FUJITSU

FUJITSU Software openFT (Windows) V12.0

Version 12.0C00
July 2015

Release Notice

1 General

*1   This Release Notice is a summary of the major extensions, dependencies and
*3   operating information with respect to openFT (Windows) V12.0C00, openFT-
*3   FTAM (Windows) V12.0C00, openFT-FTP (Windows) V12.0C00 and openFT-CR
*2   (Windows) V12.0 under the operating systems Windows Vista, Windows 7,
*2   Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2008 R2,
*1   Windows Server 2012 and Windows Server 2012 R2 that are not included in the
*3   Product Facts and in the manuals.

*3   The release level is that of: July 2015.

*3   Changes to release level November 2013 are marked with *3.
*2   Changes to release level July 2013 are marked with *2.
*1   Changes to release level September 2012 are marked with *1.

    The Release Notice is shipped on the product delivery medium.

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

*3   openFT V12.0C uses Open Source software components. Information about the
*2   used Open Source software components and the corresponding license
*2   conditions can be found in the directory ThirdPartyLicense on the openFT product
*3   CD. openFT V12.0C00 is subject to the same license conditions as openFT
*2   V12.0B00.

1.1 Ordering

*3   openFT V12.0C00 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.

    After purchase openFT-CR V12.0 may be used and copied as often as needed.
    Please observe the applicable export and re-export regulations. An export license
    is required to use the product in other EU countries or to export the product to a
    third country.

1.2 Delivery

*3   Delivery of files for openFT V12.0C00, openFT-FTAM V12.0C00 and openFT-FTP
*3   V12.0C00 on CD-ROM with installation instructions:
*3   openFT V12   dated 07.2015
            Delivery of files for openFT-CR V12.0 on CD-ROM with installation instructions:
*3   openFT V12 - Crypto -   dated 07.2015

1.3 Documentation

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

The manuals are shipped as PDF files on the product medium. The index enables
searches to be made in all manuals.

*3   A detailed description of the innovations to openFT V12.0C is available under:
*3   • openFT Explorer 'Help / Extensions to the Manuals',
*3   • Product-CD in file docs/english/notes/Readme_V12.0C.pdf
*1   • Online http://manuals.ts.fujitsu.com

2 Software extensions

*3   Only the extensions and improvements over the previous versions openFT
*3   V11.0B, 12.0A and 12.0B are described in the following section.

2.1 Configuration editor for remote administration

openFT offers with its new configuration editor a graphical interface, with which a configuration file can be created or changed for remote administration. The configuration can be viewed immediately as a tree structure in the configuration editor and corresponds to the subsequent presentation in the openFT Explorer. The configuration editor is started via the openFT Explorer.

2.2 Extended logging functions

The logging functions have been extended as follows:
- Switching the logging file and offline logging
  The logging file can be changed during ongoing operation. After the switch new logging records can be written into a new logging file. The previous logging file continues to exist as an offline logging file; its logging records can still be viewed using openFT resources.
  The command interface has been extended as follows for this purpose:
  - *ftmodo*:
    New option *-lf=c* to switch the logging file.
  - *ftshwl*:
    New options *-lf, -tlf* and *-plf*, to view logging records from offline logging files.
    New option *-llf*, to output the names of all logging files (including offline logging files).
  - *ftdell*
    New selection criterion *-tlf*, to delete offline logging files.
- Automatic deletion of logging records
  Time intervals can be set via operating parameters for the automatic deletion of logging records. To this end, the command *ftmodo* has been extended to include the new options *-ld, -lda, -ldd* and *-ldt*. The settings can be displayed using the command *ftshwo*.
- Polling function for the output of logging records
  In the case of *ftshwl* the new options *-po* and *-pnr* can be used to set the time interval and the number of repeats (polling).
- Wildcards for partner names for the output of logging records
  In the case of *ftshwl* the wildcard symbols "*" and "?" can also be specified for the partner names (*-pn=*).

2.3 Extended security functions

- Importing of keys
  The new command *ftimpk* can be used to import both externally created private keys and public keys from partner systems.
- Expiration date and authentication level of RSA keys
  - The new command *ftmodk* can be used to set an expiration date and change the authentication level (1 or 2) for keys that are used to authenticate partner systems.
  - The new command *ftshwk* can be used to output the features of the keys stored in the system.
  - The authentication level is displayed for *ftshwl* (output parameter SEC-OPTS – new values LAUTH2 and RAUTH2).
- Enforce data encryption

The new option *-c* in the command *ftmodo* can be used to generally enforce data encryption for file transfer and administration requests. The setting is possible on a separated basis for inbound and outbound requests.
- After initial installation openFT uses as standard a 2048-bit RSA key.

