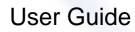
# **Connect:Express<sup>®</sup> Windows**



Version 3.0.6.002





#### Connect:Express Windows User Guide

#### Version 3.0.6.002 First Edition

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## I – The graphical interface

The **Connect:Express Windows** graphical interface allows the user to implement and manage the Transfer File Monitor either locally or remotely.

About				×
\ <mark>≧</mark>	Graphical user interface of Conr Copyright (C) 1998-2000 Sterling		s V3.0.5.001	
Г	Product Key			
	Authorization:	Standard		
	Number of simultaneous connections:	1		
	Number of monitors defined:	1		

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### **1.1 - The graphical interface - general**

Depending on the authorization being used the graphical interface allows the following:

- management and implementation, both locally and remotely, of one or several Connect:Express monitors
- configuration, either locally and remotely, of one or several Connect:Express monitors

To access these functions, the monitor(s) must be defined within the relevant resources environment.

This interface is a 32-bit graphics application, operating under Windows using TCP/IP or Named Pipe networks.

This interface is based on the API which is protected by an authorization number.

This code allows the number of configured and connected monitors, the number of monitors being managed simultaneously, and their types, to be quantified.

The operating method and how to use the API are described in the *Connect:Express Windows Programming Guide* 

### Managing a monitor

Monitor management consists of the following:

- Setting up a network (TCP/IP or Named Pipe) connection with this monitor from the graphical interface
- Stating a client name and password
- Accessing any authorized function:
  - configuring the monitor
  - initializing transfers
  - tracking transfers

The changes made when managing a monitor are dynamically handled by the Connect:Express monitor.

### Configuring a monitor

Configuring a monitor consists of directly accessing its settings as stored in its initialization file, either locally or through the file-sharing system.

The changes made when configuring a monitor needs to stop and restart the Connect:Express monitor.

### Defining a monitor

A monitor is identified by a name, which is local and must be unique, defined within the relevant resources environment.

The graphical interface enables the user to view, edit, create, or delete a monitor definition.

New monitor definitio	n		? ×
Monitor information	Cor	mment:	
Initialization file nar	ne:		Browse
- Network information -			
	Host name:		
	Address:		<u> </u>
	Port :		
Named pipe	Name:		1

A monitor definition consists of the following fields:

#### Name:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It enables a monitor to be identified in the resource window.

#### **Comment:**

This field consists of maximum 80 characters (the comma character is forbiden).

It is used to enter comments about the monitor.

#### Initialization file name:

This information will be used to **configure** a monitor.

This field consists of maximum 127 characters.

It gives the full physical name of the monitor initialization file (tomnt.ini) and allows access to the monitor settings for updating.

The | **Browse** | button allows the user to select a file by searching the disks and the view.

#### **Network Information:**

This information is used to define the network that will be used to manage a monitor. The choice of network type depends on the monitor configuration.

### TCP/IP network:

#### Host name:

This is the name of the 'host' enabling connection to the machine on which the Connect:Express monitor to be managed is running.

#### Address:

This is the address in 'aaa.bbb.ccc.ddd' format enabling connection to the machine on which the Connect:Express monitor to be managed is running **Port:** 

This is the number of the port, configured in the TCP/IP network parameters for the Connect:Express monitor to be managed.

#### Named Pipe network:

#### Named pipe name:

This is the name of the Named Pipe, indicated in the Named Pipe network parameters for the Connect:Express monitor to be managed, in the following format:

<u>\\<name</u> of server>\PIPE\<name of named pipe> for a remote named pipe, or: <u>\\.\PIPE\<Name</u> of named pipe> for a local named pipe

### **1.2 - Presentation**

The graphical interface provides a multi-document area enabling simultaneous access to different management, configuration, and implementation functions for Connect:Express monitors.

#### The bars

The following bar types are accessible:

- the resources bar
- the tool bar
- the access rights bar
- the status bar

The way they are displayed or hired is determined by the 'View' menu.

#### The menu

This is defined dynamically depending on the document that has been selected. It presents the following options:

- Files
- Edit
- View
- Management or Configuration
- Window
- ? (Help)

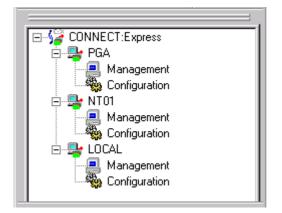
#### The documents

The configuration and management functions are viewed in separate windows, with one of the following documents showing:

- the configuration document
- the management and implementation document

The interface can display a maximum of eight documents simultaneously.

#### 1.2.1 - The resources bar



The resources bar is displayed as a window showing the directory (folder) structure for the defined monitors.

The resource information is stored in the initialization file (iutom.ini when using Activity Manager or Client/Server options or tomnt.ini – [ENV] section). It may contain up to 255 monitor definitions, according to the authorization supplied.

#### 1.2.2 - The tool bar



The tool bar contains icons enabling the user to react to the contents of the resources bar:

- define a new monitor
- edit a monitor definition
- delete a monitor definition
- manage a monitor
- configure a monitor

#### 1.2.3 - The access rights bar



The access rights bar is displayed on the left hand side of the Management document window. It gives rapid access to many of the tools used in the graphical interface, using the mouse.

#### 1.2.4 - The status bar



The status bar provides explanatory text when the mouse is moved or activated.

#### 1.2.5 – The File menu

The File menu offers the following items:

- New: to create a new monitor within the resources or a new object within a document
- Manage: to connect to a monitor to perform management or implementation services
- **Configure:** to gain direct access to a monitor's settings
- **Disconnect:** to end a connection with a monitor
- Close: to end monitor configuration
- **Properties:** to display the details relating to an object within a document
- **Exit:** used to leave the graphical interface

#### 1.2.6 – The Edit menu

The **Edit** menu offers the following options:

- **Duplicate:** to duplicate an object within a document
- **Delete:** to delete a monitor definition within the resources or an object within a document
- **Properties:** to display the details relating to an object within a document

#### 1.2.7 – The View menu

The **View** menu offers the following items:

- **Resources bar:** shows or hides the resource bar
- Tool bar: shows or hides the tool bar
- Status bar: shows or hides the status bar
- Large icons: displays objects in the form of large icons within the current document
- Small icons: displays objects in the form of small icons within the current document
- List: displays objects in the form of a list within the current document
- **Details:** displays objects in the form of a detailed list within the current document
- Refresh: updates the list when monitor messages are viewed
- **Definition:** provides details about the definition of a monitor

#### 1.2.8 – The Management menu

The Management menu offers the following options:

- Information: Displays information relating to the connection with the selected monitor
- Directories
  - **Partners:** Displays the list of partners defined in the Partners directory
  - Files: Displays the list of files defined in the Files directory
  - **Clients:** Displays the list of clients defined in the Clients directory
- Monitor
  - Activity: Gives access to transfers currently being processed by the monitor for viewing purposes or in order to take action (Interrupt, Cancel, or Resume)
  - Log: Displays timed monitor messages
  - Journal: Gives access to transfers not currently being processed by the monitor for viewing purposes
  - Notifications: Allows access to notifications for both viewing and action purposes (routing or deleting notifications)
- Settings
  - Monitor
    - **Startup:** Displays the startup settings
    - Service: Displays the Windows service settings
    - Files: Displays the settings of the files
    - Notification: Displays the settings for global notification
    - Authorization: Displays the authorization settings
    - Networks
    - LU6.2: Displays the LU6.2 settings
    - X.25: Displays the X.25 settings
    - **TCP-IP:** Displays the TCP/IP settings
    - **NAMED PIPE:** Displays the NAMED PIPE settings
- Tables
  - ◆ PeSIT
    - Session: Provides access to the PeSIT protocol session tables
    - **Presentation:** Provides access to the PeSIT protocol presentation tables
  - ETEBAC-3
    - **Presentation**: Provides access to the ETEBAC-3 protocol presentation tables

#### 1.2.9 – The Configure menu

The Configuration / Monitor menu offers the following options:

- **Startup:** Provides access to the startup settings
- Service: Provides access to the Windows service settings
- **Files:** Provides access to the files settings
- Notification: Provides access to the settings for global notification
- Authorization: Provides access to the authorization parameters
- Networks
  - **TCP-IP**: Provides access to the TCP/IP settings
  - LU6.2: Provides access to the LU6.2 settings
  - **X.25**: Provides access to the X.25 settings
  - **NAMED PIPE:** Provides access to the NAMED PIPE settings

#### 1.2.10 – The Window menu

The **Window** menu offers the commands that are necessary to organize the multi-document workspace and to access the list of open documents:

- Cascade: Arranges open documents windows so that their title bars are visible
- Tile: Arranges open documents windows one on top of the other without overlapping
- Window 1,2...: Selects and places to the front the window selected from the list

#### 1.2.11 – The ? menu (Help)

The ? (Help) menu contains the following commands to gain access to help for using this application:

- Contents: **On-line help about the application accessed from the index**
- About...: **Provides technical information about the application**

#### 1.2.12 – The Configuration document

The configuration document is shown in a new window when the Configuration function is called.

It contains the various settings relevant to the Connect:Express monitor shown in the form of icons or a list.

#### 1.2.13 - The management and implementation document

The administration and implementation document is shown in a new window when the Management function is called.

It shows, in a tree-like structure, which Connect:Express monitor functions can be accessed by the user currently connected.

If the client does not use this connection with the monitor for the period shown in the start settings, the connection is terminated.

If the client then tries to access a resource, the graphical interface indicates that the connection was terminated and suggests that it be reconnected.

The name of the client and the initial password are then automatically picked up in order to re-establish this connection.

### **II** - The transfer monitor

**Connect:Express Windows** is a file transfer monitor running under Windows NT 4.0 or higher (Server and WorkStation).

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### 2.1 – General information about the monitor

#### 2.1.1 – Overview

**Connect:Express** (**Connect:Express**) is made up of various operating modules:

- a transfer monitor
- a graphical interface for configuration purposes
- a Programming Interface (DLL), which is described in *Connect:Express Windows Programming Guide*
- Utilities, described in *Connect:Express Windows Installation and Utilities*

Connect:Express enables text or binary files to be transferred by implementing PeSIT Hors SIT (version D or E) or ETEBAC-3 (client) presentation protocols, and TCP/IP, LU6.2 or X25 transport protocols.

The monitor allows parallel transfers to be carried out in request (caller) mode and/or server (called) mode.

#### **2.1.2 – Product options**

Using the graphical interface, the '**Client/Server**' option enables the monitor to be implemented from remote Windows 32-bit workstations.

Using the graphical interface, the 'Activity Manager' enables the monitor to be managed from remote 32-bit Windows workstations.

#### 2.1.3 – Requirements

- Connect:Express will run on an Intel PC.
- (please check with us with regard to any other platforms supporting 32-bit Windows)
- The operating system for the PC should be Windows NT version 4.0 or higher (Server or Workstation).
- The system should contain one of the following network interfaces:
  - **TCP-IP:** «Windows Sockets version 1.1» interface or higher
  - LU6.2: SNA Server
  - X.25: Eicon interface

#### 2.1.4 – Implementation

The **Monitor** is a multi-transfer program, which carries out transfers according to the settings configured in the initialization file. It can be installed as a Windows service.

The **graphical interface** is used to configure all the information necessary for the monitor to function by updating the initialization file, either locally or remotely. It also implements and tracks transfers. Access to the various functions is carried out under the control of the authorizations for the client currently defined.

The **programming interface**, which is in the form of DLL enables Windows applications to interface with the monitor, either locally or remotely.

The **utilities** are used to carry out and implement the transfers, either locally or remotely, install or uninstall the monitor as well as a Windows service, configure the API on a client workstation

#### 2.1.5 – How the monitor Operates

The monitor is Windows application whose sole purpose is to transfer files as requested and to monitor their activity.

The application can be started from the desktop, via the Windows start group, or by the Windows services manager.

Access to the monitor is exclusively through the API and is controlled by an identified client's access authorizations.

Transfer requests received via the API are controlled in relation to the initialization file and the saved queuing options.

A transfer is carried out by a protocol layer and a network layer managed by the monitor depending on how the initialization file is configured.

Every stage of a transfer process indicated by the monitor is visible on the graphical interface by using the Activity menu, viewing the Journal and Messages and accessing the Notifications.

### 2.2 - The monitor directories

The Directories function in the management document on the graphical interface gives access to the following definitions:

- Partners
- Files
- Clients

A **partner** is an information system using a file transfer product that is compatible with the protocol implemented.

A file is a collection of data stored on an accessible magnetic medium.

A **client** is a workstation containing the API and an application which allows it to initiate a transfer to the monitor via TCP/IP or Named Pipe, either locally or remotely, or to manage a monitor, again either locally or remotely.

The directories are the logical files stored in the Connect:Express initialization file.

#### **2.2.1 – The partner directory**

The partner directory enables the user to define all the computer sites with which Connect:Express needs to communicate in order to implement file transfers. A partner is identified by a **symbolic name**, which must be unique.

The graphical interface enables the user to view, edit, create, or delete a partner definition controlled by the authorizations granted to the connected client.

A definition for a partner is shown by clicking on the following tabs:

- General
- (SSL)
- Session
- Networks

#### <u>2.2.1.1 – Partners directory – general tab</u>

ieneral	X
This wizard will help you add a new partner definition:	
Name:	
Comment:	
Password:	
Dynamic local identification	
Local name: Local password:	
Status: 🔽 Enabled Protocol : O PeSIT 'D'	
Automatic resume   PeSIT 'E'	
C:X monitor C ETEBAC-3	
< Back Next > Cancel	Help

#### Symbolic name:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It is used to identify a partner.

#### **Password:**

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It supplements the partner identification.

#### **Comment:**

This field consists of maximum 80 characters. It is used to enter comments about a partner.

#### **Dynamic local identification:**

States that the following local name and password are specified dynamically when submitting a file transfer request (checked) or fixed into the partner definition (unchecked).

#### Local name:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It is the identification for the Connect:Express monitor at the partner end.

#### Local password:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It supplements the identification for the Connect:Express monitor at the partner end.

#### **Status:**

Indicates the status of the partner for the Connect:Express monitor.

If this is checked, the monitor will accept communication with this partner, if not checked, the monitor refuses communications.

#### Automatic resume:

This field specifies whether or not the monitor is configured to implement the automatic resume function of failed transfers with this partner.

#### **C:X monitor**

If checked, this field indicates that the software used by the partner is part of the **CONNECT** family; if it is not checked, the software is not part of the **CONNECT** range.

#### **Protocol:**

This field indicates the version of the presentation protocol to be implemented for transfers with this partner and can take the following values: PeSIT-D, PeSIT-E or ETEBAC-3.

#### <u>2.2.1.2 – Partners directory – SSL tab</u>

If the software license key enables the SSL option, the following tab is displayed:

1

#### Use SSL:

This field indicates if SSL is used for transfers with this partner.

#### SSL client parameter definition:

This field indicates the symbolic name of an existing SSL client parameter definition. Use this field for SSL client transfers.

#### **Remote client DN control**

Used in SSL server mode in case of remote client authentication (See Connect:Express SSL guide for more information).

#### Remote client subject dn:

For SSL transfers, this field enables control of the subject distinguished name (DN) present in the certificate of the remote client.

You can provide a sequence of relative distinguished names (RDNs) separated by commas (','). Each RDN must match a corresponding value in the subject DN of the remote partner. For example "cn=Test\*,ou=tlabs01" will authorize an SSL transfer for a partner whose certificate contains the subject dn:

"CN=Test rsa1024,OU=tlabs01,O=tlabs,L=Paris,S=Paris,C=FR".

You can use '\*' and '?' wild characters.

#### Trusted root dn:

This field enables additional controls on the trusted root DN of the certificate chain of the remote client certificate. Use the same syntax as for the subject DN control.

#### **Remote server DN control**

Used in SSL client mode (See Connect:Express SSL guide for more information).

#### Remote server subject dn:

This field enables control of the subject distinguished name (DN) present in the certificate of the remote server. Use the syntax described above.

#### Trusted root dn:

This field enables additional controls on the trusted root DN of the certificate chain of the remote server certificate. Use the same syntax as for the subject DN control.

#### 2.2.1.3 – Partners directory – session tab

Number of connections:
Incoming: Outgoing: Total:
Selected session table name:
Session tables list:

#### **Number of Connections:**

These fields enable the user to specify the number of simultaneous connections that Connect:Express can make with this partner.

The total number is mandatory and can vary between 1 and 128.

The number of **incoming** sessions varies from 0 to 128. Space indicates an indeterminate number.

The number of **outgoing** sessions varies from 0 to 128. Space indicates an indeterminate number.

If Incoming and Outgoing are fixed numbers, they must add up to the number stated in Total.

#### Session table:

This field indicates the name of the session table to be used when the communication with this partner is opened using PeSIT presentation protocol.

#### Note:

Session tables are not used in ETEBAC-3.

#### 2.2.1.4 – Partners directory– network tab

This section specifies the type of network to use as default when an outgoing session is set up.

Network	×
C TCP/IP	
Host name:	
Address:	· · Port
C LU6.2	
LU name:	Mode name:
Transaction name:	
C X25	
Local address:	Remote address:
User data:	Port: 0
Facilities:	

#### **TCP/IP** Network:

#### Host name:

This is the IP host name of the partner.

#### Address:

This is the IP address of the partner in the format of aaa.bbb.ccc.ddd where 'aaa', 'bbb', 'ccc' and 'ddd' are numerical values from 0 to 255.

If provided, it takes priority over the host name above.

#### Port:

This is a numerical field whose value must be between 1 and 65535.

It indicates the number of the port on which to execute the partner's call.

#### LU6.2 network:

#### LU Name:

This field consists of maximum 8 alphanumeric characters.

It gives the LU alias (identity code) for the partner defined on the SNA server.

#### Mode name:

This field consists of maximum 8 alphanumeric characters.

It indicates the name of the mode used to establish a session with the partner's LU. Transaction program name:

This field consists of maximum 64 free characters.

For a Connect: Express partner, this name is 'TOMLU6P2'.

#### X.25 network:

#### Local address:

This field consists of maximum 15 numeric characters.

It indicates the local address to be shown when the X25 call is made.

For certain networks (TRANSPAC for example) this address does not need to be stated. **Remote address:** 

This field consists of maximum 15 numeric characters .

It indicates the partner's X25 address.

#### User data:

This field consists of maximum 8 hexadecimal characters (A to F and 0 to 9).

It states the user data field that Connect:Express is to present for the X25 call. **Facilities:** 

This field consists of maximum 32 hexadecimal characters (A to F and 0 to 9). It states the user data field that Connect:Express is to present for the X25 call.

### **Port:**

This is a numeric field with a range of 1 through 16.

It indicates the port number for the X25 card, which was specified when the Eicon software was configured.

#### 2.2.2 – The file directory

The file directory is used to define data collection profiles in order to effect transfers with the defined partners.

It is stored in the initialization file for the monitor.

A file is identified by a **symbolic name**, which must be unique.

The graphical interface enables the user to view, edit, create, or delete a file definition controlled by the authorizations granted to the connected client.

A definition for a file is shown by clicking on the following tabs:

- General
- Transfer rules
- Notification
- Commands
- Exits

#### <u>2.2.2.1 – Files directory – general tab</u>

This wizard will help you add a new file del Name :	
Comment:	✓ Enabled
Fixed File name:	Browse
Label:	
Selected presentation table name: List of PeSIT presentation tables PeSIT presentation with horizontal compression PeSIT presentation with mixed compression PeSIT presentation with vertical compression PeSIT presentation without compression tblpres-alvms	List of ETEBAC-3 presentation tables ETEBAC3 presentation with translation ETEBAC3 presentation without translation
Pi99 TRANSMISSION Offset : Value :	
Offset : Value :	

#### Symbolic name:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It enables Connect:Express to identify a data collection profile when negotiating a transfer.

#### **Comment:**

This field consists of maximum 80 characters.

It is used to enter comments about a file.

#### Status:

Indicates the status of the partner for the Connect:Express monitor. If it is checked, the monitor will transfer this file; if not checked it refuses.

#### Fixed:

This field indicates whether Connect:Express can accept (not checked) or cannot accept (checked) a change to the physical name of this file when the transfer request is submitted.

#### File name:

This field consists of maximum 127 characters.

It indicates the full physical name of the file about to be transferred.

This name can be changed or not when a transfer request is submitted depending on the indicator stipulated above.

The **|Browse**| button allows the user to select a file by searching the disks and the directories in view.

This name may contain **variables**, and, it can be **generic** in transmission. (See the Appendices for more information)

#### List of PeSIT presentation table:

This is the name of the PeSIT presentation table to use when transferring this file.

### List of ETEBAC-3 presentation table:

This is the name of the ETEBAC-3 presentation table to use when transferring this file.

#### <u>2.2.2.2 – Files directory – transfer rules tab</u>

Transfer rules			? ×
Transfer direction :			
🗖 Transmissioni		Reception	
Open action O New O Replace	Article characteristics O Fixed text O Variable text	C Fixed binary C Undefined binary	Size of articles:

#### **Transmission:**

Indicates that the file can be transmitted by the monitor.

#### **Receiver:**

Indicates which partner is authorized to receive this file.

An asterisk '\*' is used to authorize all defined partners.

**'\$\$API\$\$**' is used to authorize all partners, even undefined ones.

#### **Reception:**

Indicates that the file can be received by the monitor.

#### Sender:

Indicates which partner is authorized to send this file.

An asterisk '\*' is used to authorize all defined partners.

**'\$\$API\$\$**' is used to authorize all partners, even undefined ones.

#### **Open action:**

This field indicates the controls and the action to be taken by the monitor when it receives this file:

#### New:

Indicates that the file must not already exist. If it does exist, the transfer is refused.

#### **Replace:**

Indicates that if the file already exists, it is replaced. If it does not exist, a new file is created.

#### **Article characteristics:**

This is used to indicate how the file is structured and the data it contains:

**Fixed text**: this is an ASCII file where the records are of the *same length* and end with '*Carriage Return* – CR' and '*Line Feed* – LF' characters.

**Variable text**: this is an ASCII file where the records are of *different lengths* and end with '*Carriage Return* – CR' and '*Line Feed* – LF' characters.

Fixed binary: this is a binary file where all the records are of the same length.

Undefined binary: this is an unstructured binary file treated as a *variable*.

#### Size of article:

This field consists of maximum 5 numeric characters.

It is used to indicate the length of the records in a fixed file or the length of the longest record in a variable file.

#### For the PeSIT protocol:

- For a fixed binary file the maximum length is 32767.
- For other files the maximum length is 32765.
- In text files this size does not include the CR-LF characters.
- It can be zero for a file being received only. In this case, the monitor uses the size of the article announced by the partner transmitting the file.

#### For the ETEBAC-3 protocol:

• The article's maximum length is 4094 whatever the type of file, and may not be zero regardless of the direction of the transfer.

#### <u>2.2.2.3 – Files directory – notification tab</u>

Notification	×
Selected client name:	

#### Notification:

This indicates whether the transfer notification function is to be implemented for this file.

#### Name of client:

This is the symbolic name of the client to be notified each time this file is transferred.

See appendices for more information on the notification system.

#### If the HTTP notification component is installed, the following panel is displayed:

otification (HTTP)			
Notification			
ADMIN CLIENT	-		
, Selected client name:			
Http notification			
Beginning of transfer	End of transfer	Error of transfer	

#### **HTTP Notification:**

Http notifications are created by the monitor and sent by the tom\_httpn process.

#### **Beginning of transfer:**

If checked, an HTTP notification is created at the beginning of the transfer.

#### End of transfer:

If checked, an HTTP notification is created at the end of the transfer.

#### **Error of transfer:**

If checked, an HTTP notification is created if there is an error during the transfer.

#### Note

The original notification system and the new HTTP notification system are independent and can be used at the same time.

