



# **IBM® Sterling Connect:Express® for Microsoft Windows**

PeSIT User Fields Guide

**Version 3.1**

## Copyright

This edition applies to the 3.1 Version of IBM® Sterling Connect:Express® for Microsoft Windows and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in Notices, on page 25.

Licensed Materials - Property of IBM

IBM® Sterling Connect:Express® for Microsoft Windows

© Copyright IBM Corp. 1999, 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

# Table of Content

<b>TABLE OF CONTENT</b> .....	<b>I</b>
<b>CHAPTER 1</b> .....	<b>1</b>
INTRODUCTION .....	1
<i>PeSIT User Fields and Connect:Express</i> .....	1
<i>Pi37 and Pi99</i> .....	1
<b>CHAPTER 2</b> .....	<b>3</b>
REQUESTER .....	3
<i>Transmitting Requester</i> .....	3
Transmitting Pi37 .....	3
Transmitting Pi99 .....	4
Receiving Pi99 (PeSIT E) .....	4
<i>Receiving Requester</i> .....	6
Transmitting Pi99 .....	6
<b>CHAPTER 3</b> .....	<b>9</b>
SERVER .....	9
<i>Transmitting Server</i> .....	9
Receiving Pi99 (PeSIT E) .....	10
Transmitting Pi37 .....	10
Transmitting Pi99 .....	10
<i>Receiving Server</i> .....	11
Receiving Pi37 and Pi99 .....	11
Transmitting Pi99 (PeSIT E) .....	11
<b>APPENDIX A</b> .....	<b>13</b>
KEYWORDS AND TRANSFER COMMANDS PARAMETERS .....	13
<i>Keywords</i> .....	13
Keywords Syntax .....	17
<i>Transfer Command Parameters</i> .....	19
Implicit Parameters .....	19
Explicit Parameters .....	20
REMARKS ABOUT FILE PHYSICAL NAMES .....	21
<i>Using the Label (Pi37) in a Transfer Request</i> .....	21
<b>NOTICES</b> .....	<b>25</b>



# Chapter 1

---

## Introduction

This chapter provides an overview of the PeSIT user fields Pi37 and Pi99, and describes how information can be transferred with a non-Connect:Express Partner.

---

### PeSIT User Fields and Connect:Express

In earlier versions of Sterling Connect:Express, the PeSIT user fields could only be used between Sterling Connect:Express Connect:Express Partners, and the information transferred in these fields was unique to Sterling Connect:Express Connect:Express. With Sterling Connect:Express Connect:Express for Microsoft Windows version 3.0.3, the use of the PeSIT user fields Pi37 and Pi99 was expanded, and new keywords were added for these fields. You can now use the PeSIT user fields with non-Connect:Express Partners, and the information transferred in these fields can be understood by any PeSIT user. To use this new functionality, you must designate a Partner as type Other in the Partner definition.

---

**Note:** A non-Connect:Express Partner does not mean that the remote monitor is not a Sterling Connect:Express monitor, only that the Connect:Express proprietary protocol for Pi 37 and 99 is not used.

---

---

### Pi37 and Pi99

The Pi37 and Pi99 fields (Pi = protocol identifier) are elements of the PeSIT protocol that enable you to exchange free-form information between Partners during a file transfer. This ability to manage information outside the protocol can be used by applications that manage transfers when transmitting or receiving. The Pi37 and Pi99 fields are transmitted during the file selection phase.

The maximum size of data that can be transmitted in the Pi37 field is 80 characters. For the Pi99 field, the maximum size varies depending on the version of PeSIT that you are using. The capacity of Pi99 ranges from 64 characters with PeSIT D to 254 characters with PeSIT E.

By definition, the Pi37 field corresponds to the label of the file, or the physical file name on the transmitter's system. Pi37 is driven by the PeSIT File transfer Protocol Data Units (fpdus) *Create* and *Ack-Select*. Therefore, it can only be sent by the transmitter, either the requester or server. This field is an optional field.

Pi99 is also an optional field. With PeSIT E, it is driven by the PeSIT fpdus *Create*, *Select*, *Ack-Create* and *Ack-Select*. Therefore, it can be sent by the transmitter or receiver, requester or server. With PeSIT D, it is driven by the fpdus *Create* and *Ack-Select* and can only be sent by the transmitter of the file.

The two parameters are used by different PeSIT products depending on the mode, either proprietary or open. Depending on the product with which you communicate (CFT, INTERPEL for example), the use of a parameter may be required. Sterling Connect:Express sends parameters

with default values, but in certain cases, they can be entered at the time of the transfer request. They are handled by Sterling Connect:Express at the monitor level and at the transfer process level, internally or with keywords.

