RUMBA®

*System
Administrator Kit*

*Mainframe
File Transfer Guide*

RUMBA 8.0

MICRO FOCUS®

Contents

1 About This Guide

This guide is part of the RUMBA System Administrator Kit which is shipped online with your RUMBA software product. The guides in the kit are provided in Adobe Portable Document Format (PDF) and require the Adobe Acrobat Reader.

This guide provides a general overview of the RUMBA Mainframe File Transfer feature, and contains concise host-specific information. For in-depth information, please refer to the appropriate location in the RUMBA online help.

▶ **For more information**

RUMBA Features
RUMBA Mainframe Edition
Mainframe Printer Guide
Getting Connected Guide

2 File Transfers on the Mainframe

The file transfer feature copies files between your PC and the Mainframe. The Send and Receive commands, on the Transfer menu in the Mainframe Display, open a setup window where you specify the file type, transfer protocol, and host environment for the file transfer. You can also choose to have RUMBA software initiate the file transfer protocol. RUMBA software for the Mainframe works transparently with most IBM host operating systems, including CICS, TSO, and VM/CMS.

RUMBA software for the Mainframe provides abundant functionality, like support for ASCII or binary transfers, Write Structured Field or Buffered data streams, EBCDIC-to-ASCII translation, and data compression. RUMBA software for the Mainframe also supports DOS-based, batch, and drag-and-drop file transfer features.

This chapter discusses the following topics:

- Transfer capabilities
- Transfer setup
- Transfer startup
- Sending and receiving files

Transfer capabilities

RUMBA software works transparently with standard Mainframe operating systems. This allows an application on one platform to access and use data on another platform.

Transfer setup

RUMBA software for the Mainframe simplifies the file transfer setup process by using typical Windows menus and dialog boxes. It reads and lists PC and host files, and lets you transfer files in the background. You can also perform file transfers using the configurable tool bar.

Transfer startup

To start a transfer, RUMBA software file transfer submits a command to a host file transfer program. The most common host program used is called IND$FILE. RUMBA software provides abundant functionality, like support for ASCII or binary transfers, Write Structured Field or Buffered data streams, EBCDIC-to-ASCII translation, and data compression. RUMBA software for the Mainframe also supports DOS-based, batch, and drag-and-drop file transfer features.

Sending and receiving files

Sending files from your PC to a Mainframe host, and receiving files from a host to your PC is easily accomplished once you have configured your PC. Unless you want to change how you transfer files, you do not have to reconfigure each time you want to send or receive files.

To configure your PC:

1. Connect to the host.

2. On the Home tab, in the File Transfer group, click Configure. (In the Classic interface, click Transfer > Configure).

3. In the File Transfer Configuration dialog box, select TSO, CMS, or CICS as the destination host environment.
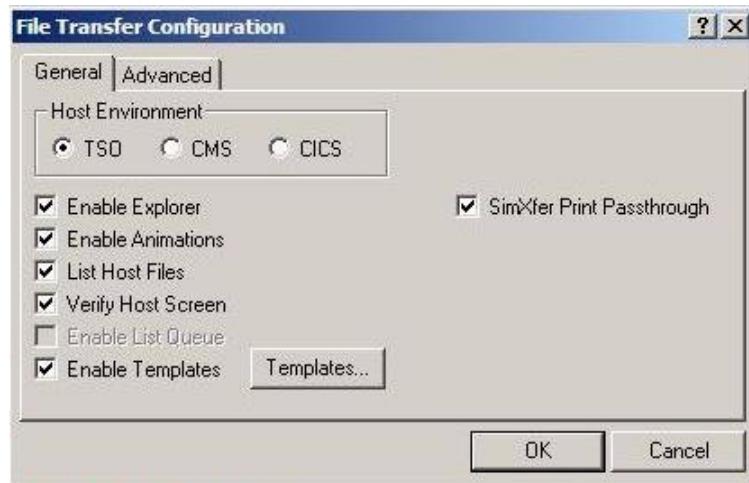
Figure 2-1   File Transfer Configuration dialog box

▶ **Note**

Click the Templates button to take you to the File Transfer Template Configuration dialog box. For more information on how to set up a template, see Chapter 3, File Transfer Templates.

