Replicate Parent Hierarchy check box and select the location groups in the Prime Infrastructure Location Groups pane.
- By default, when you select Site Groups, the buildings, floors, and associated maps are also selected. Click Select Catalyst Center Parent below the Prime Infrastructure Location Groups pane to open the Cisc..o Catalyst Center Site Groups window.
- Marked for Deletionlabel appears when you unselect an already migrated group with Deletesites in Cisco Catalyst.
- Center for the current Force Sync check b, checked.
- Marked for Unmapping label appears when you unselect an already migrated group with Delete sites in Cisc.o
- Catalyst Center for the current Force Sync check box, unchecked.
- Select Global from the Cisco Catalyst Center Site Groups pane under which you want to move the PI groups and click OK. The selected groups will be added to the Group Movement Log pane with the label Marked for

Migration.

- Update Civic Location window pops up to enter the civic location details for the selected building if no location details are available. You can choose the Address or provide Latitude and Longitude values and click Save to update the civic details for the building which you selected.
- If you want to move only a building or a floor to the Cisco Catalyst Center under a different campus or area, click.
- Select the Catalyst Center Parent below the Prime Infrastructure Location Groups pane to open the Cisco Catalyst.
- Center Site Groups window.
- Select a campus or an area from Cisco Catalyst Center Site Groups under which you need to move the building and select a building from Cisco Catalyst Center Site Groups under which you need to move the floor and click OK. The selected groups will be added in the Group Movement Log pane with the labels Marked for Migration.

If you click the Close or Cancel buttons in the Cisco Catalyst CenterSite Groups window, the window closes without selecting any groups for migration and the Group Movement Log pane is not updated with the selected groups. After you move the groups from Prime Infrastructure to Cisco CatalystCentere, the Marked for Migration label appears on the moved groups.

Already migrated groups from Prime Infrastructure to Cisco Catalyst Center appear with the label Migrated in the Prime Infrastructure Location Groups pane as well as the Group Movement Log pane. The count of selected groups for migration appears as selected for migration under sites. The count of selected devices for migration appears as Selected for Migration under Devices in Usage details.

Available groups count in Cisco Catalyst Center appears in the Available section under Sites and Available devices count in Cisco Catalyst Center appears in the Available section under Devices in Usage details. The Prime Infrastructure Location Groups pane lists all the Cisco Prime Infrastructure groups irrespective of any virtual domain.

Note

- Cisco Prime Infrastructure does not migrate devices assigned in a "Campus" to the Cisco Catalyst Center when the migration tool is used.
- As a workaround, you can assign your devices to a "Building" or "Floor" type location group before using the migration tool.
- Devices assigned in the Location groups with 'Dthe default" Group type are not migrated to the Cisco Catalyst Center.
- Catalyst Center Site BuilderTo create sites directly in Cisco Catalyst Center so that you can move your sites from
- Prime Infrastructure to Cisco Catalyst Center, click Catalyst Center Site Builder.
- In the Catalyst Center Site Builder window, if you select the Area radio button, enter the following information:
- Site Name: Site name that you can create in Cisco Catalyst Center.
- Parent Site: Cisco Catalyst Center parent under which you can create the site.
- In the Catalyst Center Site Builder window, if you select the Building radio button to create a building in the Cisco
- Catalyst Center Area, enter the following information:
- Site Name: Building name that you can create in Cisco Catalyst Center.
- Parent Site: Cisco Catalyst Center parent under which you can create the building.

- Civic Location: Enter the civic location details under which you want to create the building.
- GPS (Latitude/Longitude): These coordinates are auto-populated.
- Click Add to create a site or building in Cisco Catalyst Center and clclickext.

