



**IBM® Sterling Connect:Express®
for z/OS®**

Installation Guide

Version 4.3

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Before using this information and the product it supports, read the information in Notices, on page 61.

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Preface

The Sterling Connect:Express for z/OS Installation Guide is for network operations staff who install and maintain Sterling Connect:Express for z/OS.

This guide assumes knowledge of the z/OS operating system, including its applications, network, and environment. If you are not familiar with the z/OS operating system, refer to the z/OS library of manuals.

Chapter Overview

The Sterling Connect:Express for z/OS Installation Guide is organized into the following chapters:

Chapter	Description
1 About	This chapter provides an overview of the features and capabilities of Sterling Connect:Express and describes Sterling Connect:Express in the z/OS environment. This chapter also includes system requirements and installation prerequisites.
2 Planning the Installation	This chapter provides a description of the installation material and instructions for planning the installation of Sterling Connect:Express for z/OS.
3 Installing Sterling Connect:Express for z/OS	This chapter provides instructions to install Sterling Connect:Express for z/OS Core files.
4 Installing a Sterling Connect:Express Subsystem	This chapter provides instructions to install a Sterling Connect:Express for z/OS subsystem.
5 Verifying the Installation	This chapter provides instructions to help you verify the installation of Sterling Connect:Express.
6 Optional Installation Tasks	This chapter provides informations about optional tasks.
7 Installation Worksheets	This chapter provides installation worksheets to help preparing installation process.

Sterling Connect:Express Documentation

Sterling Connect:Express documentation consists of the following manuals:

- ❖ The *Sterling Connect:Express for z/OS 4.3 Release Notes* lists maintenance updates and any important notes.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Installation Guide* describes the planning and installation of Sterling Connect:Express.
- ❖ The *Sterling Connect:Express for z/OS 4.3 User Guide* includes general information on using the TSO/ISPF interface, and serves as a reference of user and environment commands.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Utilities Guide* describes the optional Utilities package that you can integrate with Sterling Connect:Express.
- ❖ The *Sterling Connect:Express for z/OS 4.3 FTP Guide* provides you with the information that you need to use Sterling Connect:Express with the FTP protocol.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Administration Guide* provides detailed information about transfer operations for system administrators and other advanced users of Sterling Connect:Express.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Options Guide* provides information about the CICS and IMS interfaces available for Sterling Connect:Express.
- ❖ The *Sterling Connect:Express for z/OS 4.3 PeSIT User Fields Guide* describes how you can exchange the PeSIT Pi37 and Pi99 fields with any PeSIT software.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Etebac3 User Guide* provides you with the information that you need to use Sterling Connect:Express with the Etebac3 protocol.
- ❖ The *Sterling Connect:Express HTTP Option Implementation Guide* provides you with the information that you need to implement HTTP access to the Sterling Connect:Express for z/OS repository.
- ❖ The *Sterling Connect:Express for z/OS 4.3 SSL Guide* includes general information on implementing secured file transfers.
- ❖ The *Sterling Connect:Express for z/OS 4.3 Sysplex Supervision Guide* includes general information on implementing a group of Sterling Connect:Express Plex managers under control of a Sterling Connect:Express Plex supervisor.

Getting Support for Sterling Commerce Products

Sterling Commerce provides intuitive technical products and superior Help and documentation to enable you to work independently. However, if you have a technical question regarding a Sterling Commerce product, use the Sterling Commerce Customer Support Web site.

The Sterling Commerce Customer Support Web site at www.sterlingcommerce.com is the doorway to Web support, information, and tools. This Web site contains several informative links, including a solutions database, an issue tracking system, fix information, documentation, workshop information, contact information, sunset and retirement schedules, and ordering information. Refer to the Customer Support Reference Guide at www.sterlingcommerce.com/customer/tech_support.html for specific information on getting support for Sterling Commerce products.

Conventions Used in This Guide

The Sterling Connect:Express for z/OS Installation Guide uses certain notational conventions. This section describes the conventions used in this guide.

Convention	Description
UPPERCASE LETTERS	Uppercase letters in the command format indicate that you type in information as shown.
Lowercase letters	Lowercase letters or words in commands or syntax boxes require substitution by the user. For example, index1.index2.PARMLIB indicates that you must provide the first and second indexes of the string. "PARMLIB" is mandatory.
Bold Letters	Bold print in syntax boxes indicates Sterling Connect:Express commands and required parameters. For example, PLEX=N indicates that the parameter PLEX must be set to N.
Underlined Letters	Underlining indicates default values for parameters and subparameters. For example, PLEX=Y <u>N</u> specifies that the default for PLEX is N.
Vertical Bars ()	Vertical bars indicate that you can supply one of a series of values separated by the vertical bars. For example RUN=H C specifies that H or C is valid.
Monospaced characters (characters of equal width)	Monospaced characters represent information for screens, commands, Processes, and reports.
Convention	Description
Punctuation	Code all commas and parentheses as they appear.
£ or #	The Pound character (£) and the hash character (#) are equivalent.

About Sterling Connect:Express

This chapter provides an overview of the features and capabilities of Sterling Connect:Express, and describes Sterling Connect:Express in the z/OS environment. This chapter also includes system requirements and installation prerequisites.

About Sterling Connect:Express

Sterling Connect:Express enables the control, security, and automation of file transfers across multi-platform networks. It supports numerous operating systems and protocols, thus ensuring a long-term investment. Sterling Connect:Express has the following features:

- ❖ High-performance file transfer
- ❖ Adaptability and integration into the existing operating environment and applications
- ❖ Secure data exchange and network access
- ❖ Automation of the exchange process
- ❖ Scalability according to your needs
- ❖ Interoperability and openness with different hardware, protocols, and links
- ❖ Support for ASCII/EBCDIC translation and transfer of encrypted data

With Sterling Connect:Express, you can transfer various file types including, text, binary data, and programs, to facilitate central site distribution of data and application libraries. You can also implement user exits or procedures to function at the beginning, during, and end of a transfer.

Interfaces

For each platform, several interfaces are available for administration and implementation of Sterling Connect:Express:

- ❖ Operator interface
- ❖ Batch utilities interface
- ❖ Application Programming Interface (API)

Management and Controls

Sterling Connect:Express enables transferring of all file types and includes the following facilities for improved control and management:

- ❖ Requester and server modes
- ❖ Independence between sites by using symbolic names and local parameters
- ❖ Compression for PeSIT (Horizontal/Vertical/Mixed) or ODETTE-FTP
- ❖ Automatic restart for failed connections
- ❖ Checkpoint/restart
- ❖ Management of multiple links

- ❖ Use of backup links in case of network problems
- ❖ Automatic or manual restart of interrupted transfers
- ❖ Management of external translation tables (ASCII/EBCDIC)

Sterling Connect:Express also has its own scheduling capability which is used for triggering connections to exchange Partners. Extensive exits are also available to further enable automation through event management.

Monitoring Tools

Sterling Connect:Express maintains a Files directory and a Partners directory, making it possible to take control of and monitor all data exchanges with external systems. All Sterling Connect:Express activities are monitored by extensive tracking tools, including:

- ❖ The transfer request table which enables an operator, batch job, or user program to review, activate, or delete events.
- ❖ The journal which enables an operator, batch job, or user program to view results and statistics.
- ❖ The SYSLOG file which provides a chronological view of all past events.
- ❖ The Application Program Interface (API) which enables completed event records to be filtered, processed individually, or reviewed later.

Security Features

Sterling Connect:Express ensures completely secure transfers at several levels, including:

- ❖ Control of requests issued by a known Partner or local originator
- ❖ Control of access to data
- ❖ Control of flows with specific protection, depending on the direction of the transfer
- ❖ Control of activities such as the limitation of the maximum number of simultaneous links between Partners and the activation/deactivation of Partners, Files, or transfers
- ❖ Privacy and data integrity through SSL communication

Sterling Connect:Express Functionality

Sterling Connect:Express works on different operating systems and can exchange data with any compatible software through SNA, X.25, and TCP/IP networks using public transfer protocols such as French PeSIT and ETEBAC protocols, and ODETTE-FTP. It can also support FTP transfers. Some functions, however, are only available in a Sterling Connect:Express environment with SNA 3270 and LU6.2 connections.

Sterling Connect:Express uses symbolic Partner and File names to enable communications with remote sites. The user online interface enables you to exchange and process user or application-specific information about Partners and Files.

This manual describes Sterling Connect:Express for z/OS. However, the descriptions of the Sterling Connect:Express environment and design can apply to any operating system that implements Sterling Connect:Express.

Address Spaces for Sterling Connect:Express

Sterling Connect:Express for z/OS uses six types of address spaces for the following jobs:

Job	Description
Transfer Operations Manager (TOM)	The monitor address space which manages all of file transfer operations, including the interfaces, the monitoring tools, and the security features.
Auxiliary Network Manager (ANM)	The network address space which handles X.25 CTCP (DATE and GATE), SNA PA-PA, SNA LU2, SNA LU6.2, and TCP/IP
Auxiliary Protocol Manager (APM)	The protocol address space which handles PeSIT, ODETTE, and ETEBAC3 protocols. This address space is connected to the application through user exits. One APM can process 1-16 transfers at the same time, and Sterling Connect:Express can manage 1 to 8 APMs. The supported transfer protocols are: PeSIT D and E (standard Sterling Connect:Express transfer protocol) ETEBAC3 ODETTE-FTP
Auxiliary FTP Manager (AFM)	The FTP monitor address space which handles FTP transfers.
Effector Address Space (EAS)	The FTP protocol address space which handles FTP transfers. This address space is connected to the application through user exits.
Auxiliary Trace Manager (ATM)	The trace address space which handles protocol traces.

How Sterling Connect:Express Works

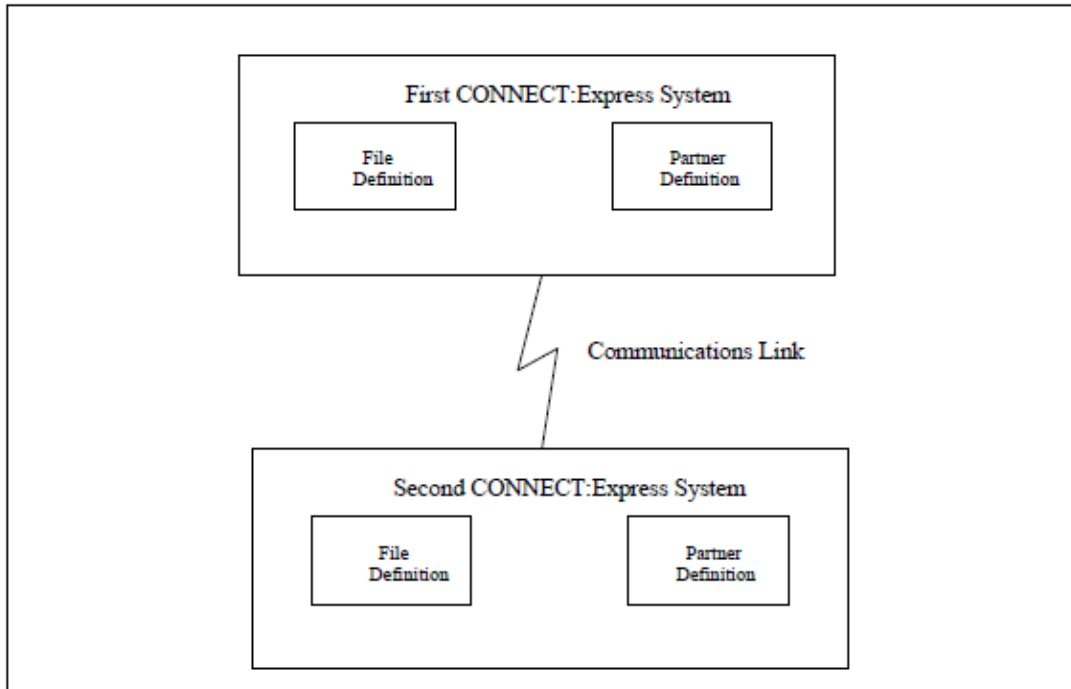
Sterling Connect:Express prepares for data transfer by setting up a relationship between Partner computer systems and data. This relationship is setup by creating Partner definitions and File definitions. The relationship can be changed at any time without affecting transfer operations.

A Partner definition refers to the remote system with whom you are to establish communication. The Sterling Connect:Express system that resides on your host is also assigned a symbolic Partner name because you are seen as a Partner by other Sterling Connect:Express or compatible systems.

