GXS

Information Exchange via TCP/IP FTP Gateway Supplement

Version 1 Release 4.1

GN10-4074-01

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This supplement identifies changed and new information applicable to the *Information Exchange via IE/FTP Gateway User's Guide*, V1 R4 (GC34-2345-01).

Contents

To the reader

The purpose of this supplement is to provide new and amended information for the ***Information Exchange via TCP/IP FTP Gateway User's Guide*** (GC34-2345-01). In particular, it introduces the new certificate issue/reissue process that is a feature of IE/FTP 1.4.1.

Please note that this supplement is not a standalone document. It is intended to be used in conjunction with the *User's Guide*. Some of the information is pertinent to Version 1 Release 4 (1.4.0) with additional information for 1.4.1.

For easy reference and comparison, the page numbers in this supplement match the affected page numbers in the *User's Guide*. Revision bars are provided to identify the exact location of new or amended information.

Summary of Amendments

The following list summarizes where the changes are located.

Section Title	Pages
Chapter 1	1 through 2
Chapter 5	23 through 35
Appendix C	125 through 128
Appendix F	147 through 148
Appendix G	149 through 152

Chapter 1

Page 2 : Updated the next to last paragraph with current references and order numbers.

Chapter 5

Pages 29 and 30: Changed the numbers in the “Field” and “Column” definitions in the “Subreply format” table.

Page 31: Changed the numbers in the “Column” definitions in the “Address format in EDI subreplies for a single user ID” table.

Page 32: Changed the numbers in the “Column” definitions in the “Address format in EDI subreplies for an alias” table.

Page 32: Changed the numbers in the “Column” definitions in the “Address format in EDI subreplies for a list” table.

Page 33: Added a leading space to each row under put orders in the “FTP session input and reply” table.

Appendix C

Page 126: Added new information under “Writing your own client” for customers using the IE/FTP 1.4.1 service.

Appendix F

Page 147: Added new information under “Distribution of certificates” for customers using the IE/FTP 1.4.1 service.

Appendix G

Page 151: Updated the information in the first question under “Internet gateway”.

Chapter 1

Introducing the IE/FTP interface

This chapter discusses the File Transfer Protocol (FTP) interface to Information Exchange and the subset of FTP functions that it supports.

Information Exchange, the mailbox component of EDI Services, allows trading partners to exchange EDI data, files, and e-mail. Each user on Information Exchange has a mailbox that is addressed using the format *account.userid*.

The *Information Exchange/File Transfer Protocol* (IE/FTP) interface simulates a standard FTP server. Using an FTP client, you connect to the IE/FTP interface via TCP/IP and submit FTP commands. The IE/FTP interface converts your FTP commands to the appropriate Information Exchange commands and sends them to Information Exchange via SNA LU 6.2 for processing.

The IE/FTP interface uses standard FTP commands to communicate with Information Exchange. See Appendix A, “FTP commands supported,” for descriptions of the supported commands.

The IE/FTP interface provides access to messages in your Information Exchange mailbox as if they were files on a remote file system. The IE/FTP interface differs from the standard FTP interface in two ways:

- After you log on to the IE/FTP interface, you use the cd command to specify the user with whom you want to communicate.
- After you download a file via the IE/FTP interface, Information Exchange deletes the file from your mailbox.

NOTE: The IE/FTP interface supports only FTP. It does not support e-mail (SMTP) or Telnet. However, you can use 3270 access via Telnet to access Information Exchange Administration Services.

IE/Interface protocol stack

The following figure illustrates the IE/FTP interface protocol stack.