2.4 Extended partner management

- A partner in the partner list can also be explicitly deactivated for inbound requests.
  The new option *-ist* has been introduced for this purpose in the commands *ftaddptn* and *ftmodptn*. The current status (activated/deactivated) is shown in the output parameter INBND for *ftshwptn*.
- Serialization of asynchronous outbound requests for certain partners
  The new option *-rqp* in the commands *ftaddptn* and *ftmodptn* can be used to control whether asynchronous outbound requests for a certain partner are always performed serially or whether parallel connections are allowed. This feature is shown in the output parameter REQU-P for *ftshwptn.*

2.5 Extended request management

- Global request identification
  In the event of an FT request the initiator's request number is transmitted to the responder, where it is visible as a global request identification. This enables a request to be clearly assigned between initiator and responder. The commands *ftshwr* and *ftshwl* have been extended as follows:
  - The global request identification is in each case shown in the new output parameter GLOB-ID in the responder.
  - The new parameter *-gid* can be used in both commands to make a selection according to a global request identification.

2.6 Operation with and without CMX

The new option *-cmx* in the command *ftmodo* can be used to change between the operating modes "with CMX" and "without CMX". The current mode is shown for the command *ftshwo* in the output parameter USE CMX.
After initial installation the "without CMX" operating mode is set.

2.7 Extended diagnostics

The new option *-troll* in the command *ftmodo* can be used to activate and deactivate the trace for the lower protocol layers in ongoing operation and to control the scope of the trace.
The current setting is shown in the command *ftshwo* in the output parameter OPTIONS-LL (line: FUNCT).

2.8 Measurement data display for Windows performance monitoring

The measurement data of openFT can also be displayed via Windows performance monitoring. The display is activated via the Windows Control Panel.

2.9 Extension to the C program interface and openFT script interface

The program interface has been extended to include the following function groups:
- *ft_sd** to determine the attributes of all the files of a directory in the remote system.
- *ft_xc** to synchronously execute commands in the remote system.

These extensions are also available at the JAVA interface.

The openFT script interface has been extended to include the following commands for the variable storing of openFT script requests:

- *ftmodsuo* to change openFT script user options.
- *ftshwsuo* to show openFT script user options.

2.10 License key administration in Windows Systems

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.
Three new commands have been introduced for the administration of the license keys:

- *ftaddlic*: Add license key
- *ftshwlic*: Show license keys
- *ftremlic*: Remove license key

2.11 Other changes

- The commands *ft* and *ncopy* are given the additional alias names *ftacopy* (for *ft*) and *ftscopy* (for *ncopy*) so as to avoid any confusion with the commands of the operating system or other manufacturers.
- The command *ftinfo* has been extended and provides additional information.
- The maximum record length for file transfer requests and when setting local file attributes has been extended to 65535. This concerns the following commands and options:
    - *ncopy -r=*
    - *ft -r=*
    - *ftmodf -rl=*
- Migration help for TNS replacement
  The tool *tns2ptn* is available for the migration to TNS-free operation. *tns2ptn* is intended to create commands, with which entries can be made in the partner list, from TNS entries with address format RFC 1006.
- The description of dynamic partners has been rendered more precise. In this connection, the partner types "Named partners", "Registered dynamic partners" and "Free dynamic partners" have been introduced.
- Functional extensions in the openFT Explorer (see online help)

*1 The innovations over the previous version openFT V12.0A are described in the
*1 following section.
*1   A detailed description of the innovations to openFT V12.0B is available under:
*3 • openFT Explorer 'Help / Extensions to the Manuals',
*3 • Product-CD in file docs/english/notes/Readme_V12.0C.pdf
*1 • Online http://manuals.ts.fujitsu.com

*1 ## 2.12 Support of FarSync X.25
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*1 As of openFT V12.0B FarSync X.25 cards from the manufacturer FarSite are
*1 directly supported by openFT. PCMX is no longer required for this. In order to
*1 enable the usage of the direct X.25 support in openFT, CMX operation must be
*1 switched off (ftmodo -cmx=n).

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2.13 Deactivate restart function

As of openFT V12.0B the restart function can be deactivated partner specific or global. The commands ftmodo (switches -rco -rci), ftaddptn and ftmodptn (switch -rco) are extended. The output of the command ftshwptn was extended.

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2.14 Exporting public keys

As of V12.0B the openFT Explorer supports the export of public keys of the local instance. This makes it easier for the FT administrator to provide partners with the keys required to authenticate the own instance.

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2.15 Extended support of the Application Entity Title

The Application Entity Title now offers the option of implementing the identification of an initiator which is independent of the partner address for FTAM as well.

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2.16 Delete diagnosis information and console messages

As of V12.0B the openFT Explorer supports the deletion of diagnosis information and console messages of the set local instance.