A File definition refers to the data that you want to transfer between two or more Partners. This includes the physical attributes, data presentation, and transfer handling information. Both the Partner definition and the File definition are assigned symbolic names. Symbolic names are used as opposed to physical names, which refer to devices.

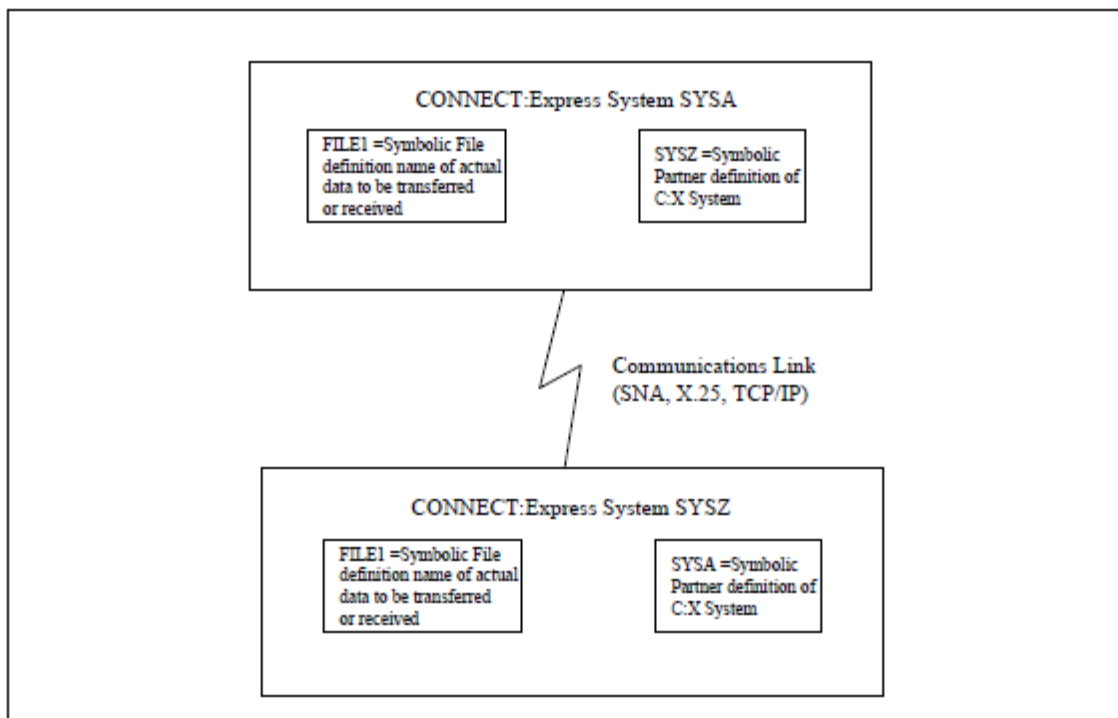
Sterling Connect:Express accepts, executes, and monitors requests to transfer files to and from Partners. Before a transfer is accepted, Sterling Connect:Express verifies that symbolic names match for both Partners and Files, and that physical file attributes are consistent.

The following diagram illustrates how two Sterling Connect:Express systems communicate to negotiate file transfers. Each system is defined as a Partner, and each system has the same File profile definition. One symbolic Partner refers to a unique location. One symbolic File refers to a collection of data sets.



Note: You can setup a Partner definition as a general Partner profile pointed to by a group of Partners, thus referring to no network identification in particular. You can use a File definition as a specific file pointing to a unique physical data set name.

The following diagram illustrates two Sterling Connect:Express systems, SYSA and SYSZ, and FILE1, a payroll file.



In the example above, the first Sterling Connect:Express system has a Partner name of SYSA. The other Sterling Connect:Express system has a Partner name of SYSZ. SYSA and its corresponding password is defined in SYSZ's Partners directory. Likewise, SYSZ is defined in SYSA's Partners directory. Each system must have the other system's Partner name in its directory for data transfer to occur.

A File profile with the symbolic name of FILE1 is defined on both Sterling Connect:Express systems. These definitions contain information such as rules about the local data set name to be transmitted or received, the Partner with which to transfer data, compression options, local record processing information, and actions to take place at the beginning and end of a transfer. Note that the symbolic names of the File are the same, FILE1, but the physical file attributes, processing, and transfer handling are local definitions. This is required for data transfer.

WARNING: Without these relationships, data transfer cannot take place between these Sterling Connect:Express systems.

Sterling Connect:Express in a z/OS Environment

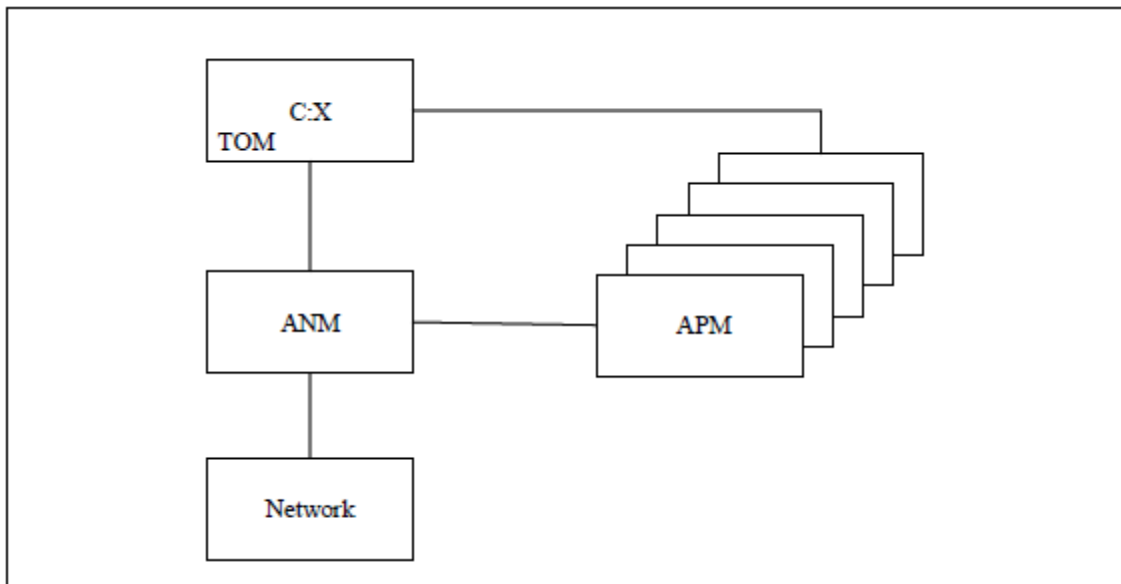
In the z/OS environment, the Sterling Connect:Express monitor address space is an MVS Subsystem, and the jobs or processes used by Sterling Connect:Express, such as the Auxiliary Protocol Manager (APM), are tasks. One environment handles PeSIT, ODETTE, and ETEBAC3 transfers over X25, SNA, and TCP/IP networks. This environment handles SSL communication. The other environment handles FTP transfers.

PeSIT, ODETTE, and ETEBAC3 Transfers

The Auxiliary Protocol Manager (APM) is a task started by Sterling Connect:Express and dedicated to handling PeSIT, ODETTE, and ETEBAC3 transfers. One APM can handle up to 16 simultaneous transfer servers for any network and transfer protocol. Sterling Connect:Express can manage the address spaces for up to 8 APMs.

The Auxiliary Network Manager (ANM) is another task started by Sterling Connect:Express that is dedicated to network handling, including SSL.

The following diagram shows the relationship between the APM(s) and the ANM. The TOM in this diagram is the Transfer Operations Manager which provides the user interface for Sterling Connect:Express.

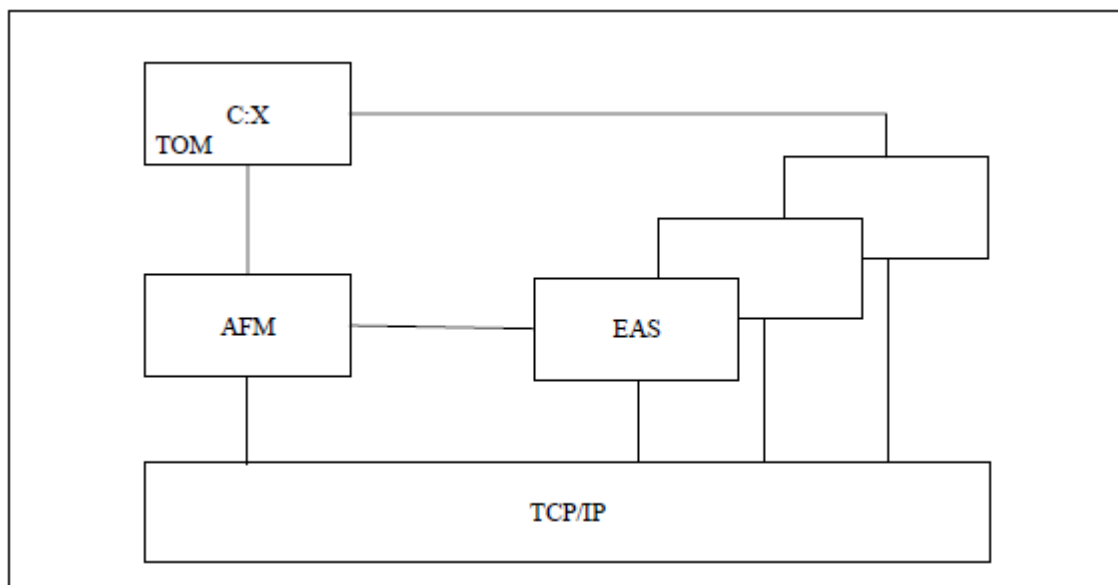


FTP Transfers

The Auxiliary FTP Manager (AFM) is a task started by Sterling Connect:Express that is dedicated to FTP transfer management. The Effector Address Space (EAS) is a task started by the AFM that is dedicated to handling the FTP transfers. Several FTP transfers can be handled by one EAS, and several EAS can be started by the AFM.

Note: The management of FTP transfers is described in *Sterling Connect:Express for z/OS FTP Guide*.

The following diagram shows the relationship between the Auxiliary FTP Manager (AFM), the EAS, and the Sterling Connect:Express user interface.

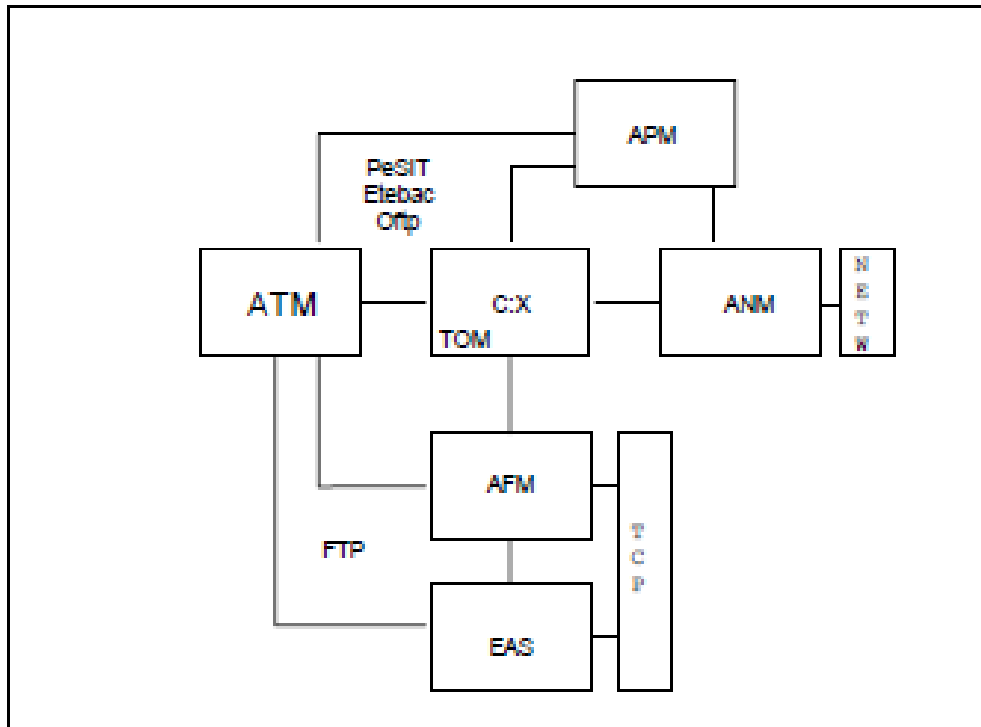


Trace Services

The Auxiliary Trace Manager (ATM) is a task started by Sterling Connect:Express that is dedicated to providing protocol traces.