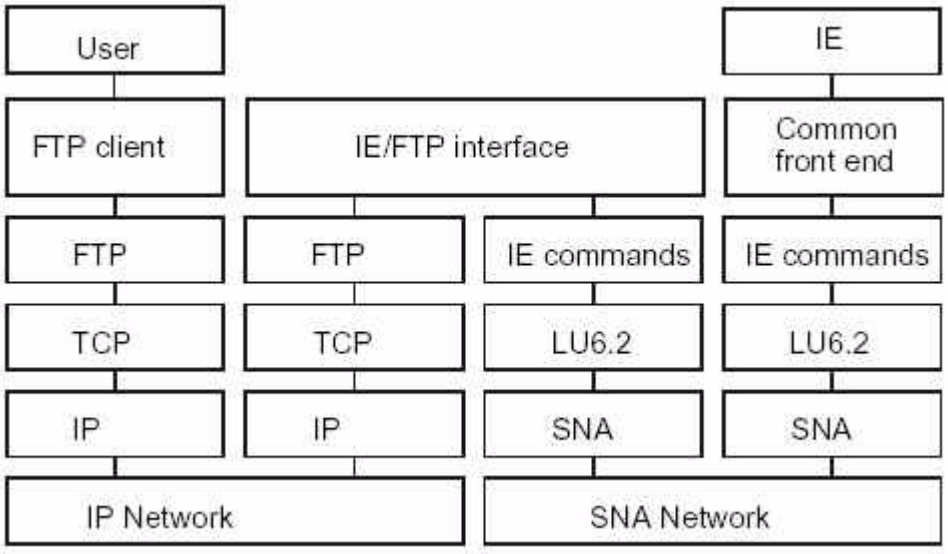

Figure 1. The IE/FTP interface protocol stack

Using the IE/FTP interface

Whether you are connected via a secure network or via the Internet, you must first be registered to use Information Exchange. Upon registering, you are orivuded with an Information Exchange mailbox address consisting of an account ID, a user ID, and an initial password value. When you connect to the IE/FTP interface, the standard Information Exchange mailbox security module compares the password you are asked to provide with the password associated with your mailbox address.

If you intend to connect to the IE/FTP interface via a secure network, you must be registered to use that network. However, no additional registration is required to use the IE/FTP interface.

If your information Exchange enter offers connection via the Internet, you must be registered to use this service. You also need a secure client that is compliant with the Internet draft for FTP and SSL security extensions **draft-murray-auth-ftp-ssl-07.txt** and two identification tokens which will be sent to you by a secure postal method. These tokens enable you to obtain an X.509 certificate specially for use with the IE/FTP interface.

The IE/FTP interface is designed from the viewpoint of an FTP user, providing access to Information Exchange via standard FTP commands. Refer to “Writing your own client” on page 125 for details.

Chapter 2

Transferring files

This chapter describes the file transfer options available to IE/FTP interface users.

Sending files

This section describes the procedures for sending the following types of files to the IE/FTP interface:

- Non-EDI files
- EDI files
- Library members

Sending a non-EDI file

To send a non-EDI file to an Information Exchange mailbox or library, you must specify the Information Exchange destination and then send the file.

There are two methods for specifying the destination:

- Issue a **cd** command prior to the **put** or **mput** command.

  ```
  cd acme.user1/invoice
  put invoices.970101
  ```

- Use composite addressing to specify the full destination within the file name on the **put** command.

  ```
  put invoices.970101 ie::/acme.user1/invoice/invoices.970101
  ```

For details of the **cd** command parameters, refer to Chapter 3, “Using the **cd** command.”

Example: Sending a single non-EDI file using the cd command

The following example illustrates sending two files: one binary mode and one in ASCII mode.

Step	FTP session input and reply
1	**cd acct.user02/text** 250 Currently to user ( ).ACCT.USER02 with class TEXT.
2	**put testtext** 200 Port command OK 150 Data connection open 226 File transferred to ( ).ACCT.USER02 with class TEXT. O.K.
3	**binary** 200 Type now set to I.
4	**cd /cadfile** 250 Currently to user ( ).ACCT.USER02 with class CADFILE.
5	**put testfile** 200 Port command OK. 150 Data connection open. 226 File transferred to ( ).ACCT.USER02 with class CADFILE O.K.