After configuring your PC and setting up a template to match your host environment, you are ready to transfer files.

To send a file to the host

1. Connect to the host.

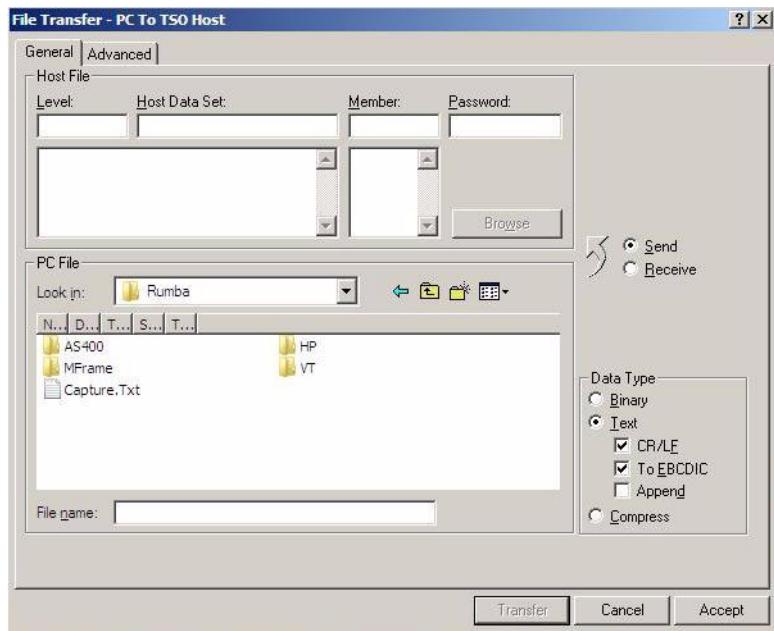2. Click Send. (In the Classic interface, click Transfer > Send).

Figure 2-2   The File Transfer Send dialog box

3. Under Host File, specify the required host file information. These fields vary, depending on the destination host environment.

4. Under PC File, specify the PC file to send to the host.

5. Under Data Type, click the appropriate data type options.

6. Click Transfer to send the file, or click Accept to save the settings for future use.

▶ **For more information**

Help topic: Transferring files > Mainframe File Transfer > Sending and Receiving Files

To receive a file from the host:

1. Connect to the host.

2. On the Home tab, click Receive (in the Classic interface, click File > Receive)

3. Under Host File, select the host file you to transfer to your PC.

4. Under PC File, select an existing destination file name or enter a new destination file name, and then select a PC directory.

5. Under Data Type, click the appropriate data type options.

6. Click Transfer to send the file, or click Accept to save the settings for future transfers.

For more information

Help topic: Transferring files > Mainframe file transfer > Configuring the file transfer environment

3 File Transfer Templates

To maximize user productivity, you can use file transfer templates to set up and save frequently used file transfer settings rather than repeatedly configuring the same types of file transfer.

You may need to transfer files on a regular basis, and RUMBA software for the Mainframe provides an efficient way of making the process easier. Use file transfer templates to set up and save detailed send or receive instructions for specific files. Saving these instructions as templates makes them available for repeated use. RUMBA software supports DOS-type wildcard characters in your file names and types, increasing your ability to match larger sets of data on the host or PC with one template.

▶ **Note**

Tip: *When you set up a Send template, it is a good idea to set up a corresponding Receive template that reverses the steps you have specified for the Send.*

There are several different types of templates that you can create depending on your host environment. This chapter discusses the following topics:

- Creating a TSO template
- Creating a CMS template
- Creating a CICS template

Creating a TSO template

To create a TSO file transfer template:

1. Configure a file transfer.

2. Under Host Environment, choose TSO.

3. Verify that the Enable Templates box is checked, then click the Templates button.
   The TSO File Transfer Template Configuration dialog box opens.