Note: The trace utility is described in the *Sterling Connect:Express for z/OS Administration Guide*.

The following diagram shows the relationship between the Auxiliary Trace Manager (ATM) and other Sterling Connect:Express address spaces. For PeSIT, Etebac, and Oftp, a trace file is built from TOM and APM address spaces information sent to ATM. For FTP, a trace file is built from AFM and EAS address spaces information sent to ATM.



Resources, Interfaces and Parameters

Sterling Connect:Express provides resources, interfaces, and parameters that users can configure for transfers.

Resources are tools that you can enable or disable. Sterling Connect:Express resources include:

- ❖ Monitor
- ❖ Partners Control table
- ❖ Files Control table
- ❖ Requests Control table
- ❖ Transfer servers (APM)
- ❖ FTP services (AFM/EAS)
- ❖ Network handlers (ANM)
- ❖ Trace Services (ATM)

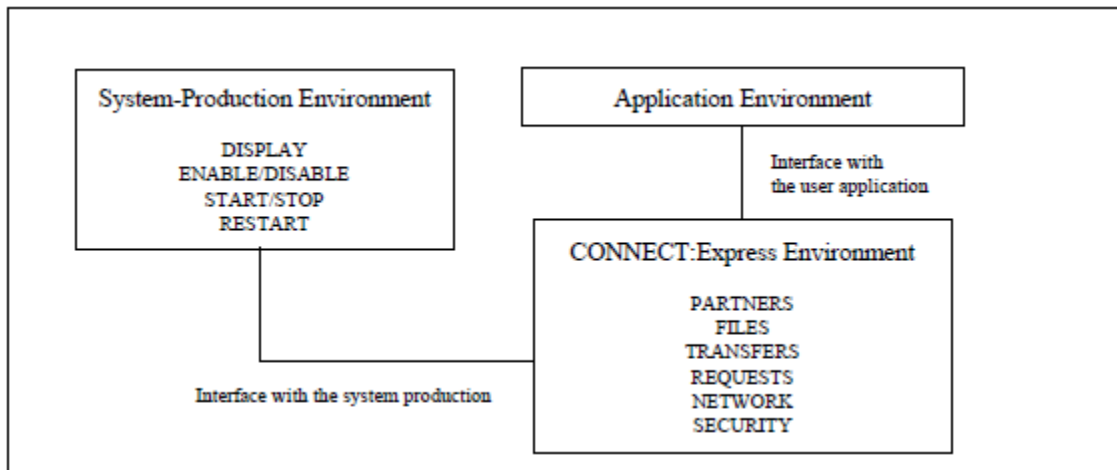
Interfaces enable users to manage Sterling Connect:Express resources through the subsystem interface for organizing and managing transfers, and operations control. There are also interfaces that enable Sterling Connect:Express to communicate with other software for file transfer planning, security, statistics, and other user applications.

Parameters tell Sterling Connect:Express how to handle certain transfers. For example, you can specify how many interruptions are allowed during a transfer and have Sterling Connect:Express automatically restart the transfer. Or when a transfer is received, you could have an application start automatically.

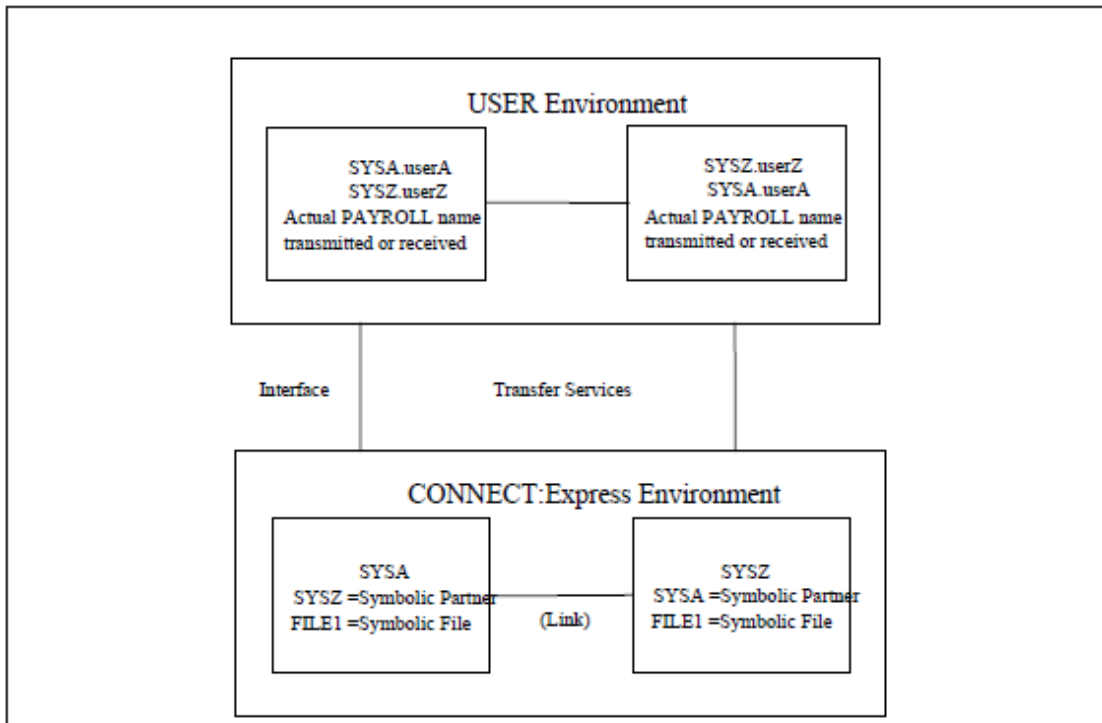
How to Use Sterling Connect:Express

Sterling Connect:Express configuration depends on the way you want to implement and integrate it into your user environment. You can use Sterling Connect:Express as a file carrier or to integrate transfer requests within applications.

If you implement Sterling Connect:Express as a file carrier, you would run Sterling Connect:Express for a system production environment. To integrate transfer requests within applications, you would need to configure an application environment. The system production environment manages transfer operations on behalf of the application with starts, stops, or restarts, while the application environment is used by the person who makes a transfer request. The system production environment typically uses a batch interface to work with Sterling Connect:Express resources while an application environment typically uses an Application Program Interface (API). The following diagram illustrates the relationship between Sterling Connect:Express and the user.



Transfer protocols enable applications to exchange specific information. Sterling Connect:Express provides transfer services through interfaces that establish communication between applications, as shown in the following illustration.

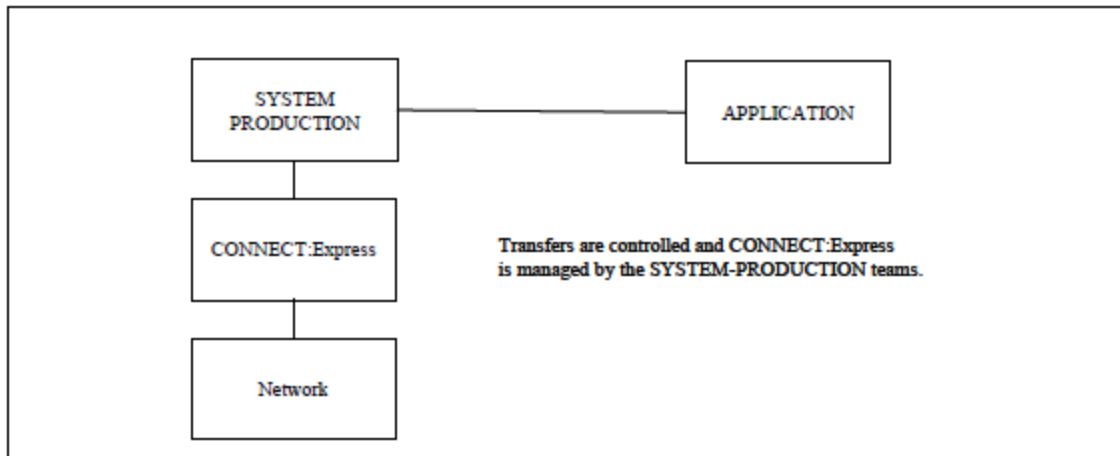


To transfer PAYROLL files between userA on SYSA and userZ on SYSZ, you must define SYSA and SYSZ as Partners and create the common FILE1 definition in Sterling Connect:Express directories. Sterling Connect:Express uses only the symbolic names when processing the transfer, and provides the interface through which user information is moved in both directions.

Sterling Connect:Express can be implemented as a system utility driven by the system production, or it can be application driven. Users can communicate with each other using Sterling Connect:Express on both ends or with Sterling Connect:Express at one end and with another application, such as FTP client, ETEBAC client, etc. at the other end. Some functions, however, are only available with Sterling Connect:Express on both ends.

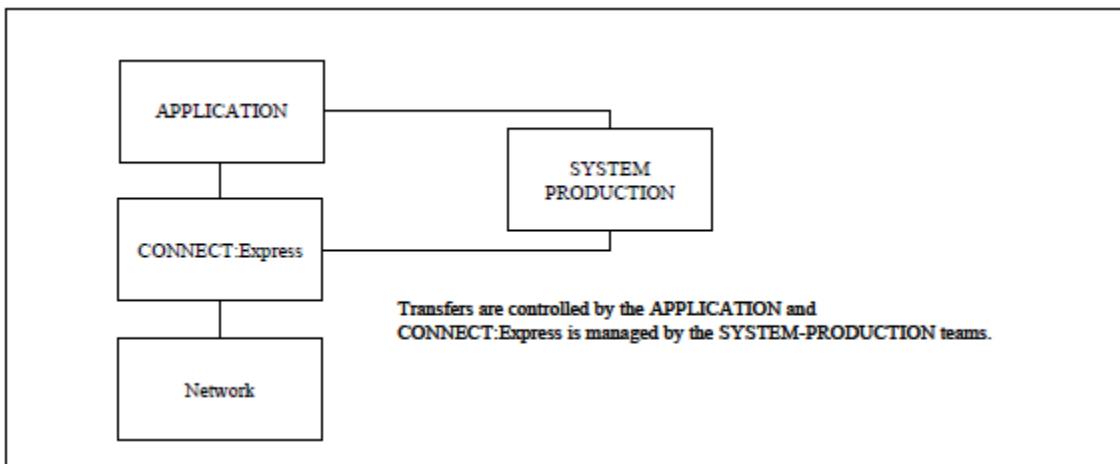
System Utility (Production) Configuration

When communication is mainly handled by the System Production team on behalf of the application, then Sterling Connect:Express facilities manage the transfers. In this case, symbolic name conventions are sufficient to control the file transfer. This is called the system utility (production) configuration. The following diagram illustrates this configuration.



Application Configuration

Application-driven requirements are accomplished with the Application Program Interface (API) and with user exits. Some Sterling Connect:Express optional features act as Data Exchange Applications under the control of Sterling Connect:Express which executes the file transfers. This is called an Application Driven configuration. The following diagram shows an application driven configuration.



Sterling Connect:Express for z/OS requires the following hardware and software:

- ❖ APF-authorized load libraries
- ❖ z/OS (release 2.1 or later)
- ❖ TSO/ISPF/PDF for interactive capability
- ❖ SMP/E
- ❖ Any release of ACF/NCP and ACF/VTAM, for communications between z/OS-based systems using SNA
- ❖ NPSI, for communications over an X.25 network
- ❖ TCP/IP, for communications in a TCP/IP environment
- ❖ RACF, ACF2, or TOP SECRET authorized tasks
- ❖ Definition of an MVS subsystem
- ❖ Definition of a storage protection key
- ❖ z/OS SSL services for SSL communications
- ❖ The UNIX System Services (POSIX) environment

Note: Read the Release Notes for the most current hardware and software requirements.

Chapter 2

Planning the Installation

This chapter contains the information you need to plan your installation. Installation is easier and more effective if you complete your planning before you begin.

