Fujitsu Software openFT (Unix Systems)
Version 12.1C
November 2024

Release Notice

1 General

*1 *11 *11 *11 This Release Notice is a summary of the major extensions, dependencies and operating information with respect to openFT (Unix Systems) V12.1C80, openFT-FTAM (Unix Systems) V12.1C80 and openFT-FTP (Unix Systems) V12.1C80 under the operating systems Linux x86_64 and Solaris Sparc that are not included in the Product Facts and in the manuals.

*6 *6 From now on the release is only for Linux x86_64 and Solaris Sparc. Further platforms may be available on request from your Fujitsu sales contact.

*11 The release level is that of November 2024.

*11 Changes to release level June 2024 are marked with *11.
*10 Changes to release level November 2023 are marked with *10.
*9 Changes to release level June 2023 are marked with *9.
*8 Changes to release level November 2022 are marked with *8.
*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.

openFT (Unix Systems) V12.1 may only be used on the system (Unix platform) for which an appropriate license has been purchased. The FTAM and/or FTP functionality (openFT-FTAM (Unix Systems) V12.1 or openFT-FTP (Unix Systems) V12.1) may only be activated on the system for which an appropriate license has been purchased.

For more information on openFT, see https://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

*11 openFT V12.1C80 can be ordered from at your local Fujitsu sales contact. Alternatively, please contact us at openFT@ts.fujitsu.com.

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 regular payments.

*11 A license is required for openFT V12.1C80, openFT-FTAM V12.1C80, openFT-FTP
*11 V12.1C80. Appropriate licenses must be ordered in order to use the product.
The product may only be used on the system for which a license was purchased.
Please note that a special license is required for openFT-FTAM and openFT-FTP.

1.2 Delivery

*11 The Delivery of openFT V12.1C80, openFT-FTAM V12.1C80 and openFT-FTP
*11 V12.1C80 is carried out on CD-ROM with installation instructions:
*11 - openFT V12.1 dated 06.2024
*5 The software for Linux x86_x64 and Oracle Solaris (SPARC) are supplied on
*5 different data carriers.

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 12.0C 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.
- In Unix systems, it is also possible to set the character set which is to be used for inbound requests in character mode. To do this, the new option *-fnccs* in the *ftmodo* command has been introduced.
  The character set which is currently set for inbound requests in character mode is displayed in *ftshwo*, FN-CCS-NAME field.

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.
- SNMP is no longer supported on Unix platforms.
- On Solaris platform, special update installation is available for updating versions older then 12.1C00.
  Refer to point 3.3.4 for more detail

*11 - *ftshwlic* command can display how many days left until openFT demo
*11 expires:
*11 ftshwlic: Your evaluation version of openFT will expire in '28' days.

*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 output of ftshwp are extended.

*1 The operating parameter ENC-MAND for outbound requests is now also operative
*1 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 the Logging window of openFT explorer

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

*1 2.11 Additional option in the help menu of the 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.

*3 2.13 Support of systemd

*3 As of V12.1C00 systemd is used for automatic startup.

*4 2.14 Openshift support for openFT

*4 Starting from version 12.1C10 openFT is prepared to run in constrained
*4 environment, such as Openshift. OpenFT in such environment runs in a special
*4 mode which is similar to single user mode.
*4 It is worth to notice that instance is created without systemd support, due to lack of
*4 systemd in containerized environment, therefore during building, installing or
*4 calling some commands warnings related to it appears.
*4
*4 Exemplary Dockerfile is attached to openFT package in docker/OpenShift location,
*4 e.g.:
*4
*4
*4 CD.ftvXXX.openFT12.1C10_XXXX_YYYMMDD.tgz
*4 ├── docker
*4 │ └── OpenShift
*4 │ └── Dockerfile
*4 ├── install.ft
*4 └── openFT-12.1C10-XXX.x86_64.rpm
*4
*4 The description how to run openFT under Openshift can be found in manual.