4. Click Send or Receive, depending on the type of template you are creating.

5. Under Name Conversion, you can either modify a default template or create a new one. If you type a new PC File Name, RUMBA software saves a new template under that name. If you do not change the PC File Name but modify its template settings, RUMBA software saves your setting changes in the default template.

6. When you are done, click OK.

This template is now available to you when you perform a TSO file transfer operation.

Creating a CMS template

To create a CMS file transfer template:

1. Configure a file transfer.

2. Under Host Environment, choose CMS.

3. Make sure the Enable Templates box is checked.

4. Click the Templates button. The CMS File Transfer Template Configuration dialog box opens.
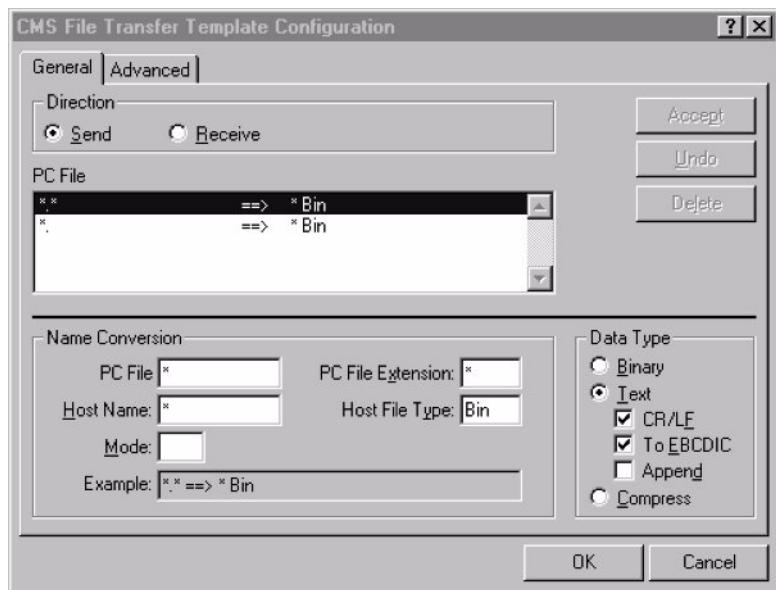

Figure 3-1   CMS File Transfer Template Configuration dialog box

5. Click Send or Receive, depending on the type of template you are creating.

6. Under Name Conversion, you can either modify a default template or create a new one. If you type a new name in the PC File name box, RUMBA software will save a new template under that name. If you do not change the PC File name but modify its template settings, RUMBA software will save whatever setting changes you make in the default template.

7. When you are done, click OK.

This template is now available to you when you perform a CMS file transfer operation.

Creating a CICS template

To create a CICS file transfer template:

1. Configure a file transfer.

2. Under Host Environment, choose CICS.

3. Make sure the Enable Templates box is checked.

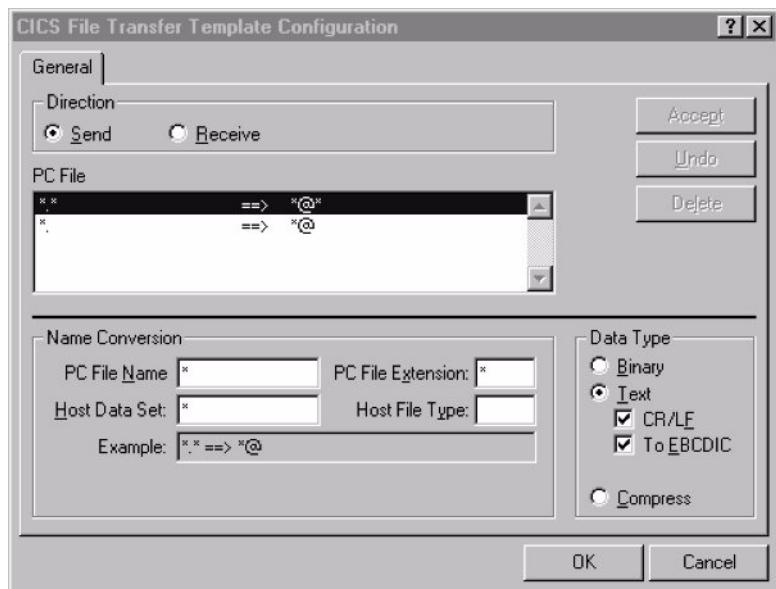4. Click the Templates button. The CICS File Transfer Template configuration dialog box opens.