Before You Begin

Before you begin your installation, complete the following steps:

1. Read the Sterling Connect:Express for z/OS Release Notes for the latest product information including:
 - o Additional installation requirements
 - o Product enhancements
 - o Maintenance updates
 - o Documentation changes
2. The information in this document can affect your installation procedures and definitions. Verify your hardware and software requirements. Review System Requirements on page 16 for hardware and software requirements.
3. Complete the worksheets in Installation Worksheets on page 53 that are relevant for all types of installations and those relevant for your specific environment.

Product FMIDs

Sterling Connect:Express consists of the following FMIDs: NSCX430, NSCF430

FMID	Description	Comment
NSCX430	Sterling Connect:Express Common Components	Contains the core product components, samples, user maclib, subsystem configuration scripts and English ISPF interface application
NSCF431	Sterling Connect:Express French language support	Contains the French localized ISPF interface application

Program Materials

An IBM program is identified by a program number. The program number for Sterling Connect:Express for z/OS is 5655-X03.

The distribution medium for this program is CDROM.

This program is in SMP/E RELFILE format and is installed by using SMP/E.

CDROM contents

Sterling Connect:Express for z/OS CDROM contains intermediate product files. These files have to be transferred from CDROM to z/OS host before starting installation procedure.

Name	ORG	RECFM	LRECL	BLKSIZE	Size in 3390 Trks	Content
SCX.NSCX430.BIN	SEQ	FB	1024	6144	82	SMP/E RELFILES in XMIT/TERSE format for FMID NSCX430
SCX.NSCX430.UNPACK	SEQ	FB	80	8800	1	Unpack JCL sample to produce SMP/E RELFILES for FMID NSCX430
SCX.NSCF430.BIN	SEQ	FB	1024	6144	10	SMP/E RELFILES in XMIT/TERSE format for FMID NSCF430
SCX.NSCF430.UNPACK	SEQ	FB	80	8800	1	Unpack JCL sample to produce SMP/E RELFILES for FMID NSCF430

Program File Content for NSCX430

Name	ORG	RECFM	LRECL	BLKSIZE	Size in 3390 Trks	Content
SCX.NSCX430.SMPMCS	SEQ	FB	80	8800	3	SMP/E MCS
SCX.NSCX430.F1	PDSE	FB	80	8800	4	Allocation and SMP/E sample Jobs
SCX.NSCX430.F2	PDSE	U	0	6144	165	Loads
SCX.NSCX430.F3	PDSE	U	0	6144	48	ISPF loads
SCX.NSCX430.F4	PDSE	FB	80	8800	6	ISPF Messages English localization
SCX.NSCX430.F5	PDSE	FB	80	8800	123	ISPF Panels English localization
SCX.NSCX430.F6	PDSE	FB	80	8800	1	ISPF Tables English Localization
SCX.NSCX430.F7	PDSE	FB	80	8800	5	ISPF Skeletons

Name	ORG	RECFM	LRECL	BLKSIZE	Size in 3390 Trks	Content
SCX.NSCX430.F8	PDSE	FB	80	8800	42	ISPF CLISTs and REXXs
SCX.NSCX430.F9	PDSE	FB	80	8800	8	INSTLIB
SCX.NSCX430.F10	PDSE	FB	80	8800	38	SAMPLIB
SCX.NSCX430.F11	PDSE	FB	80	8800	9	SYSJCL
SCX.NSCX430.F12	PDSE	FB	80	8800	5	SYSOPT
SCX.NSCX430.F13	PDSE	FB	80	8800	32	MACLIB

Program File Content for NSCF430

Name	ORG	RECFM	LRECL	BLKSIZE	Size in 3390 Trks	Content
SCX.NSCF430.SMPMCS	SEQ	FB	80	8800	3	SMP/E MCS
SCX.NSCF430.F1	PDSE	FB	80	8800	1	SMP/E sample Jobs
SCX.NSCF430.F2	PDSE	U	0	6144	6	ISPF Messages French Localization
SCX.NSCF430.F3	PDSE	U	0	6144	120	ISPF Panels French Localization
SCX.NSCF430.F4	PDSE	FB	80	8800	1	ISPF Tables French Localization

Installation requirements

SMP/E CSI Dataset

Sterling Connect:Express for z/OS cannot share its CSI Datasets with other products. Product must be installed using a specific CSI Dataset; installation procedure provides a sample JCL to allocate this Datasets.

DASD Storage Requirements

Sterling Connect:Express for z/OS libraries can reside on all supported DASD types.

Total DASD Space Required by Sterling Connect:Express for z/OS

Library Type	Total Space Required in 3390 Trks
SMP/E product libraries - Target	615 (including 130 tracks for French Language Support)
SMP/E product libraries - Distribution	615 (including 130 tracks for French Language Support)
SMP/E control data sets	2040
One Subsystem Datasets	145

Description of Sterling Connect:Express Core and Common Libraries

File	Description
INSTLIB	This library contains JCLs and PROCedures models for subsystem installation, VSAM definitions and migrations from previous version.
ISP?LIB	Contains the Sterling Connect:Express ISPF application base components and English Localization
ISP?LIBF	Contains the Sterling Connect:Express ISPF application French Localization
LOADLIB	All the Sterling Connect:Express load modules except ISPLLIB modules.
MACLIB	Cobol and Assembler Public DSECT definitions.
PARMLIB	This library contains parameters skeletons used by Subsystem installation and parameters models useful for Sterling Connect:Express customization.

File	Description
SAMPLIB	Samples JCL and programs.
SAMPOPT	Samples parameters.
SYSJCL	UNLOAD RELOAD JCL Skeletons used by Subsystem installation.
SYSPRM	UNLOAD RELOAD parameters samples.

Description of Sterling Connect:Express Subsystem Libraries

File	Description
PARMLIB	Customized Sterling Connect:Express parameters.
SYSJCL	UNLOAD RELOAD customized jobs.
SYSPRM	UNLOAD RELOAD parameters.

Planning for Security

Sterling Connect:Express for z/OS provides interfaces with RACF, CA-ACF2 and CA-TOP SECRET.

For security reasons, you should declare the Sterling Connect:Express Monitor (TOM) address space as a started task. When the TOM address space is a started task, you have more control over security because it is not dependent on the authorization of a submitter. Sterling Connect:Express Address Space IDs (TOM, ANM, APM, AFM, and EAS) must be allowed to read/write data sets used in their JCL. TOM APMs and EASs must be enabled to allocate, delete, and update data sets and temporary data sets used for data transfer. The following screen shows examples delivered in the *INSTLIB* library:

See members : \$\$\$\$RACF, \$\$\$\$SEC, \$\$\$\$ACF2, \$\$\$\$TOPS.

If the Sterling Connect:Express subsystem name is TOM3, the started tasks would be called TOM3MON, TOM3ANM, TOM3APM, TOM3AFM, and TOM3AS.

Note: When using TCP/IP with RACF, you can verify that an RACF user has a UID defined in an OMVS segment. Use the RACF command LISTUSER to check for a UID in the OMVS segment.

If you are not using RACF, then check the appropriate area in your security package for a similar function. If you do not implement the UNIX security, you must define a default UID for OMVS.

Planning Network Requirements

The Auxiliary Network Manager (ANM) of Sterling Connect:Express is a set of network application programs which support multiple sessions and protocols. You must have at least one of the following applications to operate Sterling Connect:Express:

- ❖ SNA LU-LU (LU0), SNA 3270, or LU6.2 SNA links which require the IBM ACF/VTAM and the ACF/NCP.
- ❖ X.25 (LLC0 in DATE, LLC4 in GATE, and LLC5 in all modes)

The ANM requires the IBM X.25NPSI for X.25 access. CTCPs in DATE or GATE mode are the ANM components that manage X.25 links. Contact IBM for NCP and X.25 NPSI maintenance procedures. The installed version for each component should have all the necessary updates.

An X.25 network access line can be entirely dedicated to Sterling Connect:Express with MCH generated in DATE mode, or it can be shared with other applications. For links through PAD, you can use the CVCs of an MCH even when GATE=NO is defined for the ANM. The ANM can support up to 32 X.25 access lines with 256 CVCs each.

- ❖ TCP/IP links

TCP/IP is required. The ANM supplies an optional standard interface for TCP/IP links, and the AFM provides FTP transfers over TCP/IP.

- ❖ PeSIT version D/E, ETEBAC 1/2/3, ODETTE-FTP, or FTP protocols supported by Partners that you will communicate with.

CSA Use Considerations

Starting version z/OS 1.9, the parameter ALLOWUSERKEYCSA in the active DIAGxx member of the system PARMLIB is set to the default value of 'NO'. IBM is restricting the use of CSA by applications, and Sterling Connect:Express sub-system interface is meeting this requirement. If you start Sterling Connect:Express ALLOWUSERKEYCSA(NO), the TOM address space abends with code B78-5C. Starting with version 4.2.2, the CSA storage used by Sterling Connect:Express can be protected by a key different than 8. The amount of CSA that Sterling Connect:Express uses is limited to receiving operator commands. All Sterling Connect:Express interface programs and areas are loaded in Sterling Connect:Express private storage.

If ALLOWUSERKEYCSA(NO) is set, you must associate a storage protection key, for example key 5, to the main program of Sterling Connect:Express. Or you will have to set ALLOWUSERKEYCSA(Y) .

```
File Edit Edit_Settings Menu Utilities Compilers Test Help
-----
ISREDDE2 SYS1.PARMLIB(SCHEDTM) - 01.25 Columns 00001 00072
Command ==> Scroll ==> CSR
***** ***** Top of Data *****
040000 PPT PGMNAME(P1B2P000) /* PROGRAM NAME P1B2P000 (GLOBAL) */
040500 , KEY(5) /* PROTECTION KEY 5 */
040600 PPT PGMNAME(P1B2P001) /* PROGRAM NAME P1B2P001 (LOCAL) */
040700 , KEY(5) /* PROTECTION KEY 5 */
040800 PPT PGMNAME(P1B2PCEE) /* PROGRAM NAME P1B2PCEE (LANG.ENVIR.) */
040900 , KEY(5) /* PROTECTION KEY 5 */
***** ***** Bottom of Data *****
```

Installing Sterling Connect:Express for z/OS

The distribution medium for Sterling Connect:Express is a CDROM , and this program is in SMP/E RELFILE format and is installed by using SMP/E.

The following steps are necessary to install Sterling Connect:Express for z/OS:

1. Transfer CDROM files to the z/OS host.
2. Unpack files from XMIT/TERSE format to SMP/E RELFILE format.
3. Allocate SMP/E CSI, SMP/E zones and DDDEFS
4. Execute SMP/E RECEIVE
5. Execute SMP/E Apply.
6. Execute SMP/E Accept.
7. Repeat Step 4 to 6 for French FMID if necessary
8. Setup the Sterling Connect:Express ISPF application.
9. Setup Subsystem(s).

Transfer CDROM Files to the z/OS Host

For each FMIDs, two files are available on CDROM.

SCX.FMID.BIN file is a TERSED (compressed) files containing the SMP/E RELFILES in XMIT format.

SCX.FMID.UNPACK is a text file containing a JCL delivered to decompressed and restore SMP/E RELFILES in their original format.

These two files (or 4 if you plan to install the French localization) have to be transferred to z/OS. FTP is a recommended solution.

Allocate z/OS Destination Files

Allocate two (or four) destination files with the following attributes; Select the proper value for <HLQ> depending on your installation requirements:

Name	ORG	RECFM	LRECL	BLKSIZE	Size in 3390 Trks	Content
<HLQ>.NSCX430.BIN	SEQ	FB	1024	6144	82	SMP/E RELFILES in XMIT/TERSE format for FMID NSCX430
<HLQ>.NSCX430.UNPACK	SEQ	FB	80	8800	1	Unpack JCL sample to produce SMP/E RELFILES for FMID NSCX430
<HLQ>.NSCF430.BIN	SEQ	FB	1024	6144	10	SMP/E RELFILES in XMIT/TERSE format for FMID NSCF430
<HLQ>.NSCF430.UNPACK	SEQ	FB	80	8800	1	Unpack JCL sample to produce SMP/E RELFILES for FMID NSCF430

Transfer Files to z/OS

Source Name	Destination Name	FTP mode
SCX.NSCX430.BIN	>>> <HLQ>.NSCX430.BIN	Binary
SCX.NSCX430.UNPACK	>>> <HLQ>.NSCX430.UNPACK	Text
SCX.NSCF430.BIN	>>> <HLQ>.NSCF430.BIN	Binary
SCX.NSCF430.UNPACK	>>> <HLQ>.NSCF430.UNPACK	Text

Unpack Product Files

Once files have been transferred, they need to be unpacked. Use the JCL provided: it is located in <HLQ>.NSCX430.UNPACK (<HLQ>.NSCF430.UNPACK) to decompress all the necessary files to continue with SMP/E installation.