To repeat the steps in the example, do the following:

1. Issue the **cd** command to specify the Information Exchange account and user ID to which you wish to send subsequent messages. You can also specify the user class of the messages. In this case, the next file is sent to mailbox acct.user02 with a user class of TEXT.
2. Issue the **put** command to send the contents of the local file as an Information Exchange message to user acct.user02 with a message user class of TEXT.
3. Issue the **BINARY** command, so the data sent to the IE/FTP interface no longer undergoes ASCII-to-EBCDIC conversion before being stored by Information Exchange.
4. Issue the **cd/cadfile** command, which retains the same destination mailbox (specified by the previous **cd** command), but changes the message user class for subsequent messages to CADFILE.
5. Issue the **put** command to send the contents of the local file as a binary Information Exchange message to user acct.user02, with a message user class of CADFILE.

Example: Sending files using composite addressing

You can use composite addressing as an alternative to the normal **cd** command followed by a **put** or **mput** command.

Step	FTP session
1	**open ieftp1** 220 ieftp1 IE-FTP server (v3r0mf.1) ready on system IE1. **user acct.user1 pass1** 331 Enter Password. 230 Ready.
2	**ls ie::/*.*/orders** 200 Port command OK. 150 Data connection ready to open. FFAEE607053613FEC5F1._IE FFAEE60706F13D78C5F1._IE
3	**ls ie::/*.*/orders/-l** 200 Port command OK. 150 Data connection ready to open. Filename (MSGKEY) Sender Class Size Date Time FFAEE607053613FEC5F1._IE ACME USER01 ORDERS 0000006523 970702 153415 FFAEE60706F13D78C5F1._IE XYZC USER3 ORDERS 0000001311 970702 155537 226 List for user ( ).*.*, class ORDERS transferred O.K.
4	**put /ie/outbasket/xyzco/invoice.005 ie::/xyzco.user3/invoice** 200 Port command OK. 150 Data connection ready to open. 226 File transferred to ( ).XYZCO.USER3 with class INVOICE. O.K.
5	**put /ie/docs/newsletter ie::/(list).supplier/news** 200 Port command OK. 150 Data connection ready to open. 226 File transferred to (LIST).SUPPLIER with class NEWS. O.K.

To repeat the steps in the example, do the following:

1. Initiate the connection and log on to the mailbox.
2. Issue an **Is** command with a composite address of ie::/*.*/orders. This lists messages from all users with a message user class of ORDERS.
3. Issue an **Is** command with a composite address of ie::/*.*/orders/-1. Information Exchange returns a long listing of messages from all users with a message user class of ORDERS.
4. Issue the following command to send the local file /ie/outbasket/xyzco/invoice.005 to the Information Exchange user XYZCO.USER3 with a message class of INVOICE:

   put/ie/outbasket/xyzco/invoice.005 ie::/xyzco.user3/invoice

5. Issue the following command to send the local file /ie/docs/newsletter to the distribution list SUPPLIER with a message:

   put/ie/docs/newsletter ie::/(list).suppliers/news

Sending an EDI file

There are two methods for sending an EDI file:

- Issue a **cd edi** command and then issue a **put** command.
- Use composite addressing to specify the EDI format option within the file name in the **put** command.

The format of the cd edi command is:

cd edi[(*tiii*)]

The parameter for this command is:

- *(* - Open parenthesis to indicate the start of the parameter.
- *t* - The value G (global), O (organizational), or P (private) to describe the type of alias table to use for resolution of the aliases for the EDI data.
- *iii* - The 3-character alias table name used by Information Exchange to resolve the aliases for the EDI data.
- *)* - Close parenthesis to indicate the end of the parameter.

This command supersedes the **cd [edufact|untdi|z12|ucs]** command and provides additional EDI processing functions, such as multiple EDI interchanges in a single file. The IE/FTP interface automatically determines the EDI format, which can be one of the following:

- EDIFACT
- UN/TDI
- X.12
- UCS

Each file sent can contain multiple EDI envelopes, but each file must consist of only one EDI format. The IE/FTP interface does not support mixed-format EDI data files.