The values in the two Pi fields depend on if the partner is defined as a Connect:Express partner or a non-Connect:Express partner in the Partner directory. If both Partners are Connect:Express Partners, Pi37 and Pi99 are filled in based on the proprietary mode that already exists in V301. This functionality remains unchanged.

This document describes the use of Pi37 and Pi99 by Sterling Connect:Express for Microsoft Windows in the case where the remote monitor is a non-Connect:Express monitor or where a Sterling Connect:Express monitor has defined the local Partner as non-Connect:Express. The functionality of the local Partner is described in the following four cases:

- ❖ Transmitting Requester
- ❖ Receiving Requester
- ❖ Transmitting Server
- ❖ Receiving Server

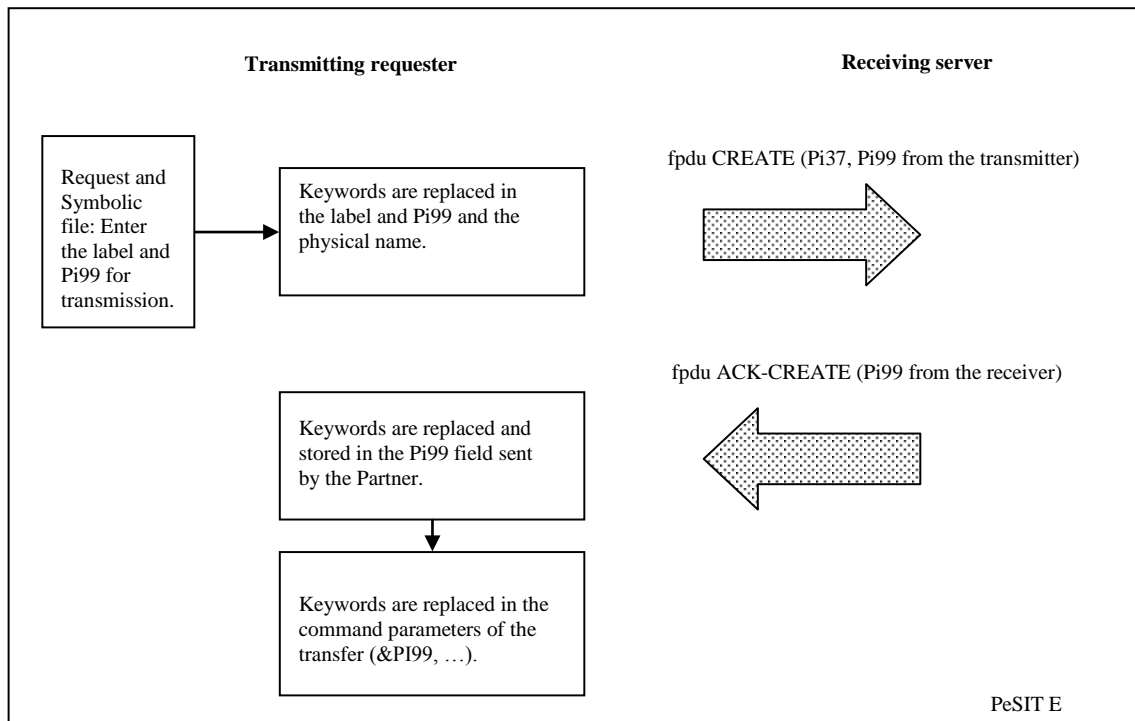
## Chapter 2

### Requester

This chapter describes the use of Pi37 and Pi99 when a requester transmits or receives a file. The Pi99 sent by the requester contains complementary information for executing the transfer, and the Pi99 sent by the server contains complementary information associated with the server response.

#### Transmitting Requester

When a requester is the transmitter, the requester issues a request to send a local file to a remote partner. The exchange of PeSIT fpdus during the selection phase is shown in the following diagram:



Note: With PeSIT D, the receiving server does not send Pi99.

#### Transmitting Pi37

You can enter a value in the Pi37 field at the time of the transfer request in any of the following ways:

- ❖ In the Label field when a request is entered with the user interface *iu\_tom*
- ❖ In the parameter */B* of the batch command *tomreq*

- ❖ In the Label field of the Windows utility *ultreq* which helps you create batch requests
- ❖ In the Label field of the symbolic file associated with the request

By default, if the Label field is not entered with the request or is not in the symbolic file definition, then the complete file name of the transmitted file is sent in Pi37.

Some keywords can be inserted in the Label field. They are replaced by the values that are valid at the time Pi37 is generated, and before the transmission of the fpdu Create. See the Appendix for more information about keywords.