Follow instructions in the JCL before executing it. You will need to:

1. Set JCL job card depending on your system requirements.
2. Change \$SCX string to your own HLQ (The one selected on previous steps)
3. Change \$TSOUSER string to a valid TSO userid.

Repeat these steps for French localized FMID NSCF430 if necessary.

Allocate Datasets

Once all the files are in SMP/E RELFILES format, process with SMP/E CSI allocation, SMP/E files allocations, product target and distribution libraries allocation and DDDEFs setup.

Library <HLQ>.NSCX430.F1 contains sample JCLs to execute these tasks:

- ❖ SCXSMPEI: Initialize SMP/E CSI Vsam for GLOBAL, TARGET and DISTRIBUTION zones, allocate SMP/E other datasets, declare standard DDDEFs.
- ❖ SCXDDDEF: Define product DDDEFs for target and distribution zones. If you plan to use the French localized ISPF interface, remove comments on DDDEFs definition related to French files in this JCL, on TARGET and DISTRIB zones.
- ❖ SCXALLOC: Allocate the target and distribution libraries.

For these 3 members, follow instructions located in the JCL before submitting them.

These three jobs have to terminate with a condition code of zero before executing SMP/E Receive.

Execute SMP/E Receive

Library <HLQ>.NSCX430.F1 contains a sample JCL to execute SMP/E RECEIVE:

- ❖ SCXRECEV: Follow instructions in JCL before submitting this JOB.

For French FMID, repeat this step with JCL SCXRECEV located in Library <HLQ>.NSCF430.F1.

Execute SMP/E Apply

Library <HLQ>.NSCX430.F1 contains a sample JCL to execute SMP/E APPLY:

- ❖ SCXAPPLY: Follow instructions in JCL before submitting this JOB.

For French FMID, repeat this step with JCL SCXAPPLY located in Library <HLQ>.NSCF430.F1.

APPLY SYSIN contains CHECK keyword. Remove this keyword after a first successful run with CHECK option.

Execute SMP/E Accept

Library <HLQ>.NSCX430.F1 contains a sample JCL to execute SMP/E ACCEPT:

- ❖ SCXACCPT: Follow instructions in JCL before submitting this JOB.

For French FMID, repeat this step with JCL SCXACCPT located in Library <HLQ>.NSCF430.F1.

ACCEPT SYSIN contains CHECK keyword. Remove this keyword after a first successful run with CHECK option.

French Localization

For the French localization installation, repeat the 3 previous steps with the right set of RELFILEs <HLQ>.NSCF430.

ISPF application Setup

To Set up a Sterling Connect:Express Subsystem, ISPF interface is necessary.

Use the CLIST SCXISPF located in <HLQ>.NSCX430.F1 to set the ISPF application environment.

Preferred method to invoke the ISPF application is the LIBDEF method. SCXISPF is a sample bilingual CLIST. Adjust it to your system requirements.

```

PROC 0 LANG(US)
/*
/* Licensed Material - Property of IBM
/* 5655-X03 (C) Copyright IBM Corp. 1992-2011
/*
/* All Rights Reserved.
/* U.S. Government users - RESTRICTED RIGHTS - Use, Duplication, or
/* Disclosure restricted by GSA-ADP schedule contract with IBM Corp.
/*
/* _____
/*
/* This is a sample CLIST to start
/* IBM Sterling Connect Express For z/OS
/* ISPF interface
/*
/* _____
/* Change £SCXHLQ£ to IBM Sterling Connect:Express HLQ
/*
/* _____
CONTROL NOMSG
CONTROL MSG
/* ISPLLIB AND LOADLIB ARE COMMON LIBS */
ISPEXEC LIBDEF ISPLLIB DATASET +
  ID('£SCXHLQ£.ISPLLIB', +
    '£SCXHLQ£.LOADLIB') +
  STACK
/* ISPSLIB IS COMMON LIB */
ISPEXEC LIBDEF ISPSLIB DATASET +
  ID('£SCXHLQ£.ISPSLIB') STACK
/* FRENCH VERSION */
IF &LANG EQ FR THEN DO
  ISPEXEC LIBDEF ISPTLIB DATASET +
    ID('£SCXHLQ£.ISPTLIBF') STACK
  ISPEXEC LIBDEF ISPPLIB DATASET +
    ID('£SCXHLQ£.ISPPLIBF') STACK
  ISPEXEC LIBDEF ISPMLIB DATASET +
    ID('£SCXHLQ£.ISPMLIBF') STACK
END
ELSE DO
/* US VERSION */
  ISPEXEC LIBDEF ISPTLIB DATASET +
    ID('£SCXHLQ£.ISPTLIB') STACK
  ISPEXEC LIBDEF ISPPLIB DATASET +
    ID('£SCXHLQ£.ISPPLIB') STACK
  ISPEXEC LIBDEF ISPMLIB DATASET +
    ID('£SCXHLQ£.ISPMLIB') STACK
END
ALTLIB DEACTIVATE QUIET APPLICATION(CLIST)
ALTLIB ACTIVATE QUIET APPLICATION(CLIST) +
  DSNAME('£SCXHLQ£.ISPCLIB')
/* START MAIN PANEL */
/* NEWAPPL(TOMP) PASSLIB MANDATORY */
ISPEXEC SELECT PANEL(S2B2Z000) NEWAPPL(TOMP) PASSLIB
/* UNSTACK LIBDEF */
ISPEXEC LIBDEF ISPLLIB
ISPEXEC LIBDEF ISPPLIB
ISPEXEC LIBDEF ISPMLIB
ISPEXEC LIBDEF ISPTLIB
ISPEXEC LIBDEF ISPSLIB
EXIT

```

Starting this CLIST should give (US interface)

```
TOM4300                MAIN MENU
OPTION ==>

          XXXXXXXX      XX   XX
XXXXXXXXXX  XX   XX   XX
XX          XX   XX   XX
XX          XXX
XX          XX   XX   XX
XXXXXXXXXX  XX   XX   XX
          XXXXXXXX      XX   XX

          IBM(R) Sterling Connect:express(R)
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_ 0  INIT          _ 2  MONITOR          _ 3  UTILITIES          _ 4  REQUEST
_ 1  DIRECTORIES  _ 2.1 MANAGEMENT      _ 3.1 INIT PARAMETERS  _ 4.1 NORMAL
_ 1.1 PARTNERS    _ 2.2 LOG              _ 3.2 DUMP TABLES    _ 4.2 MEMBER
_ 1.2 FILES       _ 2.3 JOURNAL          _ 3.3 UPDATE TABLES  _ 4.3 SYSOUT
_ 1.3 FTP RIGHTS  _ 2.4 ACTIVITY         _ 3.4 UPDATE SYSEVT   _ 4.4 INDEX
_ 9  UTILITIES    _ 2.5 APL              _ 3.5 UPDATE SYSSNA   _ 4.5 AD HOC
_ M  MAINTENANCE  _ 2.6 EXTRACT          _ 3.6 UPDATE SYSX25   _ 4.6 LIST
_ 2.7 SYSPLEX    _ 3.7 UPDATE SYSJCL
_ 2.8 GLOBAL     _ 3.8 UPDATE SYSTCP
```

Subsystems Setup

Once the ISPF interface is ready, process with Subsystem setup on the next chapter.

Installing a Sterling Connect:Express Subsystem

Once Sterling Connect:Express core libraries are installed you can define a Sterling Connect:Express Subsystem, a monitor address space and all its secondary address spaces.

A Sterling Connect:Express Subsystem Name MUST start with 'TOM' followed by any letter or number from 0 to 9. On one LPAR 36 Sterling Connect:Express Subsystem can be defined.

In all this chapter **<SCXHLQ>** defines the High Level Qualifier used to install Core and Commons Libraries.

Modify the System Parmlib

Set APF Libraries

One Sterling Connect:Express library needs to be included and declared as APF libraries. Without declaring this library, Sterling Connect:Express will abend with abend S047.

This library is:

❖ **<SCXHLQ>.LOADLIB**

Define the Subsystem in IEFSSNxx

Each Sterling Connect:Express Subsystem has to be defined in the IEFSSNxx System Parmlib Member.

Define each Subsystem you plan to use, using the right name, TOMx.

```
SUBSYS SUBNAME(TOMX)
```

Define Protection Key

Starting version z/OS 1.9, the parameter ALLOWUSERKEYCSA in the active DIAGxx member of the system PARMLIB is set to the default value of 'NO'. IBM is restricting the use of CSA by applications, and Sterling Connect:Express sub-system interface is meeting this requirement. If you start Sterling Connect:Express ALLOWUSERKEYCSA(NO), the TOM address space abends with code B78-5C. Starting with version 4.2.2, the CSA storage used by Sterling Connect:Express can be protected by a key different than 8. The amount of CSA that Sterling Connect:Express uses is limited to receiving operator commands. All Sterling Connect:Express interface programs and areas are loaded in Sterling Connect:Express private storage.

If ALLOWUSERKEYCSA(NO) is set, you must associate a storage protection key, for example key 5, to the main program of Sterling Connect:Express. Or you will have to set ALLOWUSERKEYCSA(Y) .

```

File Edit Edit_Settings Menu Utilities Compilers Test Help
-----
ISREDE2 SYS1.PARMLIB(SCHEDXX) - 01.25 Columns 00001 00072
Command ==> Scroll ==> CSR
***** ***** Top of Data *****
040000 PPT PGMNAME(P1B2P000) /* PROGRAM NAME P1B2P000 (GLOBAL) */
040500 , KEY(5) /* PROTECTION KEY 5 */
040600 PPT PGMNAME(P1B2P001) /* PROGRAM NAME P1B2P001 (LOCAL) */
040700 , KEY(5) /* PROTECTION KEY 5 */
040800 PPT PGMNAME(P1B2PCEE) /* PROGRAM NAME P1B2PCEE (LANG.ENVIR.) */
040900 , KEY(5) /* PROTECTION KEY 5 */
***** ***** Bottom of Data *****

```

Generate the Subsystem Installation JCL through ISPF/PDF

Refer to the information you recorded in the worksheets in *Installation Worksheets*, when you specify parameters on the installation panels displayed in this procedure.

Start the Subsystem Definition application

Subsystem definition is available thru the Sterling Connect:Express ISPF interface.

Start the interface and select option M followed by option 1. The following screen appears:

```

          IBM Sterling Connect:Express          DATE-YYYY/MM/DD
----- SubSystem Definition (SSN) (1) ----- TIME-HH:MM
Make the necessary changes and press Enter
CMD ==>
SubSystem to configure.. TOM _
Product High Level Qualifier .... _____ (<SCXHLQ>)
SubSystem High Level Qualifier... _____ (<SUBSYSHLQ>)
Defaults : Device... SYSDA ___ Vol... _____ Vsam Cat.. _____

          Catalog   Vol.   Cyl          Catalog   Vol.   Cyl
SYSFIL... _____ _____ 01   SYSPAR... _____ _____ 01
SYSJNL... _____ _____ 01
          Device
SYSLOG... _____ _____ 01   SYSRCY... _____ _____ 04
SYSCHK... _____ _____ 03   Max Requests.. 0512
APMCHKM1. _____ _____   APMCHKM2. _____ _____
APMCHKM3. _____ _____   APMCHKM4. _____ _____
APMCHKM5. _____ _____   APMCHKM6. _____ _____
APMCHKM7. _____ _____   APMCHKM8. _____ _____

Proc ANM   APM   AFM   ATM   EAS
Name AN?PRC AP?PRC AF?PRC AT?PRC EA?PRC
Job UNLOAD RELOAD RJE   TOM
Name TOM?U TOM?R TOM?RJ TOM?MON ENTER to continue, PF3 to Terminate

```

Complete the Subsystem Definition Screens

The Sterling Connect:Express Subsystem definition is made of The CXISSN CLIST displays a series of menus that let you customize the installation. The four installation panels are:

- ❖ The Sterling Connect:Express Subsystem definition part 1, defining files allocation and Jobs and PROCedures names.