*4 2.15 Logging Remote File Names

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

*5 2.16 Extension of cryptographic functions to support RSA 3072 and 4096

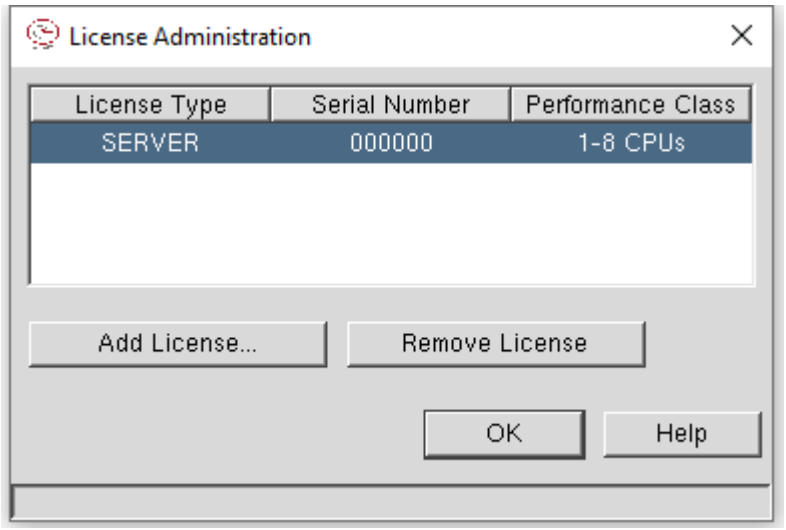
*5 Starting from version 12.1C20 openFT can use 3072 and 4096 RSA keys. The
*5 corresponding structures have been changed to accommodate the bigger keys,
*5 which means the syskpl file is converted to a new version. Behavior is different
*5 between mainframes (z/OS, BS2000) and open systems (Unix, Windows).
*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. Commands ftmodo and ftshwo are updated
*5 accordingly. Support for import and export has been added for 3072 and 4096
*5 keys.

*6 2.17 License administration

*6 So far, the license system only existed on Windows. On Unix platforms there were
*6 2 separate installation mediums – a 30 day demo, and a full version with no
*6 verification. Since openFT 12.1C30 the license system will work analogous to the
*6 Windows license system, and a Unix installation will automatically be a 30 day
*6 trial, until a license key is provided. Also, license keys now require an operating
*6 system to be specified.

*6 2.17.1 Added license administration in openFT explorer

*6



*6 License administration is now available under Administration menu.

*6 2.17.2 Added executables for license administration

*6 Console commands ftaddlic, ftshwlic and ftremlic are now present in the Unix
*6 version of openFT. For details, please refer to the manual.

*7 2.18 OpenFT administration with local admin access rights

*7 So far, only root on UNIX was openFT administrator, regardless of which UNIX
*7 user was executing openFT commands. Since openFT 12.1C40, it will be possible
*7 to pass openFT administration rights to any UNIX user, so that this user won't
*7 have to have root rights on UNIX in order to be FT admin.

*11 Starting from version 12.1C80, instances can have separate openFT
*11 administrator.

*9 2.19 OpenFT-Administrator group

*9
*9 Since 12.1C60 the openFT administrator can assign a Linux group as openFT-
*9 Administrator, every user in the group will have openFT-Administrator rights. The
*9 user cannot assign openFT-Administrator user along with openFT-Administrator
*9 group, only one option has to be used at a time. The previous openFT-
*9 Administrator will lose the permissions to the files and instances.

*9 2.19.1 Restrictions of openFT-Addministrator group feature

*9 • The user "root" may still have openFT-Administrator rights after openFT-
*9 Administrator user or group is set.
*9 • This feature is currently available for Linux only.

*10 2.20 OpenFT partner-specific configuration encryption properties RSA-MIN and *10 RSA-PROP

*10 OpenFT partners entry has new properties: RSA-PROP and RSA-MIN which are
*10 set by -kl and -klmin flags respectively, or RSA-PROP and RSA-MIN fields in
*10 openFT explorer. These properties have priority over those set in the general
*10 settings with ftmodo (displayed with ftshwo command). Currently this feature is
*10 implement for Linux, Solaris , Windows and BS200 platforms, excluding the z/OS
*10 platform.

*10 2.21 Extended support for newer Java versions

*10 Starting from version V12.1C70, openFT-Script supports Java versions 5, 8, 11,
*10 15 ,17 and 21.

*11 2.22 Global administrator

*11 The user who is set to be the administrator of the STD instance, is the global
*11 administrator. The global administrator is the only user that is allowed to run
*11 commands that affect openFT globally (ftaddlic), and commands that administer
*11 instances (ftcrei, ftmodi, ftdeli).

*11 Additionally, those commands will only work if the currently active instance is STD;
*11 Therefore, if global administrator switched to a different instance (using ftseti),
*11 those commands will not be able to be executed.

*11 2.23 Ftbackup and ftrestore functionality

*11 Since openFT 12.1C80, it is possible to back-up the entire openFT configuration
*11 with “ftbackup” command and then restore it with the “ftrestore” command.
*11 Configuration for all instances and all users will be saved, excluding licenses.