For example, if the date and time of the request are 20020501 and 195312, and the Partner is PART01, the entry &PARTNID\_&REQDATE\_&REQTIME.txt in the Pi37 field results in the following:

PART01_20020501_195312.txt
----------------------------

If the information is more than 80 characters, the transfer is interrupted with an error message. The following keywords can be used with Pi37.

&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME, DIR, &DSN, &8.3

### *Transmitting Pi99*

You can enter information in Pi99 in any of the following ways when transmitting a file:

- ❖ In the symbolic file definition used by the transfer request. If you are using the user interface *iu\_tom*, enter this in the Offset and Value fields of Pi99 in Transmission.
- ❖ In the fields Offset and Value of Pi99 when a request is entered with the user interface *iu\_tom*
- ❖ In the parameters /R (Offset) and /V (Value) of the batch command *tomreq*.
- ❖ In the fields Offset and Value of Pi99 in the Windows utility *ultreq* which helps you create batch requests.

The value is placed at the offset indicated in the Pi99 field. If the value of Pi99 is not entered in the initial transfer request, Connect:Express enters the value found in the associated symbolic file definition. If no value is found, the Pi99 field is not transmitted.

You can insert keywords in the Value field of Pi99. They are replaced by the values that are valid at the time Pi99 is generated and before the transmission of the fpdu Create. See the Appendix for more information about keywords.

If the information exceeds the capacity of Pi99, the transfer is interrupted with an error message. You can use the following variables with Pi99:

&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME, DIR, &DSN, &8.3

### *Receiving Pi99 (PeSIT E)*

You can use keywords in the Pi99 received from a Partner. These keywords can then be replaced by valid values on the local system. See the Appendix for more information about keywords.

If the information exceeds the capacity of the Pi99 field, the transfer is interrupted and an error message is recorded. You can use the following keywords with the Pi99 field when receiving files from a Partner:



&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME,  
&DIR, &DSN, &8.3

### Using &PI99 in Transfer Command Parameters

If the remote Partner has sent its own value in Pi99 in the fpdu Ack-Create, this value is retained in the keyword &PI99. This keyword can be sent in a parameter in a start of transfer command, end of transfer command, or transfer error command in the form &PI99, or in the form &offset:lengthPI99.

Transfer commands are defined in the symbolic file definition associated with the transfer. For example, in the symbolic file definition FILE01, there is an end of transfer command defined as follows:

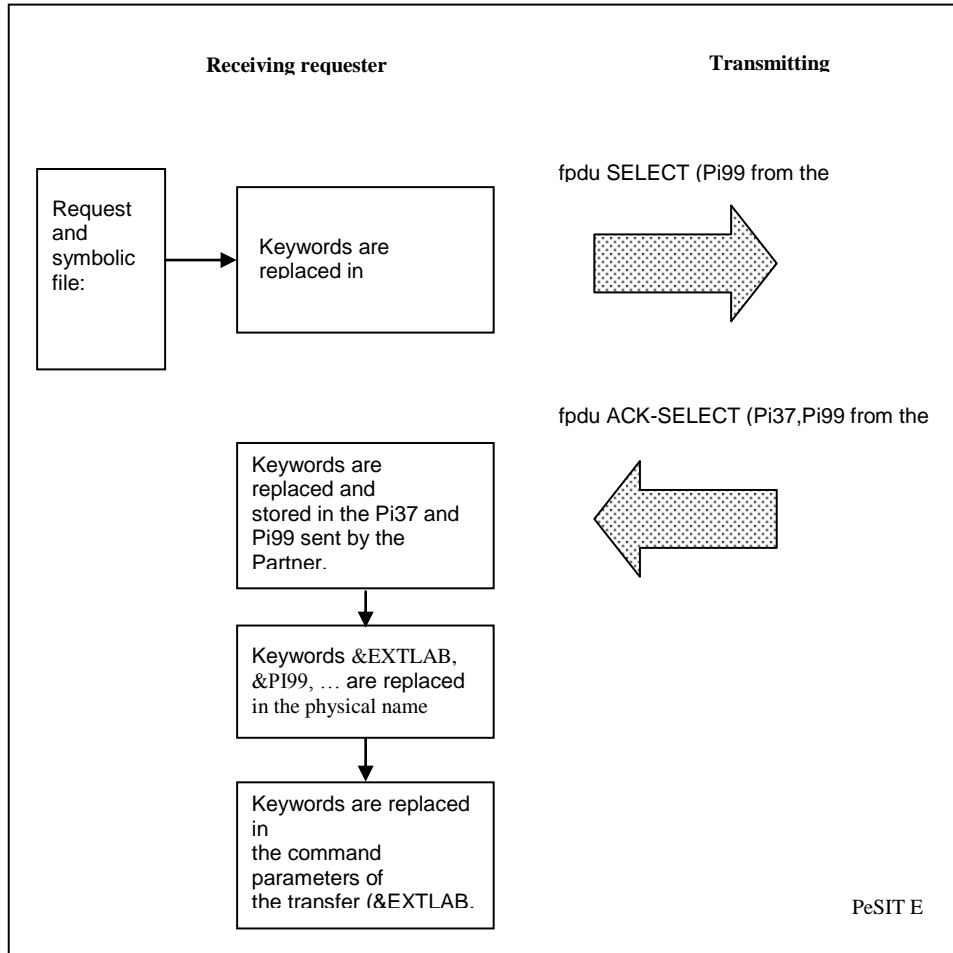
```
/N "D:\PROGRAM FILES\CEXPRESS\BATCH\CMD01.BAT" &PI99
```

