Fujitsu Software openFT (Windows)
Version 12.1C
November 2022

Release Notice

1 General

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This Release Notice is a summary of the major extensions, dependencies and operating information with respect to openFT (Windows) V12.1C30, openFT-FTAM (Windows) V12.1C30 and openFT-FTP (Windows) V12.1C30 under the operating systems Windows 10, Windows Server 2016 and Windows Server 2019 that are not included in the Product Facts and in the manuals.

*7   The release level is that of November 2022.

*7   Changes to release level June 2022 are marked with *7.
*6   Changes to release level November 2021 are marked with *6.
*5   Changes to release level June 2021 are marked with *5.
*4   Changes to release level November 2020 are marked with *4.
*3   Changes to release level June 2019 are marked with *3.
*2   Changes to release level May 2018 are marked with *2.
*1   Changes to release level July 2017 are marked with *1.

This and other current Release Notices are available online at https://bs2manuals.ts.fujitsu.com.

If one or more previous versions are skipped when this product version is used, the information from the Release Notices (and README files) of the previous versions must also be noted.

For more information on openFT, see http://www.fujitsu.com/emeia/openft.

The use of names, trademarks, etc. in this Release Notice does not entitle readers to assume that these names/designations may be used without restriction by anyone: often the names/designations are protected by law or contract, even if this is not indicated here.

openFT V12.1 uses Open Source software components. Information about the used Open Source software components and the corresponding license conditions can be found in the directory ThirdPartyLicense on the openFT product CD. openFT V12.1 is subject to the same license conditions as openFT V12.0C00.

*3   As of V12.1C00 openFT-CR is integrated in openFT.

1.1 Ordering

*7   openFT V12.1C40 can be ordered from your local distributors.

This software product is made available to the customer subject to the general terms and conditions of the software product use and service agreement in return for a one-off payment / regular payments.

The functionality of openFT and any add-on components is released on Windows systems using license keys. Without a license key openFT runs for 30 days as of date of installation without any restrictions, but may only be used for evaluation purposes. Please note that a special license is required for openFT-FTAM and openFT-FTP.

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1.2 Delivery

*7   Delivery of files for openFT V12.1C40, openFT-FTAM V12.1C40 and openFT-FTP
*7   V12.1C40 on CD-ROM with installation instructions:
*7   - openFT V12.1   dated 11.2022

1.3 Documentation

The documentation is available in the form of online manuals at
https://bs2manuals.ts.fujitsu.com.

2 Software extensions

Only the extensions and improvements over the previous version openFT V12.0C are described in the following section.

2.1 Extended Unicode support

On all Unicode capable systems, file names, FTAC transfer admissions and follow-up processing may consist of Unicode characters. To permit this, the function "Encoding Mode" has been introduced in order to represent the Unicode names correctly on all involved systems.

The command interfaces have been extended as follows:
- The new field FNC-MODE in the long output of log records displays the encoding mode for the file name (command *ftshwl*).
- New option *-fnc* in order to set the encoding mode in a file transfer, file management or administration request. This option is available for the commands *ft*, *ftadm*, *ftcredir*, *ftdel*, *ftdeldir*, *ftexec*, *ftmod*, *ftmoddir*, *ftshw* and *nopy*. The encoding mode is displayed in the output of the following commands (in addition to *ftshwl*): *ftshw* and *ftshwr* (FNC-MODE field). The number of not mapped file names is displayed using *ftshw -sif*.
- New attribute *CmdMode* in the configuration of remote administration server to define the (recommended) encoding mode for administered openFT instances. The encoding mode is displayed in the output of the *ftshwc* command (MODE field).
  This function is also available in the configuration editor of the openFT Explorer.

2.2 Logging

For inbound requests, the long output and CSV output of log records display the address of the partner system in the new field PTNR-ADDR.