Commands		×
TRANSMISSION	1	
Begin:		Browse
End:		Browse
RECEPTION		
Begin:		Browse
End:		Browse
ERROR		
		Browse

#### 2.2.2.4 - Files directory - command tab

A command is an MS-DOS (.BAT) or Windows (CMD) command file activated by the monitor:

- Before the file is transferred (begin command)
- After the file has been transferred without error (end command)
- In the event of an error in transferring the file (error command)

A command is executed asynchronously in relation to the transfer. When it is started, the command receives parameter.

The command must be preceded by one of the following parameters:

/C, indicating that the execution window is closed automatically after the command has been executed

/K, indicating that the execution window is kept and needs to be closed manually

/N, indicating that the command is run without a console window

If neither of these parameters is indicated, the command is not executed.

For commands having a pathname containing spaces, enclose the pathname with double quotes ("). If the file is chosen by using the Browse... button, the double quotes are automatically added by the program.

The following information is indicated:

#### **Transmission:**

These fields, containing a maximum of 127 characters, are used to state the full name of the command files activated prior to transmission of the file (**Begin**) or after the file has been transmitted correctly (**End**).

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

#### **Reception:**

These fields, containing a maximum of 127 characters, are used to state the name of the command files activated prior to receiving the file (**Begin**) or after the file has been received correctly (**End**).

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

#### **Error:**

This field, consisting of a maximum of 127 characters, is used to state the name of the command file activated in the event of an **error** during transfer.

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

#### <u>2.2.2.5 – Files directory – Exits tab</u>

This function is not available in this version.

#### 2.2.3 – The client directory

The client directory is used to define all the users who are authorized to connect to the monitor, either locally or remotely. The connection is made via the API by establishing a client/server dialog and utilising the TCP/IP or Named Pipe network protocols. A client is identified by a **symbolic name**, which must be unique.

The graphical interface enables the user to view, edit, create or delete a client definition controlled by the authorizations granted to the connected client.

A definition for a client is shown by means of the following tabs:

- General
- Authorizations
- Files

#### 2.2.3.1 – Clients directory – general tab

Ge	neral		2	×	
	This wizard will	new Client definition :			
	Comment:				
	Password:	E E	nabled 🔲 Notifiable	Notifiable	
		Host name:			
		Address:			
		Port:			
	O <u>N</u> amed Pipe	Name:			

#### Symbolic name:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9).

It is used to identify a client when establishing the client/server dialog with the monitor. **Comment:** 

#### Comment:

This field consists of maximum 80 characters.

It is used to enter comments about a client.

#### **Password:**

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It supplements the client identification.

#### **Status:**

Indicates the status of the client for the Connect:Express monitor.

If this is checked, the monitor will open the dialog; if unchecked, it will not.

### Notifiable:

This indicates whether or not the client is participating in the notification system.

See appendices for more information on the notification system.

### TCP/IP

This field indicates that the client is using the TCP/IP network.

## Host name:

This is the client's IP hostname.

#### Address:

This is the client's IP address in 'aaa.bbb.ccc.ddd' format where 'aaa', 'bbb', 'ccc' and 'ddd' are numerical values between 0 and 255.

This address is used by the monitor to control the caller's address if such control is operational within the monitor's TCP/IP network parameters.

It is also used by the monitor when sending transfer notifications.

If provided, it takes priority over the host name above.

#### Port:

This is a numerical field whose value must be between 1 and 65535.

It indicates the number of the port on which to execute the client's call when sending transfer notifications.

### Named Pipe:

This field indicates that the client is using the Named Pipe network.

#### Name:

This is the name of the client's Named Pipe.

It is used when sending notifications

#### Note:

If the network information is not specified, the monitor will not try to send the transfer notifications to the client directly. It only saves them in the Notifications file.

## 2.2.3.2 - Client directory - Authorizations tab

Authorizations		? ×
Partners directory	🗖 Read	🗖 Read/Write
Files directory	🗖 Read	🗖 Read/Write
Clients directory	🗖 Read	Read/Write
Transfer request	🔲 Transmission	Reception
Submit a request for another client	Authorized	
Transfer activity for the connected client	View	For Action
Transfer activity for all clients	🗖 View	For action
Log	🗖 View	
View the journal of transfers	🔲 Client connected	All clients
Transfer notifications for the client connected	🗖 View	For action
Transfer notifications for all clients	View	For action
Monitor parameters	🗖 Read	🗖 Read/Write
Protocol tables	🗖 Read	☐ Read/Write
All authorizations		

Client authorizations refer to the monitor to which the client is connecting.

## **Partners directory:**

Read access:

This indicates that the client is authorized to view partner definitions.

Read/Write access:

This indicates that the client is authorized to view, edit, create, or delete partner definitions.

#### **Files directory:**

Read access:

This indicates that the client is authorized to view file definitions.

*Read/Write access:* 

This indicates that the client is authorized to view, edit, create, or delete file definitions.

# **Clients directory:**

Read access:

This indicates that the client is authorized to view client definitions.

Read/Write access:

This indicates that the client is authorized to view, edit, create, or delete client definitions.

## **Transfer request:**

Transmission:

This indicates that the client is authorized to submit transfer requests for transmittal. *Reception:* 

This indicates that the client is authorized to submit transfer requests for receipt.

#### Submit a request on a client's account:

This indicates that the client is authorized to submit transfer requests on behalf of another client.

## Transfers activity for the connected client:

View:

This indicates that the client is authorized to view the transfer requests it has made. *For action:* 

This indicates that the client is authorized to act upon (interrupt, cancel, resume) the transfer requests it has made.

#### Transfer activity for all clients':

View:

This indicates that the client is authorized to view the transfer requests made by all clients.

For action:

This indicates that the client is authorized to react to (cancel, interrupt, resume) the transfer requests made by all clients.

#### Log:

This indicates that the client is authorized to view monitor messages.

## View Journal of Transfer

For the connected Client:

This indicates that the client is authorized to view its own transfer journal. *For all Clients:* 

This indicates that the client is authorized to view the transfer journal for all clients.

## **Transfer Notifications for the connected Client:**

View:

This indicates that the client is authorized to view its transfer notifications.

For action:

This indicates that the client is authorized to act upon (delete, route) its own transfer notifications.

## **Transfer Notifications for all Clients:**

View:

This indicates that the client is authorized to view the transfer notifications for all clients.

For action:

This indicates that the client is authorized to react to (delete, route) the transfer notifications for all clients.

# Monitor parameters:

Read:

This indicates that the client is authorized to view the monitor settings.

Read / Write:

This indicates that the client is authorized to view and edit the monitor settings.

## **Protocol tables:**

Read:

This indicates that the client is authorized to view the protocol tables.

Read / Write:

This indicates that the client is authorized to view, edit, create, or delete the protocol tables.

# 2.2.3.3 – Clients directory – files tab

Files			? ×
List of defined files:	Add -> <- Remove	List of authorized files:	

### List of files defined:

This is the list of files defined into the files directory.

## List of files authorized:

This is the list of files that the client is authorized to transfer.

An asterisk '\*' is used to indicate all defined files.

The |Add| button is used to add a file name into the list of authorized files.

The **|Remove**| button is used to remove a file name from the list of authorized files.

# 2.3 - The monitor tables

The tables are used to define the conditions for implementing the PeSIT and ETEBAC-3 protocols that are supported by the monitor on two levels:

- When the session begins
- When the file data is sent

When the session begins, the **session tables** indicate the values used by the monitor as the basis of negotiation with the partner.

The result of the negotiation is used for the duration of this session.

The ETEBAC-3 protocol does not require the use of any particular session table.

When the data is sent, the PeSIT or ETEBAC-3 **presentation tables** state the values used by the monitor to negotiate with the partner and to indicate how the data should be processed (translation, compression, and so on).

The results of the negotiation are used for the duration of this transfer.

The tables are stored in the monitor initialization file.

## 2.3.1 – The Session Tables for the PeSIT protocol

A Session table is used to define the parameters used when a session with a partner is opened. A Session table is identified by a unique **name**.

The graphical interface enables the user to view, edit, create, or delete a session table, controlled by the authorizations granted to the connected client.

General	I					×
ţ,	This wizard	d will help you	add a new sess	ion table		
ma» Syn	twork messages x size: hchronization erval:		Bytes KByte	D	irection : Transmission Reception	_
	CRC Option		number of nohronizations:			_

A session table consists of the following fields:

#### Name:

This field consists of maximum 50 characters .

It is the identifier for the session table.

#### Network messages max size:

This is a numerical field whose value must be between 256 and 9999 bytes. It states the maximum size of the network messages that will be exchanged during a communication with a partner.

## Synchronization interval:

This is a numerical field of which the value must be between 0 and 99 kilobytes. It states the interval for establishing synchronization points enabling transfers that have been interrupted to be resumed without retransmitting the synchronization intervals already completed.

## **Direction:**

This field indicates the direction of transfer during communication with a partner. It can be set to Transmission, Reception or Both.

#### **CRC Option:**

Indicates whether the mechanism for controlling data integrity is implemented.

# Max number of resynchronizations:

This is a numerical field whose value must be between 0 and 99. This file is linked to whether the CRC option is implemented and is used to indicate the maximum number of retransmission requests for changed data when the data is transferred.

## 2.3.2 – The Presentation Tables for the PeSIT protocol

A Presentation table is used to define the settings used to send or receive data from a file on the network.

A Presentation table is identified by a unique name.

The graphical interface enables the user to view, edit, create, or delete a Presentation table, controlled by the authorizations granted to the connected client.

Gener	al - PeSIT presentation tables	X
	This wizard will help you add a new PeSIT presentation table:	
	Compression : • None O Vertical O Horizontal O Mixed	
-	Functions:	
	Concatenation     Segmentation     Multi-record     ASCII/EBCDIC translation	
	Name of ASCII to EBCDIC translation table:	
	TOMNT.ASC Browse	
	Name of EBCDIC to ASCII translation table:	
	TOMNT.EBC Browse	

A Presentation table consists of the following fields: **Name:** 

This field consists of maximum 50 characters.

It is the identifier for the presentation table.

# **Compression:**

This field determines the type of compression used.

It can be set to none, horizontal, vertical, or mixed (horizontal and vertical). The PeSIT protocol compression algorithm is used.

## Functions

These fields determine whether the PeSIT protocol functions are in operation for transferring data in the network messages.

*Concatenation* is used to insert several protocol messages into the same network message.

*Multi-articles* is used to insert several articles of the file into the same network message.

*Segmentation* allows a file article to be transferred in several network messages. **SCDIC translation:** 

# **ASCII/EBCDIC** translation:

This field determines whether the data translation mechanism is implemented during transfer.

Translation is carried out in the following directions:

- ASCII to EBCDIC for sent data
- EBCDIC to ASCII for received data

This translation mechanism is based on the external **translation tables.** 

## Name of ASCII-> EBCDIC translation table

This field states the full name of the file used to perform the ASCII to EBCDIC conversion.

The **|Browse**| button allows the user to select a file name by searching the disks and the directories in view.

## Name of EBCDIC -> ASCII translation table

This field states the name of the file used to perform the EBCDIC to ASCII conversion. The |**Browse**| button allows the user to select a file name by searching the disks and the directories in view.

## 2.3.3 – The Presentation Tables for the ETEBAC-3 protocol

A presentation table is used to define the settings used to send or receive data from a file on the network.

A Presentation table is identified by a unique **name**.

The graphical interface enables the user to view, edit, create, or delete a Presentation table, controlled by the authorizations granted to the connected client.

Gene	eral - ETEBAC-3 presentation table	×
	This wizard will help you add a new ETEBAC-3 present.	ation table:
	Translation: CASCII/EBCDIC	
	Name of ASCII to EBCDIC translation table:	
	TOMNT.ASC	Browse
	Name of EBCDIC to ASCII translation table TOMNT.EBC	Browse

A Presentation table consists of the following fields: **Name:** 

This field consists of maximum 50 characters .

It is the identifier for the Presentation table.

#### **ASCII/EBCDIC** translation:

This field states whether the data translation mechanism is implemented during transfer. Translation is carried out in the following directions:

- ASCII to EBCDIC for sent data
- EBCDIC to ASCII for received data

This translation mechanism is based on the external **translation tables.** 

#### Name of ASCII-> EBCDIC translation table

This field states the name of the file used to perform the ASCII to EBCDIC conversion. The **|Browse|** button allows the user to select a file name by searching the disks and the directories in view.

#### Name of ASCII-> EBCDIC translation table

This field states the name of the file used to perform the EBCDIC to ASCII conversion. The **|Browse|** button allows the user to select a file name by searching the disks and the directories in view.

## 2.3.3 – The PeSIT retry table

You can use the retry table to filter the PRC values for which retries can take place in case of errors in PeSIT transfers. This table contains the following PRC default values, for which retries are performed:

000: Prc not set

- 201: System resources temporarily insufficient
- 202: User resources temporarily insufficient
- 203: Non-priority transfer
- 207: File occupied
- 221: End of transmission expiration time
- 225: Application congested
- 300: Congested local communication system
- 303: Congested remote communication system
- 309: Too many connections already in progress
- 310: Network incident
- 317: Time-out failure

If the file PesitPrcRetry.txt doesn't exist in the config sub-directory, the monitor performs systematically the retries in case of error, whatever the PRC value is.

To activate this table, stop the monitor, copy the file PesitPrcRetry\_example.txt to PesitPrcRetry.txt in the config sub-directory, and restart the monitor.

To modify the table edit the file and set one PRC value per line. The monitor loads it during initialization: stop and restart Connect:Express.

Note: The maximum number of retries and the interval between two retries are defined with the graphical interface in the start-up parameters.

# 2.4 – The monitor

The Monitor function within the management document in the graphical interface is used to start and track transfers.

It presents the following options:

- Request
- Activity
- Messages
- Journal
- Notifications

**Requests** is used to initiate new transfers to the monitor.

Activity is used to consult the active transfer requests at monitor level and to execute certain operations (interrupt, cancel, resume).

Messages is used to consult the list of monitor messages.

Journal is used to consult the journal of monitor transfers.

**Notifications** is used to consult the transfer notifications and to execute certain operations on them (delete or route).

# **2.4.1** – Transfer requests

This function, carried out by the graphical interface administration document, is used to initiate new file transfers to the Connect:Express monitor.

A transfer request is made up mainly by linking up the following components:

- A symbolic file defined in the file directory
- A transfer direction
- A symbolic partner defined in the partner directory
- A physical file name

The function provides three options for submitting requests:

- Simple requests consisting of:
  - **Client** information
  - **File** information
  - Schedule information
  - Notification information
- Extended requests consisting of the information in the simple request, plus:
  - Ad hoc information
  - **Extension** information
- ETEBAC-3 requests consisting of the information in the simple request, plus:
  - The ETEBAC-3 parameter card

# <u>2.4.1.1 – Transfer request – client information</u>

New transfer re	equest - Client 🔀
6	This wizard will help you create a new Simple Request:
	Choose the name of the client for which you want to submit the transfer request:
	client : ADMIN

### Client

This is the symbolic name of the client initiating the request. The name must be defined in the client directory and this client must be authorized to submit a transfer request. If the connected client is not authorized to submit a request on behalf of another client, this field cannot be edited. In that case, it suggests a list of defined clients.

# 2.4.1.2 – Transfer request – file information

New transfer request -	File		×
Physical name:			Browse
Label:			
- Pi99			
Offset :	Value :		
0 ÷			
<u>.</u>			
Direction			
O Tran	smission	C Recept	ion
Receiver partner:		Sender partner:	
			•
Application ID:			
Priority			
O Normal	C Low	0	High
Type O Normal	C Inquiry	0	Hold

# File name

This is the symbolic name of the file about to be transferred. It must have been defined in the file directory

The list indicated shows the files that are authorized for the initiating client.

# Status

This indicates the status of the symbolic file selected.

# Physical name

This is the physical name of the file about to be transferred.

This field gives the physical name that is defined in the file directory.

It can be edited if the file definition so permits.

The **|Browse**| button allows the user to select a file by searching the disks and the directories in view.

This name may contain **variables**, and when sent, may be **generic**. See Appendices for more information.

## Label

This is the value of the PI=37 at the file selection stage of the PeSIT protocol. Default value is the physical name and it may be changed.

Note: Using **&8.3** keyword in this field enables you to transmit automatically the simple name of the file in the pi37 to the remote partner.

## Pi 99 offset and value

These fields define the content of the pi 99 parameter for file transmission or file reception. See *PeSIT User Fields Guide*.

Note: If the partner type is not Connect:Express monitor (see partner definition), using **&8.3** keyword with offset **0** in this field enables you to transmit automatically the simple name of the file in the pi99 to the remote partner.

## Direction

This is the direction of transfer.

This field gives the direction that is specified in the file directory.

It can be edited if the file definition so permits.

## **Partner Receiver/Sender**

This is the symbolic name of the partner with whom the monitor is to carry out the file transfer.

It must have been defined in the partner directory and be authorized in the file definition.

This field shows the list of authorized partners for the direction indicated.

It can be edited if the file definition so permits.

### **Application Identifier**

This is a 16-character free-form field allowing the user to identify this transfer.

## Priority

This is the priority setting for the transfer. It may be Low, Normal or High. Transfers are handled by the monitor in priority order.

The default setting is Normal.

## Туре

This indicates the type of request. It may be Normal, Inquiry, or Hold.

In *Transmission*, the request is set to Normal for an outgoing call or Hold for an incoming call.

In *Reception*, it can be Normal or Inquiry depending on the parameters set for the remote site (Request on Hold or not)

## 2.4.1.3 - Transfer request - dynamic local identification

Local dynamic ID	×
Symbolic local name:	
Local password :	
ОК	<u>C</u> ancel

This window is displayed when the partner is defined as dynamic local identification. **Local name:** 

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It is the identification for the Connect:Express monitor at the partner end.

#### Local password:

This field consists of maximum 8 alphanumeric characters in capitals (A-Z, 0-9). It supplements the identification for the Connect:Express monitor at the partner end.

### <u>2.4.1.4 – Transfer request – schedule information</u>

New transfer request - Schedule	×
Startup date (YYYY/MM/DD) :	
Startup time (HH:MM:SS) :	

Scheduling mode is not operational in this version.

2.4.1.5 – Transfer request – notification information

New transfer request -	Notification	×
Notification	or i	
	Client name:	

#### Notification

This indicator allows the user to requests to be notified when a transfer ends, either as a matter or course, or following a problem.

#### **Client name**

This is the symbolic name of the client who is to receive the notification of transfer. This name must have been defined in the client directory.

See appendices for more information on the notification system.

## If the HTTP notification component is installed, the following panel is displayed:

New transfer request - Notif	ication (HTTP	)		X
Notification	Client name:	ADMIN	Y	
Http notification	r 🗖 E	nd of transfer	Error of transfer	

### **HTTP Notification:**

Http notifications are created by the monitor and sent by the tom\_httpn process.

#### **Beginning of transfer:**

If checked, an HTTP notification is created at the beginning of the transfer.

## End of transfer:

If checked, an HTTP notification is created at the end of the transfer.

## Error of transfer:

If checked, an HTTP notification is created if there is an error during the transfer.

#### Note

The original notification system and the new HTTP notification system are independent and can be used at the same time.

## 2.4.1.6 – Transfer requests – Ad hoc information

New transfer requ	uest - Ad'hoc		×
User name:		Password:	
Remote physical file name:			
Local physical file name:	[		

In Connect:Express type transfers with a partner in PeSIT version E, the **Ad hoc** option is used, to state the physical name of the file on the remote site, as well as the necessary security measures in place to access this file.

#### User name

This is the name of the user used by the remote security system to control access to the requested file in the direction indicated.

#### **Password:**

This is the user password used by the remote security system with the name stated above.

#### **Remote physical file name**

This is the physical name of the remote file using the syntax of the remote computer to which the transfer is to be made.

# Local physical file name

This is the local physical name of the file, which is to be stated to the partner with whom the transfer is to be made. It allows the user to edit the local physical name that is actually transferred.

## 2.4.1.7 – Transfer request – extension information

New transfer reque	est - Extension	×
PARTNER:		
Origin (Pi3):	Destination (Pi4):	
CUENT		•
CLIENT :		
Sender (Pi61):		
Receiver (Pi62):		

With transfers in PeSIT, the request extension is used to specify directly the values of certain fields in this protocol.

# Origin

This is the value of PI=3 at the file selection stage.

## Destination

This is the value of PI=4 at the file selection stage.

#### Sender

This is the value of PI=61 at the file selection stage in PeSIT version E only.

#### Receiver

This is the value of PI=62 at the file selection stage in PeSIT version E only.

## 2.4.1.8 – Transfer request – ETEBAC-3 information

New trans	fer request - ETEBAC-3 card	×
Card:		1
		-

The ETEBAC-3 parameter card provides the information required for presentation to the server to which the monitor will connect to perform the transfer.

This 80-character card is made up of a standard section (the first 8 characters) and a free-form section (the remaining 72 characters).

#### **Card Description**

Position 1: contains 'A' for an outgoing transfer [stands for Aller = Go in French] or 'R' for a received transfer.
Positions 2 to 4: not used, should contain spaces
Positions 5 to 8: length of article:
Positions 9 to 80: free-form

By default, **Connect:Express** displays a card with the free-form section initialized for transfers with a **Connect:Express** server, as follows:

Positions 13 to 20: symbolic name of the file
Positions 21 to 28: local symbolic name of partner
Positions 29 to 35: partner's local password
Position 47: 'I' for received transfer in Inquiry mode.

# 2.4.2 – Activity of transfers

The "activity of transfers" facility on the monitor is used to view and react to the transfers taking place.

Depending on the user's authorization rights, the user can view his own transfers only, or transfers for all clients.

This is carried out as follows:

- Indication of selection criteria and list display
- View of transfer and action details

## 2.4.2.1 – Transfer activity – selection arguments

C:X - Transfe	rs activity selection
Application I	ID:
Mode :	
- Direction -	
🗖 Trar	nsmission 🗖 Reception
Client :	<b></b>
File:	<b>_</b>
Partner:	<b></b>
	OK <u>C</u> ancel

This window is used to enter the following selection criteria:

#### **Application Identifier**

This is the transfer identifier indicated by the user when the request was submitted.

An asterisk '\*' can be used to select all identifiers.

## Mode

This is the request mode which is Internal if initiated locally or External if created dynamically at the time of an incoming call.

An asterisk '\*' can be used to select all modes.

#### Direction

This is the direction of the transfer. It may be Transmission, Reception or Both.

## Client

This is name of the client initiating the request.

The user's authorization rights determine whether this field can be edited.

An asterisk '\*' can be used to select all clients.

## File

This is the symbolic name of the transferred file.

An asterisk '\*' can be used to select all files.

### Partner

This is the symbolic name of the partner for the transfer. An asterisk '\*' can be used to select all partners.

Transfer			
Client :	Application ID:		
File:	Direction :	Partner:	
Physical name:			
Status:		TRC: PRC: SRC: NRC:	
Mode :		ERC:	
File size:		Transfer state	
Transfered size:			%
Begin date:		Action on transfer	
Begin time:		Interrupt Purge Restart	

# 2.4.2.2 - Transfer activity - detail and action

This window is used to view the details of the transfer selected from the list shown, and, depending on the user's authorization rights and the status of the transfer, to take action. The |**Interrupt**| button is used to ask the monitor to interrupt this transfer. It can be resumed later.

The **|Purge**| button is used to ask the monitor to purge this transfer. It cannot be resumed later. The **|Restart**| button is used to ask the monitor to try the transfer again.

The |Refresh| button will refresh (update) the screen display.

## 2.4.3 – Viewing messages

This function is used to display messages timed by the Connect:Express transfer monitor and to view any return codes in the event of an error.

The messages	and the re	turn codes	are described	in the	appendices.
The messages		curn couco	are accenticed	in the	uppendices.