If the remote Partner has sent the string **COPY\_FILE\_X.BAT &PARTNID.TXT** and the local name of this Partner is **PART01**, the command CMD01.BAT will be executed with the parameter %1, which is replaced by "COPY\_FILE\_X.BAT PART01.TXT" at the end of a successful transfer. See the Appendix for more information about Transfer Command Parameters.

---

## Receiving Requester

When the requester is the recipient, the monitor sends a reception request to a Partner for a remote file. The exchange of PeSIT fpdus during file selection is shown in the following diagram.



---

Note: With PeSIT D, the receiving requester does not send Pi99.

---

### Transmitting Pi99

When transmitting, you can enter Pi99 in any of the following ways:

- ❖ In the Offset and Value fields of Pi99 in reception in the symbolic file definition used by the transfer request (user interface *iu\_tom*).
- ❖ In the Offset and Value fields of Pi99 when you enter the request with the user interface *iu\_tom* as a reception request in Normal mode or Request mode.
- ❖ With the parameter */R* (Offset) and */V* (Value) of the batch command *tomreq*.
- ❖ In the fields Offset and Value of Pi99 of the Windows utility *utltreq* which helps you create batch requests.

The value is placed in the Offset specified in the transmitted Pi99. If the value of Pi99 is not

entered at the time of the transfer request, Sterling Connect:Express enters a default value from the symbolic file definition associated with the transfer. If no value is found, Pi99 is not sent.

You can enter keywords in the Value field of Pi99. These keywords are replaced by the valid values when the fpdu Select is transmitted. See the Appendix for more information about keywords.

If the information exceeds the capacity of the Pi99 field, the transfer is interrupted and an error message is recorded. The following variables can be used with Pi99:

&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME,  
&DIR, &DSN, &8.3

## **Receiving Pi37 and Pi99**

You can use keywords in Pi37 and Pi99 sent by a Partner in the fpdu Ack-Select. These keywords are replaced by the valid values on the local system and the result is entered in the keywords &EXTLAB and &PI99, respectively. See the Appendix for more information about keywords.

If the information exceeds the capacity of the Pi99 field, the transfer is interrupted and an error message is recorded. The following variables can be replaced in the Pi37 received from a Partner:

&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME,  
&DIR, &DSN, &8.3

The following variables can be replaced in the Pi99 received from a Partner:

&PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &REQDATE, &REQTIME,  
&DIR, &DSN, &8.3

You can also send the keywords &EXTLAB and &Pi99 in transfer command parameters. You define transfer commands in the symbolic file definition associated with the transfer. See the Appendix for more information about Transfer Command Parameters.