- On the next step, JCL will be created to allocate subsystem files and configure this subsystem. Give information to generate Jobcards and press **Enter**.

```

          IBM Sterling Connect:Express          DATE-YYY/MM/DD
----- SubSystem Definition (SSN) ----- TIME-HH:NN
----- TOMx Jobcards Infos -----
Make the necessary changes and press Enter
CMD ==>

Job Card Information for Configuration Jobs

==> //SCXINST <JOB PARAMETERS>, _____
==> //      COND=(0,NE) _____
==> //* _____
==> //* _____

Job Card Information for Customized TOM Jobs

Account..... _____
Program. Name.. _____
Class..... _
MsgClass..... _

Press ENTER to continue, PF1 for Help, PF3 for Previous Screen

```

- Press **Enter** to generate the JCL.

```

          IBM Sterling Connect:Express          DATE-YYYY/MM/DD
----- SubSystem Definition (SSN) ----- TIME-HH:MM
----- TOMx Generation -----

CMD ==>

The Connect:Express SSN generation may take a moment to execute.

Press ENTER to begin the generate, PF1 for Help, PF3 to return
Type CAN to terminate

Subsystem files will be allocated with the following pattern:

<SUBSYSHLQ>.TOMx.*

The following files will be allocated right now:

<SUBSYSHLQ>.TOMx.PROCLIB
<SUBSYSHLQ>.TOMx.JCL
<SUBSYSHLQ>.TOMx.CNTL

```

After Sterling Connect:Express generates the JCL, a screen displays the jobnames and a description of each member created in the file.

- Continue with *Execute the Subsystem Installation JCL* on page 35.


```

          IBM Sterling Connect:Express          +DATE-YYYY/MM/DD
----- SubSystem Definition (SSN) -----+  TIME-HH:MM
----- TOMx Generation Result -----+
CMD ==>
Connect:Express SSN Build JCL Generation Complete, RC=0

Jobname      Library      Description
-----
TOMxALLC     JCL          TOMx Files Allocations
TOMxCUST     JCL          TOMx Files Customization
TOMxBOUT     JCL          TOMx Files Backout
TOMxDEL      CNTL         TOMx Files Backout CNTL Cards

Press ENTER to terminate

```

The following table lists the members that are generated in the <SUBSYSHLQ>.JCL file.

Member Name	Content
TOMxALLC	Jobstream to allocate all Sterling Connect:Express Subsystem TOMx files.
TOMxCUST	Job stream to perform customization for JCL, PROCedures and PARMLIB members for TOMx Subsystem.
TOMxBOUT	Job stream to back out Sterling Connect:Express TOMx Subsystem files installation.
TOMxDEL	Backout parameters for TOMx Subsystem

Execute the Subsystem Installation JCL

To execute the Subsystem installation, run two job streams from the <SUBSYSHLQ>. JCL library as follows:

1. Run the job TOMxALLC to define all the Subsystem files that Sterling Connect:Express uses. This Job allocates Subsystem libraries, Files and VSAM Files.
2. Run the job TOMxCUST to customize JCL PROCedures and PARMLIB members necessary to enable Subsystem.

Note: PROCedures are not directly copied to your system PROCLIB. They are created in <SUBSYSHLQ>.PROCLIB library. Before running Subsystem for the first time, copy this PROCedure to your System PROCLib.

Note: PROCedures for ANM, APM, ATM, AFM, EAS are generated by the Subsystem customization JCL. Subsystem customization JCL does not generated a PROCedure but a JOBstream. If you plan to use a PROCedure to start the monitor, change this JOBstream to a PROCedure.

Back Out Subsystem Installation

Sterling Connect:Express provides you a back-out job stream in case errors occur during the Subsystem installation. If you need to back out the Sterling Connect:Express Subsystem installation, run the TOMxBOUT member. This job stream deletes all files created by TOMxALLC.

Verifying the Installation

This chapter provides instructions to help you verify the installation of Sterling Connect:Express. It also describes how Sterling Connect:Express manages transfer operations.

Start your Subsystem

Cold start the Monitor (RUN=C). This starts the ANM and APM procedures.. Start the monitor using JOBstream or Started Task depending of the method you choose for your subsystem.

For a started task called TOMxSTC:

```
-----  
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-7 (7)  
COMMAND INPUT ===> /S TOMxSTC,RUN=C                        SCROLL ===> CSR  
PREFIX=          DEST=(ALL) OWNER=* SORT=Prty/D  SYSNAME=  
NP  JOBNAME JobID  Owner   Prty Queue    C Pos SAff ASys Status
```

Subsystem should normally starts with the following messages in SYMSG:

```
SDSF OUTPUT DISPLAY TOMxSTC STC02444 DSID 112 LINE 0 COLUMNS 02- 81  
COMMAND INPUT ===> SCROLL ===> CSR  
***** TOP OF DATA *****  
YY/MM/DD HH:MM:SS TOMx100I TOM IS STARTING (STAND-ALONE)  
. . .  
YY/MM/DD HH:MM:SS TOMx016I TOM (STAND-ALONE) INITIALIZED V430-PTF0-0  
YY/MM/DD HH:MM:SS TOMx264I TOM LAST UPDATE DATE-TIME : YYMMDD-HHMM
```

Verify the Sterling Connect:Express Installation

To verify the installation that you just completed, you will initiate a transfer request with a simple production configuration. Then if needed, you can setup a more sophisticated application configuration or run Sterling Connect:Express in a PLEX environment. For more information about running Sterling Connect:Express in a Sysplex environment, refer to the Administration Guide and the Sysplex Supervision implementation Guide.

This section guides you through the following steps to help you verify the installation:

- Step 1 – Initialize the TSO/ISPF Session.
- Step 2 – Check your local Sterling Connect:Express system.
- Step 3 – Define the other Sterling Connect:Express Partners.
- Step 4 – Define the File attributes profiles.
- Step 5 – Execute a transfer.

Step 1 Initialize the TSO/ISPF Session

(Refer to chapter Install ISPF UI Using the LIBDEF Service on page **Error! Bookmark not defined.** to setup ISPF interface)

1. Start Sterling Connect:Express ISPF interface.
2. Select option 0 (zero) from the Main Menu to display the Initialization screen.
3. Type the subsystem name in the monitor field and press <Enter>. This updates your ISPF profile with the correct information. If Sterling Connect:Express has started, the data sets for the Sterling Connect:Express system will appear in the panel. Check to see that they are correct.
4. Type the correct data set name of the ISPLLIB file. (The ISPLLIB DSN is not in the Sterling Connect:Express batch procedure.)
5. Type the correct temporary work unit, that is 'SYSDA' or '3390', but not 'VIO'.

The following screens show an example of the Initialization Screens.

```
S2B2PI01 ----- INITIALIZATION 1/2 -----
-
OPTION ==> ?

      ? MONITOR ==> TOM7 NAMES INITIALIZATION ( AUTOMATIC ----> YES ).
      TEMPORARY WORK-UNIT ==> SYSDA      , JES2-INTERFACE ----> ISF
      L LOGON-PROCEDURE, O OPTIONS, V ISPF INSTALLATION CHECKING.
----- S : CHECK FILES OF . . .
V
- ISPLLIB      ==> <SCXHLQ>.ISPLLIB
- LOADLIB      ----> <SCXHLQ>.TOMV430.LOADLIB
-              ---->
- FILES        -> <SUBSYSHLQ>.TOMx.SYSFIL
- PARTNERS     -> <SUBSYSHLQ>.TOMx.SYSPAR
- PARAMETERS   -> <SUBSYSHLQ>.TOMx.SYSPRM
- JCL MODEL    -> <SUBSYSHLQ>.TOMx.SYSJCL
- JOURNAL      -> <SUBSYSHLQ>.TOMx.SYSJNL
- SYSLOG       -> SYSOUT
- SYSIN        -> <SUBSYSHLQ>.TOMx.PARMLIB (PARMTOMx)
- SYSEVT      -> <SUBSYSHLQ>.TOMx.PARMLIB (EVENTx)

      X EXIT, -PF3- END, -PF10/11- SCROLL
```

- Run the Installation Verification Program (IVP). After the ISPF session is initialized, type V in the option line and press <Enter> to run the ISPF installation verification. Read the messages carefully because the IVP (clist %TOMIVP) executes and checks data set allocation, initialization parameters, and tables. During IVP, exit from each panel using the <PF3> key. The following screen show example of 1 of 5 screens while running the IVP.

```

*-----*
080117
+++ TOM SSN="TOMx" IVP : INSTALLATION VALIDATION PROCEDURE

ISPFV>2-ZENVIR : ISPF 6.0MVS      TSO
ISPFV>2-ZAPPLID: TOMP

TSOE-SYSISPF  : ACTIVE
TSOE-SYSRACF  : AVAILABLE
TSOE-SYSPREF  :                (PREFIXING TEMPORARY FILE)
LOGON-PROC    : ???????

*-----*
NOTE: IF A PANEL IS DISPLAYED, ONLY EXIT WITH '-PF3-'
*-----*

*-----*
--- TESTING ISPF MANDATORY FILE ACCESS FROM LOGON-PROCEDURE FOR :

```

- Check Available Options. Type the letter O in the option field and press <Enter> to check the Sterling Connect:Express Options that are available. You can also view your CPU number. The following screens show the Options screen.

```

S2B2POPT ----- OPTIONS ----- NAMES INITIALIZED !
OPTION ==> ?                                X EXIT, -PF3- END

MONITOR => TOMx / TOMxSTC  CSGB ACTIVE GLOBAL
          RACFCN= S ADHOCN= N UPRFCT= Y
0=OPTION NOT AUTHORIZED, CPUID=????????????? , 128 APM SESS., 128 FTP SESS.

CICS      10 :          CICS INTERFACE.
ETEBAC3   05 :          LINK VIA ETEBAC3.
FTP       03 :          LINK VIA FTP.
IMS       16 :          IMS INTERFACE.
LOCAL     09 :          LOCAL MONITOR.
LU6.2     06 :          LINK VIA LU6.2.
ODETTE    11 :          LINK VIA ODETTE.
PAC       08 :          EXPLOITATION PACKAGE.
PESIT     01 :          LINK VIA PESIT (FRENCH).
SYSPLEX   19 :          SYSPLEX INTERFACE.
TCP-IP    15 :          LINK VIA TCP-IP.
SSL       20 :          SSL INTERFACE.

```

Step 2 Check your Local Sterling Connect:Express for z/OS System

1. Verify that the DPCSID and DPCPSW parameters are setup correctly in the SYSIN file (<SUBSYSHLQ>.TOMx.PARMLIB(PARMTOMx)). This information is needed for your remote Partner to define your Sterling Connect:Express system as a Partner.

Step 3 Define the Other Sterling Connect:Express Partners

To complete a transfer, you must define another Partner. Partners are the other Sterling Connect:Express systems involved in data transfer. Partner profile names can be alpha-numeric. A Partner must have your Sterling Connect:Express system defined as a Partner in its own directory. Complete the following steps to add a Partner profile:

1. Select option 1.1 (PARTNERS) from the Main Menu to display the Partners Directory (1/4) screen. Refer to Adding a Partner in Chapter 2 of the User Guide for details about the Partners Directory screens.
2. Type A (Add) in the option line, <Tab> to the Partner field, and type a Partner symbolic name. Press <Enter> to display the Partners Directory (2/4) screen.
3. Enter all necessary information about the Partner and press <Enter>. You can press <PF1> for help with field definitions. The Partners Directory (3/4) screen is displayed.
4. Press <Enter> to confirm the addition of the Partner profile.

Note: The parameters of the last Partner that you created or viewed stay on the screen when you create a new Partner. This is helpful when creating multiple Partner records because it enables you to create a new Partner from an existing Partner record.

The following screens show examples of an z/OS SNA Partner, a UNIX X.25 Partner, and a Windows TCP/IP Partner.

z/OS SNA Partner Definition

```
TOM4300      PARTNER OF TOMx TO VIEW      (2/4)
OPTION ===== -ENTER- : GO ON, -PF3- : CANCEL  X : EXIT
TYPE: TOM,PESIT-E
MOD: PSR0003 10/01/13 04:16:19 -
SYMBOLIC NAME      : OS390                DPCSID ALIAS      : -
TOM PASSWORD       : OS390                DPCPSW ALIAS     : -
INITIAL STATE      : E                    APM RECEPTION CLASS : A
RACF USER          : TOMUSR               RACF GROUP       : -

PARTNER TYPE       : T
SESSION PROT.NUM.-T. : 5 : 2                SSL CONFIGURATION : -
AUTOMATIC RESTART  : YES                  DN CONTROL MEMBER : -

LINK TYPES         : S : -
EFF. TOTAL/IN/OUT  : 050 : 025 : 025  FLOW CONTROL T.  SLD : -

SNA: LUNAME       : ANM7AP01  LOGMODE      : -          LOGDATA      : -          DISC : N
X25: MCHMSC       : -          REM.ADDR.   : -          LOC.ADDR     : -
      CUG          : -          UDF         : -          CHARGE      : -
      FACILITIES   : -
IP : ADDR.        : -          PORT       : -          FTP PASV    : - PROF.      : -
      HOST         : -          'S'       : -          RIGHTS     : -
NOTE : Z/OS PARTNET VIA SNA
```

In the example above, the z/OS Partner is enabled at initialization. Sterling Connect:Express controls the Password 'OS390' and executes the transfer in Class A. File access is through RACF User 'TOMUSR'.