C:X - Selection in LOG	×
Begin Begin date (YYYY/MM/DD) (HH:MM:SS):	
End End date (\\\\/MM/DD) [	
<u>D</u> efault <u>ÖK</u> <u>C</u> ancel	

Messages are displayed by entering the following criteria:

#### **Begin date**

The date that timed messages started in YYYY/MM/DD format. The default is today's date.

#### **Begin time**

The time that timed messages started in HH:MM:SS format.

The default is that the current time less 10 minutes.

## End date

The date that timed messages ended in YYYY/MM/DD format. The default is today's date.

## End time

The time that timed messages ended in HH:MM:SS format. The default is that the current time.

The current document lists messages meeting the indicated criteria.

## 2.4.4 – Consulting the transfer journal

This function is used to view the monitor transfer journal.

Depending on the user's authorization rights, either transfers from the connected client or all transfers may be read.

C:E - Selecti	on in J	ournal					?	×
Date and	time: —						 	
Begin date (YYYY/MN	4/DD)			Beg (HH	gin time I:MM:SS) :			
End date (YYYY/MN	4/DD)				d time ł:MM:SS) :			
- Direction -	_						 	
	Transmi	ssion			Recept	ion		
Client:							•	
File:							•	
Partner:							•	
			OK		<u>C</u> ancel			

The following criteria are used:

### **Begin date**

The date that the transfer journal starts in YYYY/MM/DD format. The default is today's date.

#### **Begin time**

The time that the transfer journal starts in HH:MM:SS format. The default setting is '00:00:00'.

#### End date

The date that the transfer journal ends in YYYY/MM/DD format. The default is today's date.

## End time

The time that the transfer journal ends in HH:MM:SS format.

The default setting is '23:59:59'.

#### Direction

This is the direction of the transfer. It may be Transmission, Reception or Both.

## Client

This is name of the client initiating the request. The user's authorization rights determine whether this field can be edited. An asterisk '\*' can be used to select all clients.

## File

This is the symbolic name of the transferred file. An asterisk '\*' can be used to select all files.

### Partner

This is the symbolic name of the partner for the transfer. An asterisk '\*' can be used to select all partners.

# 2.4.4 – Consulting the transfer journal – General tab

This window gives all the general information about the transfer selected from the transfer journal.

The following information is displayed:

- Date recorded on journal
- Time recorded on journal
- Request number:
- Application Identifier
- Symbolic name of the client initiating the request.
- Request number at partner
- PeSIT identifier for the transfer
- Begin date of transfer
- Begin time of transfer
- End date of transfer
- End time of transfer
- Status of transfer (ended, interrupted...)
- Return codes (TRC, PRC, SRC, NRC, ERC)
- File name
- Partner name
- Direction of transfer
- Physical file name

# <u>2.4.4.2 – Consulting the transfer journal – File tab</u>

This window gives all the file information about the transfer selected from the transfer journal.

The following information is displayed:

- File name
- File size in bytes
- Creation date in YYYY/MM/DD-HH:MM:SS format
- Last update dated in YYYY/MM/DD-HH:MM:SS format
- Physical name
- Origin physical name
- Remote physical name
- Label
- Organization (Sequential, Relative, Indexed)
- Type (Fixed text, Variable text, Fixed binary, Undefined binary)
- Definition (Fixed, Dynamic)
- Data type (ASCII, EBCDIC, binary)
- Article size

# 2.4.4.3 – Consulting the journal – Partner tab

This window gives all the partner information about the transfer selected from the transfer journal.

The following information is displayed:

- Name
- Local name
- Type
- Protocol version

And, for a TCP/IP link:

- Host name
- IP Address
- Port number
- Return Code

For a LU6.2 link:

- Name of LU
- Mode name
- Name of transaction program
- Primary return code
- Secondary return code

For an X.25 link:

- Local address
- Remote address
- User data
- Facilities
- X.25 return code
- X.25 cause code
- X.25 diagnostic code

# <u>2.4.4.4 – Consulting the journal – Transfer tab</u>

This window gives all the information about the transfer selected from the transfer journal. The following information is displayed:

- Request number
- Application identifier
- Date and time of requested start
- Status
- Purge request indicator
- Mode of request
- Type of request
- Priority
- Origin (Pi3)
- Destination (Pi4)
- Network message size negotiated
- Compression requested
- Compression negotiated
- Window size
- Interval
- CRC
- Sender (Pi 61 PeSIT E)
- Receiver (Pi 62 PeSIT E)

## 2.4.5.4 – Consulting the journal – Statistics tab

This window gives the statistics for the transfer selected from the transfer journal. The following information is displayed:

- File size
- Transferred byte count
- Number of records
- Network inputs/outputs count
- Retries count
- Resynchronizations count
- Open file action

# 2.4.5 – Consulting the transfer notifications

This function can be used to consult and take action on transfer notifications.

Depending on the user's authorization rights, it is possible to read the notifications for the connected client only, or for all clients.

An asterisk '\*' can be used to enable display of all notifications for all clients, on the selection criteria window.

## 2.4.5.1 - Consulting notifications - Details and Action

This window shows information about the notification selected.

The following information is displayed:

- Transfer request number
- Status of transfer
- Client
- Application identifier
- File name
- Direction of transfer
- Physical name
- Remote physical name
- File label
- Origin
- Destination
- Return codes (TRC, PRC, SRC, NRC, ERC)
- Date notification created
- Time notification created

The **|Remove**| button can be used to delete the notification.

The **|Forward**| button can be used to forward the notification to another client. *See appendices for more information on the notification system.* 

# 2.5 - The monitor settings

The monitor settings are made up of various items of information used at startup and during Connect:Express monitor operation.

They can be viewed through the Management function or viewed and updated through the Configure function, except for service parameters. These are updated only by running the Connect:Express service management utility described in *Connect:Express Windows Installation and Utilities.* 

These settings are stored in the monitor's initialization file and are broken down as follows:

- Startup
- Service
- Files
- Notification
- Authorization
- Networks
  - ♦ TCP/IP
    - ◆ LU6.2
    - ◆ X25
    - Named Pipe

## 2.5.1 - Startup parameters

📲 Startup		×
Call/Resume Number of retries:	Interval: 0 sec. 💼	Time-out during transfer
C Hot	O Cold	Time-out on Client connection

These settings consist of the following:

#### Number of call/retries

This is a numerical field whose value must be between 1 and 99.

This states the maximum number of automatic attempts the monitor will make to carry out a transfer.

## Interval

This is a numerical field whose value must be between 0 and 300 seconds It determines the time to wait between each attempt.

## Time out during transfer

This is a numerical field whose value must be between 30 and 300 seconds It determines what is considered to be the normal maximum timeout during which there is an absence of traffic on the line and during a transfer. After that time, an error is detected.

## Time out on client connection

This is a numerical field whose value must be between 30 and 300 seconds It determines what is considered to be the normal maximum timeout during which there is an absence of traffic on a network and during a client connection. After that time, an error is detected.

#### Start type

Determines the process to be carried out on the control point of the file when the monitor is started.

From **HOT**, the monitor should recover any transfers not performed or incomplete transfers remaining into the control point of the file.

From **COLD**, the monitor completely reinitializes the control point of the file without taking any notice of its contents.

# 2.5.2 – Service parameters

*Connect:Express Windows Installation and Utilities* gives details of how Connect:Express is installed and uninstalled from the TOM\_SRV.EXE utility as a Windows service. These settings can only therefore be accessed for viewing purposes, and are made up of the following:

### Status

This is an identifier stating whether the Connect:Express service is installed or not. List of dependencies list

This is a list of dependent services when the Connect:Express service is installed. *Notes:* 

- When the transfer monitor is installed as service it is no longer possible to start it manually from the desktop; instead, it needs to be started from the Windows services manager.
- The Connect:Express service stores messages relating to its start and termination in the NT Event Log that can be viewed using the NT Event Viewer application.
- When the service starts, the monitor window may or may not appear depending on the start settings that are indicated in the services manager.
- If the window appears,
  - the service will terminate if the window is closed
  - the transfer command execution windows appear on the desk-top
- If the window does not appear,
  - the monitor will terminate only when the service is terminated
  - the transfer command execution windows do not appear on the desk-top.

## 2.5.3 – The file parameters

Files	×
Journal Size: 0	
Log Reset Size: 0	
Notification Reset Size : 0	
Trace Enabled	
Statistics Enabled Reorganize at startup	
Number of days kept during daily purge :	
Time of daily purge (HH:MM):	

These settings consist of the following:

#### **Reset Journal**

This indicates whether or not the transfer journal file needs to be reinitialized when the monitor is started.

Size

This is a numerical field whose value must be between 100 and 9999 records. this is the maximum number of records the monitor allows into the file when it is reinitialized, the oldest records are deleted.

#### **Reset Notifications**

This indicates whether or not the transfer notifications file needs to be reinitialized when the monitor is started.

Size

This is a numerical field whose value must be between 100 and 9999 records. This is the maximum number of records the monitor allows in the file when it is reinitialized. The oldest records are deleted.

## **Reset Log**

This indicates whether or not the messages file needs to be reinitialized when the monitor is started.

Size

This is a numerical field whose value must be between 100 and 9999. It is the size (in records) of the formatted file when it is reinitialized.

# Trace

States whether the monitor's internal trace mechanism is enabled or not. The trace mechanism should only be activated when requested to aid the analysis of an incident. Its operation can compromize the monitor's performance and disk space and memory space utilization.

# **Statistics**

# Enabled

Indicates if the statistics functionality is activated.

# **Reorganize at startup**

Indicates if the statistics files are reorganized during Connect:Express initialization.

# Number of days kept during daily purge

Indicates the maximum number of days activity kept in statistics files during the purge process.

# Time of daily purge

Indicates the time when the purge statistics process is daily scheduled.

# Remarks

If the monitor is cold started, the statistics files are reinitialized.

The disk space of the statistics files is about 25 Mo for 10 000 transfers.

# **2.5.4** – The notification parameters

No	tification		×
	Notification requested	Client name:	

These settings consist of the following:

# **Notification requested**

This states whether or not global notification is implemented.

# **Client name**

This is the symbolic name of the client to be notified.

See appendices for more information on the notification system.

# 2.5.5 – Authorization parameters (Old asset protection key)

These parameters are the elements of the old asset protection key.

Authorization	<b>د</b>	×
Alias :		
, 		
Number :		

These settings consist of the following:

# Alias (Identity code)

A code used to reference the product licence.

# Number

A sequence of characters used to show details of how the product is used.

# 2.5.6 – Authorization parameters (New asset protection key)

These parameters are the elements of the new asset protection key.

Properties of :WXP	×
License W KEY-NUM 175645 T LICENSE-ID 14553 W ACCT-NUM 12345678 W PSP 123456 W CUSTOMER-NAME STERLING PARIS S PRODUCT EXPRESS B EXPIRATION-DATE 09-20-2009 HALT M OPERATING-SYSTEM WINDOWS S LICENSE-TYPE NORMAL S MAINTENANCE CENTRAL SITE N NUMBER-SESSIONS 10 N NUMBER-CLIENTS 10 B PESIT 09-20-2009 HALT B TEBAC3 09-20-2009 HALT B TCPIP 09-20-2009 HALT B CTPIP 09-20-2009 HALT B CLIENT-SERVER 09-20-2009 HALT B CLIENT-SERVER 09-20-2009 HALT B SSL 09-20-2009 HALT B SSL 09-20-2009 HALT	

Software protection key elements are displayed.

The monitor loads these elements from the license.key file placed in its root directory.

# 2.5.7 – Authorization parameters (license.key)

These parameters are the parameters contained in the new asset protection key file license.key.

license.key	
W KEY-NUM 175645 T LICENSE-ID 14553 W ACCT-NUM 12345678 W PSP 123456 W CUSTOMER-NAME STERLING PARIS S PRODUCT EXPRESS B EXPIRATION-DATE 09-20-2009 HALT M OPERATING-SYSTEM WINDOWS S LICENSE-TYPE NORMAL S MAINTENANCE CENTRAL SITE N NUMBER-SESSIONS 10 N NUMBER-SESSIONS 10 N NUMBER-CLIENTS 10 B PESIT 09-20-2009 HALT B ETEBAC3 09-20-2009 HALT B TCPIP 09-20-2009 HALT B LU-6.2 09-20-2009 HALT B ACTIVITIES-MANAGER 09-20-2009 HALT B CLIENT-SERVER 09-20-2009 HALT B SSL 09-20-2009 HALT	
Cancel Load Help	

The software protection key file license.key placed in the monitor's root directory is displayed.

- If the monitor is stopped: This file will be loaded at the next restart
- If the monitor is started:
  - This file can be loaded, without stopping the monitor, by clicking on the "Load" button
  - $\circ$   $\;$  This file can also be loaded, by stopping and restarting the monitor

# 2.5.8 – The TCP/IP Network parameters

Allen.	
Network status	
C Enabled C Disabled	
Caller address check	
Transfer port number:	
Client port number:	
Windows socket DII name:	
Browse	

These settings consist of the following:

#### Status

This states whether the TCP/IP network is enabled or disabled.

# **Caller address check**

When an incoming call from a partner or client is received via TCP/IP, this states whether the caller's address should be checked against its definition.

#### **Transfer port number**

States the port number for receiving incoming calls from partners.

#### **Client port number**

States the port number for receiving incoming calls from clients.

# Windows socket DLL name

States the name of the DLL Windows Socket V1.1 that the monitor should use to interface with the system's TCP/IP network.

The standard DLL for Windows 32bits is: WSOCK32.DLL.

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

# 2.5.9 – The LU6.2 Network parameters

Network - LU6.2				×
Network status				
C Enabled	0		Disabled	
Caller address c Local LU name : [	heck			
APPC DII name :		_		
			Browse	J
CSV DII name :		_	Browse	1
			Diction	1

These settings consist of the following:

# Status

This states whether the LU6.2 network is enabled or disabled.

Caller address check

When an incoming call from a partner is received in LU6.2, this states whether the caller's LU name should be checked against its definition.

# Local LU name

This is the name of the local LU the monitor should use to receive incoming calls from partners.

# APPC DLL name

States the name of the DLL APPC for SNA SERVER that the monitor should use to interface with the system's LU6.2 network.

The standard DLL for SNA SERVER is: WAPPC32.DLL.

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

# **CSV DLL name**

States the name of the DLL CSV for SNA SERVER that the monitor should use to interface with the system's LU6.2 network.

The standard DLL for SNA SERVER is: WINCSV32.DLL.

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

# 2.5.10 – The X.25 Network parameters

Network - X25	×
Network status	
C Enabled	O Disabled
Caller address check	
X25 local address:	Eicon port number:
	0 🛨
Eicon DII name:	
	Browse

These settings consist of the following:

# Status

This states whether the X.25 network is enabled or disabled.

#### **Caller address check**

When an incoming call from a partner is received in X.25, this states whether the caller's address should be checked against its definition.

# X.25 local address

States the local address (or sub-address) applied for receiving incoming calls.

# **EICON port number**

States the number of the port used by the monitor for the EICON card.

# EICON DLL name

States the name of the DLL C.25 for EICON that the monitor should use to interface with the system's X.25 network.

The standard DLL for EICON is: EX25.DLL

The **|Browse**| button allows the user to select a name by searching the disks and the directories in view.

# 2.5.11 – The NAMED PIPE Network parameters

×
C Disabled

These settings consist of the following:

# Status

This states whether the Named Pipe network is enabled or disabled.

# Pipe name

This is the name of the Named Pipe for receiving incoming calls from clients. The syntax for the name is '\\ PIPE name'

# **III - Appendices**

# 3.1. – The notification system

The transfer notification system can be used by clients defined in the monitor's client directory to receive a data transfer report.

This system operates on three levels:

- Globally: for all transfers handled by the monitor
- File: for all transfers of a file specified in the monitor's file directory
- **On request:** when a transfer is submitted

# Globally

Global notification is implemented in the monitor's notification parameters. The client indicated receives notifications for all transfers handled by the monitor.

File

File notification is implemented in the definition of the file. The client indicated receives notifications for all transfers of this file.

# At request

Notification of the request is implemented when the transfer request is submitted. The client indicated receives notifications for this transfer.

Notifications are generated at the end of every transfer process by the monitor, and state whether or not the transfer was ended correctly or not.

The notification is written to the notification file and can be viewed, deleted, or routed by the destination client.

It can also be sent directly to the destination client provided when the client's specifications contain the network elements that are necessary for the monitor to call it.

In this event, the client should use one of the Receive Notifications utility, which are documented in *Connect:Express Windows Installation and Utilities*.

These utilities are used to receive transfer notifications, alert the user by means of a popup message or an audible tone, etc., to start a batch command file (.bat or .cmd) and to generate and acknowledgement file.

# 3.2. – Transfer commands

A transfer command is used, at a specified moment, to execute a batch command file (.BAT or .CMD).

This file is started by Connect:Express with the following default parameters:

- %1: Transfer request number in AAAAQQQNNNNN format
- %2: Symbolic file name
- %3: Direction of transfer (<u>Transmit or Receive</u>)
- %4: Symbolic name of partner
- %5: Physical file name
- %6: The TRC code of the transfer
- %7: The PRC code of the transfer
- %8: The physical name of the file in 8.3 format (<name>.<extension>)

The following procedure is followed when Connect:Express monitor starts a command file:

- The command is executed separately from the execution of the monitor
- A message is written to indicate whether or not the transfer command was started
- The command file is executed within the transfer monitor's start directory
- The end transfer commands are executed only if the transfer ended correctly
- The transfer error command is executed only if a transfer error occurs

If the transfer monitor is installed as a Windows service the command execution window is not visible on the desktop.

#### Note V302 :

The parameters described above are default parameters and don't have to be mentioned after the command. For use of specific parameters, see the appendix « *Parameters of the commands associated to the transfers* » in the document « *Exchanging pi 37 and pi 99 parameters with PeSIT partners* ».

# 3.3 – Physical name variables

The physical name of the file to be transmitted or received may contain variables, which the monitor will replace dynamically during the transfer operation.

Depending on the direction and the protocol implemented, the possible variables are:

# For Transmitting and Receiving

- &PARTNID: For PeSIT and ETEBAC-3
- &FILENAM: For PeSIT and ETEBAC-3
- &ORG: For PeSIT
- &DEST: For PeSIT

# **Receiving only:**

- &USRVAR1: For PeSIT
- &REQDATE: For PeSIT and ETEBAC-3
- &REQTIME: For PeSIT and ETEBAC-3
- &REQNUMB: For PeSIT and ETEBAC-3
- &8.3: For PeSIT
- &EXTLAB: For PeSIT

In reference to the explanations below, a physical name is made up of the following:

disk drive: the letter of the drive on which it is stored.

**path:** the hierarchy of the disk drive broken down in directories and sub-directories. **name:** the name of the file.

**Extension:** the file type.

# &PARTNID: Symbolic name of partner

This variable is used to be replaced by the symbolic name of the partner with whom the transfer is taking place.

# &FILENAM: Symbolic file name

This variable is used to be replaced by the symbolic name of the file being transferred.

# **&ORG:** Source of transfer request

This variable is used to be replaced by the name of the source partner (PI=3 in the PeSIT selection stage) making the transfer request.

# **&DEST: Destination of transfer request**

This variable is used to be replaced by the name of the destination partner (PI=4 in the PeSIT selection stage) receiving the transfer request.

# &USRVAR1: Last index in the physical file name at the partner end

This variable is used for the last index in the name of the file at the partner end (usually IBM/MVS sites).

# &REQDATE: Date of transfer

This variable is used for the transfer date in YYYYMMDD format.

# &REQTIME: Time of transfer

This variable is used for the transfer time in HHMMSS format.

#### &REQNUMB: Request number:

This variable is used for the transfer request number.

# **&8.3:** Name and extension of file at the partner end

This variable is used for the name and extension of the file at the partner end as indicated in PI=37 in the PeSIT protocol., truncated if necessary to the 8.3 file name format The partner site should show a file name that is compatible with those managed under 32-bit Windows.

# &EXTLAB: Full name of file at the partner end

This variable is used for the name as the file sent by the partner and as indicated in PI=37 of the PeSIT protocol. The partner site should show a file name that is compatible with those managed under 32-bit Windows.

#### **Rules for use:**

- The &EXTLAB variable may not be combined with any other variable.
- Combinations of the &USRVAR1, &REQDATE, &REQTIME, &REQNUMB and &8.3 variables are not permitted.
- Variables &PARTNID and &FILENAM may be combined with one another, and can be combined with one of the following variables: &USRVAR1, &REQDATE, &REQTIME, &REQDATE, &REQNUMB and &8.3.
- The same variable cannot be used multiple times
- A maximum of three variables is allowed

Please note that Connect: Express does not create a (sub-)directory when a file is received.

# 3.4 – Wildcards in the physical name during Transmission (Generic)

This function applies only to **Sending**.

The physical name of the file to be transmitted may contain the following wild characters: '\*' or '?'

By making just one transfer request call, this function can be used to generate as many transfer requests as they are files corresponding to the generic name indicated, with a maximum of 100.

# 3.5 - ASCII / EBCDIC translation

This function is used to translate the file data during transmission. The translation process is carried out as follows:

- ASCII to EBCDIC for transmitted transfers
- EBCDIC to ASCII for received transfers

The translation tables used are indicated in the presentation table for the file used. These tables are stored in external files in text format and can be copied or edited using a text editor.

The tables supplied as standard are:

- TOMNT.ASC for translating from ASCII to EBCDIC
- TOMNT.EBC for translating from EBCDIC to ASCII

The format of the files must be maintained for this function to operate correctly.

# 3.6 – Connect:Express files

# 'tomnt.ini' monitor initialization file.

This file contains all the information required for the monitor and the local API to operate.

# 'iutom.ini' API initialization file.

This file contains all the information required for the remote API to operate.

# 'TOMNT.LOG' message file.

This is a sequential file which is managed in rotation, that is, when the monitor has written into the last record in the file, the next message is written over the first record in the file.

In fact this file contains two types of records:

- a header record stating the position of the current line
- 'n' message records

When the monitor starts, this file is formatted if the re-initialization setting is made in the monitor settings, or if it does not already exist.

# 'TOMJNL.DAT and TOMJNL.IX1' transfer journal files.

This is a C-TREE file containing an index and data.

When the monitor starts, this file is initialized if the re-initialization setting is made in the monitor settings, or if it does not already exist.

The maximum number of records kept when re-initialization takes place is set in the monitor configuration.

# 'TOMNOT.DAT, TOMNOT.IX1 and TOMNOT.IX2' notification files.

This is a C-TREE file containing two directories and data.

When the monitor starts, this file is initialized if the re-initialization setting is made in the monitor settings, or if it does not already exist.

The maximum number of records kept when re-initialization takes place is set in the monitor configuration.

# 'TOMCHK.DAT, TOMCHK.IX1 and TOMCHK.IX2' check point files.

This is a C-TREE file containing two directories and data. This file is initialized when the monitor is 'cold' started. It contains all the information relating to the transfers.

# 'TOMSTAT.DAT, TOMSTAT.IX1 and TOMSTAT.IX2' statistics files.

This is a C-TREE file containing two directories and data. This file is used when the statistics functionality is active. This file is initialized when the monitor is 'cold' started. It contains all the information relating to the statistics of transfers.

# 3.7 – Transfer monitor messages

# 3.7.1 - Messages into Connect:Express LOG file

# nnnnnnnnn - ccccccccc - ACCEPTED (t)

This message indicates the number of a new requests accepted by the monitor (nnnnnnnnnn) and the identifier (ccccccccc) of the connection for the client making the submission.

The letter 't' indicates the type of request (N = Normal, H = Hold, I = Inquiry)

# ALIAS= nnnnnnnnnnnnnnnnnnnnnnn

This message indicates the alias (ID code) for the authorization number.

# ALIAS NOT FOUND

This message indicates that the initialization file does not contain the ID code for the authorization number.