2.3 Extended security functions

An openFT instance can require a minimum AES key length for the openFT session encryption. The minimum AES key length can be defined in the operating parameters.
To permit this, the following command has been modified:
– *ftmodo*: New option *-aesmin*

2.4 Transferring directories

- Directories can be transferred between Unix and Windows systems. To permit this, the commands *ft* and *ncopy* have been extended with option *-d*.
- The new field PROGRESS in the output of the *ftshwr* command displays the progress of (asynchronous) directory transfer.
- The new option *ftmodo -ltd* has been introduced to set the logging scope for directory transfer.
- The new value *ftshwl -ff=T* selects log records of directory transfer requests. In addition, the *ftshwl* output has been extended to the field TRANSFILE (long output) as well as the FT function values TD, SD, SF (short output) and the value FUNCTION=TRANSFER-DIR (long output).

2.5 Transferring multiple files via FTAM

Multiple files can be transferred synchronously between Unix and Windows systems using the FTAM protocol. This is controlled by a specific file name syntax of the *ncopy* command.

2.6 Extensions of the openFT-Script command

-   The FT administrator can set limits of openFT requests. To permit this, the command *ftmodsuo* has been extended to the options *-u*, *-thl* and *-ftl*.
-   *ftshwsuo* displays the limits currently set.

2.7 Other changes

-   The *ftshwk* command displays the partner name for public keys of partner systems.

*1   ## 2.8 Encryption of File Management Requests

*1   As of openFT V12.1B also the encryption of file management requests will be
*1   offered in addition to the already existing encryption of user data. Therefore the
*1   commands ftshw, ftcrep, ftmodp and out of ftshwp are extended.

*1   The operating parameter ENC-MAND for outbound requests is now also
*1   operative for file management requests.
*1   The option -c of command ft_mget is extended to encrypt the file(s) attribute list.

*1   ## 2.9 Unicode Support in openFT explorer

*1   The new option to select Encoding Mode type (Transparent / Character mode) is
*1   available in the openFT explorer from the openFT V12.1B onwards.

*1   ## 2.10 Filter Icon Indicator at Logging Windows of openFT Explorer

*1   As of V12.1B, a filter icon indicator is visible at the toolbar of the logging window,
*1   if openFT logging records have been selected that differ from the default after
*1   the openFT installation.

*1   ## 2.11 Additional Option in Help Menu of openFT Explorer

*1   In the openFT explorer a new option ("Extension to the manuals") in the drop-
*1   down list of the help menu item has been added.
*1   When the user clicks on "Extension to the manuals" a web help page will open
*1   with a link to a document which describes the extensions.

*3   ## 2.12 Unicode Support for C- and JAVA APIs

*3   The functionality of the switch -fnc from command line interface is available as of
*3   12.1C for C- and JAVA API.

*4   ## 2.13 Logging Remote File Names

*4   Starting from version 12.1C10 log record is extended by remote file name. New field
*4   REMOTE-FN is displayed in long form output for outbound FT and FTAC logging
*4   records. All output formats support REMOTE-FN (CVS). Further information see
*4   manual.

*5   ## 2.14 Extension of cryptographic functions to support RSA 3072 and 4096

*5   Starting from version 12.1C20 openFT can use 3072 and 4096 RSA keys.
*5   The corresponding structures have been changed to accommodate the bigger
*5   keys, which means the syskpl file is converted to a new version. Behavior is
*5   different between mainframes (z/OS, BS2000) and open systems (Linux,
*5   Windows).
*5   For open systems, 3072 and 4096 RSA keys have been added. When creating
*5   new keys, five keys (768, 1024, 2048, 3072, 4096) are created. When updating
*5   openFT from previous versions, the old keys are converted to new format, and
*5   3072 and 4096 keys are generated automatically. The default key length remains
*5   at 2048 when openFT is installed.
*5   Commands ftmodo and ftshwo are updated accordingly.
          Support for import and export has been added for 3072 and 4096 keys.

*6   ## 2.15 OpenFT administration without local admin access rights

*6   So far, only local admin (System) on Windows was openFT administrator,
*6   regardless of which windows user was executing openFT commands. Since
*6   openFT 12.1C30, it is possible to pass openFT administration rights to any
*6   windows user, so that this user doesn't have to have system rights on windows in
*6   order to be FT admin similar as FTAC admin rights work. Also similar to FTAC
*6   admin, for now, FT admin rights can be assigned only to one user, no possibility
*6   for multiple users to have those rights at the same time.