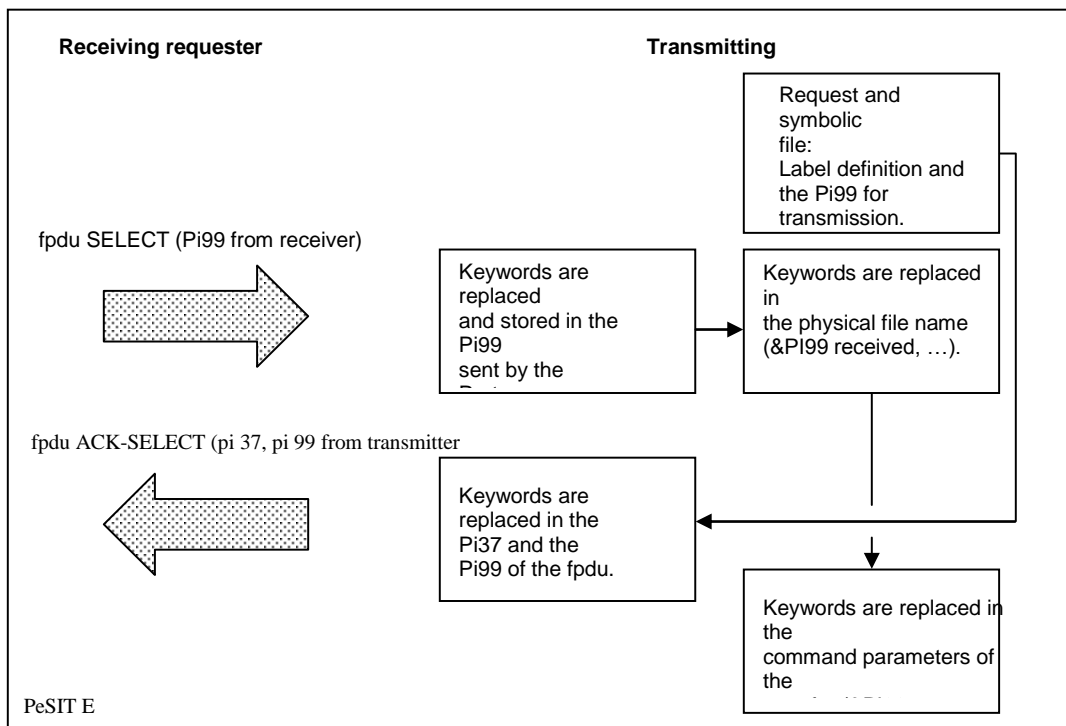
# Chapter 3

## Server

This chapter describes the use of Pi37 and Pi99 when a server transmits or receives file. The Pi99 sent by the requester contains complementary information for executing the transfer, and the Pi99 sent by the server contains complementary information associated with the server response.

### Transmitting Server

When a server is transmitting a file, the monitor receives a reception request for a local file from a remote Partner. The following diagram shows how PeSIT fpdus are exchanged during the file selection phase:



Note: With PeSIT D, the receiving requester does not send Pi99.

### *Receiving Pi99 (PeSIT E)*

The contents of Pi99 received from a remote Partner in the fpdu Select is stored in the keyword &PI99. If Pi99 contains keywords, they are replaced by the valid local values. You can use the following keywords when receiving Pi99:

&PARTNID, &FILENAM, &ORG, &REQNUMB, &REQNO, &DST, &REQDATE, &REQTIME, &DIR, &LNK, TRFID

You can also use the keyword &PI99 in transfer command parameters.

### *Transmitting Pi37*

You can enter Pi37 in any of the following ways:

- ❖ In the Label field when you are entering a Held request using the user interface *iu\_tom*
  - ❖ In parameter /B of the batch command *tomreq*
  - ❖ In the Label field of the Windows utility *utltreq*, which helps you create the tomreq file to submit batch requests
  - ❖ In the symbolic file definition used by the transfer request (User interface *iu\_tom*, Label field)
- By default, if the Label field is not entered in either the request or in the symbolic file name, then the physical file name is sent in Pi37. For implicit requests where the reception request is Normal and comes from an authorized remote Partner, the Label field of the symbolic File definition is used. With Held requests, the Label field of the symbolic File definition is not used unless it is not entered when the request is entered.

You can also use keywords in the Label field. They are replaced by the valid values in Pi37 before the transmission of the fpdu Ack-Select. See the Appendix for more information about Keywords.

### *Transmitting Pi99*

When transmitting, you can enter Pi99 in any of the following ways:

- ❖ In the Offset and Value fields of Pi99 at the time that a Held request is entered with the user interface *iu\_tom*
- ❖ In the parameter /R (Offset) and /V (Value) of the batch command *tomreq*
- ❖ In the fields Offset and Value of Pi99 in the Windows utility *utltreq*, which helps you create the tomreq file to submit batch requests
- ❖ In the symbolic file definition used by the transfer request (User interface *iu\_tom*, in the Offset and Value fields of Pi99 in Transmission)