Step 12
In the ISE & CMX Credentials window:

- Click the ISE tab to view the ISE server details that are present in Prime Infrastructure such as:
    - Server Status
    - Server IP
    - Port
    - Server Name
    - Username
    - Shared Secret: You must ensure that this shared secret field is not empty.
    - Timeout: This value must not exceed 20.
    - Retries
    - If no ISE server is present in Prime Infrastructure, a No data available message appears.
- Click the CMX tab to view the list of associated CMX servers for selected groups with the following details:
    - Credential Status
    - Server IP address
    - Device Name
    - Username
    - Password
    - SSH Username
    - SSH Password
    - You must update the SSH Username and SSH password if it is not available for the respective CMX.
    - If the associated CMX is not found, then click Next

Note
When the CiscoPrime Infrastructure – Cisco Catalyst Center migration tool is active and auto sync is enabled, then CMX will be dynamically pushed to Cisco Catalyst Center floor groups. Cisco Catalyst Center will, therefore, therefore provide the location data for assigned groups.

Step 13
If you check the Migrate User Defined CLI Templates check box or Migrate CLI System Templates check box in the Sync Settings page, then a new page Select CLI Templates appears after the CMX page.

Step 14
In the Select CLI Templates window:

- Non-migrated templates list all the available CLI templates, Composite User Defined templates, and CLI System templates available inPrime Infrastructure.
- Choose the templates that you want to migrate to the Cisco Catalyst Center.
- Migrated templates list all the migrated templates available in the Cisco Catalyst Center. You can either update or delete these templates.

Note

By default, all the rows are selected. Selected templates from the list are updated and the deselected templates are deleted from Cisco Catalyst Center.

Step 15

Click Next.

Step 16

In the Summary window:

- You can view the overall summary of selected location groups, devices, associated maps, user-defined templates, CLI System templates, CMX servers, and ISE servers before migrating to the Cisco Catalyst Center.
- Click the CLI templates tab to view the selected CLI templates listed here. Based on the device selection in the groups you can Add, Update, or Delete the CLI templates, Composite user-defined templates, and CLI System templates in the Cisco Catalyst Center.
- In the Sync Settings tab, you can view the summary of the sync status.

Step 17

Click Force Sync to push data to the Cisco Catalyst Center server after the first migration. A confirmation message appears Catalyst Center data will be overwritten by PI data by the Force Sync. Click Yes
to proceed or No to stop Force Sync. A success message appears after the successful completion of the Force Sync operation.

What to do next

1. If you want to revert the site hierarchy in the Cisco Catalyst Center, uncheck the migrated groups in the prime Data Migration tool and click ForceSync. This step deletes the migrated groups in the Cisco Catalyst Center. If you want to revert the device assignment (devices will be unassigned from Cisco Catalyst Center sites and assigned to migrated groups if the same devices are present both in CiscoPrime Infrastructure groups and Cisco Catalyst Center sites), perform the following steps:
   - Uncheck the migrated groups in the Prime Data Migration tool and click Force Sync. This step deletes the migrated groups and devices in the Cisco Catalyst Center.
   - Add and assign or provision the devices in the Cisco Catalyst Center in the required sites. The pre-migration site hierarchy appears in the Cisco Catalyst Center. To migrate your Cisco Prime Infrastructure data again using the Prime Data Migration Tool, unassign the devices in Cisco Prime Infrastructure for the required groups and migrate the data.
2. Multi-Catalyst Center is supported by Prime Data Migration Tool Update 02.0. This feature allows you to migrate to multiple Catalyst Center clusters(one Catalyst Center server at a time) and retain the migration data for each Catalyst Center server.
3. Refer to the important notes about CiscoPrime Infrastructure – Cisco Catalyst Center migration, see Important.

Notes

1. Important Notes

   This section contains important notes about Cisco Prime Infrastructure – Cisco Catalyst Center migration:
   - You can integrate only one Cisco Catalyst Center server at a time.
   - The Prime Data Migration tool supports port number TCP 8078. For more information, see Ports Used by

Prime Infrastructure and Assurance in the Cisco Prime Infrastructure 3.10 Quick Start Guide.