The following common data header fields are extracted from the EDI data when sending a file:

- EDISQUAL
- EDISENDER
- EDIRQUAL
- EDIRECVR
- EDICNTLN

The following fields are also extracted from the EDI data and placed in the Information Exchange **SDISNDM** command:

- Recipient address
- Message user class
- Message name

The following examples illustrate the use of alias tables to resolve EDI addresses.

This command...	Resolves aliases from...
cd edi (gxs)	A global alias table named **GXS**
cd edi (od99)	An organizational (account) alias table names **D99**
cd edi (pjoe)	A private alias table named **JOE**

FTP replies when sending an EDI file

When you issue the FTP user command put or mput, the client issues the FTP command STOR (store). This requests the FTP server to receive a file. If you send an EDI file, the IE/FTP interface returns a multiline FTP reply indicating the progress of each individual EDI envelope.

The reply is in the following format:

226-EDI processing started

Subreply 1
Subreply 2
.
.
.
Subreply n
226 0 Sxxxxx Exxxxx EDI processing complete
or
226 1 Sxxxxx Exxxxx EDI processing terminated

The parameters for this reply are:

- *Sxxxxx* indicates the number of envelopes successfully sent.
- *Exxxxx* indicates the number of envelopes in error.

You can control the format of EDI replies using the **site edireplies** setting.

0 With **site edireplies** set to 0, the IE/FTP interface returns only the 226 end reply; thereby, making it a single-line reply.

1 With **site edireplies** set to 1, the IE/FTP interface returns a 226 start reply, followed by a subreply for each EDI envelope in the file, followed by a 226 end reply.

2 With **site edireplies** set to 2, the IE/FTP interface returns a 226 start reply, followed by a subreply for each EDI envelope in error, followed by a 226 end reply.

Subreply format for each envelope

The subreply format for each envelope is as follows:

Field	Column	Name	Description
1	2-3	SUBCODE	Code of reply. 00 = No error (EDI interchange sent) 01 = User ID detected is in invalid format. 02 = Not authorized to send to user ID. 03 = User ID does not exist. 11 = EDI format error. 12 = Cannot determine EDI type. 13 = Error with Information Exchange/Communications. 14 = X.12 Binary or Security segment and not TYPE 1. 15 = Mixed EDI types detected 16 = EDI header error 17 = EDI control number mismatch You receive the response 02 or 03 only if **site probe** is enabled, and the probe command indicates an error.
2	5	EDITYPE	Identifies the EDI data type for this interchange and contains one of the following values: E = EDIFACT T = UN/TDI X = X.12 U = UCS
3	7-13	OFFSET	Offset to start of EDI interchange. The offset is the byte counter as seen by the IE/FTP interface. Because of CR/LF manipulation carried out by both your client application and the IE/FTP interface, it might not correspond directly with your file.
4	15-20	COUNT	Length of EDI interchange. The length is the byte counter as seen by the IE/FTP interface. Because of CR/LF manipulation carried out by both your client application and the IE/FTP interface, it might not correspond directly with your file.
5	22-42	ADDRESS	Addressing information determined from the previous **cd** command and the recipient address details extracted from the EDI interchange. The format is described in the following three tables.
6	44-51	MSGUCLS	Message user class. Contains the sender's classification. It is extracted from the EDI data or is the default.
7	53-66	EDICNTLN	The EDI control number extracted from EDI data. The format is left-justified and padded on the right with blanks.

Field	Column	Name	Description
8	68-78	DESCR	Sub-code description. Message text that describes the SUBCODE generated for this EDI interchange.

All text fields are left-justified and padded on the right with blanks, unless otherwise stated. All numeric fields are right-justified and padded on the left with zeros.

Format of the ADDRESS field in the 226 response

Thereare three types of addresses that can be returned in the subreply.