# nnnnnnnnn - APPC RC= XXXX YYYYYYY

This message indicates the APPC (PRIMARY and SECONDARY) error codes when a network error is detected.

# AUTOMATIC RESUME NOT FOUND

This message indicates an internal error in the automatic resume function.

# nnnnnnnnn BEGIN OF TRANSFER COMMAND STARTED

This message indicates that the command to start the transfer for the provided request number has been started.

# cccccccccc - CLIENT nnnnnnn CONNECTED (t)

# This message indicates the client connection (nnnnnnn)

The connection identifier (ccccccccc) and the network type (TCP/IP or NAMED PIPE) are also stated.

# ccccccccc - CLIENT nnnnnnn DISCONNECTED (t)

This message indicates that the client is disconnected (nnnnnnn). The connection identifier (cccccccccc) and the network type (TCP/IP or NAMED PIPE) are also stated.

# nnnnnnnnn - CLIENT ccccccc NOTIFICATION ERROR - TRC= xxxx

The monitor indicates an error while processing the transfer notification for the stated client (ccccccc). This message also states the request number concerned (nnnnnnnnnn) and the error code.

# ccccccccc CLIENT nnnnnnn REJECTED - TRC=xxxx SRC=xxxx

This message indicates that the client (nnnnnnn), the connection identifier (cccccccccc) and the corresponding return codes have been rejected.

# nnnnnnnnn COMMUNICATION CLOSED WITH pppppppp (t)

The monitor indicates that communication with the stated partner has closed down. The letter (t) indicates the type of link (TCP/IP, LU6.2, X25).

# nnnnnnnnn COMMUNICATION OPENED (s) WITH pppppppp (t)

The monitor indicates that communication with the stated partner has opened. The letter (s) gives the direction of communication (OUTGOING or INCOMING) The letter (t) indicates the type of link (TCP/IP, LU6.2, X25).

#### nnnnnnnnn COMMUNICATION REJECTED - PARTNER ppppppp

The monitor indicates that communication with the stated partner has been rejected.

#### **C-TREE INITIALIZATION ERROR**

The monitor indicates an error in the C-TREE database initialization process.

#### **DE-ALLOCATION ERROR nnnnnnnn – TRC=xxxx SRC= yyyy**

The monitor has encountered a system error when freeing up the stated buffer memory

#### nnnnnnnnn DISABLED

This message states the number of the request the monitor has just processed

# cccccccccc - nnnnnnnnnn – ENABLED

This message states the number of the restart request (nnnnnnnnn) and the identifier (cccccccccc) of the connection for the user carrying out the operation.

# nnnnnnnnn END OF TRANSFER COMMAND STARTED

This message indicates that the command to end the transfer for which the request number is stated has been started.

#### ERROR: nnnnnnn ALLOCATION - TRC=xxxx SRC= yyyy

The monitor has encountered a system error when allocating the stated buffer memory.

# nnnnnnnnn ERROR OF TRANSFER COMMAND STARTED

This message indicates that the transfer error command for which the request number is stated has been started.

#### ERROR MESSAGE nnnnnnnn – TRC=xxxx SRC= yyyy

The monitor has encountered a system error when sending the stated message

# ERROR NOTIFY - TRC= xxxxSRC= xxxx NRC= xxxx

The monitor indicates an error while sending a transfer notification to a client.

# ERROR nnnnnnnnn OPTION NOT AUTHORIZED

This message indicates that option nnnnnnnnn (Activity Manager, Client/Server or ETEBAC-3) for the product is not authorized by the authorization code.

# **ERROR SIGNAL – TRC= xxxx**

The monitor encountered an internal communication error in the 'send notification' procedure.

# nnnnnnnnn ERROR - TRC= xxxx PRC= xxxx SRC= xxxx ERC=xxxx NRC= xxxx

This message states that the transfer for which the request number is shown or that the client connection for which the identifier is shown is defective.

# nnnnnnnnn – ERROR WHILE CLOSING COMMUNICATION WITH ppppppp

The monitor indicates an error while closing communication with the stated partner (ppppppp). This message also states the request number concerned (nnnnnnnnn).

# nnnnnnnnn – ERROR WHILE OPENING COMMUNICATION WITH ppppppp

The monitor indicates an error while opening communication with the stated partner.

# INCOMING CALL (t) ACCEPTED - nnnnnnnnn

This message indicates that the monitor has accepted an incoming call. The request number or the identifier for the attributed client connection is indicated, as well as the network type (TCP/IP, LU6.2, X25 or NAMED PIPE).

# INCOMING CALL REJECTED - TRC xxxx PRC= xxxxSRC= xxxx NRC= xxxx

This message states that an incoming call has been rejected.

# nnnnnnnnn – INTERRUPTED - TRC=xxxx PRC=xxxx SRC=xxxx ERC=xxxx NRC=xxxx

This message states the number of the interrupted transfer request and the corresponding return codes.

# cccccccccc - nnnnnnnnnn - INTERRUPTION IN PROGRESS...

This message states the request number of the transfer for which the interruption has been requested (nnnnnnnnn) and the identifier (ccccccccc) of the connection for the user carrying out the operation.

# **INVALID START TYPE**

This message states that the type of start found in the initialization file is incorrect.

# JOURNAL FILE NOT FOUND

This message states that the journal file was not found in the monitor directory.

# JOURNAL FILE REINITIALIZED

This message states that the monitor journal file has been reinitialized.

# LOG FILE REINITIALIZED

This message states that the monitor message file has been reinitialized.

# MONITOR INITIALIZATION IN PROGRESS...

This message states that the monitor is currently initializing.

# MONITOR TERMINATING (MAX nn SECONDS)

This message indicates that the monitor is currently terminating and states the maximum amount of time required for the operation.

# NETWORK nnnnn DISABLED

This message states the name of the network that is not operational when the monitor is started.

This network is made non operational either by the monitor settings, or due to a failure signalled by an error message during initialization.

# NOTIFICATIONS FILE NOT FOUND

This message states that the notification file was not found in the monitor directory.

# NOTIFICATIONS FILE REINITIALIZED

This message states that the monitor notifications file has been reinitialized.

# NOTIFICATION NOT POSSIBLE – PROCESSES NOT RUNNING

This message indicates that the send notifications procedure is no longer active and therefore it is impossible to send notifications direct.

#### nnnnnn NOTIFY IS STARTED

This message states that the notification send procedure on network nnnnnnn (TCP/IP or NAMED PIPE) has been started.

# nnnnnn NOTIFY IS STOPPED

This message states that the notification send procedure on network nnnnnnn (TCP/IP or NAMED PIPE) has been halted.

# NUMBER NOT FOUND

This message indicates that the initialization file does not contain the authorization number.

# NUMBER OF SIMULTANEOUS REMOTE CLIENTS ALLOCATED=nnn

This message states the maximum number of remote clients that can connect simultaneously to the transfer monitor, depending on the authorization number.

# NUMBER OF SIMULTANEOUS TRANSFERS ALLOCATED=nnn

This message states the maximum number of simultaneous transfers that the transfer monitor can carry out, depending on the authorization number.

# **OPTION nnnnnnnnn IS ACTIVE**

This message indicates that option nnnnnnnnn (Activity Manager, Client/Server or ETEBAC-3) for the product has been activated by the authorization code.

#### cccccccccc - nnnnnnnnn - PURGED

This message states the number of the request purged by the monitor (nnnnnnnnn) and, if such action is requested by a client, the identifier (cccccccccc) of the connection for the client making the request. This request cannot be resumed.

#### cccccccccc - nnnnnnnnnn – PURGE IN PROGRESS...

This message states the request number of the cancelled/purged transfer (nnnnnnnnnn) and the identifier (cccccccccc) of the connection for the user carrying out the operation.

#### nnnnnnnnn – PURGED - TRC=xxxx PRC=xxxx SRC=xxxx ERC=xxxx NRC=xxxx

This message states the number of the cancelled/purged transfer request and the corresponding return codes.

#### nnnnnnnnn - RECOVERED

This messages states the number of the request recovered in the check point file when the monitor has been 'hot-started'.

#### nnnnnnnnn - RESUME IN xx SECONDS

This message indicates the number of a requested awaiting the automatic resume function by the monitor and the waiting time.

#### nnnnnnnnn - SELECTED

This message states the number of the request the monitor has started to process.

# nnnnnnnnn - SELECTION ERROR - TRC= xxxx SRC= xxxx ERC=xxxx NRC= xxxx

This message states the request number for which an error has been detected by the monitor when it was processed.

#### nnnnnn SERVER IS STARTED

This message states that the server component (nnnnnnn) has started.

#### nnnnnn SERVER IS STOPPED

This message states that the server component (nnnnnnn) has halted.

# nnnnnnnnn - SESSION REJECTED pppppppp - TRC= xxxx PRC= xxxx SRC= xxxx ERC=xxxx NRC= xxxx

This message states that the monitor has rejected an incoming session. The number of the request of the identifier of the client concerned is stated (nnnnnnnnn) and also the symbolic name of the partner or client (ppppppp). SOFTWARE NOT AUTHORIZED This message states that the authorization number has been revoked or is incorrect.

#### nnnnnnn START IN PROGRESS ...

This message states the type of start (HOT or COLD) the monitor is carrying out.

# nnnnnnnnn – SUSPENDED - TRC=xxxx PRC=xxxx SRC=xxxx ERC=xxxx NRC=xxxx

This message states the number of the suspended transfer request and the corresponding return codes.

# nnnnnnnnn TCP/IP RC= XXXX

This message states the TCP/IP error code when a network error is detected.

# **TERMINATE MONITOR ERROR – TRC=xxxx**

This message indicates an error when the monitor terminated, together with the corresponding return code.

# THE MONITOR IS STARTED

This message states that the monitor has been initialized.

#### THE MONITOR IS STOPPED

This message states that the monitor has stopped.

#### nnnnnnnnn – TRACE ERROR - TRC= xxxx SRC= xxxx

This message indicates the request number or the identifier of the client connection for which the internal audit trail procedure cannot be activated.

The 'SRVTCPIP' descriptor indicates a TCP/IP server network component, the 'SRVLU62' descriptor indicates an LU6.2 server network component, the descriptor 'SRVCLIENT' indicates a TCP/IP CLIENT server network component, 'SRVX25' indicates an X25 server network component, and 'SRVNAMP' indicates a NAMED PIPE server network component. nnnnnnnnnn – TRACE NOT ACTIVATED - TRC= xxxx SRC= xxxx

This message states the network component for which the internal audit trail cannot be activated.

The designator 'SRVTCPIP' indicates the TCP/IP server network component.

The designator 'SRVLU62' indicates the LU6.2 server network component.

The designator 'SRVCLIENT' indicates the TCP/IP CLIENT server network component.

The designator 'SRVX25' indicates the X25 server network component.

The designator 'SRVNAMP' indicates the NAMED PIPE server network component.

The designator 'NOTIFYIP' indicates the TCP/IP notification network component.

The designator 'NOTIFYNP' indicates the NAMED PIPE notification network component.

# nnnnnnnnn – TRANSFER ACCEPTED

This message indicates that a new transfer with the partner has been successfully negotiated. The request number is shown.

#### nnnnnnnnn - ffffffff – TRANSFER ENDED

This message indicates the end of the transfer for which the request number is stated. It also states the symbolic name of the file

# nnnnnnnnn – TRANSFER REJECTED ffffffff

This message indicates that the transfer for which the request number (nnnnnnnnnn) and the symbolic name of the file are stated, has been rejected.

# nnnnnnnnn - TRANSFER REJECTED - TRC= xxxx

This message states that the monitor has rejected a new request.

# nnnnnnnnn – TRANSFER RESTARTING

This message indicates that a resume-transfer operation with the partner has been successfully negotiated.

The request number is shown.

#### nnnnnnnnn - ffffffff - TRANSFER STARTED (s)

This message indicates the start of the transfer for which the request number is stated (nnnnnnnnnn). It also states the symbolic name of the file (ffffffff) and the direction (Transmit or Receive).

#### nnnnnnnnn - TRC=xxxx PRC=xxxx SRC=xxxx ERC=xxxx NRC=xxxx

This message supplements another message and indicates the corresponding return codes.

#### UNKNOWN SYSTEM VERSION

This message indicates that the software cannot ascertain the version of the system and is therefore not able to run.

# **USER INTERFACE IS CLOSED**

This message indicates that the monitor's user interface has terminated.

#### WINDOWS xxx SYSTEM AUTHORIZED

This message indicates that the detected system is authorized for the software. 'xxx' may be 'NT, 95 or 98'

# WINDOWS xxx SYSTEM NOT AUTHORIZED

This message indicates that the detected system is not authorized for the software. 'xxx' may be 'NT, 95 or 98'

# nnnnnnnnn - X25 RC= XXXX CAUSE=YY DIAG=ZZ

This message states the X25 error code when a network error is detected. The CAUSE and DIAGNOSTIC codes for the X25 network used are also indicated, in hexadecimal.

#### **ERROR READING LICENSE FILE**

The license.key file cannot be read.

#### EMERGENCY-KEY: DEFAULT NUMBER OF SIMULTANEOUS TRANSFERS ALLOCATED = nnnn

Indicates the maximum number of simultaneous transfers in case of emergency key.

# EMERGENCY-KEY: DEFAULT NUMBER OF SIMULTANEOUS REMOTE CLIENTS ALLOCATED = nnnn

Indicates the maximum number of simultaneous remote clients in case of emergency key.

# STOPPING. AP UNABLE TO INITIALIZE

The monitor is stopping. The license.key file is not valid.

# STOPPING. AP KEY NOT VALID

The monitor is stopping. The license.key file is not valid.

# STOPPING. AP KEY HAS EXPIRED (EMERGENCY-KEY).ret=dddd

The license.key file contains an expired emergency key.

# STOPPING. ACTIVATION-DATE.AP KEY NOT VALID FOR dddd DAYS

(ACTIVATION-DATE) The license.key file indicates that the product cannot be started before ddd days.

# UPDATE. AP KEY NOT VALID IGNORED (ACTIVATION-DATE)

The license.key file has been modified. The new activation date is ignored.

# STOPPING. AP KEY NOT VALID (ACTIVATION-DATE)

The monitor is stopping. The license.key file contains an invalid activation date.

# STOPPING. AP KEY HAS EXPIRED (EXPIRATION-DATE)

The monitor is stopping. The expiration date in the license.key file is exceeded.

# WARNING. AP KEY HAS EXPIRED (EXPIRATION-DATE)

The expiration date in the license.key file is exceeded.

# WARNING. AP KEY EXPIRES IN dddd DAY(S)

The key in the license.key file will expire.

# STOPPING. AP KEY NOT VALID (EXPIRATION-DATE)

The monitor is stopping. The expiration date in the license.key file is invalid.

# STOPPING. AP KEY NOT VALID FOR THIS SYSTEM (OPERATING-SYSTEM)

The monitor is stopping. The key of the license.key file is not valid for Windows.

# AP KEY NOT VALID IGNORED (OPERATING-SYSTEM)

The parameter OPERATING-SYSTEM of the license.key file is not valid.

# STOPPING. AP KEY NOT VALID (OPERATING-SYSTEM)

The monitor is stopping. The parameter OPERATING-SYSTEM of the license.key file is not valid.

# STOPPING. AP KEY NOT VALID FOR THIS SYSTEM (PRODUCT)

The monitor is stopping. The parameter PRODUCT of the license.key file is not valid for Windows.

# **AP KEY NOT VALID IGNORED (PRODUCT)**

The parameter PRODUCT of the license.key file is not valid.

# **STOPPING. AP KEY NOT VALID (PRODUCT)**

The monitor is stopping. The parameter PRODUCT of the license.key file is not valid.

# **RESTART THE MONITOR. NEW AP KEY IGNORED BECAUSE SESSION-NUMBER DIFFERENT FROM THE ONE IN THE PREVIOUS KEY**

The monitor cannot take into account dynamically a new maximum number of simultaneaous sessions.

# STOPPING. AP KEY NOT VALID (SESSION-NUMBER > 255)

The monitor is stopping. The parameter SESSION-NUMBER of the license.key file is not valid because greater than 255.

# STOPPING. AP KEY NOT VALID (SESSION-NUMBER)

The monitor is stopping. The parameter SESSION-NUMBER of the license.key file is not valid.

# **RESTART THE MONITOR. NEW AP KEY IGNORED BECAUSE NUMBER-CLIENTS DIFFERENT FROM THE ONE IN THE PREVIOUS KEY**

The monitor cannot take into account dynamically a new maximum number of remote clients.

# STOPPING. AP KEY NOT VALID (NUMBER-CLIENTS>128)

The monitor is stopping. The parameter NUMBER-CLIENTS of the license.key file is not valid because greater than 128.

# STOPPING. AP KEY NOT VALID (NUMBER-CLIENTS)

The monitor is stopping. The parameter NUMBER-CLIENTS of the license.key file is not valid.

# ssss OPTION NOT LICENSED

The license.key file indicates that the option ssss is not active.

# THE ssss OPTION HAS EXPIRED

The license.key file indicates that the option ssss has expired.

# THE ssss OPTION WILL EXPIRE IN dddd DAY(S)

The license.key file indicates that the option ssss is going to expire.

# STOPPING. AP KEY NOT VALID (ssss)

The monitor is stopping. The license.key file has an invalid key.

# LICENSE CHECK TIMER ERROR - TRC= %04X SRC= %04d

Error during periodic check of the license.key file.

# LICENSE CHECK ...

Checking the validity of the license.key file.

# **RELOADING AP KEY**

Reloading the license.key file.

# TCPIP OPTION NOT ENABLED BY AP KEY. TCP/IP SERVER DISABLED

The TCP/IP server was active, but it is not anymore authorized by license.key.

# TCPIP OPTION ENABLED BY AP KEY. RESTART THE MONITOR FOR TCP/IP SERVER RESTART

The TCP/IP server was not started, but it is now authorized by licence.key.

# TCPIP OPTION NOT AUTHORIZED BY AP KEY

The license.key file indicates that the TCPIP option is not authorized.

#### LU6.2 OPTION NOT ENABLED BY AP KEY. LU6.2 SERVER DISABLED

The LU6.2 server was active, but it is not anymore authorized by license.key.

# LU6.2 OPTION ENABLED BY AP KEY. RESTART THE MONITOR FOR LU6.2 SERVER RESTART

The LU6.2 server was not started, but it is now authorized by licence.key.

#### LU6.2 OPTION NOT AUTHORIZED BY AP KEY

The license.key file indicates that the LU6.2 option is not authorized.

#### SSL OPTION NOT ENABLED BY AP KEY. SSL SERVER (PORT pppp) DISABLED

The SSL servers were active, but they are not anymore authorized by license.key.

# SSL OPTION ENABLED BY AP KEY. RESTART THE MONITOR FOR SSL SERVER x RESTART

The SSL servers were not started, but they are now authorized by licence.key.

# SSL OPTION NOT AUTHORIZED BY AP KEY (SERVER x)

The license.key file indicates that the SSL option is not authorized.

# 3.7.2 - Messages into Windows applications journal

#### Service started.

This message indicates that the transfer service is started.

#### Service stopped.

This message indicates that the transfer service is stopped.

#### **Stopping Service in progress.**

This message indicates that the transfer service is being stopped.

#### **Starting Service in progress.**

This message indicates that the transfer service is being started.

#### Successful end of transfer - request number nnnnnnnnnn.

This message states the request number of a successful transfer.

# Transfer failed - request number nnnnnnnnnn.

This message states the request number of a failed transfer.

#### Service already started.

This message indicates that the transfer service is already started.

#### System error - <function name> SRC=XXXX.

This message states the system function name that failed and the system return code retrieved at the time of failure.

# 3.8 – Return codes

# 3.8.1 – TRC return codes

TRC return codes are specified by the transfer monitor when a local error is detected.

These codes allow you to identify the action the monitor was performing when the local error was detected and, using the others codes, identify the cause of the problem encountered.

# A null TRC code indicates that the error was encountered remotely and, therefore, the cause must be found on the partner side.

1000: Outgoing session rejected by the partner 1003: Incoming session rejected – invalid caller password **11xx**: Protocol error – invalid length of command 'xx' 12xx: Protocol error – unknown field ID 'xx' 15xx: Protocol error – invalid value into the 'xx' field **16xx**: Protocol error – 'xx' command invalid or unknown 17xx: Protocol error – header of 'xx' command invalid 18xx: Protocol error – invalid length of 'xx' field 19xx: Protocol error - 'xx' field invalid or not found 1Axx: Protocol error - 'xx' command syntax invalid **2007**: API error – invalid data length 2008: API error – unknown resource **2009**: API error – unknown command 200A: API error - action not authorized **200B**: Transfer rejected – the network is disabled 200C: Transfer rejected – the ETEBAC-3 option is disabled **2010**: Transfer rejected – unknown symbolic file name **2011**: Transfer rejected – unknown symbolic partner name 2012: Transfer rejected – invalid transfer direction **2013**: Transfer rejected – invalid physical file name 2014: Transfer or Command rejected – unknown symbolic client name 2015: Transfer rejected – unknown PeSIT presentation table 2016: Transfer rejected - unknown PeSIT session table 2017: Transfer rejected - unknown ETEBAC-3 presentation table **2018**: API error - invalid remote client DN 2019: API error - invalid remote server DN 201A: Outgoing session rejected – invalid local password **201B**: Incoming session rejected – invalid local name 201C: Incoming session rejected – invalid partner network address **2020**: API error – invalid direction **2021**: API error – invalid link type 2022: API error – asked request not found 2024: API error – invalid request type **2025**: API error – request type and transfer direction are not compatible 2026: API error – invalid priority 2027: API error – invalid notification option 2028: API error – invalid request type for ETEBAC-3 protocol **2029**: API error – Error retrieving certificate **202A**: Partner – invalid total number of session

**202B**: Partner – invalid incoming number of session

202C: Partner – invalid outgoing number of session

2031: File-invalid definition

- 2032: File invalid type
- **2033**: File invalid open action
- 2034: File invalid status
- 2035: File invalid article length
- **2036**: File invalid direction
- **2038**: Partner invalid status
- **2039**: Partner invalid type
- $203A: \ Partner-invalid\ automatic\ restart$
- 203B: Partner invalid protocol
- 203C: Partner invalid link type
- **203D**: Partner invalid dynamic local identification
- 2040: Transfer rejected invalid file format
- 2041: Transfer rejected invalid article length
- 204A: Transfer rejected not enough free space on disk to receive the file
- **204B**: Transfer rejected article length cannot be greater than synchronization interval
- **204C**: Article length cannot be greater than network message size when the 'Segmentation' feature is not enabled
- 2051: Transfer rejected sender partner not authorized
- 2053: Transfer rejected receiver partner not authorized
- 2054: Transfer rejected request not found for an Inquiry or Restart demand
- **2055**: Notification asked not found
- 2158: Session entrante rejetée: DN du certificat distant non autorisé (SSL)
- 2159: Session entrante rejetée: Erreur fichier de contrôle du DN distant (SSL)

**205A**: Protocol error – invalid transfer direction

- **205C**: Incoming session rejected direction not authorized
- **2060**: Incoming session rejected partner is disabled
- **2061**: Transfer rejected File is disabled
- **2062**: Invalid client password
- 2063: Client is disabled
- 2064: Invalid client link type
- **2065**: Invalid client network address
- **2066**: File not authorized for this client
- 2067: Notify not stated into the client definition
- 2071: Incoming session rejected invalid PeSIT version
- 2079: Transfer rejected Max number of request per day reached
- **207A**: PeSIT not authorized
- **207B**: Etebac3 not authorized
- 2151: Incoming session rejected unknown symbolic partner name
- 2152: Incoming session rejected invalid partner link type
- **2153**: Incoming session rejected too many simultaneous transfers
- 2154: Incoming session rejected too many requests
- 2155: Incoming session rejected too many simultaneous sessions for the partner
- 2156: Incoming session rejected too many simultaneous clients sessions
- 2157: Incoming session rejected remote client connection not authorized
- **2158**: Incoming session rejected remote certificate DN not authorized (SSL)
- 2159: Incoming session rejected error remote certificate DN control file (SSL)
- 2200: Session table invalid network message size