- When the integration or initialization phase remains in the loading state for more than 5 minutes, check for any firewall restrictions, and ensure that no firewall restrictions are blocking or redirecting communication.
- CMX must be installed with a self or RAC-signed certificate to migrate from the Prime Data Migration Tool to Cisco Catalyst Center, 2.3.7.5 and above.
- You can migrate obstacles that are created within an image to the Cisco Catalyst Center.
- Maps Migration fails when you migrate other groups along with the outdoor area to a non-global area.
- Outdoor area migration is not supported in the Prime Data Migration tool.
- You can migrate the ISE Server and CLI Templates along with the group migration.
- Groups with empty/null civic location values will be ignored for migration.
- When migrating ISE from Prime Infrastructure to Catalyst Center, ISE gets added to Catalyst Center in the failed state. To avoid this make sure to do the following:
- Activate PXGrid on ISE
- Enable ERS on ISE
- ISE's CLI and Gpasswordsmust be the same
- Cisco Catalyst 9800 Series Wireless Controllers can be managed in multiple Cisco Prime Infrastructure servers on the Cisco Catalyst Center and Prime Infrastructure server as long as the subscription limit is available. To get managed, a single Infrastructure server consumes or requires 30 config telemetry subscriptions, and a single Catalyst Center requires 70 or more telemetry subscriptions. IOS XE – 17.6 and later versions support 128 telemetry subscriptions.
- To connect with cisco.com, concerning SWIM and Software Update, you must install
- PI_3_9_1_Security_Update_01 UBF along with PI 3.9.x Prime Data Migration Tool Update 03 UBF or
- PI_3_8_1_Security_Update_01 UBF along with PI 3.8.x Prime Data Migration Tool Update 03 UBF.
- You use a single session of the migration at a time for the same Cisco Prime Infrastructure server and Cisco Catalyst Center server pair.

2. Once the CMX is migrated to Cisco Catalyst Center, it will not be managed by CiscoPrime Infrastructure.
3. Any legacy devices that are not supported by the Ciscosco Catalyst Center chosen for migration will be added to the Cisco Catalyst Center inventory under the Device Type column -"Unsupported Cisco Device".
4. Devices managed with SNMP v2 and v3 can be migrated to Cisco Catalyst Center.
   - Any devices managed only with SNMP v1 or SNMP v3 with DES protocol of AuthPriv credentials in Cisco Prime Infrastructure cannot be migrated to the Cisco Catalyst Center.
   - Also, bulk migration fails if any one of the devices is managed by SNMP v1 or v3 with the DES protocol of AuthPriv credentials.
   - Only the basic information of the groups will be migrated, but not the rules and profiles assigned to the group.
   - After integration, while upgrading Cisco Catalyst Center to an unsupported version, an error will be thrown as "Unsupported Version" and migration will stop.
   - AccessPoints positioned in the maps in CiscoPrime Infrastructure will migrate to Cisco Catalyst Center, only if we manage its WLC devices with CLI Credentials.
   - For Composite template Migration – The associated template should not be a System template. If any composite template with a system template will not get migrated.
   - During composite template migration, all the associated templates in the composite template should have

the same device type. Otherwise, migration will fail.

- Specific compositetemplate migration is not recommended till Cisco Catalyst Center 1.3.3.8 and 2.1.1.3.
- However, it works in later Catalyst Center versions.
- Catalyst Center Version 2.2.1.0 specific update.
- Civic location is mandatory for Location Groups / Site groups migration, especially from the Cisco CatalystCenter 2.2.1.0 version.

Documents / Resources

CISCO PI 3.10.5 Prime Infrastructure [pdf] Instructions
PI 3.10.5, PI 3.9.x, PI 3.8.x, PI 3.7.x, PI 3.10.5 Prime Infrastructure, PI 3.10.5, Prime Infrastructure, Infrastructure

References

- **User Manual**