- Single destination user ID
- Information Exchange alias
- Information Exchange list

Address format in EDI subreplies for a single user ID

These addresses are described in the following table.

Field	Column	Name	Description
1	22	DTBLID	Destination system. A 3-character system ID (such as USA or JPN) of the system the EDI interchange was sent to, or blanks if the destination was your local Information Exchange system.
2	25	fill 1	Blank.
3	26	DESTACCT	Destination account. The destination account code and, in conjunction with DESTUID (field 5), identifies the message recipient. The format is right-justified and padded on the left with blanks.
4	34	fill2	A period.
5	35	DESTUID	Destination user ID. In conjunction with DESTACCT (field 3), identifies the message recipient. The format is right-justified and padded on the left with blanks.

Address format in EDI subreplies for an alias

These addresses are described in the following table.

Field	Column	Name	Description
1	22	DTBLTYP	Alias table type for Information Exchange to use for address resolution of the alias. G = Global alias table O = Organizational (account) alias table. P = Identifies a private (user ID) alias table.

Field	Column	Name	Description
2	23	DTBLID	Alias table name for Information Exchange to use for address resolution of the alias.
3	26	fill1	A period.
4	27	ALIAS	Destination alias name. Information Exchange resolves the alias address from the table identified by DTBLTYP and DTBLID. The format is left-justified and padded on the right with blanks.

Address format in EDI subreplies for a list

These addresses are described in the following table.

Field	Column	Name	Description
1	22	TEXT	"LIST."
2	26	fill1	Blank
3	27	LISTNAME	Destination list name. The list from which Information Exchange resolves the recipient addresses.
4	35	fill2	Blanks.

Example: Sending an EDI file using the *cd edi* command

The following table provides an extract from a sample session that illustrates how to send an EDI file to Information Exchange via the IE/FTP interface. Full EDI validation is shown, including the use of the **site probe** function for EDI destination validation.

Step	FTP session input and reply
1	**site probe 1** 214 PROBE set ON for future commands
2	**cd edi** 250 EDI data.
3	**put orders** 226-EDI processing started. 01 E 0000000 012345 SEND_IT_TO_FRED ORDER 4235467235695 Bad user 00 E 0012345 003524 ACCT.USER01 INVOICE 4321473265789 Sent O.K. 00 E 0015869 031415 USA ATAP.MARY DELIV 4327564783965 Sent O.K. 00 E 0047284 092654 USA ATAP.MUNGO ROUTE 5438728561547 Sent O.K. 00 E 0139938 027182 USA ATAP.MIDGE SUPPLY 4321756479113 Sent O.K. 00 E 0167120 081812 PXYZ.MYBESTMATE ORDER 4321476789124 Sent O.K. 02 E 0248932 021736 GTTT.7367564732057FGD INVOICE 4321674896327 Not Auth 00 E 0270668 004817 GIBM.GNORDERS ORDER 4321647396217 Sent O.K. 03 E 0275485 006245 NO.USER RUBBISH 4321467382198 No user 00 E 0281730 049865 ACCT.USER02 INVOICE 4321467389123 Sent O.K. 226 0 S00007 E00003 EDI processing complete.

To repeat the steps in the example, do the following:

1. Issue the **site probe 1** command to enable destination address checking when sending files to the IE/FTP interface.

2. Issue the **cd edi** command to specify that all files subsequently sent to the IE/FTP interface are EDI data in one of the supported formats. In this case, the data is in EDIFACT format.
3. Replies received after the **put** command is issued indicate various EDI processing results, summarized by the final column in each subreply:

SENT O.K.	All interchanges were processed successfully.
BAD USER	The destination address in the UNB segment was in an invalid format
NOT AUTH	The user in session is not authorized to send to the destination address in the UNB segment (this error can occur only when **site probe** is set to **ON**).
NO USER	The destination address in the UNB segment does not exist (this error can occur only when **site probe** is set to **ON**).