*6   ### 2.15.1 Known issues

*6   **Instances management**
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          The user that has been given the openFT administrator status is not able to
*6   perform instance management operations.
*6   Creating, deleting, or modifying of instances, has to be done as it was in previous
          versions, which is by the user that has local administrative rights.
          Otherwise, the application will return Access Denied error.

*7   **Displaying active instance**

*7   To display the name of currently set instance, *ftinfo* command should be used.
*7   FTSHWI command is displaying an instance currently set in openFT Explorer,
          Instead of the one set in the shell.

*6   ## 2.16 Changes to Graphical User Interface

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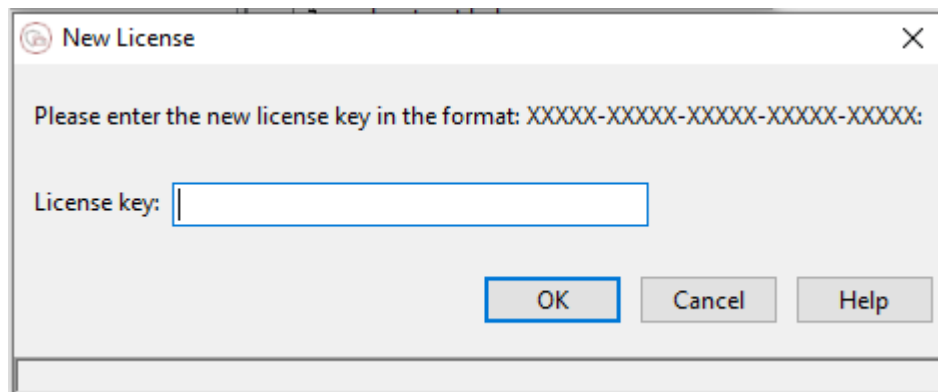
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Previously, there were 5 separate text windows for each part of the license key. Now, there is one text input box, which allows the license key to be copy-pasted into it.

3 Technical information

3.1 Resource requirements

The required hard disk space is approx. 60 -75 Mbytes (including standard instance). At least approx. 30 Mbytes are required for each further instance (default settings). An instance immediately requires approx. 380 MB if the maximum number of requests is increased to 32,000.
In principle, openFT writes any number of logging records. If there is no more hard disk space available, FT requests are rejected. Please ensure therefore that logging records are deleted on a regular basis (see section 3 of System Administrator Guide).
If you use the openFT script interface, a Java Virtual Machine is started for every user currently running openFT script requests. In case of a large number of parallel external activities the machine needs up to 212 Java threads and a further 4 Java threads per openFT script request.

3.2 Software configuration

The following products are required to use openFT (Windows) V12.1:

	Windows 10	or
*6	Windows 11	or
*2	Windows Server 2016	or
	Windows Server 2019	or
*6	Windows Server 2022	

*3 As of V12.1C00 data encryption is integrated to openFT. openFT-CR is no longer
*3 released.

Note: There is an incompatible change in JAVA 7 handling filenames with blanks. Use at least JAVA (JRE) 7 Update 25 for the ftscript interface. To allocate a special Java version to openFT use the command ftsetjava.

You should refer to the installation information in the openFT script manual if you want to use the openFT script interface.

Further information on the software configuration can be found in the Data Sheet (see also http://www.fujitsu.com/emeia/openft).

3.3 Product installation

openFT V12.1 must be installed under Windows using the Windows Installer from Microsoft. It can be installed interactively (i.e. with user guidance) and unattended.
*2 The PCMX-32 V5.0B21 product required to use openFT with CMX is only installed automatically by the openFT installation package during an update installation. For an initial installation operation without CMX is enabled as standard so that PCMX-32 is not needed and is also not installed during interactive installation. If openFT is installed unattended, the required PCMX-32 product cannot be installed automatically by openFT and must therefore be installed before openFT itself is installed if openFT is to be used in operation with CMX.