**2201**: Session table – invalid synchronization interval 2202: Session table – invalid direction 2203: Session table – invalid CRC option 2204: Session table – invalid number of resynchronization 2210: Presentation table – invalid compression 2211: Presentation table – invalid concatenation **2212**: Presentation table – invalid multi-articles **2213**: Presentation table – invalid segmentation 2214: Presentation table – invalid translation 2717: Activity Manager session not authorized 2722: Client/Server session not authorized 2729: SSL client parameter not found in partner definition 272F: SSL parameter definition not found **2911**: Transfer rejected – request table is full 2F00: Client rejected – invalid protocol version **2F01**: Client rejected – invalid data type 2F02: Client rejected – invalid client type **3001**: File transfer error - error while retrieving file information for the file being transmitted **3002**: File transfer error - invalid article length received 3003: File transfer error - open for read **3004**: File transfer error – open for write 3005: File transfer error - read **3006**: File transfer error – article cannot be saved – article length too large **3007**: File transfer error - seek **3008**: File transfer error - write 3013: File transfer error - close **4801**: Compression error 4802: Decompression error 5001: Restart negotiation failed 5004: Protocol error – too much data without synchronization **5006**: Invalid count of bytes transferred 5007: Invalid count of articles transferred 5008: Resynchronization not possible 5009: Max number of resynchronizations reached 7001: Checkpoint file error - creation 7003: Checkpoint file error – open 7005: Checkpoint file error – sequential read 7006: Checkpoint file error - remove 7008: Checkpoint file error - write 7013: Checkpoint file error - close 7014: Checkpoint file error – seek at beginning 7015: Checkpoint file error – direct read 7016: Checkpoint file error – article deletion 7017: Checkpoint file error – read next 7018: Checkpoint file error - compression 7019: Checkpoint file error - lock 701A: Checkpoint file error - unlock 701B: Checkpoint file error - creation 701C: Checkpoint file error - add 7101: Journal file error - creation

**7103**: Journal file error – open for write 7104: Journal file error – open for read 7106: Journal file error - remove 7108: Journal file error - write 7113: Journal file error - close 7114: Journal file error – seek at beginning 7115: Journal file error – direct read **7116**: Journal file error – article deletion **7117**: Journal file error – read next 7118: Journal file error - compress 7119: Journal file error - lock 711A: Journal file error - unlock 711B: Journal file error - creation 711C: Journal file error - add 7205: Initialization file error - read 7206: SSL not enabled for this partner 7208: Initialization file error - write 7301: Trace file error – open 7313: Trace file error – close 7401: Messages file error – open 7405: Messages file error – read 7407: Messages file error – seek 7413: Messages file error – close 7601: Translation file table error – open **7605**: Translation file table error – read 7613: Translation file table error – close 7617: Translation file table error – invalid syntax 7701: Notification file error – creation 7703: Notification file error – open for write 7704: Notification file error – open for read 7706: Notification file error – remove 7708: Notification file error – write 7713: Notification file error – close 7714: Notification file error – seek at beginning 7715: Notification file error – direct read 7716: Notification file error – article deletion 7717: Notification file error – read next 7718: Notification file error – compression 7719: Notification file error – lock 771A: Notification file error – unlock 771B: Notification file error – creation 771C: Notification file error – add 8001: Physical file name – unknown variable 8002: Physical file name – EXTLAB variable cannot be combined with another variable 8003: Physical file name – invalid combination of variables 8004: Physical file name – too many variables 8005: Physical file name – invalid variable for the transfer direction stated 8006: Physical file name – variable repeated too many times 8007: Physical file name – invalid generic name 8008: Physical file name – too many files found for the generic name

**8009**: Physical file name – invalid variables for ETEBAC-3 protocol 9000: Transfer interrupted by a user 9001: Transfer purged by a user 9100: CRC error detected A000: The network component of monitor has detected an error F005: Memory allocation error F006: Lock allocated memory error F007: Unlock allocated memory error F008: Free allocated memory error **F009**: Unable to free allocated memory F00A: Request table full – hot start type not possible F00B: Send message on main window error FOOC: Signal on main window error F00D: Free post not found into the protocol components table F00F: Protocol component initialization error F010: Network component initialization error F011: Network component termination error F012: Internal error – request asked not found F013: User interface initialization error F014: Server component initialization error F015: Transfer rejected – free post into request table not found F016: Transfer rejected – max number of requests per day reached F018: Error while purging a request F019: Error while restarting a request F01A: Session closed - request table full F01B: Timer error F01C: Error while starting a client server component F01D: Free post into connection table not found F01E: Begin of transfer command error F01F: End of transfer command error F020: Windows services manager error F021: Security descriptor allocation error F022: Security descriptor initialization error F023: Error whil adding the security descriptor into the ACL table F024: Error of transfer command error F025: Unknown client F026: Initialization file lock error **F027**: Connections table lock error F028: Internal error into the connections table F029: C-TREE initialization error F02A: C-TREE termination error **F02C**: Incoming call rejected – monitor stopping F02D: C-TREE lock error **F02E**: Internal communication error F02F: Error while starting a notify component F030: Error while starting an ETEBAC-3 component

# **3.8.2 – PRC return codes**

These codes state the error code at protocol level for PeSIT.

- **100** Transmission error.
- 200 Insufficient file characteristics.
- 201 System resources temporarily insufficient.
- 202 User resources temporarily insufficient.
- 203 Non-priority transfer.
- **204** File exists already.
- **205** File not found.
- **206** Disk quota will be exceeded if file received.
- **207** File occupied.
- **208** File too old.
- 209 Message of this type not accepted.
- 210 Failure of presentation context negotiation.
- 211 Cannot open file.
- **212** Cannot routinely close file.
- **213** Input/output error.
- 214 Failure of restart point negotiation.
- 215 System-specific error.
- **216** Voluntarily premature stop.
- 217 Too many synchronization points without acknowledgments.
- **218** Re-synchronization impossible.
- 219 File space used up.
- **220** Incorrect record length.
- 221 End of transmission expiration time.
- 222 Too much data without synchronization points.
- 223 Abnormal end-of-transfer.
- **224** File size larger than expected.
- 225 Application congested; file deleted.
- **226** Transfer refused.
- **299** Miscellaneous.

- Congested local communication system.
- Identification of caller Partner unknown.
- Unauthorized caller Partner.
- Caller Partner unknown.
- Identification of called Partner unauthorized.
- Failure of a SELECT negotiation.
- Failure of a RESYNC negotiation.
- Failure of SYNC negotiation.
- Version number not supported.
- Too many connections already in progress.
- 310 Network incident.
- Remote protocol error code.
- Closure of service requested by user.
- Unused connection cut off.
- Failure of negotiation.
- Time-out failure.
- Parameter absent or incorrect value.
- Number of bytes or records incorrect.
- Maximum number of re-synchronizations reached.
- 399 Miscellaneous.

# 3.8.3 – SRC return codes

Connect:Express specific values used by the monitor to specify the cause of an error encountered while reading or writing the initialization file:

10001: partner ID not found 10002: partner variables not found 10003: partner session table not found 10004: partner connection counts not found 10005: partner TCP/IP information not found 10006: partner LU6.2 information not found 10007: partner X.25 information not found 10008: file variables not found 10009: file presentation table not found 10010: file physical name not found 10011: file article length not found 10012: file sender/receiver names not found 10013: client ID not found **10014**: client variables not found **10015**: client authorizations not found 10016: client TCP/IP information not found 10017: session table not found 10018: presentation table not found 10019: local LU name not found 10020: client files information not found 10021: client Named Pipe information not found 10024: file notifications information not found 10025: SSL client parameter information not found in partner definition 10026: Type information not found in SSL parameter definition 10027: Enabled information not found in SSL parameter definition 10028: Client Auth information not found in SSL parameter definition 10029: Trace information not found in SSL parameter definition 10030: Protocol information not found in SSL parameter definition 10031: SSL parameter definition not found 10032: Use SSL information not found in SSL parameter definition

# These codes are from the Microsoft documentation.

<pre>// Incorrect function. #define ERROR_INVALID_FUNCTION 1</pre>
<ul><li>// The system cannot find the file specified.</li><li>#define ERROR_FILE_NOT_FOUND 2</li></ul>
<ul><li>// The system cannot find the path specified.</li><li>#define ERROR_PATH_NOT_FOUND 3</li></ul>
<pre>// The system cannot open the file. #define ERROR_TOO_MANY_OPEN_FILES 4</pre>
<ul><li>// Access is denied.</li><li>#define ERROR_ACCESS_DENIED 5</li></ul>
<ul><li>// The handle is invalid.</li><li>#define ERROR_INVALID_HANDLE 6</li></ul>
<ul><li>// The storage control blocks were destroyed.</li><li>#define ERROR_ARENA_TRASHED 7</li></ul>
<ul><li>// Not enough storage is available to process this command.</li><li>#define ERROR_NOT_ENOUGH_MEMORY 8</li></ul>
<ul><li>// The storage control block address is invalid.</li><li>#define ERROR_INVALID_BLOCK 9</li></ul>
<ul><li>// The environment is incorrect.</li><li>#define ERROR_BAD_ENVIRONMENT 10</li></ul>
<ul><li>// An attempt was made to load a program with an incorrect format.</li><li>#define ERROR_BAD_FORMAT 11</li></ul>
<ul><li>// The access code is invalid.</li><li>#define ERROR_INVALID_ACCESS 12</li></ul>
<ul><li>// The data is invalid.</li><li>#define ERROR_INVALID_DATA 13</li></ul>
<ul><li>// Not enough storage is available to complete this operation.</li><li>#define ERROR_OUTOFMEMORY 14</li></ul>
<ul><li>// The system cannot find the drive specified.</li><li>#define ERROR_INVALID_DRIVE 15</li></ul>

// The directory cannot be removed.#define ERROR\_CURRENT\_DIRECTORY 16

// The system cannot move the file to a different disk drive.
#define ERROR\_NOT\_SAME\_DEVICE 17

// There are no more files.
#define ERROR\_NO\_MORE\_FILES 18

// The media is write protected.#define ERROR\_WRITE\_PROTECT 19

// The system cannot find the device specified.
#define ERROR\_BAD\_UNIT 20

// The device is not ready.
#define ERROR\_NOT\_READY 21

// The device does not recognize the command.
#define ERROR\_BAD\_COMMAND 22

// Data error (cyclic redundancy check)
#define ERROR\_CRC 23

// The program issued a command but the command length is incorrect.
#define ERROR\_BAD\_LENGTH 24

// The drive cannot locate a specific area or track on the disk.
#define ERROR\_SEEK 25

// The specified disk or diskette cannot be accessed.
#define ERROR\_NOT\_DOS\_DISK 26

// The drive cannot find the sector requested.
#define ERROR\_SECTOR\_NOT\_FOUND 27

// The printer is out of paper.
#define ERROR\_OUT\_OF\_PAPER 28

// The system cannot write to the specified device.
#define ERROR\_WRITE\_FAULT 29

// The system cannot read from the specified device.
#define ERROR\_READ\_FAULT 30

// A device attached to the system is not functioning.
#define ERROR\_GEN\_FAILURE 31

// The process cannot access the file because it is being used by another process.
#define ERROR\_SHARING\_VIOLATION 32

// The process cannot access the file because another process has locked a portion of the file.
#define ERROR\_LOCK\_VIOLATION 33

// The wrong diskette is in the drive. Insert %2 (Volume Serial Number: %3) into drive %1.
#define ERROR\_WRONG\_DISK 34

// Too many files opened for sharing.#define ERROR\_SHARING\_BUFFER\_EXCEEDED 36

// Reached end of file.
#define ERROR\_HANDLE\_EOF 38

// The disk is full.
#define ERROR\_HANDLE\_DISK\_FULL 39

// The network request is not supported.#define ERROR\_NOT\_SUPPORTED 50

// The remote computer is not available.
#define ERROR\_REM\_NOT\_LIST 51

// A duplicate name exists on the network.#define ERROR\_DUP\_NAME 52

// The network path was not found.#define ERROR\_BAD\_NETPATH 53

// The network is busy.
#define ERROR\_NETWORK\_BUSY 54

// The specified network resource or device is no longer available.
#define ERROR\_DEV\_NOT\_EXIST 55

// The network BIOS command limit has been reached.
#define ERROR\_TOO\_MANY\_CMDS 56

// A network adapter hardware error occurred.#define ERROR\_ADAP\_HDW\_ERR 57

// The specified server cannot perform the requested operation.
#define ERROR\_BAD\_NET\_RESP 58

// An unexpected network error occurred.#define ERROR\_UNEXP\_NET\_ERR 59

<ul><li>// The remote adapter is not compatible.</li><li>#define ERROR_BAD_REM_ADAP 60</li></ul>
<ul><li>// The printer queue is full.</li><li>#define ERROR_PRINTQ_FULL 61</li></ul>
<ul><li>// Space to store the file waiting to be printed is not available on the server.</li><li>#define ERROR_NO_SPOOL_SPACE 62</li></ul>
<ul><li>// Your file waiting to be printed was deleted.</li><li>#define ERROR_PRINT_CANCELLED 63</li></ul>
<ul><li>// The specified network name is no longer available.</li><li>#define ERROR_NETNAME_DELETED 64</li></ul>
<pre>// Network access is denied. #define ERROR_NETWORK_ACCESS_DENIED 65</pre>
<ul><li>// The network resource type is not correct.</li><li>#define ERROR_BAD_DEV_TYPE 66</li></ul>
<pre>// The network name cannot be found. #define ERROR_BAD_NET_NAME 67</pre>
<ul><li>// The name limit for the local computer network adapter card was exceeded.</li><li>#define ERROR_TOO_MANY_NAMES 68</li></ul>
<pre>// The network BIOS session limit was exceeded. #define ERROR_TOO_MANY_SESS 69</pre>
<ul><li>// The remote server has been paused or is in the process of being started.</li><li>#define ERROR_SHARING_PAUSED 70</li></ul>
<pre>// No more connections can be made to this remote computer at this time // because there are // already as many connections as the computer can accept. #define ERROR_REQ_NOT_ACCEP 71</pre>
<ul><li>// The specified printer or disk device has been paused.</li><li>#define ERROR_REDIR_PAUSED 72</li></ul>
<pre>// The file exists. #define ERROR_FILE_EXISTS 80</pre>
<ul><li>// The directory or file cannot be created.</li><li>#define ERROR_CANNOT_MAKE 82</li></ul>

// Fail on INT 24
#define ERROR\_FAIL\_I24 83

// Storage to process this request is not available.
#define ERROR\_OUT\_OF\_STRUCTURES 84

// The local device name is already in use.
#define ERROR\_ALREADY\_ASSIGNED 85

// The specified network password is not correct.
#define ERROR\_INVALID\_PASSWORD 86

// The parameter is incorrect.
#define ERROR\_INVALID\_PARAMETER 87

// A write fault occurred on the network.
#define ERROR\_NET\_WRITE\_FAULT 88

// The system cannot start another process at this time.
#define ERROR\_NO\_PROC\_SLOTS 89

// Cannot create another system semaphore.#define ERROR\_TOO\_MANY\_SEMAPHORES 100

// The exclusive semaphore is owned by another process.
#define ERROR\_EXCL\_SEM\_ALREADY\_OWNED 101

// The semaphore is set and cannot be closed.
#define ERROR\_SEM\_IS\_SET 102

// The semaphore cannot be set again.
#define ERROR\_TOO\_MANY\_SEM\_REQUESTS 103

// Cannot request exclusive semaphores at interrupt time.
#define ERROR\_INVALID\_AT\_INTERRUPT\_TIME 104

// The previous ownership of this semaphore has ended.
#define ERROR\_SEM\_OWNER\_DIED 105

// Insert the diskette for drive %1.
#define ERROR\_SEM\_USER\_LIMIT 106

// Program stopped because alternate diskette was not inserted.
#define ERROR\_DISK\_CHANGE 107

// The disk is in use or locked by another process.
#define ERROR\_DRIVE\_LOCKED 108

// The pipe has been ended.
#define ERROR\_BROKEN\_PIPE 109

// The system cannot open the device or file specified.
#define ERROR\_OPEN\_FAILED 110

// The file name is too long.
#define ERROR\_BUFFER\_OVERFLOW 111

// There is not enough space on the disk.
#define ERROR\_DISK\_FULL 112

// No more internal file identifiers available.#define ERROR\_NO\_MORE\_SEARCH\_HANDLES 113

// The target internal file identifier is incorrect.
#define ERROR\_INVALID\_TARGET\_HANDLE 114

// The IOCTL call made by the application program is not correct.
#define ERROR\_INVALID\_CATEGORY 117

// The verify-on-write switch parameter value is not correct.
#define ERROR\_INVALID\_VERIFY\_SWITCH 118

// The system does not support the command requested.
#define ERROR\_BAD\_DRIVER\_LEVEL 119

// This function is only valid in Windows NT mode.#define ERROR\_CALL\_NOT\_IMPLEMENTED 120

// The semaphore timeout period has expired.
#define ERROR\_SEM\_TIMEOUT 121

// The data area passed to a system call is too small.
#define ERROR\_INSUFFICIENT\_BUFFER 122

// The filename, directory name, or volume label syntax is incorrect.
#define ERROR\_INVALID\_NAME 123

// The system call level is not correct.
#define ERROR\_INVALID\_LEVEL 124

// The disk has no volume label.
#define ERROR\_NO\_VOLUME\_LABEL 125

// The specified module could not be found.
#define ERROR\_MOD\_NOT\_FOUND 126

// The specified procedure could not be found.
#define ERROR\_PROC\_NOT\_FOUND 127

// There are no child processes to wait for.
#define ERROR\_WAIT\_NO\_CHILDREN 128

// The %1 application cannot be run in Windows NT mode.
#define ERROR\_CHILD\_NOT\_COMPLETE 129

 $\prime\prime$  Attempt to use a file handle to an open disk partition for an operation other than raw disk I/O.

#define ERROR\_DIRECT\_ACCESS\_HANDLE 130

// An attempt was made to move the file pointer before the beginning of the file.
#define ERROR\_NEGATIVE\_SEEK 131

// The file pointer cannot be set on the specified device or file.
#define ERROR\_SEEK\_ON\_DEVICE 132

// A JOIN or SUBST command cannot be used for a drive that contains previously joined drives.

#define ERROR\_IS\_JOIN\_TARGET 133

// An attempt was made to use a JOIN or SUBST command on a drive that has already been joined.

#define ERROR\_IS\_JOINED 134

// An attempt was made to use a JOIN or SUBST command on a drive that has already been
// substituted.
#define EDDOD\_IS\_SUBSTED\_\_\_\_\_125

#define ERROR\_IS\_SUBSTED 135

// The system tried to delete the JOIN of a drive that is not joined.
#define ERROR\_NOT\_JOINED 136

// The system tried to delete the substitution of a drive that is not substituted.
#define ERROR\_NOT\_SUBSTED 137

// The system tried to join a drive to a directory on a joined drive.
#define ERROR\_JOIN\_TO\_JOIN 138

// The system tried to substitute a drive to a directory on a substituted drive.
#define ERROR\_SUBST\_TO\_SUBST 139

// The system tried to join a drive to a directory on a substituted drive.
#define ERROR\_JOIN\_TO\_SUBST 140

// The system tried to SUBST a drive to a directory on a joined drive.
#define ERROR\_SUBST\_TO\_JOIN 141

// The system cannot perform a JOIN or SUBST at this time.
#define ERROR\_BUSY\_DRIVE 142

// The system cannot join or substitute a drive to or for a directory on the same drive. #define ERROR\_SAME\_DRIVE 143

// The directory is not a subdirectory of the root directory.
#define ERROR\_DIR\_NOT\_ROOT 144

// The directory is not empty.
#define ERROR\_DIR\_NOT\_EMPTY 145

// The path specified is being used in a substitute.
#define ERROR\_IS\_SUBST\_PATH 146

// Not enough resources are available to process this command.
#define ERROR\_IS\_JOIN\_PATH 147

// The path specified cannot be used at this time.
#define ERROR\_PATH\_BUSY 148

// An attempt was made to join or substitute a drive for which a directory on the drive is the
// target of a previous substitute.
#define ERROR\_IS\_SUBST\_TARGET 149

// System trace information was not specified in your CONFIG.SYS file, or tracing is
disallowed.
#define ERROR\_SYSTEM\_TRACE 150

// The number of specified semaphore events for DosMuxSemWait is not correct.
#define ERROR\_INVALID\_EVENT\_COUNT 151

// DosMuxSemWait did not execute; too many semaphores are already set.
#define ERROR\_TOO\_MANY\_MUXWAITERS 152

// The DosMuxSemWait list is not correct.
#define ERROR\_INVALID\_LIST\_FORMAT 153

// The volume label you entered exceeds the label character limit of the target file system.
#define ERROR\_LABEL\_TOO\_LONG 154

// Cannot create another thread.
#define ERROR\_TOO\_MANY\_TCBS 155

// The recipient process has refused the signal.#define ERROR\_SIGNAL\_REFUSED 156

<ul><li>// The segment is already discarded and cannot be locked.</li><li>#define ERROR_DISCARDED 157</li></ul>
<ul><li>// The segment is already unlocked.</li><li>#define ERROR_NOT_LOCKED 158</li></ul>
<ul><li>// The address for the thread ID is not correct.</li><li>#define ERROR_BAD_THREADID_ADDR 159</li></ul>
<pre>// The argument string passed to DosExecPgm is not correct. #define ERROR_BAD_ARGUMENTS 160</pre>
<ul><li>// The specified path is invalid.</li><li>#define ERROR_BAD_PATHNAME 161</li></ul>
<ul><li>// A signal is already pending.</li><li>#define ERROR_SIGNAL_PENDING 162</li></ul>
<ul><li>// No more threads can be created in the system.</li><li>#define ERROR_MAX_THRDS_REACHED 164</li></ul>
<ul><li>// Unable to lock a region of a file.</li><li>#define ERROR_LOCK_FAILED 167</li></ul>
<ul><li>// The requested resource is in use.</li><li>#define ERROR_BUSY 170</li></ul>
<ul><li>// A lock request was not outstanding for the supplied cancel region.</li><li>#define ERROR_CANCEL_VIOLATION 173</li></ul>
<pre>// The file system does not support atomic changes to the lock type. #define ERROR_ATOMIC_LOCKS_NOT_SUPPORTED 174</pre>
<pre>// The system detected a segment number that was not correct. #define ERROR_INVALID_SEGMENT_NUMBER 180</pre>
<ul><li>// The operating system cannot run %1.</li><li>#define ERROR_INVALID_ORDINAL 182</li></ul>
<ul><li>// Cannot create a file when that file already exists.</li><li>#define ERROR_ALREADY_EXISTS 183</li></ul>
<ul><li>// The flag passed is not correct.</li><li>#define ERROR_INVALID_FLAG_NUMBER 186</li></ul>
// The specified system semaphore name was not found.