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2.17 Scope ID and line number

The scope ID in IPv6 addresses and the line number (or adapter number:line number) in X.25 address specifications are integrated in the "Host" within the partner address, but are not taken into consideration when determining a partner list entry via the partner address, unless a scope ID or line number is specified in the partner address. This is a change in the previous behavior for IPv6, which is a particular advantage for the inbound resolution of the sender via the partner address.

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The innovations over the previous version openFT V12.0B are described in the following section.
A detailed description of the innovations to openFT V12.0C is available under:
- openFT Explorer 'Help / Extensions to the Manuals',
- Product-CD in file docs/english/notes/Readme_V12.0C.pdf
- Online http://manuals.ts.fujitsu.com

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2.18 Changes at Unattended Installation

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.

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2.19 Configuration of minimum key length

For an openFT instance it is possible to require a minimum RSA key length for the negotiation of the openFT session encryption key.

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2.20 Extended ftinfo output

The output of the command ftinfo is extended by the column Crypt.

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2.21 ftmonitor polling time change

The graphic openFT monitor supports the change to another polling interval without restarting the program

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2.22 Case extension to ft_mget

The tool ft_mget is extended to include the option –case; this sets the consideration or non-consideration of upper case / lower case in the file name pattern.

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2.23 Extension of logging functionality in openFT explorer

The logging functionalities are extended to the context menu of the node 'Logging' by a menu entry **Settings…** allowing to open the 'Operating Parameters' dialog and position on its 'Logging' tab automatically.

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2.24 openFT Explorer recognizes newly created openFT instance automatically

The drop down menu for choosing an instance is always available. Newly created instances are added to the menu without restarting openFT Explorer.

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:

	Windows Vista	or
	Windows 7	or
*1	Windows 8	or
*2	Windows 8.1	or
	Windows Server 2008	or
	Windows Server 2008 R2	or
*1	Windows Server 2012	or
*3	Windows Server 2012 R2	

At least J2SE Runtime Environment 5.0 (JRE 5.0) is needed to use the JAVA and ftscript interface.
*2   **Note:** There is an incompatible change in JAVA 7 handling filenames with blanks.
*2   Use at least JAVA (JRE) 7 Update 25 for the ftscript interface. To allocate a
*2   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.ts.fujitsu.com/openft).

3.3   Product installation

openFT V12 must be installed under Windows using the Windows Installer from Microsoft. It can be installed interactively (i.e. with user guidance) and unattended.
*3   The PCMX-32 V5.0A90 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 openFT-CR for Windows Systems delivery unit consists of the following package:
openFT-CR: Crypto module for openFT (encryption)
openFT-CR may only be installed after openFT.

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.

As of openFT (Windows) V12.0A the functionality is activated with the help of 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 V11 or V10)

An update installation is carried out if openFT V11 or V10 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 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 V12.0

All running openFT V12 applications must be closed before starting installation.
The version already installed is automatically detected and updated.

*1   Note: All existing settings are retained. Active instances are automatically updated
*3   during an installation form V12.0A or V12.0B to V12.0C. Use the command ftupdi
*1   to update deactivated instances.

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.

*3   The installation package for PCMX-32 (PCMX-32.msi) is located in the
            \openFT\Unattended_installation directory on the product CD.
*3   Older PCMX-32 versions can be updated with PCMX-32 V5.0A90.

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 System Administrator Guide – Installation and Administration
*3   Section 2.1.4 and the file Readme_v12.0C.pdf. The file Readme_V12.0C.pdf is
*3   available under:
*3   • Product-CD in file docs/english/notes/Readme_V12.0C.pdf
*3   • Online http://manuals.ts.fujitsu.com

*3   As of openFT V12.0C00 the unattended installation has been changed as follows:
*3   • Packages openFTde.mst and PCMX-32de.mst are no longer delivered
*3   • For installing the German language use TRANSFORMS=:de
*3   • Default language: If German or English is set as locale in operating system
*3   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 are offered by Fujitsu (http://training.ts.fujitsu.com).

If you want to use encryption of user data, you must use the openFT-CR (Windows) V12 delivery unit because of export regulations.

openFT V12 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.

Administering openFT via SNMP:
The file "openFT\Docs\English\Notes\SNMPSupport.pdf" on the product CD contains information on administering openFT via SNMP.

For information on the configuration of X.25 or ISDN, see the online help of PCMX-32. For an annotated example of Eicon card configuration, see the file "openFT\Docs\English\Notes\X25-ISDN.pdf" on the product CD.

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.

Information on the use of ISDN CAPI TP0:
Information is provided in the PCMX-32 help system under "Configuration of the ISDN CAPI TP0 transport system".