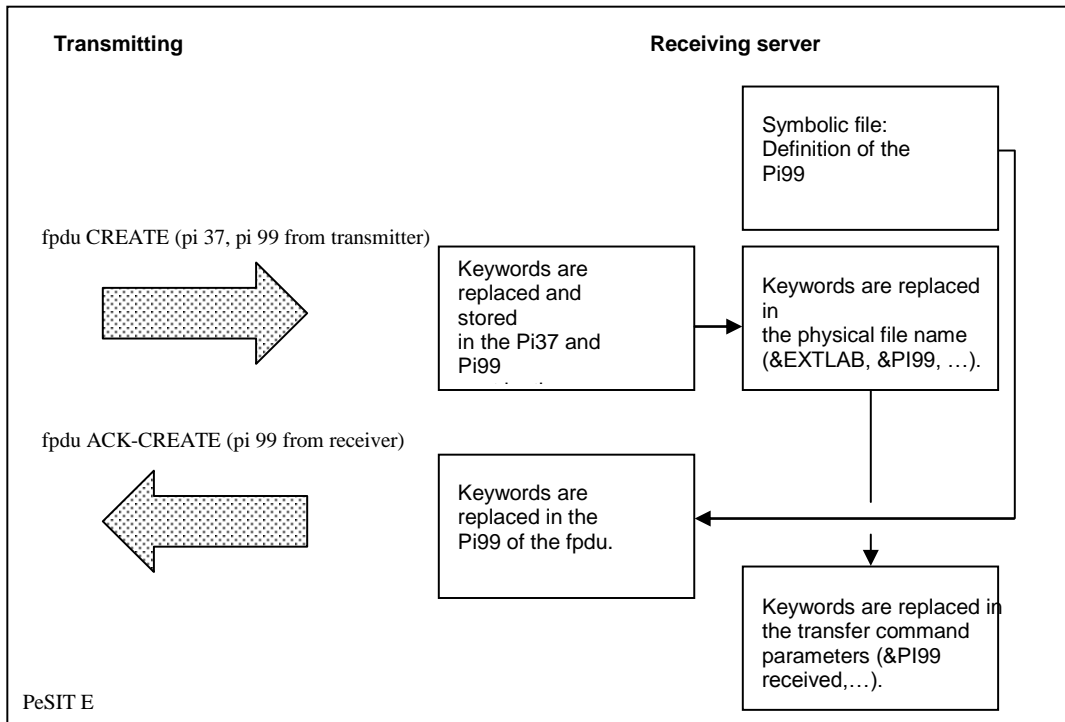
The value entered is placed in the position specified in the transmitted Pi99. If the value of Pi99 is not entered at the transfer request level, Connect:Express looks for a value in the symbolic file definition associated with the transfer. If no value is found, Pi99 is not sent.

You can also use keywords in the value field when entering data in Pi99. These keywords are then replaced by the valid values in Pi99 before the transmission of the fpdu Ack-Select. See the Appendix for more information about keywords.

---

## Receiving Server

When the server is receiving a file, the monitor receives a transmission request for a remote file from a remote Partner. The following diagram shows the exchange of PeSIT fpdus during the file selection phase:



---

Note: With PeSIT D, the receiving requester does not send Pi99.

---

### *Receiving Pi37 and Pi99*

The contents of Pi37 and Pi99 received from a remote Partner in the fpdu Create are stored in the keywords &EXTLAB and &PI99, respectively. If Pi37 and Pi99 contain the valid syntax of a keyword, they are replaced by the valid local values. You can use the following keywords when receiving Pi37 and Pi99:

&PARTNID, &FILENAM, &ORG, &REQNUMB, &REQNO, &DST, &REQDATE, &REQTIME, &DIR, &LNK, TRFID

The keywords &EXTLAB and &PI99 can also be used in transfer command parameters.

### *Transmitting Pi99 (PeSIT E)*

The receiver of the file can send a Pi99 to a Partner in the fpdu Ack-Create. This process is similar to transmitting Pi99 by the requester/transmitter, except that you only need to enter the description of Pi99 in the symbolic file definition associated with the request. This information is

entered in the Offset and Value fields of Pi99 in Reception in the user interface iu\_tom.



## Appendix A

---

# Keywords and Transfer Commands Parameters

This chapter lists the keywords that you can use in PeSIT user fields with a non-Connect:Express partner, and describes transfer command parameters.

---

## Keywords

The following table lists the keywords that you can use with a non-Connect:Express Partner.

<b>Keyword</b>	<b>Maximum Length (Characters)</b>	<b>Description</b>
&PARTNID	8	Symbolic Partner name
&FILENAM	8	Symbolic File name
&ORG	8	Origin of the transfer request. Name of the partner originating the transfer request. (Pi3 of the PeSIT selection phase, truncated to 8 characters.)
&DST	8	Destination of the transfer request. Name of the destination Partner, or partner receiving the transfer. (Pi4 of the PeSIT selection phase, truncated to 8 characters.)
&TRFID	6	Transfer identifier from Pi13. This is a hexadecimal value. (0-9, A-F)
&REQNUMB	8	Request number in the format REQnnnnn
&REQNO	12	Request number in the format CCYYJJnnnnn, where JJJ is the Julian date in the year CCYY.
&REQDATE	8	Date of transfer in the format CCYYMMJJ.
&REQTIME	6	Time of transfer in the format HHMMSS
&EXTLAB	80	Contents of Pi37 (file label)
&8.3	80	File name and extension on the Partner's system, extracted from Pi37. The Partner must enter a Windows compatible file name in Pi37.