Figure 3-2   CICS File Transfer Template Configuration dialog box

5. Click Send or Receive, depending on the type of template you are creating.

6. Under Name Conversion, you can either modify a default template or create a new one. If you type a new name in the PC File Name box, RUMBA software will save a new template under that name. If you do not change the PC File Name but modify its template settings, RUMBA software will save whatever setting changes you make in the default template.

7. When you are done, click OK.

This template is now available to you when you perform a CICS file transfer operation.

4   Batch File Transfers

You can use batch files to transfer several files between your PC and the mainframe host. A batch file consists of two main components: a batch list, and send or receive commands. The batch list serves as a means of grouping send and receive commands that you can run from your batch file. You can have several batch lists within one batch file, and several commands within each batch list.

If you only need one batch file, you can use the default batch file DEFAULT.FTB. You can also use drag and drop for multiple file transfers.

You can use drag and drop for multiple file transfers.

To create a batch file

1. On the Home menu, in the File Transfer group, click Batch. (In the Classic interface, click Transfer > Batch).
   If no batch files are defined, a New Batch List dialog box opens. Otherwise, click the New button in the Batch File area at the top of the dialog box.

2. Specify a name for the new batch file, then click OK.
   The new batch file name appears in the Name box of the File Transfer Batch dialog box.
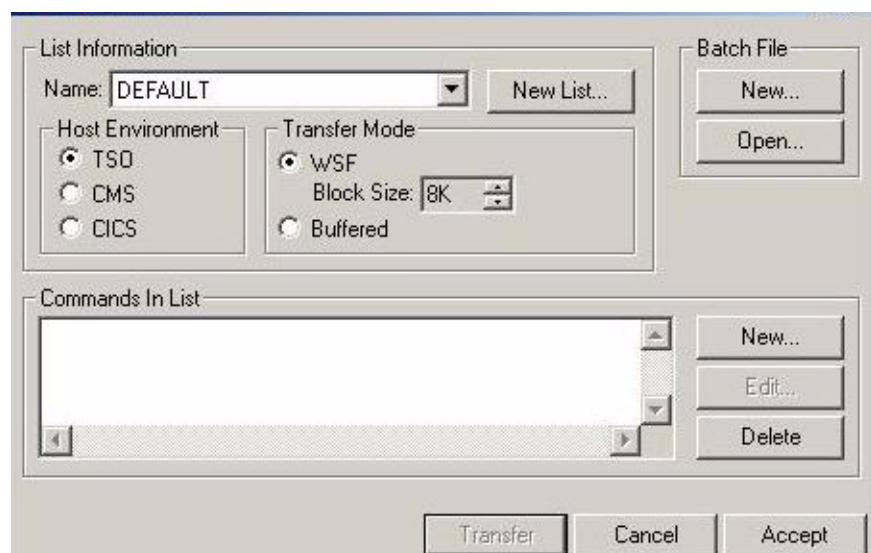
Figure 4-1   The File Transfer Batch dialog box