The end reply indicates that seven interchanges from the file were sent successfully while three were in error. For details on all the replies shown, refer to Appendix B, “FTP replies from the Information Exchange/FTP interface.”

Example: Sending an EDI file using composite addressing

You can use composite addressing instead of issuing the **cd edi** command. For details on composite addressing, refer to “Using composite addressing” on page 11.

Step	FTP session input and reply
1	**open ieftp1** 220 ieftp1 IE-FTP server (v3r0mf.I) ready on system IE1. **user acct.user1 pass1** 331 Enter Password. 230 Ready.
2	**put /ie/outbasket/orders.x12 ie::/edi** 200 Port command OK. 150 Data connection ready to open. 226-EDI processing started. 00 X 0000001 002253 GX12.ACMEORDERS #E2 000022223 Sent O.K. 00 X 0002253 004301 GX12.XYZINVOICES #E2 000022224 Sent O.K. 226 0 S00002 E00000 EDI processing complete.

To repeat the steps in the example, do the following:

1. Initiate the connection and log on to the mailbox.
2. Issue the following command to send the local file/ie/outbasket/orders.x12 to the IE/FTP interface for EDI processing:

   put/ie/outbasket/orders.x12 ie::/edi

Message sequence number

Information Exchange maintains a counter for all EDI interchanges sent during a session. It begins at 00001 and rolls over after 99999. The value of this counter is placed in the **MSGSEQN** field of the Information Exchange **SDISNDM** command for each EDI envelope processed.

Sending X.12 Binary and Security segments

X.12 Binary and Security segments can be reliably transmitted only when the file type is set to BINARY. If the file type is set to ASCII and the EDI data contains X.12 Binary and Security segments, the processing of the interchange halts and the remainder of the file is not processed. The IE/FTP interface processes X.12 data as follows:

- No translation or CR/LF processing is performed on data within the Binary or Security segments.
- Normal translation and CR/LF processing occurs for the rest of the X.12 data.

NOTE: This processing is valid only if you use the **cd edi** command.

Storing a library member

NOTE: Please refer to the *User's Guide*, GC34-2345-01, for the remaining topics covered in this chapter.

Sample reorganization jobs are provided. See the *Expedite/CICS Program Directory* for more information.

Appendix C

Writing an application

There are two ways to write an application using Information Exchange via the IE/FTP interface:

- The more complicated method, which is to write the FTP client as a communictions layer application.
- The simpler method, which is to create a script for you FTP client to execute. This is the quickest way to start using Information Exchange and can offer a fast, flexible solution.

Writing your own client

A secure FTP client suitable for accessing the IE/FTP gateway from the Internet can be engineered on top of a plain RFC 959-compliant FTP client. The IE/FTP gateway supports the standard RFC 959 commands, as well as a subset of the extensions defined in RFC 2228, “FTP Security Extensions.” This addition to the traditional FTP protocol specifies a means by which a security mechanism can be negotiated dynamically between the client and the server at any time during an FTP session. These commands are also documented in “FTP commands supported”. Note especially those commands that are required and those supported by the IE/FTP interface.

The IE/FTP interface supports TLS as the security mechanism. TLS is the successor to the SSL v3.0 protocol designed by Netscape Communications Corporation. The best reference to TLS is the Request for comments document RCF 2246. The informational Internet draft **draft-murray-auth-ftp-ssl-07.txt**, “securing FTP Using TLS,” describes the use of TLS in the context of RFC 2228 with FTP.

The IE/FTP registration personnel will issue registered customers with a private key and public certificate for each account/user ID to use the IE/FTP gateway. The private key will be encrypted using the PKCS# 12/PFX standard owned by Public certificates will be distributed in PEM-encoded format. PEM is specified in RFCs 1421-1424.

Customers using the IE/FTp 1.4.1 service will obtain their keys using a Web-based registration service. The keys will be exported from a customer’s browser in the PKCS#12 format (which is owned by RSADSI Inc.). For more information, see Appendix F.