The Partner's type is TOM (Sterling Connect:Express), which means that some functions are active, such as transferring extra information in the protocol fields.

The Session protocol number corresponds to the PeSIT-E profile, and the Automatic Restart is YES, for full retry if needed.

The Partner connects using an SNA Link with the Luname ANM4AP01 for controlled input, and the Partner is authorized for 50 simultaneous sessions, 25 input sessions and 25 output sessions.

UNIX X.25 Partner Definition

```

TOM4300      PARTNER OF TOM7 TO VIEW          (2/4)
OPTION ==>          -ENTER- : GO ON, -PF3- : CANCEL  X : EXIT
TYPE: TOM,PESIT-E
MOD: PSR0003  10/01/13 04:21:16          1
SYMBOLIC NAME      : UNIX                DPCSID ALIAS      : -
TOM PASSWORD       : UNIX                DPCPSW ALIAS     : -
INITIAL STATE      : E                   APM RECEPTION CLASS : A
RACF USER          : TOMUSR              RACF GROUP       : -

PARTNER TYPE       : T
SESSION PROT.NUM.-T. : 5 : 2             SSL CONFIGURATION : -
AUTOMATIC RESTART  : YES                 DN CONTROL MEMBER : -

LINK TYPES         : X : -
EFF. TOTAL/IN/OUT  : 020 : 010 : 010    FLOW CONTROL T.  SLD : -

SNA: LUNAME : -          LOGMODE : -          LOGDATA : -          DISC :
N
X25: MCHMSC : A          REM.ADDR. : 03110214404824  LOC.ADDR : -
      CUG    : -          UDF       : -          CHARGE  : 1
      FACILITIES : -
IP : ADDR. : -          PORT : -          FTP PASV : - PROF. : -
      HOST  : -          'S' : - RIGHTS : -
NOTE : UNIX PARTNET VIA SNA

```

WINDOWS TCP/IP Partner Definition

```
TOM4300 PARTNER OF TOM7 TO VIEW (2/4)
OPTION ==> -ENTER- : GO ON, -PF3- : CANCEL X : EXIT
TYPE: TOM,PESIT-E
MOD: PSR0003 10/01/13 04:23:45 -
SYMBOLIC NAME : CXNT DPCSID ALIAS : -
TOM PASSWORD : CXNT DPCPSW ALIAS : -
INITIAL STATE : E APM RECEPTION CLASS : A
RACF USER : - RACF GROUP : -

PARTNER TYPE : T
SESSION PROT.NUM.-T. : 5 : 2 SSL CONFIGURATION : -
AUTOMATIC RESTART : YES DN CONTROL MEMBER : -

LINK TYPES : I : -
EFF. TOTAL/IN/OUT : 020 : 010 : 010 FLOW CONTROL T. SLD : -

SNA: LUNAME : - LOGMODE : - LOGDATA : - DISC :
N
X25: MCHMSC : - REM.ADDR. : - LOC.ADDR : -
CUG : - UDF : - CHARGE : -
FACILITIES : -
IP : ADDR. : 1.1.1.1 PORT : 4006 FTP PASV : - PROF. : -
HOST : - 'S' : - RIGHTS : -
NOTE : WINDOWS PARNET VIA TCPIP
```


Step 4 Define the File Attributes Profile

File profiles contain information about the data that is transferred between two or more Partners. File profile names can be alphanumeric. To complete a transfer, each Partner must define the File profile on their system with their local parameters. Complete the following steps to add a new File profile:

1. Select option 1.2 (Files) from the Main Menu to display the File Attributes (1/5) screen.
2. Type A (Add) on the option line, <Tab> to the File field, and type a File symbolic name. Press <Enter> to display the File Attributes (2/5) screen. Refer to Adding a File in Chapter 2 of the User Guide for detailed information about the File Attributes screens.
3. Enter all necessary information about the File and press <Enter>. You can press <PF1> for help with field definitions. The File Attributes (3/5) screen is displayed
4. Enter all necessary information about the File and press <Enter> to display the File Attributes (4/5) screen.
5. Use this screen for a user exit, if applicable. Press <Enter> to reach the File Attributes (5/5) screen.
6. Press <Enter> to confirm the addition of a new File profile.

Note: The parameters of the last File that you created or viewed stay on the screen when you create a new File. This is helpful when creating multiple File profiles because it enables you to create a new File profile from an existing File profile.

The following screens show an example of a File profile.

File Attributes (2/5) Screen

```
TOM4300----- FILES ATTRIBUTES (2/5) -----
OPTION ===>

SYMBOLIC NAME           : FILE1           MODE: NORMAL

INIT STATE .....       : E               E: IN-SERVICE H: HOLD

NOTIFICATION LEVEL .... : 0               0:NO 1:START 2:END 3:START AND END
                        4,5,6,7: SAME AS 0,1... AND ON

ERROR
DIRECTION .....       : T               T:TRANSMIT R:RECEIVE *:TRANS./REC.
RECEIVING PARTNER ..... : UNIX           'NAME', £LIST, */$SALL$$ OR $$API$$
SENDING PARTNER .....   : -               'NAME', £LIST, */$SALL$$ OR $$API$$

PRIORITY .....         : 1               0:URGENT 1:FAST 2:NORMAL 3:SLOW
DSN DEFINITION TYPE ... : F               D:DYNAMIC F:FIXED
ALLOCATION RULE .....   : 1               0:CREATE/REPLACE 1:PREALL. 2:CREATE
                        3:EXIT A:APPLICATION SERVER

FILE TYPE .....        : S               S/H/M/P/PU/V/VU/UU/SU/TU/HU
PRESENTATION .....     : 04              COMPRESS.,DATA TYPE (01-24)
UNLOAD/RELOAD MEMBER .. : -               OPTIONNAL
SSL CONFIGURATION.....  : -               OPTIONNAL

OPTION : VIEW                UPDATE: 10/01/13 04:28 PSR0003
-ENTER- : NEXT SCREEN        -PF3- : CANCEL
```

In the example above, the profile 'FILE1' is Enabled at initialization and this file can only be Transmitted. The receiving Partner must be the UNIX Partner that you defined.

The Priority of the transfer is '1' and the data set name is Fixed by this entry. It cannot be forced when making the transfer request.

The Allocation rule '1' means that the file must exist at the time the transfer is executed. The File Type is Sequential (QSAM). Using the Presentation table number '04' means that Compression will be Mixed because the UNIX Partner is a PeSIT Partner.

File Attributes (3/5) Screen

```

TOM4300----- FILES ATTRIBUTES (3/5) -----
OPTION ===>

SYMBOLIC NAME           : FILE1           DEF.: F ALL.: 1 TYPE: S DIR.: T
                        :                   SDB: Y
DSN LOCAL .....       : TOM7.FILE1.XMIT.TEST
GDG NUMBER .....      : -             +XX OR -XX
1 SYMBOLIC UNIT NAME .. : -             'UNITNAME'
  VOLUME NAMES .....  : -             -             -             -
2 SMS DATA-STOR-MGMT .. : -             -
DISPOSITION .....     : SHR           SHR/OLD/NEW

ALLOCATION TYPE .....  : -             CYL/TRK UB/KB/MB(?BYTES-SMSSDB)
SPACE PRIM.-SEC. .... : -             1 TO 4 NUMERIC CHARACTERS
DIRECTORY BLOCKS ..... : -             IF PARTITIONED
RECORD FORMAT .....   : -             F,FB,FBA,FBM,V,VB,VBA,VBM,VBS,VS,U
LRECL-BLKSIZE .....   : -             1 TO 5 NUMERIC CHARACTERS
RETENTION (EXPDT/RETPD) : -             X'CCYYDDD',E'YYDDD'/R'NNNN'
PERMISSION (HFS) ..... : - - -         User(1-7) Group(1-7) Other(1-7)
Remote dsn/Pi99 ..... : -             <
TYPE/STRUCTURE/MODE FTP : - - -         EN/AN/I,F/R,B/C/S
UNIQUE ..... FTP ..... : N             Yes/No
NOTE : -

```

In the File Attributes (3/5) screen, you can see the data set name and the Disposition 'SHR' for allocating this file. On the top of this screen, parameters from the previous screen are displayed.

File Attributes (4/5) Screen

```
TOM4300----- FILES ATTRIBUTES (4/5) -----
OPTION ==>

SYMBOLIC NAME          : FILE1          DEF.: F ALL.: 1 TYPE: S DIR.: T
                                UPRFCT:

--- S : SYMBOLS CHECKING
V
TRANSMISSION :
START EXIT .....      : L1GFIUE1      USER EXIT NAME
_ START COMMAND .....  : -
END EXIT .....        : L1GFIUE1      USER EXIT NAME
_ END COMMAND .....    : S MYPROC,D=&D

RECEPTION :
START EXIT .....      : -                USER EXIT NAME
_ START COMMAND .....  : -
END EXIT .....        : -                USER EXIT NAME
_ END COMMAND .....    : -

OPTION : VIEW                      UPDATE: 10/01/13 04:28 PSR0003
-ENTER- : NEXT SCREEN              -PF3- : PREVIOUS SCREEN
```

The File Attributes (4/5) screen shows actions that take place at the beginning and end of transfer. For example, there is a Start Exit 'L1GFIUE1' from the Sterling Connect:Express Utilities Package Option, and at End of Transfer the same exit will be activated followed by the z/OS Start Command 'MYPROC'. The parameter D=&D is passed to this command. &D is a symbolic keyword that is replaced with the name of the data set that you are transferring.

The UPRFCT=Y parameter remembers the SYSIN option that gives you authorization to declare a Start command in this screen.

Step 5 Execute a Transfer

To transfer data in Sterling Connect:Express, you can enter a request by application call, in BATCH, or by using the ISPF Normal Transfers screens (option 4.1).

When Sterling Connect:Express accepts a request, the request is queued in the Request Control Table (RCT). After accepting your request, it is scheduled if Sterling Connect:Express resources are active. You can view schedule information in the SYSLOG file (SYSOUT or option 2.2) or in the Request Control Table (option 2.1). If all definitions are correct, the transfer is completed, the request is purged, and the result is stored in the SYSJNL file (option 2.3 JOURNAL). The successful end of transfer is reported through the user interface.

Note: To transfer a file, you must have created Partner and File definitions on the remote UNIX system. The profile, FILE1, must be setup for reception on the remote system and the Partner name must be from your local DPCSID= and DPCPSW= parameters in the SYSIN file of Sterling Connect:Express. Likewise, the UNIX Partner and password must be from the DPCSID= and DPCPSW= parameters in the SYSIN file of the remote UNIX site.

Enter a Normal Transfer Request

1. Select option 4.1 (Normal) from the Main Menu to display the Normal Transfer screen. Activate the checking option, but do not activate the Extension option. See Transfer Requests in Chapter 3 of the User Guide.
2. In the File field, type the symbolic File attributes profile name that you have already defined.

Note: If you defined the direction, Partner, and the DSNAME on the File Attributes screens press <Enter> to submit the request.

3. In the Direction field, type T for transmit.
4. In the Partner field, type the symbolic Partner name you have already defined.
5. In the DSNAME field, type the name of a data set already cataloged and press <Enter>.

Note: The DSNAME cannot be quoted, either with ISPF or batch transfers. Also, a DSNAME **cannot** contain leading blanks, imbedded blanks, or special characters.

6. Because the Checking option is Yes, this screen displays information found in the directories about the data to be transferred, such as LINK TYPE. If this information is correct, press <Enter> to confirm the request or press <PF3> to cancel the request.
7. When your request is accepted by the Sterling Connect:Express Monitor, the following message is displayed:

REQUEST ACCEPTED, NUMBER xxxxxxxx
where: xxxxxxxx is the request number. (This number is used to reference a request.)