3. Under Commands In List, click the New button.
    The File Transfer Template Configuration dialog box opens, where
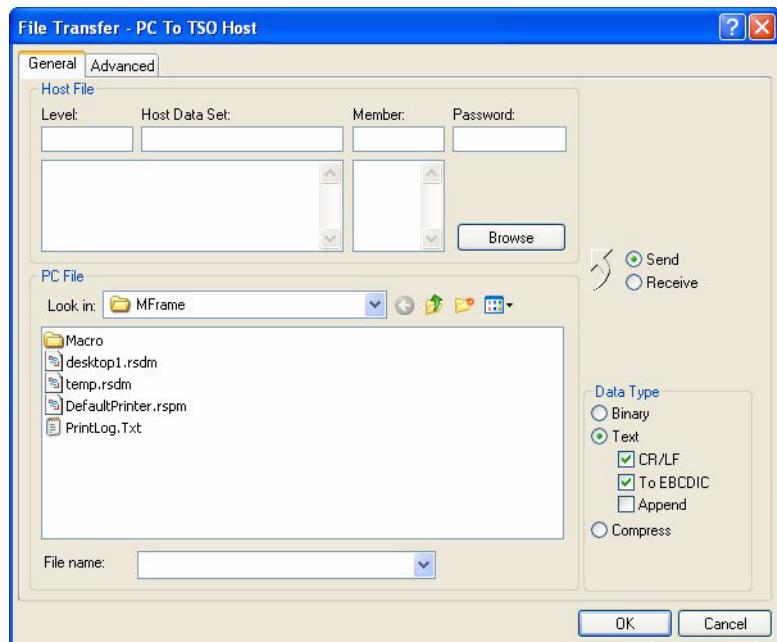   you can set the Template commands for the new batch file.

Figure 4-2   File Transfer dialog box

4. Click the Send button to send files to the host, or the Receive button to receive files from the host.

5. Select the file(s) to transfer, then click OK. You can use file extensions and wild cards to transfer multiple files with a single command.

6. Repeat steps 3 - 5 to add transfer commands as needed.

7. Click Accept to save your settings, or Transfer to save settings and run the batch file transfer.

To run a batch file transfer

To start a batch file transfer:

1. Open your RUMBA profile and connect to the host.

2. On the Home menu, in the File Transfer group, click Batch. (In the Classic interface, click Transfer > Batch).

3. Select the batch file you want to use. Batch files have an **.ftb** extension.
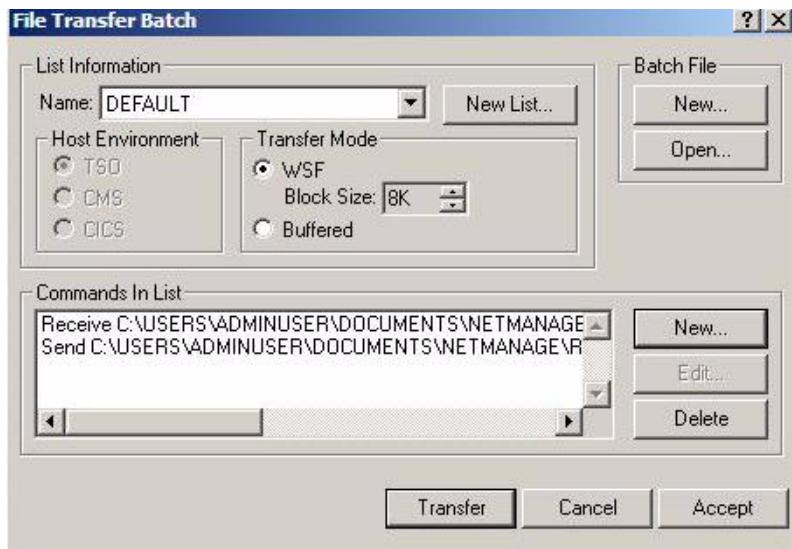
4. Click Open.

Figure 4-3   File Transfer Batch

5. To run individual lines in a batch file, select the lines you want to start before clicking the Transfer button on the File Transfer Batch dialog box.

6. Click the Transfer button to start the batch file transfer.

▶ **For more information**

Help topic: Transferring files > Mainframe file transfer > Using batch file transfers

5 RUMBA File Transfer Registry Settings

This chapter discusses Windows Registry settings that you need to know about when you are installing an upgrade version of RUMBA software for the Mainframe over an existing 16-bit version.

File Transfer Registry settings

The installation program converts settings that were previously in the **rumba.ini** file into Windows Registry settings. The following table lists the old file transfer **rumba.ini** settings, the new Windows Registry settings, and the purpose of each setting.