<b>Keyword</b>	<b>Maximum Length (Characters)</b>	<b>Description</b>
&DIR	1	Direction of transfer T-Transmission R-Reception
&LNK	1	Network type T-TCP/IP X-X25 L-SNA LU6.2
&DSN	128	Local physical file name
&USRVAR1	44	Last index of the physical name on the Partner's system. (IBM/MVS data set name syntax)
&PI99	PeSIT D: 64 PeSIT E: 254	Contents of Pi99
&PI61	24	Pi61 (PeSIT-E)
&PI62	24	Pi62 (PeSIT-E)
&P99S	254	Pi99 sent
&LNAM	8	Local name
&PI51	12	Creation date YYMMDDHHMMSS (Pi 51)
&PI11	4	Type of file (Pi 11) 4 hexadecimal digits (0-9,A-F)
&TYPR	1	Type of request (N,H,I,M or E)
&TRC	4	Connect:Express return code (local)
&PRC	4	PeSIT return code
&SRC	4	System return code
&NRC	4	Network return code
&ERC	4	CTREE error code
&PARTNID	8	Symbolic Partner name
&FILENAM	8	Symbolic File name

The following table lists the fields in which you can use keywords, and the possible keywords for each field.

<b>Field</b>	<b>Location</b>	<b>Transfer Direction</b>	<b>Possible Keywords</b>
Physical File Name	Transfer request	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &EXTLAB, &PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &8.3, &TRFID, &USRVAR1, &PI99
Physical File Name	Symbolic File definition	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &EXTLAB, &PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &8.3, &TRFID, &USRVAR1, &PI99
Pi99	Transfer request	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
Pi99	Symbolic File definition	Transmission (Requester)	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
		Reception (Server)	&REQDATE, &REQTIME, &DIR, &LNK, &EXTLAB, &PARTNID, &FILENAM, &ORG, &DST, &REQNUMB, &REQNO, &8.3, &TRFID,&USRVAR1, &PI99
		Reception (Requester)	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
		Transmission (Server)	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM, &DSN
&PI99	Received f pdu Create	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
&PI99	Received f pdu Ack-Select	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &ORG, &DST, &PARTNID, &FILENAM
Label	Transfer request	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &8.3, &TRFID, &ORG, &DST

<b>Field</b>	<b>Location</b>	<b>Transfer Direction</b>	<b>Possible Keywords</b>
Label	Symbolic File definition	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &8.3, &TRFID, &ORG, &DST
&EXTLAB	Received Pi37 of the fpdu Create	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &8.3, &TRFID, &ORG, &DST
&EXTLAB	Received Pi37 of the fpdu Ack-Select	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &8.3, &TRFID, &ORG, &DST
Start of transfer Command	Symbolic File definition	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM, &REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62
End of transfer Command	Symbolic File definition	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62
Transfer error Command	Symbolic File definition	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID,&TRC, &PRC, &SRC, &NRC, &ERC, &PI99
		Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID,&TRC, &PRC, &SRC, &NRC, &ERC, &PI99

## Keywords Syntax

Keywords can take any of the following forms. In the following examples, VAR represents the keyword name.

Syntax	Description
&VAR	The keyword is replaced by the value represented by VAR.
&position:lengthVAR	The keyword is replaced by the substring extracted from the value represented by VAR, based on the position and length that you specify. For example, if you specify position 0, this indicates the first byte.
&lengthVAR	The keyword is replaced by the substring extracted from the value represented by VAR, based on the first byte and the length that you specify.
&position:VAR	The keyword is replaced by the substring extracted from the value represented by VAR, based on the position that you specify.

For example, **&PI99** is replaced with the contents of Pi99, and **&5:16PI99** is replaced by the text string extracted from Pi99 in the 5th byte with a length of 16.

If the replaced value is less than the position and length that you specify, spaces are added in the final positions.

If the position is greater than the length of the value represented by VAR, &VAR is replaced with an empty string. In the following examples, VAR = 20-character string.

Text string	Results
<b>beg&amp;VARend</b>	<b>beg20-character stringend</b>
<b>beg&amp;13:10VAR end</b>	<b>Begstring end</b> (four spaces were added)
<b>beg&amp;30VAR end</b>	<b>begend</b>

If VAR does not correspond to a known keyword, there is no substitution and &VAR results in the text string "&VAR." For example, AA&UNKNOWNbb remains AA&UNKNOWNbb. However, if VAR is a known variable and you want to insert the string "&VAR" without substituting the value for the keyword, then you double the &. For example, &&VAR results in the string &VAR.