References

Refer to the follwing documents for additional information.

Internet drafts

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Requests for comments

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J.Postel, “File Transfer Protocol”, RFC 959, October 1985.

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J.Linn, “Privacy Enhancement for Internet Electronic Mail: Part I: Message encryption and Authentication Procedures,” RFC 1421, February 1993.

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B.Kaliski, “Privacy Enhancement for Internet Electronic Mail: Part IV: Key Certification and Related Services,” RFC 1424, February 1993.

S. Bellovin, “Fireway-Friendly FTP,” RFC 1579, February 1994.

M.Horowitz, S. Lunt, “FTP Security Extensions,” RFC 2228, October 1997.

Implementation guidelines

You should also consider the following implementation guidelines:

- The IE/FTP interface sends multiple line responses to some **help**, **site**, and **cd edi** commands.
- When you specify an ASCII file type, Information Exchange translates the data using either:
  - The standard Information Exchange ASCII to EBCIDIC translation table (see Appendix E).
  - Any table you specify when you issue the **site xlate** command.
- For ASCII data, solitary line-feed characters are converted to the carriage-return and line-feed (CR/LF) combination. The data is translated on receipt, using the same table, only if the CDH does not indicate binary data in the CTYPE field.
- A file type of binary causes text data to be sent without modification or translation.

- Only stream mode data transfer is supported.
- Only file-structure data transfer is supported.
- FTP restart is not supported.

Using Scripts

Execution of the script in batch mode varies from system to system. Therefore, refer to the FTP documentation associated with the products and hardware being used. For example, the AS/400 requires you to write a CL procedure or a REXX program to initiate the batch process. The RISC/6000, on the other hand, allows you to create a script file and pipe it into the FTP process for execution.

Site confirm command

When creating scripts to execute via an FTP client, it is important to issue a site **confirm 1** command at the start of a script. This command ensures that messages are committed to and from your mailbox at the correct time and ensures message integrity. For more information on the **site confirm** command, see “Using site commands.”

Processing FTP replies from the IE/FTP interface

You can redirect the output of an FTP session to a file, so that you can later examine all messages relating to the file transfer. To capture all FTP user commands, underlying FTP commands, and FTP reponses in a file, include the **debug** and/or **verbose** commands in your script. You can then correlate each command with an action taken by the IE/FTP interface and Information Exchange.

In writing your scripts, use the message code to determine what actions or processing options are required. You should not rely on the text of a message, because the text is subject to change. However, there are two exceptions to this rule:

- The 226 reply for the FTP **RETR** command when a message key is specified
- The 226 reply for the FTP **STOR** command for EDI data.

Sample scripts

The following four sample scripts written in Perl are available in the support directory of the gateway.

- Sendbinary script
- Sendedi script
- Sendnonedi script
- Get nonedi script

These scripts check return codes for all commands and return any error and the reason it happened (if possible).

For details on how to access files in the support directory, refer to “Retrieving support files”.l

Appendix F

Registration for IE/FTP over the Internet

It is possible to use IE/FTP over the Internet. To provide secure communication over the Internet, the IE/FTP gateway authenticates clients by exchanging X.509 certificates. To connect to an IE/FTP Internet gateway, you need a certificate for each Information Exchange sys/account/user ID.

Registration

To use IE/FTP over the Internet, you must register with the service. The following information is required for registration:

- Information Exchange account and user ID
- Contact Information

Distribution of certificates

The IE/FTP 1.4.1 service features a certificate self-registration process.

New certificates

New customers using the IE/FTP 1.4.1 service will not receive their certificates directly from GXS. Instead, they will receive a pair of identification tokens and directions on how to request a certificate via the registration interface on the registration website (https://pki.services.ibm.com). Customers using the IE/FTP 1.4.0 service who wish to use the new IE/FTP 1.4.1 service or Information Exchange customers who wish to try the new IE/FTP 1.4.1 Internet service can use the self-registration process to obtain their identification tokens. Details of this process can be found on the registration website (https://pki.services.ibm.com).