	Converts to this Windows Registry Setting	Purpose of the Setting
[FTX] Blank Screen	BlankScreen (DWORD)	BlankScreen is used to set whether the screen should be blank while RUMBA software displays the File Transfer Configuration dialog box. When the dialog box is first opened, the screen is frozen. When the dialog box is dismissed, the screen is refreshed with the current buffer contents.
[FTX] NOPA1	NOPA1 (DWORD)	The NOPA1 setting is used to disable the PA1 key from being automatically sent to the host following a TSO file transfer or file list command. Some host applications, such as session managers, reserve the PA1 key for special functions. Enabling the NOPA1 setting prevents RUMBA software from interfering with these host applications. You disable the setting by assigning it the value 0, and enable the setting by assigning the value 1. *Note: For compatibility with older versions of RUMBA software, the value NOPA1=2 is supported as an alternative for the ListcatWithATTN setting.*
[FTX] ListcatWith ATTN	ListcatWith ATTN (DWORD)	The ListcatWithATTN setting overrides the default behavior of sending a PA1 following a LISTCAT command. RUMBA software issues the LISTCAT command internally to generate the file list in the file transfer dialog box. When ListcatWithATTN is specified, the LISTCAT command is terminated by sending an Attention key, rather than a PA1, to the host. To disable the setting, assign it the value 0; to enable the setting, assign it the value 1.
[FTX] IND_Timeout	IND_Timeout (DWORD)	The IND_Timeout setting is used to adjust file transfer responsiveness by specifying the amount of time to wait before timing out during a file transfer command. The setting specifies the timeout in milliseconds.
[FTX] List_Timeout	List_Timeout (DWORD)	The List_Timeout setting is used to adjust file transfer responsiveness by specifying the amount of time to wait before timing-out during a file list command. The setting specifies the timeout in milliseconds.

Table 5-1   File transfer Windows Registry settings

6 Using RUMBA Macros to Transfer Files

You can use the RUMBA Macro Editor to create macros that automate and simplify file transfer procedures for your users. A macro is a type of program that issues commands and reads responses. Macros can save you a great deal of time by automating file transfer tasks you perform frequently.

To create a file transfer macro

1. On the Tools tab, click Edit to open the Macro Editor. (In the Classic interface, click Tools > Edit Macro).

2. On the lower toolbar, click the File Transfer Send [icon] button or the File Transfer Receive [icon] button depending on whether you want to send or receive a file.

3. Configure the file transfer as needed, then click OK.

4. From the Macro Editor File menu, choose Save.

5. Give the macro a name, then click OK.

▶ **For more information**

Help topic: Simplifying your work > Automating tasks > Macros > Creating and editing macros > Macro commands

IND$FILE TRANSXX Codes

The most common host file transfer program is IBM's IND$FILE. This program uses a set of what are referred to as TRANSXX codes, which convey information about certain key file transfer transactions. The following table lists the various codes used by the IND$FILE program and gives an explanation of these codes.

TRANSXX code	Explanation
TRANS00 Error in file transfer: file transfer canceled	This code indicates that an error occurred in the File Transfer operation that was detected by the CICS File Transfer transaction. This may be an error in the data being transferred, or an unidentified system error. Examine the file for incorrect format or bad data, and check the installation procedure and the setup of all the components involved. Re-attempt the File Transfer transaction.
TRANS01 File Transfer command being processed	This code alerts you that the File Transfer transaction is currently being processed.
TRANS02 Number of bytes of file transferred so far ===> xxxx	The File Transfer transaction is currently being processed, and this code informs you of the number of bytes of information transferred so far.
TRANS03 File transfer complete	The File Transfer transaction has completed normally and the file has been transferred without any errors detected. Examine the data in the file to determine if the operation was correctly implemented.