<b>Text string</b>	<b>Results</b>
&&PI99	&PI99
&ABC	&ABC
&&ABC	&&ABC
&:VAR	&VAR
&0:VAR	
&0:0VAR	
&:0VAR	
&0VAR	
&0:xVAR	&xVAR

In the following examples, VAR represents the text string ABCDEFGH.

<b>Text string</b>	<b>Is replaced with</b>
&VAR	ABCDEFGH
XY&VARZ	XYABCDEFGHZ
&3VAR	ABC
&10VAR	ABCDEFGH (2 spaces at the end)
&3:4VAR	DEFF
&5:VAR	EFGH
&10:VAR	“(empty string)”
&0:0VAR	&VAR
&0:3VAR	&3VAR

---

## Transfer Command Parameters

Transfer commands are MS-DOS batch commands (.bat) or Windows commands (.cmd) executed at the beginning of a transfer, at the end of a transfer, or when there is a transfer error. Transfer commands are defined in the symbolic File definition on the Commands tab.

The execution of these commands is done separately from the execution of the monitor. If you do not specify a path, the starting working directory is the same as the directory of the monitor.

End of transfer commands are only executed if the transfer ended successfully. Transfer error commands are automatically executed when there is a transfer error. Transfer commands can be defined with implicit or explicit parameters.

### *Implicit Parameters*

With implicit parameters, you enter the parameter /N, /K, or /C followed by the name of the command file in the symbolic file definition. You do not need any additional parameters. The following table describes each parameter.

---

<b>Parameter</b>	<b>Description</b>
/N	Executes the command without opening a window. This is not available with Windows 95 and Windows 98.
/K	Opens a control window when the command is executing.
/C	Closes the control window after the command has executed.

---

When the command is executing, Connect:Express can send any of the following parameters:

---

<b>Parameter</b>	<b>Description</b>
%1	Request number with the format, CCYYJJNNNNN
%2	Symbolic file name
%3	Transfer direction
%4	Symbolic Partner name
%5	Physical file name
%6	TRC Code of the transfer
%7	PRC Code of the transfer
%8	Physical file name with the format, <i>name.extension</i>
%9	Local name
%10	Transfer origin (Pi3 bis)
%11	Transfer destination (Pi4 bis)

---

%12	Type of file (Pi11)
%13	Transfer identifier (Pi13)
%14	Creation date (Pi51)
%15	File sender (Pi61)
%16	File receiver (Pi62)
%17	Type of request (N,H,I,M or E)

The following screen shows an example of a transfer command with a parameter in the symbolic file definition.

```
/N "d:\Program Files\Cexpress\command\cmd1.bat"
```

### Explicit Parameters

**With explicit parameters, the parameters are entered using keywords after the complete command file name.** The following table lists the keywords that you can use for each type of command.

Command	Transfer Direction	Possible Keywords
Start of transfer command	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62,&P99S,&LNAM,&PI51,&PI11,&TYPR
	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62,&P99S,&LNAM,&PI51,&PI11,&TYPR
End of transfer command	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62,&P99S,&LNAM,&PI51,&PI11,&TYPR
	Reception	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID, &PI99, &PI61, &PI62,&P99S,&LNAM,&PI51,&PI11,&TYPR
Transfer error command	Transmission	&REQDATE, &REQTIME, &DIR, &LNK, &PARTNID, &FILENAM,&REQNUMB, &REQNO, &EXTLAB, &8.3, &PHYNAM, &TRFID,&TRC, &PRC, &SRC, &NRC, &ERC, &PI99, &PI61, &PI62,&P99S,&LNAM,&PI51,&PI11,&TYPR





*Label : &8.3*

*Pi37 sent :*

*0123456789012345678901234567890123456789012345678901234567890123456789.EXTEN*

Remarks:

- ❖ The keyword « 8.3 » means “simple file name” and doesn’t restrict the « name » part to 8 characters and the extension part to 3 characters.
- ❖ The shorter the path is, the longer the simple file name can be.





This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

1623-14, Shimotsuruma, Yamato-shi

Kanagawa 242-8502 Japan

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:** INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
J46A/G4  
555 Bailey Avenue  
San Jose, CA\_\_95141-1003  
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available. This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2010. Portions of this code are derived from IBM Corp. Sample Programs.  
© Copyright IBM Corp. 2010.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

#### Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be

trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at ["Copyright and trademark information"](http://www.ibm.com/legal/copytrade.shtml) at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect:Express®, Connect Control Center®, Connect:Direct®, Connect:Enterprise, Gentran®, Gentran:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.