IE/FTP 1.4.1 customers will be notified of when their certificate is scheduled to expire. They will receive a 60-day notification via e-mail or via their Information Exchange mailbox. Customers who still have their original identification tokens can use these tokens to obtain new certificates from the registration website (https://pki.services.ibm.com). Customers who no longer have their original identification tokens can use the self-registration service to obtain new tokens, which they can subsequently use with the registration website.

Revocation of private key

If the key is compromised in any way, your certificate must be revoked and a new one issued to ensure no unauthorized use of your account. To revoke the certificate and receive a new one, contact your country help desk with the following information:

- Information Exchange account and user ID
- Serial number of certificate (if known)

You should also have your certificate revoked if you are no longer using the service.

Appendix G

Problems

This appendix explains what you should do when reporting a problem through Customer Care. It also contains frequently asked questions that supply tips you can use in determining problems.

Reporting a problem

Before contacting GXS, check that there are no problems with your own system and network. If you still experience the problem, please supply as much of the following information as possible when reporting the problem to GXS.

- Your Information Exchange account and user ID
- Your operating system
- Your FTP client software
- Any error messages
- Date and time of any problem
- Detailed description of the problem

If your client has a debugging mode, enable it and supply GXS with a log.

Frequently asked questions

Q My FTP client usually tells me how long a file will take to download. It doesn't work with the IE/FTP gateway, why?

A Many graphical FTP clients assume that the output produced from an Is-I command will be in the format produced by a Berkley Unix FTP server. The responses produced by the IE/FTP gateway contain different information and, therefore, the client is unable to parse the replies from the server.

Q Can I be informed when a new message is placed in my Information Exchange mailbox so that I don't have to keep connecting to find out?

A Yes, this service is available via IP Notification Manager (IPNM). However, this service is only suitable for customers with leased-line connections. Refer to "Message-arrival notification" for more details.

Q I can log on to the gateway, but it fails if I send an **Is** command or try to get a file. Why?

A You may have a firewall set up that is preventing the server from setting up another connection from itself back to your machine. Try using passive transfer mode on a client that supports the PASV command.

Q Yesterday, I could connect to the gateway, but today I cannot reach it at all. Why?

A This is usually due to something being changed on the local network. Ask you network administrator if there have been any changes (e.g., a new firewall being put in place).

Q Why does the data I receive from a certain Trading Partner appear corrupted?

A This could be due to the translate table being used by you or the Trading Partner. There are sample translate tables in the support directory. Details on how to receive files form the support directory are in “Retrieving support files”.

This could also be due to the file being sent and received in a different way. For example, if the file was sent in ASCII mode and received in BINARY mode.

Q Where can I find help and information?

A The support directory contains information files, technical specifications, sample scripts, and translate tables. Details on how to receive files from the support directory are on “Retrieving support files” on page 45.

Q What are the password rules when using the IE/FTP gateway?

A The rules are the same as those specified for Information Exchange in the document *Information Exchange Administration Services User’s Guide*. You should never use your user ID as a password.

Internet gateway

Q How do I use the Internet IE/FTP gateway?

A You must register to use this service. You must also have a secure FTP client. New IE/FTP 1.4.1 customers will receive a pair of identification tokens when they register for the Internet gateway. They can use these tokens to obtain a certificate from the registration website (https://pki.services.ibm.com). Existing Information Exchange customers who wish to use 1.4.1 can obtain identification tokens using the self-registration process described on the registration websit (https://pki.services.ibm.com).

Q How do I use my key/certificate?

A This depends entirely on the client software that you are using. Refer to your manual or contact your product vendor.

Q Occasionally, my transfers fail. What should I do?

A If your transfers usually complete successfully, occasional failures could simply be due to network problems on the Internet. Try to connect again. If you have an automated script which connects for you, then it is a good idea to implement retry logic.