#define ERROR\_SEM\_NOT\_FOUND 187

// The operating system cannot run %1.
#define ERROR\_INVALID\_STARTING\_CODESEG 188

// The operating system cannot run %1.
#define ERROR\_INVALID\_STACKSEG 189

// The operating system cannot run %1.#define ERROR\_INVALID\_MODULETYPE 190

// Cannot run %1 in Windows NT mode.#define ERROR\_INVALID\_EXE\_SIGNATURE 191

// The operating system cannot run %1.
#define ERROR\_EXE\_MARKED\_INVALID 192

// %1 is not a valid Windows NT application.#define ERROR\_BAD\_EXE\_FORMAT 193

// The operating system cannot run %1.
#define ERROR\_ITERATED\_DATA\_EXCEEDS\_64k 194

// The operating system cannot run %1.#define ERROR\_INVALID\_MINALLOCSIZE 195

// The operating system cannot run this application program.
#define ERROR\_DYNLINK\_FROM\_INVALID\_RING 196

// The operating system is not presently configured to run this application.
#define ERROR\_IOPL\_NOT\_ENABLED 197

// The operating system cannot run %1.
#define ERROR\_INVALID\_SEGDPL 198

// The operating system cannot run this application program.
#define ERROR\_AUTODATASEG\_EXCEEDS\_64k 199

// The code segment cannot be greater than or equal to 64KB. #define ERROR\_RING2SEG\_MUST\_BE\_MOVABLE 200

// The operating system cannot run %1.
#define ERROR\_RELOC\_CHAIN\_XEEDS\_SEGLIM 201

// The operating system cannot run %1.
#define ERROR\_INFLOOP\_IN\_RELOC\_CHAIN 202

// The system could not find the environment option that was entered.
#define ERROR\_ENVVAR\_NOT\_FOUND 203

// No process in the command subtree has a signal handler.
#define ERROR\_NO\_SIGNAL\_SENT 205

// The filename or extension is too long.#define ERROR\_FILENAME\_EXCED\_RANGE 206

// The ring 2 stack is in use.
#define ERROR\_RING2\_STACK\_IN\_USE 207

// The global filename characters, \* or ?, are entered incorrectly or too many global filename
// characters are specified.
#define ERROR\_META\_EXPANSION\_TOO\_LONG 208

// The signal being posted is not correct.
#define ERROR\_INVALID\_SIGNAL\_NUMBER 209

// The signal handler cannot be set.
#define ERROR\_THREAD\_1\_INACTIVE 210

// The segment is locked and cannot be reallocated.
#define ERROR\_LOCKED 212

// Too many dynamic link modules are attached to this program or dynamic link module.
#define ERROR\_TOO\_MANY\_MODULES 214

// Can't nest calls to LoadModule.
#define ERROR\_NESTING\_NOT\_ALLOWED 215

// The image file %1 is valid, but is for a machine type other than the current machine.
#define ERROR\_EXE\_MACHINE\_TYPE\_MISMATCH 216
// The pipe state is invalid.
#define ERROR\_BAD\_PIPE 230

// All pipe instances are busy. #define ERROR\_PIPE\_BUSY 231

// The pipe is being closed.
#define ERROR\_NO\_DATA 232

// No process is on the other end of the pipe.
#define ERROR\_PIPE\_NOT\_CONNECTED 233

// More data is available.#define ERROR\_MORE\_DATA 234

// The session was cancelled. #define ERROR\_VC\_DISCONNECTED 240 // The specified extended attribute name was invalid. #define ERROR\_INVALID\_EA\_NAME 254 // The extended attributes are inconsistent. #define ERROR\_EA\_LIST\_INCONSISTENT 255 // No more data is available. #define ERROR\_NO\_MORE\_ITEMS 259 // The Copy API cannot be used. #define ERROR\_CANNOT\_COPY 266 // The directory name is invalid. #define ERROR\_DIRECTORY 267 // The extended attributes did not fit in the buffer. #define ERROR EAS DIDNT FIT 275 // The extended attribute file on the mounted file system is corrupt. #define ERROR EA FILE CORRUPT 276 // The extended attribute table file is full. #define ERROR\_EA\_TABLE\_FULL 277 // The specified extended attribute handle is invalid. #define ERROR\_INVALID\_EA\_HANDLE 278 // The mounted file system does not support extended attributes. #define ERROR\_EAS\_NOT\_SUPPORTED 282 // Attempt to release mutex not owned by caller. #define ERROR NOT OWNER 288 // Too many posts were made to a semaphore. #define ERROR TOO MANY POSTS 298 // Only part of a Read/WriteProcessMemory request was completed. #define ERROR\_PARTIAL\_COPY 299 // The system cannot find message for message number 0x%1 in message file for %2. #define ERROR\_MR\_MID\_NOT\_FOUND 317 // Attempt to access invalid address. #define ERROR\_INVALID\_ADDRESS 487

<ul><li>// Arithmetic result exceeded 32 bits.</li><li>#define ERROR_ARITHMETIC_OVERFLOW 534</li></ul>
<ul><li>// There is a process on other end of the pipe.</li><li>#define ERROR_PIPE_CONNECTED 535</li></ul>
<ul><li>// Waiting for a process to open the other end of the pipe.</li><li>#define ERROR_PIPE_LISTENING 536</li></ul>
<ul><li>// Access to the extended attribute was denied.</li><li>#define ERROR_EA_ACCESS_DENIED 994</li></ul>
<ul><li>// The I/O operation has been aborted because of either a thread exit or an application request.</li><li>#define ERROR_OPERATION_ABORTED 995</li></ul>
<ul><li>// Overlapped I/O event is not in a signalled state.</li><li>#define ERROR_IO_INCOMPLETE 996</li></ul>
<ul><li>// Overlapped I/O operation is in progress.</li><li>#define ERROR_IO_PENDING 997</li></ul>
<ul><li>// Invalid access to memory location.</li><li>#define ERROR_NOACCESS 998</li></ul>
<ul><li>// Error performing inpage operation.</li><li>#define ERROR_SWAPERROR 999</li></ul>
<ul><li>// Recursion too deep, stack overflowed.</li><li>#define ERROR_STACK_OVERFLOW 1001</li></ul>
<pre>// The window cannot act on the sent message. #define ERROR_INVALID_MESSAGE 1002</pre>
<ul><li>// Cannot complete this function.</li><li>#define ERROR_CAN_NOT_COMPLETE 1003</li></ul>
<pre>// Invalid flags. #define ERROR_INVALID_FLAGS 1004</pre>
// The volume does not contain a recognized file system. Please make sure that all required file
<pre>// system drivers are loaded and that the volume is not corrupt. #define ERROR_UNRECOGNIZED_VOLUME 1005</pre>
// The volume for a file has been externally altered such that the opened file is no longer valid.

#define ERROR\_FILE\_INVALID 1006

// The requested operation cannot be performed in full-screen mode.
#define ERROR\_FULLSCREEN\_MODE 1007

// An attempt was made to reference a token that does not exist.
#define ERROR\_NO\_TOKEN 1008

// The configuration registry database is corrupt.
#define ERROR\_BADDB 1009

// The configuration registry key is invalid.#define ERROR\_BADKEY 1010

// The configuration registry key could not be opened.
#define ERROR\_CANTOPEN 1011

// The configuration registry key could not be read.
#define ERROR\_CANTREAD 1012

// The configuration registry key could not be written.
#define ERROR\_CANTWRITE 1013

// One of the files in the Registry database had to be recovered by use of a log or alternate copy.

// The recovery was successful.

#define ERROR\_REGISTRY\_RECOVERED 1014

// The Registry is corrupt. The structure of one of the files that contains Registry data is corrupt, or

// the system's image of the file in memory is corrupt, or the file could not be recovered because

// the alternate copy or log was absent or corrupt.
#define ERROR\_REGISTRY\_CORRUPT 1015

 $\prime\prime$  An I/O operation initiated by the Registry failed unrecoverably. The Registry could not read

// in, or write out, or flush, one of the files that contain the system's image of the Registry.
#define ERROR\_REGISTRY\_IO\_FAILED 1016

// The system has attempted to load or restore a file into the Registry, but the specified file is not

// in a Registry file format.
#define ERROR\_NOT\_REGISTRY\_FILE 1017

// Illegal operation attempted on a Registry key which has been marked for deletion.
#define ERROR\_KEY\_DELETED 1018

// System could not allocate the required space in a Registry log.
#define ERROR\_NO\_LOG\_SPACE 1019

// Cannot create a symbolic link in a Registry key that already has subkeys or values.
#define ERROR\_KEY\_HAS\_CHILDREN 1020

// Cannot create a stable subkey under a volatile parent key.
#define ERROR\_CHILD\_MUST\_BE\_VOLATILE 1021

 $\prime\prime$  A notify change request is being completed and the information is not being returned in the caller's

// buffer. The caller now needs to enumerate the files to find the changes.
#define ERROR\_NOTIFY\_ENUM\_DIR 1022

// A stop control has been sent to a service which other running services are dependent on. #define ERROR\_DEPENDENT\_SERVICES\_RUNNING 1051

// The requested control is not valid for this service
#define ERROR\_INVALID\_SERVICE\_CONTROL 1052

// The service did not respond to the start or control request in a timely fashion.
#define ERROR\_SERVICE\_REQUEST\_TIMEOUT 1053

// A thread could not be created for the service.
#define ERROR\_SERVICE\_NO\_THREAD 1054

// The service database is locked.
#define ERROR\_SERVICE\_DATABASE\_LOCKED 1055

// An instance of the service is already running.#define ERROR\_SERVICE\_ALREADY\_RUNNING 1056

// The account name is invalid or does not exist.
#define ERROR\_INVALID\_SERVICE\_ACCOUNT 1057

// The specified service is disabled and cannot be started.
#define ERROR\_SERVICE\_DISABLED 1058

// Circular service dependency was specified.#define ERROR\_CIRCULAR\_DEPENDENCY 1059

// The specified service does not exist as an installed service.
#define ERROR\_SERVICE\_DOES\_NOT\_EXIST 1060

// The service cannot accept control messages at this time.
#define ERROR\_SERVICE\_CANNOT\_ACCEPT\_CTRL 1061

// The service has not been started.
#define ERROR\_SERVICE\_NOT\_ACTIVE 1062

// The service process could not connect to the service controller.
#define ERROR\_FAILED\_SERVICE\_CONTROLLER\_CONNECT 1063

// An exception occurred in the service when handling the control request. #define ERROR\_EXCEPTION\_IN\_SERVICE 1064

// The database specified does not exist.
#define ERROR\_DATABASE\_DOES\_NOT\_EXIST 1065

// The service has returned a service-specific error code.
#define ERROR\_SERVICE\_SPECIFIC\_ERROR 1066

// The process terminated unexpectedly.
#define ERROR\_PROCESS\_ABORTED 1067

// The dependency service or group failed to start.
#define ERROR\_SERVICE\_DEPENDENCY\_FAIL 1068

// The service did not start due to a logon failure.
#define ERROR\_SERVICE\_LOGON\_FAILED 1069

// After starting, the service hung in a start-pending state.
#define ERROR\_SERVICE\_START\_HANG 1070

// The specified service database lock is invalid.
#define ERROR\_INVALID\_SERVICE\_LOCK 1071

// The specified service has been marked for deletion.
#define ERROR\_SERVICE\_MARKED\_FOR\_DELETE 1072

// The specified service already exists.
#define ERROR\_SERVICE\_EXISTS 1073

// The system is currently running with the last-known-good configuration.
#define ERROR\_ALREADY\_RUNNING\_LKG 1074

// The dependency service does not exist or has been marked for deletion.
#define ERROR\_SERVICE\_DEPENDENCY\_DELETED 1075

// The current boot has already been accepted for use as the last-known-good control set.
#define ERROR\_BOOT\_ALREADY\_ACCEPTED 1076

// No attempts to start the service have been made since the last boot.
#define ERROR\_SERVICE\_NEVER\_STARTED 1077

// The name is already in use as either a service name or a service display name.
#define ERROR\_DUPLICATE\_SERVICE\_NAME 1078

 $/\!/$  The account specified for this service is different from the account specified for other services

// running in the same process.

#define ERROR\_DIFFERENT\_SERVICE\_ACCOUNT 1079

// The physical end of the tape has been reached.
#define ERROR\_END\_OF\_MEDIA 1100

// A tape access reached a filemark.
#define ERROR\_FILEMARK\_DETECTED 1101

// Beginning of tape or partition was encountered.
#define ERROR\_BEGINNING\_OF\_MEDIA 1102

// A tape access reached the end of a set of files.#define ERROR\_SETMARK\_DETECTED 1103

// No more data is on the tape.
#define ERROR\_NO\_DATA\_DETECTED 1104

// Tape could not be partitioned.
#define ERROR\_PARTITION\_FAILURE 1105

// When accessing a new tape of a multivolume partition, the current blocksize is incorrect.
#define ERROR\_INVALID\_BLOCK\_LENGTH 1106

// Tape partition information could not be found when loading a tape.
#define ERROR\_DEVICE\_NOT\_PARTITIONED 1107

// Unable to lock the media eject mechanism.
#define ERROR\_UNABLE\_TO\_LOCK\_MEDIA 1108

// Unable to unload the media.
#define ERROR\_UNABLE\_TO\_UNLOAD\_MEDIA 1109

// Media in drive may have changed.
#define ERROR\_MEDIA\_CHANGED 1110

// The I/O bus was reset.
#define ERROR\_BUS\_RESET 1111

// No media in drive.
#define ERROR\_NO\_MEDIA\_IN\_DRIVE 1112

// No mapping for the Unicode character exists in the target multi-byte code page.
#define ERROR\_NO\_UNICODE\_TRANSLATION 1113

// A dynamic link library (DLL) initialization routine failed. #define ERROR\_DLL\_INIT\_FAILED 1114

// A system shutdown is in progress.
#define ERROR\_SHUTDOWN\_IN\_PROGRESS 1115

// Unable to abort the system shutdown because no shutdown was in progress.
#define ERROR\_NO\_SHUTDOWN\_IN\_PROGRESS 1116

// The request could not be performed because of an I/O device error.
#define ERROR\_IO\_DEVICE 1117

// No serial device was successfully initialized. The serial driver will unload.#define ERROR\_SERIAL\_NO\_DEVICE 1118

 $/\!/$  Unable to open a device that was sharing an interrupt request (IRQ) with other devices. At least

// one other device that uses that IRQ was already opened.
#define ERROR\_IRQ\_BUSY 1119

// A serial I/O operation was completed by another write to the serial port. // (The IOCTL\_SERIAL\_XOFF\_COUNTER reached zero.) #define ERROR\_MORE\_WRITES 1120

// A serial I/O operation completed because the time-out period expired. // (The IOCTL\_SERIAL\_XOFF\_COUNTER did not reach zero.) #define ERROR\_COUNTER\_TIMEOUT 1121

// No ID address mark was found on the floppy disk.
#define ERROR\_FLOPPY\_ID\_MARK\_NOT\_FOUND 1122

// Mismatch between the floppy disk sector ID field and the floppy disk controller track
address.
#define ERROR\_FLOPPY\_WRONG\_CYLINDER 1123

// The floppy disk controller reported an error that is not recognized by the floppy disk driver.
#define ERROR\_FLOPPY\_UNKNOWN\_ERROR 1124

// The floppy disk controller returned inconsistent results in its registers.
#define ERROR\_FLOPPY\_BAD\_REGISTERS 1125

// While accessing the hard disk, a recalibrate operation failed, even after retries.
#define ERROR\_DISK\_RECALIBRATE\_FAILED 1126

// While accessing the hard disk, a disk operation failed even after retries.
#define ERROR\_DISK\_OPERATION\_FAILED 1127

// While accessing the hard disk, a disk controller reset was needed, but even that failed.
#define ERROR\_DISK\_RESET\_FAILED 1128

// Physical end of tape encountered.
#define ERROR\_EOM\_OVERFLOW 1129

// Not enough server storage is available to process this command. #define ERROR\_NOT\_ENOUGH\_SERVER\_MEMORY 1130

// A potential deadlock condition has been detected.
#define ERROR\_POSSIBLE\_DEADLOCK 1131

// The base address or the file offset specified does not have the proper alignment.
#define ERROR\_MAPPED\_ALIGNMENT 1132

// An attempt to change the system power state was vetoed by another application or driver. #define ERROR\_SET\_POWER\_STATE\_VETOED 1140

// The system BIOS failed an attempt to change the system power state.
#define ERROR\_SET\_POWER\_STATE\_FAILED 1141

// An attempt was made to create more links on a file than the file system supports.
#define ERROR\_TOO\_MANY\_LINKS 1142

// The specified program requires a newer version of Windows.
#define ERROR\_OLD\_WIN\_VERSION 1150

// The specified program is not a Windows or MS-DOS program.
#define ERROR\_APP\_WRONG\_OS 1151

// Cannot start more than one instance of the specified program.
#define ERROR\_SINGLE\_INSTANCE\_APP 1152

// The specified program was written for an older version of Windows.
#define ERROR\_RMODE\_APP 1153

// One of the library files needed to run this application is damaged.
#define ERROR\_INVALID\_DLL 1154

// No application is associated with the specified file for this operation.
#define ERROR\_NO\_ASSOCIATION 1155

// An error occurred in sending the command to the application.
#define ERROR\_DDE\_FAIL 1156

// One of the library files needed to run this application cannot be found.
#define ERROR\_DLL\_NOT\_FOUND 1157

# 3.8.4 – NRC return codes

These codes indicate a network error encountered by a network component of the monitor.

## 3.8.4.1 NRC's For all network types:

A000: invalid demand
A001: invalid link type
A002: API version not supported by the stated DLL
A003: memory allocation error
A004: free memory error
A005: unable to free the memory
A006: network component already initialized
A007: network component not successfully initialized previously
A008: API already initialized
A009: API not successfully initialized previously
A004: no incoming call received
A008: network message too large
A00C: null length message to send
A00D: API not terminated

## 3.8.4.2 NRC's for the SNA LU6.2 network type:

A101: APPC dll load error A102: CSV dll load error A103: bad 'WinAPPCStartup' function address A104: bad 'APPC\_C' function address A105: bad 'WinAPPCSCleanup' function address A106: bad 'WinCSVStartup' function address A107: bad 'ACSSVC C' function address A108: bad 'WinCSVCleanup' function address A109: 'Startup' APPC error A10A: 'Startup' CSV error A10B: 'Cleanup' APPC error A10C: 'Cleanup' CSV error A10D: free APPC dll error A10E: free CSV dll error A10F: 'convert' error A110: 'TP\_STARTED' error A111: 'ALLOCATE' error A112: 'RECEIVE\_ALLOCATE' error A113: 'Sync Level' error A114: 'Conv Type' error A115: 'SEND' error A116: 'PREPARE TO RECEIVE' error A117: 'RECEIVE' error A118: 'CONFIRMED' error A119: 'DEALLOCATE' error A11A: 'TP ENDED' error

#### 3.8.4.3 NRC's for the X.25 network type:

A201: X.25 dll load error A202: X.25 dll free error A203: bad 'x25init' function address A204: bad 'x25exit' function address A205: bad 'x25error' function address A206: bad 'x25alloc' function address A207: bad 'x25free' function address A208: bad 'x25xcall' function address A209: bad 'x25cause' function address A20A: bad 'x25diag' function address A20B: bad 'x25done' function address A20C: bad 'x25cancel' function address A20D: bad 'x25send' function address A20E: bad 'x25recv' function address A20F: bad 'x25hangup' function address A210: bad 'x25xlisten' function address A220: 'x25init' error A221: 'x25exit' error A222: 'x25xcall' error A223: 'x25done' error for 'x25xcall' function A224: 'x25cancel' error for 'x25xcall' function A225: 'x25xcall' error after 'x25cancel' issued A226: 'x25done' error for 'x25xcall' function after 'x25cancel' issued A227: 'x25xlisten' error A228: '25send' error A229: 'x25done' error for 'x25send' function A22A: 'x25cancel' error for 'x25send' function A22B: 'x25send' error after 'x25cancel' issued A22C: 'x25done' error for 'x25send' function after 'x25cancel' issued A22D: 'x25recy' error A22E: 'x25done' error for 'x25recy' function A22F: 'x25cancel' error for 'x25recv' function A230: 'x25recv' error after '25cancel' issued A231: 'x25done' error for 'x25recy' function after 'x25cancel' issued A232: 'x25recv clear' error A233: 'x25done' error for 'x25recv clear' function A234: 'x25cancel' error for 'x25recv clear' function A235: 'x25recy' error after 'x25cancel' issued A236: 'x25done' error for 'x25recv' function after 'x25cancel' issued A237: 'x25hangup' error A238: 'x25done' error for 'x25hangup' function A239: 'x25done' error for 'x25xlisten' function A23A: 'x25cancel' error for 'x25xlisten' function A23B: 'x25xlisten' error after 'x25cancel' issued A23C: 'x25done' error for 'x25xlisten' function after 'x25cancel' issued

#### 3.8.4.4 NRC's codes for TCP/IP network type:

A301: Windows socket API initialization error A302: 'socket' function error for an outgoing call A303: 'socket' function error for an incoming call A304: 'htons' function error A305: 'inet addr' function error A306: 'connect' function error A307: 'bind' function error A308: 'listen' function error A309: 'accept' function error A30A: 'asynchronous send' function error A30D: 'send' function error A30E: 'shutdown' function error A30F: 'closesocket' function error A311: Windows socket termination error A312: 'recv' function error A313: 'inet ntoa' function error A314: load Windows socket dll error A315: bad 'wsastartup' function address A316: bad 'socket' function address A317: bad 'closesocket' function address A318: bad 'connect' function address A319: bad 'htons' function address A31A: bad 'bind' function address A31B: bad 'listen' function address A31C: bad 'accept' function address A31D: bad 'inet addr' function address A31E: bad 'inet ntoa' function address A31F: bad 'recv' function address A320: bad 'send' function address A321: bad 'shutdown' function address A322: bad 'wsacancelblockingcall' function address A323: bad 'wsacleanup' function address A324: bad 'wsagetlasterror' function address A325: Free Windows socket dll error A326: bad 'ioctlsocket' function address A327: 'ioctlsocket' error A328: 'select' error A329: bad 'select' function address A32A: time out while writing A32B: time out while reading A32C: bad 'gethostbyname' function address

A32D: 'gethostbyname' error

## 3.8.4.5 NRC's for the Named Pipe network type:

A401: Security description initialization error
A402: Security description update error
A403: Named pipe creation error
A404: Connection error
A405: Close error
A406: Disconnection error
A407: Write data error
A408: Write length error
A409: Read error
A40A: Open clients named pipe error

#### **3.8.4.6 SSL error codes of the monitor:**

A501: Error Windows version A502: Error loading Secur32.dll A503: Error init security interface A504: Bad pointer to CertFreeCertificateContext A505: Bad pointer to CertFinfCertificateInStore A506: Bad pointer to CertOpenStore A507: Bad pointer to CertFindChainInStore A508: Bad pointer to CertNameToStrA A509: Bad pointer to CertGetIssuerCertificateFromStore A50A: Bad pointer to CertGetCertificateChain A50B: Bad pointer to CertVerifyCertificateChainPolicy A50C: Bad pointer to CertFreeCertificateChain A50D: Bad pointer to CryptFindOidInfo A50E: Bad pointer to CerStrToNameA A520: Internal error A521: Incomplete message A522: Error Context expired A523: Error Renegotiate **A524:** Error Init credentials A525: Error Client handshake A526: Error Server handshake A527: Error Server send **A528:** Error Server receive A529: Error Client send **A52A:** Error Client receive A52B: Error Client disconnect A52C: Error Server disconnect A52D: Error Subject DN in remote server certificate not authorized A52E: Error remote DN control file (SSL) A52F: Error Subject DN in remote certificate not authorized

# 3.8.4.7 TCP/IP return codes (from Microsoft documentation)

## 2714 Interrupted system call

Indicates that an interruptible function's process was interrupted by a signal that the process caught.

### 2719 Bad file number

Indicates that a socket or file descriptor parameter is invalid.

### **271D** Permission denied

Indicates that the requested operation did not have the proper access permissions. This error may also indicate one or more of the following:

- The named file is not an ordinary file (acct()).
- The operation would cause the parent directory or process's information level to float such that it would no longer be dominated by the directory or process's sensitivity level.
- The requested file is not available for read or write access.
- The process is attempting to mount on a multilevel child directory.
- The value of the process ID argument matches the process ID of a child process of the calling process and the child process has successfully executed one of the exec functions (setpgid()).
- The function is trying to manipulate two files on two different file systems.