The installation of SNMP functions requires an installed Microsoft SNMP server.

A network drive must not be specified as the installation path, openFT must be installed on a local hard disk instead.

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The functionality of openFT (Windows) V12.1 is activated with license keys. The purchased license keys can be specified during the installation or at any time afterwards with the command ftaddlic. Without license keys openFT can be used as an evaluation version for a period of max. 30 days.

3.3.1   Initial installation

As of openFT V12 support is provided for operation without CMX. If you want to work with CMX, see 3.3.4.

Installation is performed interactively and the installation path can be selected.

The previously selectable functions FTAM, FTP have been omitted. Instead they can now be released by specifying the appropriate license keys. They are queried during the interactive installation of openFT or specified during unattended installation by means of MSI variables that are to be set by the user. An invalid license key is rejected. If no license key is entered, openFT works as a 30-day evaluation version, which permits the use of all the protocols supported by openFT (openFT, FTAM, FTP, ADM) for this period.

The host name (ftmodo -p=) and the identification (ftmodo -id=) are set automatically during initial installation. After the installation you should check that these values are correct.

3.3.2   Update installation (migration from V12)

An update installation is carried out if openFT V12 is already installed.

*3   As of V12.1C00 openFT-CR is integrated in openFT. Please deinstall openFT-CR
*3   if available (see 3.3.6).

The following points should be observed:
- The admission sets and admission profiles are taken from the previous version.
- Key pair sets are taken from the previous versions. If a 2048-bit RSA key has until now not existed due to update installations, this cannot be automatically created for technical reasons. In order to use a 2048-bit RSA key it is necessary to create a completely new key pair set using the command ftcrek.
- All running openFT applications should be stopped before starting the installation. Also terminate all running openFT script requests. They are stopped during the installation and are regarded as in the new version as not restartable.
- With an update installation the old logging, trace and diagnostic files are deleted.
- To ensure that all instances are also automatically updated, you should enable all disabled instances with ftcrei before you start the update installation. Otherwise you must update all disabled instances with the ftupdi command after completing the update installation.

3.3.3   Updating/Repairing an installed openFT V12.1

All running openFT V12.1 applications must be closed before starting installation. The version already installed is automatically detected and updated.
*2   Note: All existing settings are retained. Active instances are automatically updated during an installation from V12.1A, V12.1B or V12.1C. Use the command ftupdi to update deactivated instances.

*3   As of V12.1C00 openFT-CR is integrated in openFT. Please deinstall openFT-CR
*3   if available (see 3.3.6).

Subsequent installation/deinstallation of the SNMP support of openFT is performed via Control Panel -> Software -> openFT.

Installation of the SNMP support requires an installed Microsoft SNMP server. It is also possible to repair the existing installation using Control Panel -> Software -> openFT.

3.3.4   Installation of CMX

As of openFT V12 support is provided for operation without CMX. If you want to work with CMX and no CMX or an older version is installed in the system, you have to install the CMX that is on the data medium before activating operation with CMX in openFT.

During initial installation of openFT operation without CMX is used as standard. During an openFT interactive update installation CMX is automatically updated and operation with CMX is activated. PCMX-32 is only installed during interactive installation (update or initial) if an older PCMX version already exists on the system. If operation with CMX is required after conclusion of the installation, PCMX-32 can be subsequently installed at any time. However, the TNS entries required by openFT for operation with TNS are not automatically created in this case. They can be created manually by invoking the program createtns.exe from the %ProgramFiles%\openFT\bin\ftbin directory. It is then possible to switch to operation with CMX and TNS.

The installation package for PCMX-32 (PCMX-32.msi) is located in the \openFT\Unattended_installation directory on the product CD.
*2   Older PCMX-32 versions can be updated with PCMX-32 V5.0B21.

3.3.5   Unattended installation

openFT and PCMX-32 can also be installed unattended using the msiexec command. The files "openFT.msi" and "PCMX-32.msi" are located in the "openFT\Unattended_installation" directory on the product CD. For more information see the Guide openFT (Unix and Windows Systems) V12.1 – Installation and Operation.