Table A-1   IND$FILE TRANSXX codes

TRANSXX code	Explanation
TRANS04 File transfer complete, with records segmented	The File Transfer transaction completed successfully, but at least one of the records of data sent to the host was longer than the maximum allowed (32767). The record has been broken into more than one segment, each of which appears as a separate item in the Temporary Storage queue. The error may have occurred because the CRLF option was used when the file did not contain logical records. Check the contents of the file being uploaded, and the options used, and re-attempt the file transfer transaction. Alternatively, use the BINARY option to transfer the data "as is" from the 3270 to the host without interpretation. Interpret the data in the host.
TRANS05 Personal computer filespec incorrect: file transfer canceled	The PC file specified is incorrect. Verify the file and re-attempt the File Transfer transaction.
TRANS06 Command incomplete: file transfer canceled	The File Transfer command entered is incomplete. Verify the command and re-attempt the File Transfer transaction.
TRANS07 Cannot link to host: file transfer canceled	A link cannot be established with the host. Check the status of the host, or refer to the user's guide for more information.
TRANS09 Error reading file from damaged personal computer disk: file transfer canceled	The PC file specified resides on a damaged disk. Copy the file to an undamaged medium and re-attempt the File Transfer transaction.
TRANS10 Host has not responded within timeout period: Refer to user's guide for more information	The host did not respond within the allotted amount of time. Check the status of the host, or refer to the user's guide for more information.
TRANS11 Lost contact with host: file transfer canceled	Re-establish a host connection and re-attempt the File Transfer transaction.
TRANS12 Error writing to damaged or full personal computer disk: file transfer canceled	The PC disk specified is damaged or full. Examine the disk for damage and ensure that it contains enough space to receive the transferred data. Re-attempt the File Transfer transaction.
TRANS13 Error writing file to host: file transfer canceled	An error occurred while writing the file to the host. Refer to the user's guide for more information.
TRANS14 Error reading file from host: file transfer canceled	An error occurred while reading the file from the host. Refer to the user's guide for more information.
TRANS15 Host storage unavailable: file transfer canceled	The CICS File Transfer transaction could not obtain enough storage in which to place its own control blocks, I/O buffers, or save areas. Make more storage available to the transaction and attempt to perform the operation again.

Table A-1   IND$FILE TRANSXX codes, (continued)

TRANSXX code	Explanation
TRANS16 Incorrect request code: file transfer canceled	The command that started the file transfer operation did not specify GET or PUT. The command is rejected. Check the parameters used to invoke the file transfer operation and correct them. Re-attempt the File Transfer transaction.
TRANS17 Invalid file name: file transfer canceled	The file name specified is invalid. Verify the file name and re-attempt the File Transfer transaction.
TRANS18 Incorrect option specified: file transfer canceled	An incorrect File Transfer option was specified. Verify all options selected and re-attempt the File Transfer transaction.
TRANS19 Error handling host file: file transfer canceled	An error occurred while handling the host file. Refer to the user's guide for more information.
TRANS21 Not enough personal computer memory available: file transfer canceled	Not enough memory is available on your PC to proceed with the File Transfer transaction. Close one or more applications and re-attempt the File Transfer transaction.
TRANS22 Host session identifier incorrect: file transfer canceled	The host session identifier specified is incorrect. Verify the identifier and re-attempt the File Transfer transaction.
TRANS23 Activity specified not a host session: file transfer canceled	The activity specified is not a host session. Verify the activity and re-attempt the File Transfer transaction.
TRANS24 Autokey operation in progress: file transfer canceled	Wait for the autokey operation to complete, then re-attempt the File Transfer transaction.
TRANS25 Keyboard inhibited: file transfer canceled	The keyboard has been inhibited. Refer to the user's guide for more information.
TRANS26 Unrecoverable system error: file transfer canceled	An unrecoverable system error occurred. Check the installation procedure and the setup of all the components involved. Re-attempt the File Transfer transaction.
TRANS27 Communication sequence with host disrupted: file transfer canceled	Communication between your PC and the host was disrupted. Re-establish a host connection and re-attempt the File Transfer transaction.

Table A-1   IND$FILE TRANSXX codes, (continued)

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