#### 271E Bad address

Indicates that the requested address is in some way invalid, for example, out of bounds.

#### 2726 Invalid argument

Indicates that an invalid argument was passed to the function (such as, the requested argument does not exist or is out of bounds or is not a regular file, or that the result would be invalid). This error may also indicate one or more of the following:

- The requested socket is not accepting connections (accept()) or is already bound (bind()).
- The specified superblock had a bad magic number or a block size that was out of range (mount()).
- The requested parameter is a lock/unlock parameter, but the element to be locked is already locked/unlocked (plock()).
- The kernel has not been compiled with the QUOTA option (quota()).
- An attempt was made to to ignore or supply a handler for the SIGKILL, SIGSTOP, and SIGCONT signals (sigaction()).
- The requested device was not configured as a swap device or does not allow paging (swapon()).
- The requested device is not mounted or local (mount()).

#### 2728 Too many open files

Indicates one or more of the following errors:

Too many file descriptors are open (exceeding OPEN\_MAX).

No space remains in the mount table.

The attempt to attach a shared memory region exceeded the maximum number of attached regions allowed for any one process.

2733 Operation would block

Indicates one or more of the following errors:

The socket is marked nonblocking and no connections are waiting to be accepted.

The socket is marked nonblocking and connection cannot be immediately completed.

The file is locked and the function is instructed not to block when locking.

The socket is marked as non-blocking and no space is available for the specified function.

2734 Operation now in progress

Indicates that a lengthy operation on a non-blocking object is now in progress.

**2735** Operation already in progress

Indicates that an operation was attempted on a non-blocking object for which an operation was already in progress.

**2736** Socket operation on non-socket Indicates that the specified socket parameter refers to a file, not a socket.

**2737** Destination address required Indicates that a required destination address was omitted from an operation on a socket.

2738 Message too long

Indicates that the message is too large to be sent all at once, as the socket requires.

**2739** Protocol wrong type for socket Indicates that the specified protocol does not support the requested type of socket.

**273A** Option not supported by protocol Indicates that the requested socket option is unknown and the protocol is unavailable.

**273B** Protocol not supported Indicates that either the socket or the protocol is not supported.

**273C** Socket type not supported Indicates that the socket type is not supported.

**273D** Operation not supported on socket Indicates either that the socket does not support the requested operation, or that the socket cannot accept the connection.

**273E** Protocol family not supported Indicates that the selected protocol family is unconfigured or unimplemented.

**273F** Address family not supported by protocol family Indicates that the addresses in the specified address family are not supported by the protocol family.

**2740** Address already in use Indicates that the specified address is already in use.

2741 Can't assign requested address

Indicates that the specified address is not available from the local machine.

2742 Network is down

Indicates that a socket operation has encountered a network that is down. This error may be reported at any time if the Windows Sockets implementation detects an underlying failure.

**2743** Network is unreachable Indicates that no route to the network or host exists.

2744 Network dropped connection on reset

Indicates that the network connection dropped when the remote host reset it by rebooting.

2745 Software caused connection abort

Indicates that the software caused a connection abort because there is no space on the socket's queue and the socket cannot receive further connections.

2746 Connection reset by peer

Indicates that a connection was forcibly reset (closed) by a peer. The situation normally results when a timeout or a reboot causes the loss of the connection on the remote socket.

2747 No buffer space available

Indicates insufficient resources, such as buffers, to complete the call. Typically, a call used with sockets has failed due to a shortage of message or send/receive buffer space.

**2748** Socket is already connected Indicates that the socket is already connected.

**2749** Socket is not connected Indicates that the socket is not connected.

**274A** Can't send after socket shutdown Indicates that data cannot be sent to a socket because it has been shut down.

**274B** Too many references; can't splice Indicates that there are too many references to some kernel-level object. The associated resource has presumably run out.

274C Connection timed out

Indicates one or more of the following errors:

The requested attempt at a connection timed out before a connection was established. For NFS files that are mounted with the soft option, either the server is down or there is a network problem.

274D Connection refusedIndicates that the connection request was refused.274E Too many levels of symbolic linksIndicates that too many links were encountered in translating a path-name.

274F File name too long

Indicates that the pathname argument exceeds PATH\_MAX (currently 1024), or a pathname component exceeds NAME\_MAX (255).

**2750** Host is down Indicates that a socket operation failed because the destination host was down.

**2751** Host is unreachable Indicates that a socket operation failed because no route could be found to the host.

**276B** Subsystem unusable Indicates that the network subsystem is unusable.

**276C** Version not supported Indicates that the Windows Sockets DLL cannot support this application.

276D Not initialized

Indicates that a successful initialization has not yet been performed.

**2AF9** The name you have used is not an official host name or alias; this is not a soft error, another type of name server request may be successful.

**2AFA** Operation would block

Indicates that the requested resource, such as a lock or a process, is temporarily unavailable. This error may also indicate one or both of the following:

If the O\_NONBLOCK flag is set for the requested function, the process would be delayed in a read or write operation.

The specified time has elapsed (pthread\_cond\_timedwait()).

2AFC No message on stream head read queue.

Indicates that is no message on the stream head read queue.

# 3.8.4.8 SNA LU6.2 return codes (from Microsoft documentation)

The LU6.2 error codes are displayed in the following format (XXXX YYYYYYY) where:

## **'XXXX' is the PRIMARY RETURN CODE 'YYYYYYYY' is the SECONDARY RETURN CODE.**

## **PRIMARY RETURN CODES**

**0001** The verb did not execute because of a parameter error.

0002 The verb did not execute because it was issued in an invalid state.

0003 APPC has failed to allocate a conversation. The conversation state is set to RESET.

This code may be returned through a verb issued after [MC\_]ALLOCATE.

**0005** The conversation has been deallocated for one of the following reasons:

- The partner TP issued MC\_DEALLOCATE with dealloc\_type set to AP\_ABEND.
- The partner TP encountered an ABEND, causing the partner LU to send an MC\_DEALLOCATE request.

**0006** The conversation has been deallocated for one of the following reasons:

- The partner TP has issued DEALLOCATE with dealloc\_type set to AP\_ABEND\_PROG.
- The partner TP has encountered an ABEND, causing the partner LU to send a DEALLOCATE request.

**0007** The conversation has been deallocated because the partner TP issued DEALLOCATE with dealloc\_type set to AP\_ABEND\_SVC.

**0008** The conversation has been deallocated because the partner TP issued DEALLOCATE with dealloc\_type set to AP\_ABEND\_TIMER.

**0009** The partner TP has deallocated the conversation without requesting confirmation.

**000C** The partner TP has issued one of the following verbs while the conversation was in SEND state:

- SEND\_ERROR with err\_type set to AP\_PROG
- MC\_SEND\_ERROR
- Data was not truncated.

**000F** The conversation was terminated because of a temporary error. Restart the TP to see if the problem occurs again. If it does, the system administrator should examine the error log to determine the cause of the error.

**0010** The conversation was terminated because of a permanent condition, such as a session protocol error.

The system administrator should examine the system error log to determine the cause of the error.

Do not retry the conversation until the error has been corrected.

**0011** While in SEND state, the partner TP (or partner LU) issued SEND\_ERROR with err\_type set to AP\_SVC. Data was not truncated.

**0012** In SEND state, after sending an incomplete logical record, the partner TP issued SEND\_ERROR. The local TP may have received the first part of the logical record.

**0013** The partner TP (or partner LU) issued SEND\_ERROR with err\_type set to AP\_SVC while in RECEIVE, PENDING\_POST (Windows NT and OS/2 only), CONFIRM, CONFIRM\_SEND, or CONFIRM\_DEALLOCATE state. Data sent to the partner TP may have been purged.

0014 No data is immediately available from the partner TP.

0017 APPC is currently processing a CNOS verb issued by a local LU.

0018 The partner LU rejected a CNOS request from the local LU:

**0019** The TP has issued both Basic and Mapped conversation verbs. Only one type can be issued in a single conversation.

**0021** The local TP issued one of the following verbs, which cancelled [MC\_]RECEIVE\_AND\_POST:

- DEALLOCATE with dealloc\_type set to AP\_ABEND\_PROG, AP\_ABEND\_SVC, or AP\_ABEND\_TIMER
- MC\_DEALLOCATE with dealloc\_type set to AP\_ABEND
- [MC\_]SEND\_ERROR
- TP\_ENDED

Issuing one of these verbs causes the semaphore to be cleared.

**F002** The local TP has issued a call to APPC while APPC was processing another call for the same TP. This may occur if the local TP has multiple threads, and more than one thread is issuing APPC calls using the same tp\_id.

F003 Indicates one of the following conditions:

- The node used by this conversation encountered an ABEND.
- The connection between the TP and the PU 2.1 node has been broken (a LAN error).
- The SnaBase at the TP's computer encountered an ABEND.
- The system administrator should examine the error log to determine the reason for the ABEND.

**F004** A required component could not be loaded or has terminated while processing the verb. Thus, communication could not take place. Contact the system administrator for corrective action.

**F005** There can only be one outstanding conversation verb at a time on any conversation.

**F006** The calling thread is already in a blocking call.

F008 The VCB extended beyond the end of the data segment.

**F011** The operating system has returned an error to APPC while processing an APPC call from the local TP. The operating system return code is returned through the secondary\_rc. It appears in Intel byte-swapped order. If the problem persists, consult the system administrator.

**F015** The stack size of the application is too small to execute the verb. Increase the stack size of your application.

F020 The supplied key was incorrect.

# SECONDARY RETURN CODES

00000001 The value of tp\_id did not match a TP identifier assigned by APPC.

**00000002** The value of conv\_id did not match a conversation identifier assigned by APPC.

**00000003** Secondary return code; APPC cannot find the specified lu\_alias among those defined.

**00000004** The conversation cannot be allocated because of a permanent condition, such as a configuration error or session protocol error. To determine the error, the system administrator should examine the error log file. Do not retry the allocation until the error has been corrected.

**00000005** The conversation could not be allocated because of a temporary condition, such as a link failure. The reason for the failure is logged in the system error log. Retry the allocation.

**00000006** The PIP data was longer than the allocated data segment, or the address of the PIP data buffer was wrong.

00000007 APPC accepts the session limits and responsibility as negotiable by the partner LU.

Values that can be negotiated are:

- plu\_mode\_session\_limit
- min\_conwinners\_source
- min\_conwinners\_target
- responsible
- drain\_target

**00000011** The value specified for conv\_type was invalid.

**00000012** The value specified for sync\_level was invalid.

00000013 The value specified for security was invalid.

**00000014** The value specified for rtn\_ctl was invalid.

**00000016** The value of pip\_dlen was greater than 32,767.

**00000017** SNASVCMG is not a valid value for mode\_name.

**00000018** The value specified for mode\_name was invalid.

**00000031** The local TP attempted to use [MC\_]CONFIRM in a conversation with a synchronization level of AP\_NONE. The synchronization level, established by [MC\_]ALLOCATE, must be AP\_CONFIRM\_SYNC\_LEVEL.

00000032 The conversation was not in SEND state.

**00000033** The conversation for the local TP was in SEND state, and the local TP did not finish sending a logical record.

**00000051** The dealloc\_type parameter was not set to a valid value.

**00000053** The conversation was not in SEND state, and the TP attempted to flush the send buffer and send a confirmation request.

**00000055** The conversation was in SEND state, and the TP did not finish sending a logical record. The dealloc\_type parameter was set to AP\_SYNC\_LEVEL or AP\_FLUSH.

**00000057** The LL field of the GDS error log variable did not match the actual length of the log data.

00000061 The conversation was not in SEND state.

**000000A1** The ptr\_type parameter was not set to a valid value.

**000000A2** The local TP did not finish sending a logical record.

000000A3 The conversation was not in SEND state.

**000000B1** The conversation was not in RECEIVE or SEND state when the TP issued this verb.

**000000B2** The conversation was in SEND state; the TP began but did not finish sending a logical record.

**000000B5** The fill parameter was set to an invalid value.

**000000C1** The conversation was not in RECEIVE state.

**000000C4** The fill parameter was set to an invalid value.

**000000D1** The conversation was not in RECEIVE or SEND state when the TP issued this verb.

**000000D2** The conversation was in SEND state; the TP began but did not finish sending a logical record.

000000D5 The fill parameter was set to an invalid value.

000000D6 The address of the RAM semaphore or system semaphore handle was invalid.

000000D7 The specified rtn\_status value was not recognized by APPC.

000000E1 The conversation is not in an allowed state when the TP issued this verb.

**000000F1** The logical record length field of a logical record contained an invalid value—X'0000', X'0001', X'8000', or X'8001'.

**000000F2** The local TP issued [MC\_]SEND\_DATA, but the conversation was not in SEND state.

**000000F5** The type CONFIRM is not permitted for a conversation that was allocated with a sync\_level of NONE.

**000000F6** The TP started but did not finish sending a logical record. This occurs only when type is one of the following:

AP\_SEND\_DATA\_CONFIRM

AP\_SEND\_DATA\_DEALLOC\_FLUSH

AP\_SEND\_DATA\_DEALLOC\_SYNC\_LEVEL

AP\_SEND\_DATA\_P\_TO\_R\_FLUSH

AP\_SEND\_DATA\_P\_TO\_R\_SYNC\_LEVEL

**00000102** The LL field of the error log GDS variable did not match the actual length of the data.

00000103 The value of err\_type was invalid.

00000105 The specified err\_dir was not recognized by APPC.

**00000150** APPC does not permit a program to change the session limit for a mode other than SNASVCMG mode for the implicit partner template when the template specifies parallel sessions. (The term template is used because many of the actual values are yet to be filled in).

**00000151** APPC does not permit setting session limits to a nonzero value unless the limits currently are 0.

**00000152** On the CNOS verb, the value for auto\_activate is greater than the value for partner\_lu\_mode\_session\_limit.

**00000153** APPC does not permit a nonzero session limit when mode\_name\_select indicates ALL.

**00000154** Your program specified invalid settings for the partner\_lu\_mode\_session \_limit, min\_conwinners\_source, or min\_conwinners\_target parameters when mode\_name was supplied.

**00000155** The sum of min\_conwinners\_source and min\_conwinners\_target specifies a number greater than partner\_lu\_mode\_session\_limit.

**00000156** The local LU cannot negotiate a nonzero session limit because the local maximum session limit at the partner LU is 0.

**00000157** The partner LU does not recognize the specified mode name.

00000159 The SNASVCMG mode does not support the drain parameter values.

**0000015A** For a single-session CNOS verb, APPC permits only the local (source) LU to be responsible for deactivating sessions.

**0000015B** APPC did not recognize the supplied partner\_lu\_alias.

**0000015**C Your program issued a CNOS verb, specifying a partner\_lu\_mode \_session\_limit number and set\_negotiable (NO).

**0000015D** APPC does not permit mode\_name\_select (ONE) and drain\_source (YES) when drain\_source (NO) is currently in effect for the specified mode.

**0000015E** A command has reset the definition of the local LU before the CNOS verb tried to specify the LU.

0000015F The local LU is currently processing a CNOS verb issued by the partner LU.

**00000167** Your local program attempted to issue the CNOS verbs for the mode named SNASVCMG, specifying a session limit of 0.

000001B4 The returned DISPLAY information did not fit in the buffer.

**000001B5** The value supplied for NUM\_SECTIONS or INIT\_SEC\_LEN is invalid.

**00000506** Secondary return code; in the configuration file for your application, APPC could not find an invokable TP name matching the value of tp\_name.

**00000509** APPC did not find an incoming allocate (from the invoking TP) to match the value of tp\_name, supplied by RECEIVE\_ALLOCATE. RECEIVE\_ALLOCATE waited for the incoming allocate and eventually timed out.

**00000519** The mode named CPSVCMG cannot be specified as the mode\_name on the DEACTIVATE\_SESSION verb.

**00000525** The process issuing RECEIVE\_ALLOCATE was different from the one started by APPC.

**080F6051** The user ID or password specified in the allocation request was not accepted by the partner LU.

**084B6031** The remote LU rejected the allocation request because it was unable to start the requested partner TP. The condition may be temporary, such as a time-out. The reason for the error may be logged on the remote node. Retry the allocation.

**084C0000** The remote LU rejected the allocation request because it was unable to start the requested partner TP. The condition is permanent. The reason for the error may be logged on the remote node. Do not retry the allocation until the error has been corrected.

10086021 The partner LU does not recognize the TP name specified in the allocation request.

**10086031** The allocation request specified PIP data, but either the partner TP does not require this data, or the partner LU does not support it.

**10086032** The partner TP requires PIP data, but the allocation request specified either no PIP data or an incorrect number of parameters.

**10086034** The partner LU or TP does not support the conversation type (Basic or Mapped) specified in the allocation request.

**10086041** The partner TP does not support the sync\_level (AP\_NONE or AP\_CONFIRM\_SYNC\_LEVEL) specified in the allocation request, or the sync\_level was not recognized.

#### 3.8.4.9 X.25 return codes (from EICON documentation)

The X.25 error codes are displayed in the following format (XXXX – CAUSE=YY DIAG=ZZ) where:

'XXXX' is the EICON RETURN CODE

**'YY'** is the cause code from the X.25 packet switched network used **'ZZ'** is the diagnostic code from the X.25 packet switched network used

#### **EICON codes from the EICON documentation**

**0001** /\* Invalid buffer length \*/ 0003 /\* Invalid command \*/ 0005 /\* Command timeout \*/ **0006** /\* Incomplete message \*/ 0008 /\* Invalid local session number \*/ 0009 /\* No circuit available \*/ 000A /\* Call cleared \*/ **000B** /\* Command cancelled \*/ **000D** /\* PU name exist \*/ 000E /\* PU name table full \*/ 0011 /\* Session table full \*/ 0012 /\* Unsuccessful call \*/ 0014 /\* Protocol name not found \*/ **0016** /\* Circuit in use \*/ **0017** /\* PU name not found \*/ 0018 /\* Session reset \*/ 0019 /\* Trace not started \*/ 001A /\* Insufficient memory \*/ 0021 /\* Too many outstanding commands \*/ 0022 /\* Too many outstanding commands \*/ 0023 /\* Bad port number \*/ 0025 /\* No number to dial \*/ **0040** /\* No dial tone \*/ 0050 /\* Modem test failed \*/ **0090** /\* Modem not ready \*/ 0091 /\* Modem not ready (no DSR) \*/ 0092 /\* Modem not ready (no CTS) \*/ 0093 /\* Modem not ready (no clock) \*/ 0094 /\* Remote line busy \*/ 0095 /\* Remote not answering \*/ 0096 /\* No line available \*/ 0099 /\* Modem in use \*/ **009E** /\* Bad phone number syntax \*/ 009F /\* Modem initialized \*/ **00A0** /\* Link level not ready \*/ **00B0** /\* Packet level not ready \*/ 00B2 /\* Restart indication received \*/

**00C0** /\* Transport connection cleared remotely \*/

**00C1** /\* Transport connection cleared locally \*/

00C2 /\* Timeout occurred on CR or DR \*/

00C3 /\* X.25 network connection cleared \*/

**00C4** /\* X.25 network reset \*/

**00C5** /\* Transport connection refused by remote \*/

00C6 /\* CR sent by remote site not acceptable \*/

00CF /\* Not enough memory to start transport layer \*/

00F8 /\* Submit request again \*/

**00F9** /\* EiconCard snapshot \*/

00FA /\* EiconCard snarked \*/

00FB /\* EiconCard error \*/

**00FC** /\* EiconCard not loaded \*/

00FD /\* EiconCard halted \*/

**00FE** /\* EiconCard driver not installed \*/

00FF /\* Command not completed \*/

0100 /\* Library not initialized \*/

0101 /\* Library error \*/

0102 /\* No more memory available or request bigger than MAXSHORT \*/

0103 /\* Bad DTE address \*/

0104 /\* Interrupted operation \*/

0105 /\* Buffer in use \*/

**0106** /\* Connection not established \*/

0107 /\* Bad facility length \*/

0108 /\* Done command timed-out \*/

0109 /\* Invalid connection number \*/

010A /\* No pending request \*/

**010B** /\* Invalid toolkit initialization \*/

010C /\* Invalid gateway name \*/

**010D** /\* Invalid NULL pointer address \*/

**010E** /\* Invalid Toolkit User option \*/

## **CLEARING CAUSES**

- **00h** DTE originated call
- 01h Number busy
- 03h Invalid facility request
- 05h Network congestion
- 09h Out-of-order
- **0Bh** Access barred
- **0Dh** Not obtainable
- 11h Remote procedure error
- 13h Local procedure error
- **15h** RPOA out of order
- **19h** Reverse charging not subscribed to
- 21h Incompatible destination
- 29h Fast Select acceptance not subscribed to
- **39h** Ship absent (for mobile maritime service)

# **RESETTING CAUSES**

- **00h** DTE originated call
- 01h Out of order (PVC only)
- 03h Remote procedure error
- 05h Local procedure error
- 07h Network congestion
- **09h** Remote DTE operational (PVC only)
- **0Fh** Network operational (PVC only)
- 11h Incompatible destination
- 1Dh Network out of order (PVC only)

# **RESTARTING CAUSES**

00h DTE originated of	call
-----------------------	------

- 01h Local procedure error
- D7h Network operational

Cause codes above 80h are network-specific.

# DIAGNOSTICS

00h	NO ADDITIONAL INFORMATION
01h	Invalid P(S)
02h	Invalid P®
10h	PACKET TYPE INVALID
11h	For state r1
12h	For state r2
13h	For state r3
14h	For state p1
15h	For state p2
16h	For state p3
17h	For state p4
18h	For state p5
19h	For state p6
1Ah	For state p7
1Bh	For state d1
1Ch	For state d2
1Dh	For state d3
20h	PACKET NOT ALLOWED
21h	Unidentifiable packet
22h	Call on one way logical channel
23h	Invalid packet type on a PVC
24h	Packet on unassigned LCN
25h	Reject not subscribed to
26h	Packet too short
27h	Packet too long
28h	Invalid GFI (General Format Identifier)
29h	Restart with non-zero GFI
2Ah	Packet type not compatible with facility
2Bh	Unauthorized interrupt confirmation
2Ch	Unauthorized interrupt
2Dh	Unauthorized reject

30h	TIMER EXPIRED	
31h	For incoming call	
32h	For clear indication	
33h	For reset indication	
34h	For restart indication	
40h	CALL SET-UP, CALL CLEARING OR REGISTRATION PROBLEM	
41h	Facility/registration code not allowed	
42h	Facility parameter not allowed	
43h	Invalid called address	
44h	Invalid calling address	
45h	Invalid facility/registration length	
46h	Incoming call barred	
47h	No logical channel available	
<b>48h</b>	Call collision	
49h	Duplicate facility requested	
4Ah	Non-zero address length	
4Bh	Non-zero facility length	
4Ch	Facility not provided when expected	
4Dh	Invalid CCITT-specified DTE facility	
50h	MISCELLANEOUS	
51h	Improper cause code from DTE	
52h	Non-aligned byte (octet)	
53h	Inconsistent Q-bit setting	
70h	INTERNATIONAL PROBLEM	
71h	Remote network problem	
72h	International protocol problem	
73h	International link out of order	
74h	International link busy	
75h	Transit network facility problem	
76h	Remote network facility problem	
77h	International routing problem	
78h	Temporary routing problem	
79h	Unknown called DNIC	
7Ah	Maintenance action	

Diagnostic codes above 80h are network-specific.