Additional information on the use of ISDN cards:

a) AVM Fritz!Card, AVM FRITZ!Card USB 2.0, AVM B1
A maximum of two X.25 connections is possible per B channel.

b) Eicon/Dialogic DIVA Pro 2.0
With the current driver versions, one X.25 connection is possible per B channel. With the new DIVA Client Version 2.50, up to eight X.25 connections are possible via a B channel. For the DIVA Server cards, you require Version 3.02 or higher for eight X.25 connections via a B channel.

*1 **3.4.1   Special licenses**
*1   With openFT V12 two limited client licenses are available:
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*1   1. KBA license
*1   - only openFT Protocol
*1   - no dynamic partners
*1   - only one instance (the std instance)
*1   - a maximum of 2 fixed partners in the partner list
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*1   2. ZOLL license
*1   - only FTAM protocol
*1   - no dynamic partners
*1   - only one instance (the std instance)
*1   - maximum of 6 fixed partners in the partner list
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*1   For testing these limited licenses in real mode, evaluation licenses are available.
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*1   When using these licenses please note the following:

*1   Dynamic partners and central ADM server are switched off.
*1   Subsequent installation of the SERVER license, dynamic partners and/or remote
*1   administration server must be activated as needed (ftmodo -dp=n -admcs=y).
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*1   Only the std instance is allowed. All other instances will be terminated and cannot
*1   be used any more (except a few necessary commands ftshwo, ftshwd, ftaddlic,
*1   ftremlic and ftshwlic).
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*1   The number of partners is limited. If more partners are listed than permitted they
*1   must be removed from the partner list with the command ftremptn. Until then
*1   transfer commands cannot be executed.

3.4.2   Eicon/Dialogic

The "Connections for ISO Transport" software is required to operate
Eicon/Dialogic X.25 cards. As of release V6R4 the "Connections for Windows"
software can also be used, because the "ISO Transport" protocol required by
openFT has been added.
Use the Eicon/Dialogic configuration program of the driver and check if the
protocol "Transport ISO" exists and can be selected under "High Level Protocols".
In this case, the driver can be used by openFT. Both drivers "Connections for ISO
Transport V6R4" and "Connections for Windows V6R4" do have problems when
establishing ISDN connections with certain X.25 cards (like the C91 V2) up to
software build 281. In this case we recommend you to use the "Connections for
ISO Transport V5R7" software until the bug has been fixed by Eicon/Dialogic.

The drivers can be downloaded from the Eicon/Dialogic Web site. More
information is provided at http://www.dialogic.com.

3.4.3   X.25 Stack of FarSite Communications

More information on FarSync X.25 cards from FarSite Communications is
provided at http://www.farsite.co.uk.
*1   Following Software is necessary:
*1   FarSync Software V4.0 as of Windows XP up to an including Windows Vista
*1   FarSync Software V4.2.0 as of Windows 7
*1   Download software
*1   http://www.farsite.com/custsupp/Download_X.25_software.htm

3.5 Obsolete functions (and those to be discontinued)

The following functions are no longer supported as of this version:
ftmodo -ftp=
The deactivating of the FTP server with ftmodo -ftp= is no longer supported.
Please use the option -acta= of the ftmodo command instead.

3.6 Incompatibilities

Apart from the following restrictions openFT V12 is fully compatible to openFT V11:
* After initial installation openFT uses as standard an RSA key of 2048 bits in length.

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.
  A PERLE error report will be opened for Second Level Support.

See also the appropriate information in the manuals:
- User or System Administrator Guide , section 'What if..'
- System Administrator Guide, section 'Actions in the event of an error'

4 Hardware requirements

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

openFT V12 can be used on the following systems:
PC, processor I586 or higher;
Boards:

- LAN (TCP/IP) any (if driver available)
- RAS (TCP/IP) via any X.25 or ISDN (if driver available)
- X.25 / ISO TP02:
  Direct connection:
  a) Eicon/Dialogic card C91 V2 / C91 PCIE / S91 V2 / S94 V2 / S94 PCIe
  c) FarSync X.25 T-series, M-series and Flex USB (see section 3.4.3)

  Via ISDN:
  a) Eicon/Dialogic card C91 V2 / C91 PCIE / S91 V2

  Note: The transport system X.25 (Eicon/Dialogic) is currently available on
  Windows Vista und Windows Server 2008.
- ISDN CAPI TP0: AVM FRITZ!Card, AVM FRITZ!Card USB 2.0, AVM B1,
  Eicon/Dialogic DIVA Pro 2.0 and all cards with a CAPI 2.0 compatible port
  support the ISO 8208 (X.25 DTE-DTE) protocol and are compatible with one
  of the tested cards.