The unattended installation has been changed as follows:
- Packages openFTde.mst and PCMX-32de.mst are no longer delivered
- For installing the German language use TRANSFORMS=:de
- Default language: If German or English is set as locale in operating system this language is taken as default language for openFT.

3.3.6   Deinstallation

openFT, openFT-CR and PCMX-32 can only be deinstalled separately. This must be done in the following order using Control Panel -> Software:
1. openFT-CR (if installed)
2. openFT
3. PCMX-32

3.4 Product use

Courses for openFT V12.1 are offered by Fujitsu (http://training.ts.fujitsu.com).

*3   As of V12.1C00 openFT-CR is integrated in openFT.

openFT V12.1 is compatible to openFT versions that still receive maintenance.

Authentication Level 2 (AUTHL2) is supported as of openFT V11.0B.

With a connection FTP / openFT-FTP FTAC transfer admissions must be specified as user name. Password may not be specified (confirm request with enter).

If problems occur during connection setup to external implementations (RFC1006 of the external implementation does not accept user data), the environment variable NOCONRSUDATA must be set to the value 1 prior to the start of the openFT server. This disables connection setup optimization. The environment variable must be defined in the system variables.

Executing a sample of the samples directory (OCXDEMO) returns a DLL error:
If calling the Visual Basic example from the samples directory results in a DLL error, then the Visual Basic runtime system should be re-installed.
The program VBRun60sp5.exe in the directory "openFT\Tools\VBrun" on the product CD installs the necessary Visual Basic 6.0 runtime files. For more detailed information on installation, see the file "openFT\Tools\VBrun\VBrun_readme.htm" on the product CD.

3.4.1   Special licenses

With openFT V12.1 following limited client licenses are available:

1. Client license (CL)
- only openFT Protocol
- no dynamic partners
- only one instance (the std instance)
- a maximum of 2 fixed partners in the partner list

2. FTAM Client license (FTAM-CL)
- only FTAM protocol
- no dynamic partners
- only one instance (the std instance)
- maximum of 6 fixed partners in the partner list

3. SEDI Client license (SEDI)
- only FTAM protocol
- no dynamic partners
- only one instance (the std instance)
- maximum of 255 fixed partners in the partner list

For testing these limited licenses in real mode, evaluation licenses are available.

When using these licenses please note the following:

Dynamic partners and central ADM server are switched off.
Subsequent installation of the SERVER license, dynamic partners and/or remote administration server must be activated as needed (ftmodo -dp=n -admcs=y).

Only the std instance is allowed. All other instances will be terminated and cannot be used any more (except a few necessary commands ftshwo, ftshwd, ftaddlic, ftremlic and ftshwlic).

The number of partners is limited. If more partners are listed than permitted they must be removed from the partner list with the command ftremptn. Until then transfer commands cannot be executed.

3.5   Obsolete functions (and those to be discontinued)

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The following functions are no longer supported in this version:
X.25
The following functions are supported for the last time in this version:
PCMX

3.6   Incompatibilities

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As of openFT V12.1C00 type of 'buf' argument (belonging to ft_xcinfo() function) has been changed from char to byte in Java API. Further information see manual.

3.7   Restrictions

None

3.8   Procedure in the event of errors

If an error occurs, the following error documents are needed for diagnostics:
-   A detailed description of the error condition, indicating whether and how the error can be reproduced.
-   The error must be reported to the appropriate service provider. An incident will be opened for Second Level Support.

See also the appropriate information in the manuals:
-   openFT (Unix- und Windows-Systems) V12.1 Command Interface, section 'What if..'
-   openFT (Unix- und Windows-Systems) V12.1 Installation and Operation, section 'Diagnostics''

4 Hardware requirements

Refer to the Data Sheet for the hardware supported by the products.
(see also http://www.fujitsu.com/emeia/openft).

openFT V12.1 can be used on systems with x86 processors.