## 3.8.5 - C-TREE return codes (from FAIRCOM documentation)

- 2 /\* Key value already exists \*/
- 3 /\* Could not delete since pntr's don't match \*/
- 4 /\* Could not find key to delete \*/
- 5 /\* Cannot call delete w/o verification with duplicate keys \*/
- 6 /\* c-tree(...) jump table error \*/
- 7 /\* Terminate user \*/
- 8 /\* sysiocod value when FNOP\_ERR caused by conflicting open requests (server) \*/
- 9 /\* sysiocod value when FNOP\_ERR, DCRAT\_ERR or KCRAT\_ERR caused by device access error \*/
- **10** /\* INTREE parameters require too much space \*/
- 11 /\* Bad INTREE parameters \*/
- 12 /\* Could not open file: not there or locked \*/
- 13/\* Unknown file type \*/
- 14 /\* File corrupt at open \*/
- 15 /\* File has been compacted \*/
- 16/\* Could not create index file \*/
- 17 /\* Could not create data file \*/
- 18 /\* Tried to create existing index file \*/
- **19**/\* Tried to create existing data file \*/
- 20 /\* Key length too large for node size \*/
- 21 /\* Record length too small \*/
- 22 /\* File number out of range \*/
- 23 /\* Illegal index member info \*/
- 24 /\* Could not close file \*/
- 25 /\* Bad link in deleted node list. REBUILD \*/
- 26 /\* File number not active \*/
- 27 /\* drn before beginning of data records \*/
- 28 /\* Zero drn in ADDKEY \*/
- 29 /\* Zero drn in data file routine \*/
- 30 /\* drn exceeds logical end of file \*/
- 31 /\* Flag not set on record in delete chain \*/
- 32/\* Attempt to delete record twice in a row \*/
- 33 /\* Attempt to use NULL ptr in read/write \*/
- 34 /\* Predecessor repeat attempts exhausted \*/
- 35 /\* Seek error: check sysiocod value \*/
- 36 /\* Read error: check systocod error \*/
- 37 /\* Write error: check sysiocod error \*/
- 38 /\* Could not convert virtual open to actual \*/
- 39/\* No more records available \*/
- 40 /\* Index node size too large \*/
- 41 /\* Could not unlock data record \*/
- 42 /\* Could not obtain data record lock \*/
- 43 /\* Version incompatibility \*/
- 44 /\* Data file serial number overflow \*/

- 45 /\* Key length exceeds MAXLEN parameter \*/
- 46 /\* File number already in use \*/
- 47 /\* c-tree has not been initialized \*/
- 48 /\* Operation incompatible with type of file \*/
- 49 /\* Could not save file \*/
- 50 /\* Could not lock node \*/
- 51 /\* Could not unlock node \*/
- 52 /\* Variable length keys disabled OR invalid key type \*/
- 53 /\* File mode inconsistent with c-tree config \*/
- 54 /\* Attempt to write a read only file \*/
- 55 /\* File deletion failed \*/
- 56 /\* File must be opened exclusive for delete \*/
- 57 /\* Proper lock is not held (CHECKLOCK/READ) \*/
- 58 /\* LOADKEY called with incorrect key number. You cannot continue \*/
- 59 /\* LOADKEY called with key out of order You may skip this key & continue \*/
- 60 /\* Percent out of range \*/
- 61 /\* NULL fcb detected during I/O \*/
- 62 /\* File must be opened exclusively \*/
- 63 /\* Start file / log file serial number error \*/
- 64/\* Checkpoint past end of log file \*/
- 65 /\* Not enough memory during tran processing \*/
- 66 /\* Log file entry failed to find checkpoint \*/
- 67 /\* Could not rename file \*/
- 68 /\* Could not allocate memory for control list \*/
- 69 /\* Node does not belong to index \*/
- 70 /\* Transaction already pending \*/
- 71 /\* No active transaction \*/
- 72 /\* No space for shadow buffer \*/
- 73 /\* LOGFIL encountered during shadow only \*/
- 74 /\* Recovery: two active tran for user \*/
- 75 /\* Recovery: bad tran owner \*/
- 76 /\* Recovery: bad tran type \*/
- 77 /\* Recovery: file name too long \*/
- 78/\* Transaction abandoned: too many log extents or dynamic dump wait exhausted \*/
- 79 /\* Could not log file opn/cre/cls/del \*/
- 80 /\* NULL target or bad keyno \*/
- **81** /\* Transaction allocation error \*/
- 82 /\* User allocation error \*/
- 83 /\* ISAM allocation error \*/
- 84 /\* Maximum users exceeded \*/
- 85 /\* Reduce lock to read lock after update \*/
- 86 /\* Dead lock detected \*/
- 87 /\* System not quiet: files in use \*/
- 88 /\* Linked list memory allocation error \*/
- 89 /\* Memory allocation during tran processing \*/
- 90 /\* Could not create queue \*/
- 91 /\* Queue write error \*/
- 92 /\* Queue memory error during write \*/
- 93 /\* Queue read error \*/
- 94 /\* Pending error: cannot save or commit tran \*/

05 /*	
	Could not start task */
	Start-file/log open error */
	Bad user handle */ Bad transaction mode */
99/* 100	Transaction type / filmod conflict */ /* No current record for isam datno */
100	/* Could not find isam keyno request */
101	/* Could not open ISAM parameter file */
102	/* Could not read first 5 parameters in ISAM parameter file */
103	/* Too many files in ISAM parameter file */
104	/* Could noy undo ISAM update. Rebuild Files */
105	/* Could not read data file record in ISAM parameter file */
107	/* Too many keys for data file in ISAM parameter file */
108	/* Incorrect keyno for index member in parameter file */
109	/* Too many key segments defined in ISAM parameter file */
110	/* Could not read segment record in ISAM parameter file */
111	/* Could not read index file record in ISAM parameter file */
112	/* LKISAM(ENABLE) found pending locks */
113	/* No memory for user lock table */
114	/* 1 <sup>st</sup> byte of data record equals delete flag or bad variable length record mark */
115	/* Key segments do not match key length */
116	/* Bad mode parameter */
117	/* Could not read index member record */
118	/* NXTSET called before FRSSET for keyno */
119	/* FRSSET called for index with wrong keytyp */
120	/* Data record length exceeds rebuild max */
121	/* Tried to update data with ctISAMKBUFhdr on */
122	/* Attempt to change fixed vs variable len */
123	/* Var length header has bad record mark */
124	/* # of indices does not match (OPNIFIL) */
125	/* c-tree already initialized */
126	/* Bad directory path get */
127	/* Could not send request */
128 120	/* Could not receive answer */ /* c-tree not initialized */
129 130	/* Null file name pointer in OPNFIL */
130	/* File name length exceeds msg size */
131	/* No room for application message buffer */
132	/* Server is not active */
134	/* Could not get servers message id */
135	/* Could not allocate application id */
136	/* Could not get application msg status */
137	/* Could not set message appl msg size */
138	/* Could not get rid of application msg */
139	/* Badly formed file name */
140	/* Variable record length too long */
141	/* Required message size exceeds maximum */
142	/* Application MAXLEN > server's MAXLEN */
143	/* Communications handler not installed */
144	/* Application could not id output queue */

- 145 /\* Could not find COMM software \*/
- 146 /\* Could not update free space info \*/
- 147 /\* Space to be reused is not marked deleted \*/
- 148 /\* WRTVREC cannot fit record at recbyt \*/
- 149 /\* Varlen less than minimum in ADDVREC \*/
- 150 /\* Server is shutting down \*/
- 151 /\* Could not shut down. transactions pending \*/
- 152 /\* Could not extend logfile \*/
- 153 /\* Buffer too small \*/
- 154 /\* Zero length record in REDVREC \*/
- 155 /\* Native system failure \*/
- **156** /\* timeout error \*/
- 158 /\* REDVREC record not marked active \*/
- 159 /\* Zero recbyt value \*/
- 160 /\* Multi-user interefernce: index information updated by the time user got to actual data record \*/
- 161 /\* User appears inactive \*/
- 162 /\* Server has gone away \*/
- 163 /\* No more room in server lock table \*/
- 164 /\* File number out of range \*/
- 165 /\* No file control block available \*/
- 166 /\* No more ct file control blocks in server \*/
- 167 /\* Could not read request \*/
- 168 /\* Could not send answer \*/
- 169 /\* Create file already opened (in recovery) \*/
- 170 /\* Bad function number \*/
- 171 /\* Application msg size exceeds server size \*/
- 172 /\* Could not allocate server msg buffer \*/
- 173 /\* Could not identify server \*/
- 174 /\* Could not get server message id \*/
- 175 /\* Server could not allocate user msg area \*/
- 176 /\* Could not get server msg status \*/
- 177 /\* Could not set message server msg size \*/
- 178 /\* Unexpected file# assigned to [si] in rcv \*/
- 179 /\* Server is at full user capacity \*/
- 180 /\* Could not read symbolic key name \*/
- 181 /\* Could not get mem for key symb name \*/
- 182 /\* No room for sort key. increase MAXFIL \*/
- 183 /\* Could not read file field number values \*/
- 184 /\* Attempt to reallocate set space \*/
- 185 /\* Not enough memory for addt'l sets-batches \*/
- 186 /\* Set number out of range \*/
- 187 /\* Null buffer in rtread.c \*/
- 188 /\* Null target buffer in rtread.c \*/
- **189** /\* Join\_to skip \*/
- **190** /\* Join\_to error \*/
- **191** /\* Join\_to null fill \*/
- **192** /\* Detail\_for skip \*/
- 193 /\* Detail\_for error \*/
- 194 /\* Detail\_for null fill \*/

195 /\* Could not get mem for dat symb name \*/ 196 /\* Exceeded RETRY\_LIMIT in RTREAD.C \*/ 197 /\* Could net get memory for ifil block \*/ 198 /\* Improper ifil block \*/ 199 /\* Schema not defined for data file \*/ 400 /\* Resource already enabled \*/ 401 /\* Resources not enabled \*/ 402 /\* File must be exclusive to enable res\*/ 403 /\* Empty resource id \*/ **404** /\* Output buffer to small \*/ 405 /\* Resource id already added \*/ 406 /\* Bad resource search mode \*/ 407 /\* Attempt to get non-resource info \*/ 408 /\* Resource not found \*/ 409 /\* Not in use: available \*/ 410 /\* User not active \*/ 411 /\* Not a superfile \*/ 412 /\* WRL to WXL commit promote pending(CIL) \*/ 413 /\* Superfile host not opened \*/ 414 /\* Cannot nest superfiles \*/ 415 /\* Illegal ADDKEY to superfile \*/ 416 /\* Illegal DELBLD to superfile \*/ 417 /\* Cache page size error \*/ 418 /\* Max name inconsistency \*/ 419 /\* Host superfile does not support recovery \*/ /\* Key update with pending transaction \*/ 420 421 /\* Filter not supported yet \*/ 422 /\* Other functions not sup \*/ 423 /\* Incomplete \*/ 424 /\* Add list err \*/ 425 /\* Batch in progress \*/ 426 /\* No batch active \*/ 427 /\* Status info already returned \*/ 428 /\* No more info, batch cancelled \*/ 429 /\* Bufsiz too small for record \*/ 430 /\* Request is empty or inconsistent \*/ 431 /\* Aggregate/serialization lock denied \*/ 432 /\* Fixed length string requires len in DODA \*/ 433 /\* Segment def inconsistent with schema \*/ 434 /\* Very long def block not supported \*/ 435 /\* File def memory error \*/ 436 /\* Bad def number \*/ 437 /\* defptr NULL during GETDEFBLK \*/ 438 /\* Requested def blk is empty \*/ 439 /\* No conversion routine for Definition Block \*/ 440 /\* Dynamic dump already in progress \*/ 441 /\* No memory for dynamic dump file buffer \*/ 442 /\* One or more files not available for dump \*/ 443 /\* File length discrepancy \*/

- 445 /\* Not enough data to assemble key value \*/
  446 /\* Bad key segment mode \*/
  447 /\* Only the file's owner can perform op \*/
  448 /\* Permission to set file definition denied \*/
- 449 /\* ADMIN has opened file. Cannot delete file \*/
- 450 /\* Invalid user id \*/
- 451 /\* Invalid password \*/
- 452 /\* Server could not process user/acct info \*/
- **453** /\* No such server \*/
- 454 /\* Service not supported \*/
- 455 /\* User does not belong to group \*/
- 456 /\* Group access denied \*/
- 457 /\* File password invalid \*/
- 458 /\* Write permission not granted \*/
- 459 /\* File delete permission denied \*/
- 460 /\* Resource not enabled \*/
- 461 /\* Bad permission flag \*/
- 462 /\* No directory found in superfile \*/
- 463 /\* File id uniqueness error \*/
- 464 /\* ISAM level logon not performed \*/
- 465 /\* Incremental Index: dnumidx < 1 \*/
- 466 /\* Incremental Index: dfilno not a ISAM file \*/
- 467 /\* Incremental Index: aidxnam NULL for 1<sup>st</sup> \*/
- 468 /\* Incremental Index: active tran not allowed \*/
- 469 /\* Negative I/O request \*/
- 470 /\* Guest logons disabled \*/
- **471** = error deleting sortwork file
- 472 = error creating unique name
- 473 = error opening first dummy file
- 474 = too few handles available min 3
- 475 = error closing dummy file
- 476 = error unlinking dummy file
- 477 = error getting first data area
- 478 = sinit phase not previously performed-srelease
- **479** = sreturn phase already started
- 480 =no records in data buffers
- **481** = sint phase not previously performed-sreturn
- 482 = not enough memory
- 483 = no valid record pointers in merge buffers
- **484** = error opening sortwork file
- **485** = error creating sortwork.00x file
- 486 = no records fit in output buffer
- **487** = error reading sortwork file
- **488** = bytes in buf <> merge buf size
- **489** = error adjusting file pointer
- **490** = error closing sortwork.00x
- **491** = error closing sortwork file
- **492** = error deleting sortwork file
- **493** = error renaming sortwork.00x
- **494** = error closing output file

**495** = error creating output file **496** = insufficient disk space 498 /\* Old log file found during log create \*/ 499 /\* Mismatch between recv log & file id \*/ 500 /\* Server could not init SQL engine \*/ 501 /\* Could not init SQL for a user \*/ 502 /\* Could not access SOL master info \*/ 503 /\* Could not continue SQL request \*/ 504 /\* Server does not support SQL \*/ 505 /\* User profile does not enable SQL \*/ 506 /\* Could open save-restore file \*/ 507 /\* Could not process save-restore file \*/ 508 /\* Save restore inconsistency \*/ 509 /\* Duplicate server \*/ 510 /\* Active chkpnt at start of roll-forward \*/ 511 /\* Index nodes form illegal loop: rebuild \*/ 512 /\* Data file loop detected \*/ 513 /\* FPUTFGET does not support CTSBLDX () \*/ 514 /\* Queue has been closed \*/ 515 /\* Cannot convert old IFIL structure \*/ 516 /\* ctNOGLOBALS not allocated \*/ 517 /\* 'regid' is not registered \*/ 518 /\* 'regid' is already registered \*/ 519 /\* index logical EOF error \*/ 520 /\* Attempt to update index with inconsistent tran# \*/ 521 /\* Could not allocate memory for the streettalk login message buffer \*/ 522 /\* Userid in INTISAM does not match current login id \*/ 530 /\* client does not match server \*/ 531 /\* index reorg entry error \*/ 532 /\* TRANSAV called with AUTOSAVE on \*/ 533 /\* file header high-water-mark overflow\*/ 534 /\* transaction # overflow \*/ 535 /\* ctree not registered. Call REGCTREE\*/ 541 /\* transaction log cannot be written \*/ 542 /\* could not create mirror file \*/ \*/ 543 /\* could not open mirror file 544 /\* could not close mirror file \*/ \*/ 545 /\* could not delete mirror file \*/ 546 /\* could not write to mirror file 547 /\* could not save mirror file \*/ 548 /\* could not read from mirror \*/ 549 /\* mismatch between mirror headers \*/ 550 /\* attempt to open primary w/o mirror\*/ 551 /\* file already opened without mirror \*/ 555 /\* could not read primary, switching \*/ 556 /\* could not write primary, switching \*/ 557 /\* could not write mirror, suspend mir \*/ 558 /\* could not save primary, switching \*/ 559 /\* could not save mirror, suspend mir \*/ 560 /\* only one of each monitor at a time \*/

\*/ 561 /\* SYSMON: dynamic dump begins 562 /\* SYSMON: dynamic dump ends \*/ 563 /\* SYSMON: dynamic dump ends (errors) \*/ 570 /\* incomplete compression \*/ 571 /\* index rebuild required 572 /\* incomplete compression & index re-build required \*/ 573 /\* primary\mirror out-of-sync. Copy good file over bad.\*/ 574 /\* incomplete compression & primary\mirror out-of-sync\*/ 575 /\* index rebuild required & primary/mirror out-of-sync\*/ 576 /\* incomplete compression & index rebuild required & primary\mirror out-of-sync \*/ 590 /\* could not find ISAM context ID \*/ 591 /\* old context ID. Call CLSICON() \*/ 592 /\* context ID exists \*/ **595** /\* varlen too small in PUTCIDX \*/ 596 /\* missing information \*/ **597** /\* could not initialize expression \*/ 598 /\* could not evalutate conditional exp \*/ 600 /\* no more client threads 601 /\* ctVERIFY detected problems with idx\*/ 602 /\* no memory for system lock table 610 /\* CTHIST target==NULL 611 /\* CTHIST could not access log 612 /\* CTHIST must be called with ctHISTfirst\*/ 613 /\* CTHIST can only access data or index \*/ 614 /\* CTHIST could not map from indx to data\*/ 615 /\* cannot get index info from data filno \*/ 616 /\* CTHIST cannot be called during a tran \*/ 617 /\* did not find target \*/ 618 /\* log scan terminated: EOF or bad entry \*/ 619 /\* CTHIST on data file: recbyt==0 620 /\* bufsiz too small \*/ 621 /\* transaction type not expected \*/ 622 /\* must reset CTHIST first \*/ 623 /\* not enough memory for CTHIST \*/ 624 /\* net change only applies to specific match of key or record position \*/ 625 /\* must specify exactly one matching criteria (user & node may be combined)\*/ 626 /\* encountered an UNDTRAN going forward: must completely restart this CTHIST sequence \*/ 627 /\* unknown type of request \*/

- 628 /\* must specify filno
- 629 /\* could net initialize internal file ID \*/

## 3.8.6 – Connect:Express API return codes

0001: API already initialized

- **0002**: Named Pipe I/O error
- **0003**: Invalid message received
- **0004**: Rejected by the monitor
- **0005**: API not initialized
- **0006**: Invalid link type **0007**: TCP/IP I/O error
- **0008**: API version unknown
- **0009**: Invalid resource code
- **000A**: Invalid list address
- **000B**: Invalid command
- **000C**: Initialization file I/O error
- 000D: Invalid password
- **000E**: Client not authorized
- **000F**: Client unknown
- **0010**: Memory allocation error
- **0011**: Memory lock error
- 0012: Too many simultaneous connections
- 0013: Bad connection ID
- 0014: Authorization information not found or invalid
- 0015: Monitor type not authorized

Note: When the API error code is 000E, the SRC code can have one of the following values: **0001:** license.key open error 0002: AP unable to initialize 0003: AP key not valid 0004: AP key has expired (EMERGENCY-KEY) 0005: AP key not valid (ACTIVATION-DATE) **0006:** AP key has expired (EXPIRATION-DATE) 0007: AP key not valid (EXPIRATION-DATE) **0008:** AP key not valid (PRODUCT missing) **0009:** AP key not valid for this system (PRODUCT) **0010:** AP key not valid (PRODUCT) 0011: AP key not valid (NUMBER-SESSIONS missing) 0012: AP key not valid (NUMBER-SESSIONS>128) 0013: AP key not valid (NUMBER-SESSIONS) **0014:** AP key not valid (NUMBER-SERVERS>50) **0015:** AP key not valid (NUMBER-SERVERS) 0016: AP key not valid (ACTIVITIES-MANAGER) **0017:** AP key has expired (ACTIVITIES-MANAGER) **0018:** AP key not valid (CLIENT-SERVER) 0019: AP key has expired (CLIENT-SERVER)

These codes are returned by the control of the api authorization file license.key.

## 3.8.7 – PeSIT protocol identifiers

Fields identifiers

01	CRC USE		
02	DIAGNOSTIC		
03	REQUESTER ID		
04	SERVER ID		
05	ACCESS CONTROL		
06	VERSION NUMBER		
07	SYNCHRONIZATION OPTION		
09	FILE ID		
11	FILE TYPE		
11	FILE NAME		
13	TRANSFER ID		
14	REQUESTED ATTRIBUTES		
15	TRANSFER RETRY FLAG		
16	DATA CODE		
17	TRANSFER PRIORITY		
18	RESTART POINT		
19	END OF TRANSFER CODE		
20	NUMBER OF SYNCHRONIZATION POINTS		
21	COMPRESSION		
22	ACCESS TYPE		
23	RESYNCHRONIZATION		
25	MAXIMUM SIZE OF THE DATA ENTITY		
26	MONITORING TIMER		
27	NUMBER OF DATA BYTES		
28	NUMBER OF ARTICLES		
29	DIAGNOSTIC COMPLEMENT		
30	LOGICAL ATTRIBUTES		
31	RECORD FORMAT		
32	RECORD LENGTH		
33	FILE ORGANIZATION		
34	SIGNATURE INDICATOR		
36	SIT DATA DIGEST		
37	FILE LABEL		
38	KEY LENGTH		
39	KEY OFFSET		
40	PHYSICAL ATTRIBUTES		
41	SPACE ALLOCATION UNIT		
42	MAXIMUM VALUE OF SPACE ALLOCATION		
50	HISTORICAL ATTRIBUTES		
51	CREATION DATE AND TIME		
52	LAST EXTRACTION DATE AND TIME		
61	CUSTOMER IDENTIFICATION (INITIAL SENDER)		
62	BANK IDENTIFICATION (FINAL RECEIVER)		
63	FILE ACCESS CONTROL		
()			

64 SERVER DATE AND TIME

- 71 AUTHENTICATION TYPE
- 72 ELEMENTS OF AUTHENTICATION
- 73 TYPE OF DATA DIGEST
- 74 ELEMENTS OF DATA DIGEST
- **75** TYPE OF ENCRYPTION
- 77 TYPE OF SIGNATURE
- 78 DATA DIGEST
- 79 SIGNATURE
- **80** ACCREDITATION
- 81 NOTIFICATION OF SIGNATURE RECEPTION
- 82 SECOND SIGNATURE
- 91 MESSAGE
- 92 FREE FIELD

Command identifiers

00	
00	FPDU.DTF
01	FPDU.READ
02	FPDU.WRITE
03	FPDU.SYN
04	FPDU.DTF.END
05	FPDU.RESYN
06	FPDU.IDT
08	FPDU.TRANS.END
11	FPDU.CREATE
12	FPDU.SELECT
13	FPDU.DESELECT
14	FPDU.ORF
15	FPDU.CRF
16	FPDU.MSG
17	FPDU.MSGDM
18	FPDU.MSGMM
20	FPDU.CONNECT
21	FPDU.ACONNECT
22	FPDU.RCONNECT
23	FPDU.RELEASE
24	FPDU.RELCONF
25	FPDU.ABORT
30	FPDU.ACK(CREATE)
31	FPDU.ACK(SELECT)
32	FPDU.ACK(DESELECT)
33	FPDU.ACK(ORF)
34	FPDU.ACK(CRF)
35	FPDU.ACK(READ)
36	FPDU.ACK(WRITE)
37	FPDU.ACK(TRANS.END)
38	FPDU.ACK(SYN)
39	FPDU.ACK(RESYN)
<b>3</b> A	FPDU.ACK(IDT)
<b>3B</b>	FPDU.ACK(MSG)

40	FPDU.DTFMA
41	FPDU.DTFDA

42 FPDU.DTFFA