*11 2.23.1 Restrictions to ftbackup and ftrestore functionality

*11 FTscript functionality will not be backed up and restored with “ftbackup” and
*11 “ftrestore” commands due to buggy show ft script command “ftshws”.

*11 On Unix, if the STD administrator is set to any user other than root, then all users
*11 who are admins of their own instances can run ftcrei and ftdeli commands in
*11 some situations.

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). Main memory requirements are approx. 2-4 MB per openfts process plus a three-digit KB value for each current request depending on platform and protocol.
The /var partition should be sufficiently dimensioned to hold management files under /var and to store logging and trace files. Please ensure therefore that superfluous logging records and trace files are deleted on a regular basis. If necessary, /var/openFT can be stored on its own, separate or large partition using a symbolic link.
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 (Unix Systems) V12.1:

*3	Linux (x86-64) as of SuSE SLES 12 or RedHat RHEL 8 [1]
*3	with Kernel 3.10 or compatible Linux distributions
*3	Oracle Linux 8 as of unbreakable Enterprise kernel 3.10 [1]
*9	OpenSSL as of 1.1.0 or 3.0
*5	Oracle Solaris as of 11.4

*3 PCMX is no more available on product CD.

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).

[1] openSSL as of 1.1.0 is required

3.3 Product installation

The openFT (Unix Systems) delivery unit consists of the following packages:
openFT: Basic package with German and English user interface includes
FT (File Transfer Unix Systems)
FTAM (File Transfer OSI Support)
FTAC (File Transfer Access Control)
FTP (File Transfer FTP Support)

You must perform the installation under root.

From version 12.1C30 you must install a license key for operation with openFT after one of the installation variants (new, update or correction installation), otherwise openFT operation is no longer possible after 30 days.

3.3.1 Installation of openFT products

Operation without CMX is supported as of openFT V12.
*3 PCMX is no more released.

The language is set using the LANG environment variable.

During initial/update installation a suitable JAVA interpreter is found and made known to openFT. If no suitable interpreter is found or if a new JAVA package is installed after openFT has been installed, the 'ftsetjava <JAVA-interpreter>' command must be issued to make the JAVA interpreter known to openFT (only for using ftscript).
If a faulty JAVA interpreter is installed on the system, openFT installation may freeze ('java -version' command generates a dump). In this case, you should terminate the 'java -version' process by means of kill so that installation resumes. You should then clean up your JAVA installation.

3.3.2 Initial installation

Necessary steps to be taken by the system administrator:
1. If an openFT < V11.0 and any add-on products are already installed, you then need to deinstall openFT and the add-on products. Before deinstalling openFT the admission sets and profiles should be saved in a file using ftexpe.
2. Install the product software for openFT V12.1.
3. Import the saved admission sets and admission profiles using ftimpe if required. The standard admission set is not changed.

Automatically performed steps:
During initial installation the following steps are carried out automatically in addition to loading the product software:
- Set the processor name; the processor name of the operating system is registered.
- Enter the DNS name as instance identification; if no DNS name is available, the processor name of the system is registered.
*3 - Support the automatic start of openFT in the case of system start or end in the case of system shutdown with systemd
- Create a key pair set.
- Start openFT.

Activities after the installation:
- Where applicable, install the saved profiles (ftimpe), options, partner list entries

3.3.3 Update installation (migration from V12)

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

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 in the new version as not restartable.
- With an update installation the old logging, trace and diagnostic files are deleted, currently running requests are terminated, and open graphical user interfaces are closed.
- The new instance-global rc file is installed; the old file is no longer saved.
- 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.

Necessary steps of the system administrator:

1. Install openFT V12.1 from the data medium.
2. If you have made any changes in the old startup and shutdown files, you must also make them in the new startup and shutdown files please adapt them to systemd. *3

Automatically performed steps for all active instances:

- File transfer will be stopped.
- Unconditionally delete existing requests from the request queue; follow-up processing, if any, is initiated.
- Load the product software.
- Transfer the operating parameters.
  Existing TNS entries for openFT are modified if necessary; operation with CMX remains activated; use of TNS names is not changed.
- Transfer of the FTAM catalog, admissions profiles, admissions sets and configuration data for central administration.
- The old instance-specific startup and shutdown files are saved.
  - The new instance-specific startup and shutdown files are subsequently installed on the AIX, HP and Linux systems.
  - SMF support is provided on Oracle Solaris as of openFT V12; the startup and shutdown files are no longer installed.
- Transfer of the language setting from the previous version. However, the openFT man pages are installed in German and English on the Linux platform, i.e. a user receives the man pages in the language that is set during his login session.
- Start of the file transfer (exception: HP).

3.3.4 Update installation from version before 12.1C00 on Solaris

An issue was reported when updating openFT from 12.1B00 to a new version on a Solaris system. Due to changes in e.g. sysfsa files in new versions of openFT on Solaris, which cannot be altered during standard update process, new steps were required and the update installation is changed for that case.

Special update installation will be performed as follows:

- Exporting all instances together with all data from those instances, which are passed during standard update process, to the temporary folder /tmp/oft_upd_bak
- Removal of current openFT on system
- Installation of new version of openFT
- Importing of all instances with their data from folder in /tmp/oft_upd_bak and removal of /tmp/oft_upd_bak folder afterwards

This update will be performed only from version lower than 12.1C00 to version 12.1C00 or higher. In every other case (e.g. from 12.1C30 to 12.1C53) standard update will be performed.

Changes to package layout.

Due to the fact, that export of instances has to be performed before installation of new openFT, separate scripts need to be added to Solaris package:
“update_Solaris_scripts/preinstall_update” and
“update_Solaris_scripts/postinstall_update”.
New layout of Solaris package will look as follows:

```
CD.ftv455.openFT12.1C60_Solaris_F70.1_20231110.tar
├── update_Solaris_scripts
|   └── preinstall_update
|   └── postinstall_update
├── install.ft
└── openFT-12.1C60-455.sparc.OPSSL1_1.pkg
└── openFT-12.1C60-455.sparc.OPSSL3_0.pkg
```

Restrictions

Due to nature of this special update, inactive instances (deactivated with ftdeli command), which are outside of standard /var/openFT directory, cannot be backed up, since there is no information stored in openFT, where directories of those instances are. In order to update properly all instances outside of standard path, they must be activated with ftcrei, otherwise they will be lost.

Changes to console output during installation

*8 During Solaris update installation, additional questions and output will be shown.

*8 If the update script detects that an update installation is being performed from
*8 version older than 12.1C00, following information will be shown:
*8 "WARNING!: Due to changes in e.g. sysfsa files, it's impossible to perform
*8 standard update on Solaris

*8 Update will be performed via exporting all info from instances,
*8 removing openFT, installing new version and importing all instances
*8 to newly installed openFT application.

*8 Due to this operation, all instances outside of /var/openFT directory
*8 MUST be active (turned on via ftcrei command), otherwise they will be
*8 lost.

*8 Do you want to continue(y/n)?"

*8 Afterwards, next steps will be performed automatically with questions for users
*8 (triggers by Solaris package system) filled in by script, since user shouldn't be
*8 asked questions to e.g. remove openFT package to avoid confusion and also input
*8 for these questions have to be affirmative to not break special update process.

*8 **Changes to manual**

*8 Because of the update changes, it is required for the client to activate any
*8 instances that are not in /var/openFT as mentioned in "Restrictions".

*8 In manual "Installation and operation" for Windows and Unix, under point "2.1.2
*8 Update installation of OpenFT", under "Tasks required of the system
*8 administrator", it should be added that if you're updating from version earlier than
*8 12.1C00, and you have instances installed somewhere other than the default
*8 /var/openFT location, all those instances should be turned on before an update
*8 installation.

3.3.5 Installation of a correction version

Installation of a correction version means that openFT V12.1 already exists on the computer.

Necessary steps of the system administrator:

1. All running applications and openFT script requests of openFT V12.1 must be terminated before starting the installation.
2. Install openFT V12.1 from the data medium.

Automatically performed steps:

*3
*3
*3
*3
*3

- Admission profiles and sets, logging files, the FTAM catalog, operating parameters, requests, partner list, configuration data for central administration and key pair sets are transferred unchanged for all openFT instances.
- openFT and all active graphical openFT user interfaces are stopped during installation.

3.3.6 Deinstallation

Proceed as follows to deinstall:

Linux: rpm -e <package>

*5 Solaris: pkgrm <package>
*5 specify openFT for package

The instance directories in /var/openFT are automatically deleted during deinstallation.

3.3.7 Linux

For installation purposes insert the CD in the corresponding drive and mount it (e.g. mount /dev/cdrom). Change to the mounted directory (here: cd /cdrom) and start the procedure
sh install.ft to install openFT

*9 The script will automatically detect the openSSL version and install correct
*9 package.
*9 If installation by “rpm” command is need, please first check openSSL version by
*9 “openssl version” and choose correct package:
*9
- package name containing “OPSSL1_1” for OpenSSL version 1.1
*9
- package name containing “OPSSL3_0” for OpenSSL version 3.0

The FTAM and FTP functionality is not installed automatically during initial or update installation (V12 to V12.1). To install this functionality (if the corresponding license is available), invoke the following commands:
/opt/openFT/bin/ftbin/install.ftam -i and/or
/opt/openFT/bin/ftbin/install.ftp -i.
If you are updating V12.1, any FTAM and FTP functionality already installed is retained intact.

*5 3.3.8 Oracle Solaris (SPARC)

*5 For installation purposes insert the CD in the corresponding drive and mount it
*5 (e.g. mount /dev/cdrom). Change to the mounted directory (here: cd /cdrom) and
*5 start the procedure:
*5 sh install.ft

*5 to install openFT

*9 The script will automatically detect the openSSL version and install correct
*9 package.
*9 If installation by “pkgadd” command is need, please first check openSSL version
*9 by “openssl version” and choose correct package:
*9
- package name containing “OPSSL1_1” for OpenSSL version 1.1
*9
- package name containing “OPSSL3_0” for OpenSSL version 3.0

*5 For the Oracle Solaris platform openFT V12 supports the installation into an
*5 alternative root directory. For this purpose, change to the mounted directory and
*5 start the procedure:
*5 sh install.ft –r=<alternative root directory>

*5 Example:
*5 To install openFT in the directory /altroot invoke the following command:
*5 sh install.ft –r=/altroot

*5 As of Oracle Solaris 10 openFT is automatically installed in the current zone
*5 (pkgadd-option -G).

*3 3.3.9 Encryption

*3 As of V12.1C00 data encryption is integrated to openFT. openFT-CR is no longer
*3 released.
*3 Please deinstall package openFT-CR if available with
*3 rpm -e openFT-CR

3.4 Product use

*6 **As of V12.1C30, openFT requires a license key on Unix systems, similar to**
*6 **Windows, otherwise openFT operation expires after 30 days.**

Courses for openFT V12.1 are offered by Fujitsu (https://fujitsu.docebosaas.com/customer). You may also send any questions you have on courses to openFT@ts.fujitsu.com.

openFT (Unix systems) V12.1 implicitly includes the functionality of FTAC, FTAM and FTP. If you want to use the FTAM and FTP functionality additionally, you need only purchase the corresponding license (see 1.).

*3 As of V12.1C00 data encryption is integrated to 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), set and export the environment variable NOCONRSUDATA prior to ftstart. This disables connection setup optimization.
Example:
NOCONRSUDATA=1 ; export NOCONRSUDATA
ftstart

3.5 Obsolete functions (and those to be discontinued)

*3 The following functions are no longer supported as of this version:
*3 Usage of CMX and X.25
*3 PCMX packages

3.6 Incompatibilities

*1 As of openFT V11 the namespace de.siemens.openft.coreapi is marked as
*1 deprecated. Please use the new namespace com.fujitsu.ts.openft.coreapi. See
*1 also JAVA.DOCS.

*4 As of openFT V12.1C00 type of ‘buf’ argument (belonging to ft_xcinfo() function) has
*4 been changed from char to byte in Java API:
*4
*4 <method type="int" name="ft_xcinfo">
*4 <comment>read data</comment>
*4 <retvalComment>0§no more data available
*4 n§n databytes are written to buf
*4 -1§an error occurred</retvalComment>
*4 <param name="id" mandatory="yes" type="void" ptr="true" direction="in">
*4 <comment>id of ft_xcopen()</comment>
*4 </param>
*4 <param name="par" type="ft_xcipar" mandatory="yes" specifier="struct" ptr="true"
*4 direction="in">
*4 <comment>request parameter</comment>
*4 </param>
*4 <param name="buflen" type="int" direction="in">
*4 <comment>nr of bytes in buf</comment>
*4 </param>
*4 <param name="buf" mandatory="yes" type="byte" direction="out" ptr="true"
*4 listSizeVar="buflen">
*4 <comment>buffer with buflen bytes</comment>
*4 </param>
*4 <param name="errorinfo" specifier="struct" type="ft_err" ptr="true"
*4 direction="out">
*4 <comment>error information</comment>
*4 </param>
*4 </method>

3.7 Restrictions

None.

*8 3.8 Known Issues

*9 None

*8 3.9 Procedure in the event of errors

*8 If an error occurs, the following error documents are needed for
*8 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 / User Guide , section 'What if..'
- openFT (Unix- und Windows-Systems) V12.1 Installation and Operation / System Administrator Guide, section 'Troubleshooting and Diagnosis''

4 Hardware requirements

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