The following screens show an example of a normal transfer request with the results.

Normal Transfer (Screen 1)

```

TOM4300      NORMAL TRANSFER
OPTION =====>                                     CSGB

SUB-SYSTEM . =====> TOM7
FILE ..... =====> FILE1
NOTIFICATION =====>                               (0-7/*)
DIRECTION .. ---->                                   (T/R)
PARTNER .... ---->

DSNAME ..... ---->

TYPE ..... ----> N          (N/H/I/K/U)
MODE ..... ----> I          (I/D)
LINK ..... ---->           ( /C/I/S/T/X)
CLASS ..... ----> A          (A-Z/*)
PRIORITY ... ----> 1         (0-3)
MEMBER ..... ---->          (PRM)
CHECKING ... ----> YES       (YES/NO)
EXTENSION .. ----> NO        (YES/NO) ALIAS/ORG/DST/API-ETB3/SEC/RGR.
NOTE->

X EXIT, -ENTER- REQUEST, -PF1- HELP TRC, -PF3- END

```

Normal Transfer (Screen 2)

```

TOM4300      NORMAL TRANSFER                          -ENTER- / -PF3-  !
OPTION =====>                                     CSGB

TOM7

SUB-SYSTEM . =====> TOM7
FILE ..... : FILE1                                     ENABLED
NOTIFICATION :                               (0-7/*)           0
DIRECTION .. :                               (T/R)             T
PARTNER .... :                               UNIX             52           ENABLED

DSNAME ..... :                                     TOM7.FILE1.XMIT.TEST    -           FIXED
                                                         SEQUENTIAL

TYPE ..... : N          (N/H/I/K/U)
MODE ..... : I          (I/D)
LINK ..... :           ( /C/I/S/T/X)   X25
CLASS ..... : A          (A-Z/*)
PRIORITY ... : 1         (0-3)
MEMBER ..... :          (PRM)           -
CHECKING ... : YES       (YES/NO)
EXTENSION .. : NO        (YES/NO) ALIAS/ORG/DST/API-ETB3/SEC/RGR.
NOTE->

X EXIT, -ENTER- REQUEST, -PF1- HELP TRC, -PF3- END

```

LOG of Transfer

```
REQUEST 00000001 FILE1 UNIX SRC=0000 TRC=0000 PRC=0000
REQUEST 00000001 <- TSO00001 ACCEPTED (N)
COMMUNICATION OPENED (O) WITH: UNIX REQ: 00000001 (X MCH3, LCCE1B01)
REQUEST 00000001 FILE1 TRANSFER ACCEPTED APM 01 EFF 01
REQUEST 00000001 FILE1 TRANSFER STARTED APM 01 EFF 01
REQUEST 00000001 FILE1 TRANSFER ENDED TRC=0000L APM 01 EFF 01
REQUEST 00000001 TRANSMITTED -> UNIX FILE FILE1 NUMBER OF RECORDS
TRANSFER DURATION :00:02:56, RESTART NUMBER : 000 , NUMBER OF S/R
COMMUNICATION CLOSED (O) WITH: UNIX
REQUEST 00000001 <- TSO00001 COMPLETED
REQUEST 00000001 <- TSO00001 PURGED
```

Enter a BATCH Transfer Request

After executing a normal transfer, you should also enter a BATCH request. See the \$REQESCI JCL in the Sterling Connect:Express SAMPLIB. The following example shows the BATCH Normal Transfer facility, P1B2PREQ, and the full PARM field.

```
/*-----
/* PARAMETERS: -
/* -
/* SSN = Sterling Connect:Express SUBSYSTEM NAME (REQD) -
/* TYP = TYPE OF TRANSFER (N=NORM,H=HELD,I=INQ) (REQD) -
/* PRT = PRIORITY (REQD) -
/* CLS = CLASS (REQD) -
/* DIR = DIRECTION (T=TRANSMIT,R=RECEIVE) (REQD) -
/* LNK = LINK TYPE (S=SNA,X=X25,I=TCP-IP) (OPT) -
/* SFN = SYMBOLIC FILENAME (ACTUAL NAME (REQD) -
/* $JCL = USE DD CARD FOR DATA SET -
/* $SYS = USE SYSIN FOR DATA SET -
/* SPN = SYMBOLIC PARTNER NAME (OPT) -
/* DSN = DSNAME FOR REQUEST (OPT) -
/* DFRD IF REQUEST TO BE DIFFERRED (MODE=D) (OPT) -
/* WAITnnnn TO MAKE PROGRAM WAIT nnnn MINUTES COMPLETION (OPT) -
/* NLV = HTTP NOTIFICATION LEVEL -
/* -
/* A DD CARD //RETPDNNN DD DUMMY ADDED TO JCL TRANSMIT A -
/* RETENTION DELAY = NNN TO THE RECEIVER -
/* -
/* -
/*-----
//STEP01 EXEC PGM=P1B2PREQ,
// PARM=('SSN=TOM4','TYP=N','PRT=0','CLS=A','DIR=T','LNK=I', *
// 'SFN=FILE1','SPN=UNIX', *
/* 'DSN=a.b.c','DFRD','WAITnnnn') optional
/* -----
//STEPLIB DD DSN=INDEX1.TOMV430.LOADLIB,DISP=SHR
//SYSUDUMP DD SYSOUT=*
//SYSPR20 DD SYSOUT=*
/*
```

The Transfer Process

A transfer can be initialized as an outgoing transfer from a local Batch or TSO/ISPF requestor, or as an incoming transfer from an external connected requestor.

There are three phases of a transfer:

1. Connection
2. File selection
3. File transfer, either transmission or reception.

Connection takes place in the Sterling Connect:Express address space, while selection and transfer occur in the APM address space. Sterling Connect:Express is notified about results and conditions by the APM, and several selections and transfers can take place during one connection. For example, you could have the following scenario:

- ❖ Connection
- ❖ File1 selection
- ❖ File1 transfer
- ❖ File2 selection aborted
- ❖ File3 selection
- ❖ File3 transfer
- ❖ End connection

Getting Started with Sterling Connect:Express

You just completed a normal transfer request to verify the installation of Sterling Connect:Express. There are additional features that you can use to automate the transfer process and to integrate it into your business operations. The User Guide provides information about how to prepare the file transfers in Sterling Connect:Express. The Administration Guide has information to help you better manage transfer operations with Sterling Connect:Express.

Optional Installation Tasks

Some installation tasks are optional or depend on the features you are using.

Clean Up Installation Files

After you have installed and verified your installation of Sterling Connect:Express thru SMP/E, you can delete the following files:

- ❖ <HLQ>.NSCX430.*
- ❖ <HLQ>.NSCF430.*

Installation Worksheets

The following worksheet corresponds to the installation panels and additional worksheets are used for the definition of a Subsystem. Make copies of the Subsystem worksheets if necessary. You may want to save the worksheets for later reference.

Worksheet for Product Installation

Field	Description
STERLING CONNECT:EXPRESS Product High Level Qualifier (SCXHLQ) (Required)	The data set high level qualifier (SCXHLQ) used for ALL STERLING CONNECT:EXPRESS system Core and Common data sets

Worksheet for SubSystem Definition

	Description
SubSystem Name (SSN) (Required)	This is the STERLING CONNECT:EXPRESS Subsystem Name. Name begins with TOM followed by any Character from A to Z or Number from 0 to 9.
SubSystem High Level Qualifier (SUBSYSHLQ) (Required)	The data set high level qualifier (SUBSYSHLQ) used to allocate subsystem datasets and libraries. This qualifier must be different from <SCXHLQ>
Permanent DASD Device Type	The DASD device type for all permanent Sterling Connect:Express Subsystem files. This field is required and defaults to SYSDA.
Permanent DASD Volume Serial	This field can be filled in if you wish to allocate all Sterling Connect:Express Subsystem files in a specific volume.
Default VSAM Catalog	

Description

This field can be filled in if you wish to allocate all Sterling Connect:Express VSAM Subsystem files in a specific catalog.

Specific Vsam Catalog

This field can be filled in if you wish to allocate this VSAM Subsystem file in a specific catalog.

Specific Vsam Catalog

This field can be filled in if you wish to allocate this VSAM Subsystem file in a specific catalog.

Specific DASD Volume Serial

This field can be filled in if you wish to allocate this Sterling Connect:Express system file in a specific volume.

Specific DASD Device Type

The DASD device type for this permanent file if needs to be specific one.

Primary Cyl allocation

This field has to be filled with the primary CYL allocation value. Defaulted to:
01 for SYSFIL, SYSPAR, SYSLOG, SYSCHK
03 for APMCHKMx
04 for SYSJNL

SYSCHK Max Requests

This is the STERLING CONNECT:EXPRESS Subsystem Maximum Requests hold by SYSCHK File. This number must be greater or equal to the RQEMAX (RCT size) parameter.

Procedures and Jobs Names

	Description
	<p>Give a Unique and different Name to Procedures and Jobs.</p> <p>ANM (6 chars max):</p> <p>APM (6 chars max):</p> <p>AFM (6 chars max):</p> <p>ATM (6 chars max):</p> <p>EAS (6 chars max):</p> <p>TOM (7 chars max):</p> <p>UNLOAD (5 chars max):</p> <p>RELOAD (5 chars max):</p> <p>RJE (6 chars max):</p>
Work Dsn Major Index	<p>This is the major index of temporary files allocated by Sterling Connect:Express when unloading and loading partitioned, VSAM-type or EDCICONV-processed files.</p>
Work Dsn Unit Name	<p>Enter a valid Unit Name for temporary files created by STERLING CONNECT:EXPRESS when unloading and loading partitioned or VSAM-type files.</p>
Monitor Name	<p>DPCSID is the symbolic name given to the Sterling Connect:Express Monitor. Partners use this name for identification when the session begins. This is your Partner name.</p>
Monitor Password	<p>DPCPSW is the default symbolic password of your Sterling Connect:Express.</p>
Requests Max Queue Entries	<p>This is the Request Control Table (RCT) size with a maximum of 1024.</p> <p>This field value cannot be greater than the Max Requests field value.</p>
Max Simultaneous Requests	

Description

Enter the number of Simultaneous Requests STERLING CONNECT:EXPRESS can hold at a time. This number includes TSO requests and batch jobs.

SSN Command Prefix

CMDPRE is the unique prefix character of the subsystem command. All commands intended for the Monitor can be transmitted by MODIFY or through the subsystem feature.

Message Prefix

Messages Issued in SYSMMSG can be prefixed using this Value.

User Exit Journal Name

UEXJNL is the name of the user exit routine which receives control for each end of transfer. For no Exit, Enter NONE.

User Exit Journal Error Action

Use CONT to enable STERLING CONNECT:EXPRESS to ignore a return code other than 0 from a User Exit (UEXJNL=). User Exit is disabled. Use STOP to stop the monitor if the User Exit (UEXJNL=) ends with a return code other than zero. Leave this field blank if UEXJNL=NONE.

RMF Logging

When set to Y, Sterling Connect:Express sends RMF records. This measures the Sterling Connect:Express system utilization. When set to N, Sterling Connect:Express does not produce RMF records.

SMF Record Number

This is the SMF Record Number created for STERLING CONNECT:EXPRESS. This record enables Sterling Connect:Express to control network and system resource usage, file names which have moved, statistics per Partner or per type of link, the RACF userid used against dsnames, and the type of request. Enter 000 for no SMF Record.

RACF Control

	Description
	<p>Valid Values are Y,N or S.</p> <p>Y: RACF Usage.</p> <p>S: SAF Usage.</p> <p>N: No RACF or SAF Usage.</p>
SMS System Det. Blocksize	<p>SMSSDB tells the Monitor which method to use when computing the blocksize. With Y, blocksize is calculated by SMS. Otherwise, (N) Sterling Connect:Express computes itself the blocksize.</p>
Initial Optionnal Message	<p>Message to be sent to an operator when a TSO ISPF session starts or when a Sterling Connect:Express function starts.</p>
Post Init User Proc	<p>UPRCPI is the name of a user procedure to be started after correct initialization of Sterling Connect:Express. Enter NONE for no Post Init User Procedure.</p>
Normal End User Proc	<p>UPREND is the name of a user procedure to be started after correct termination of Sterling Connect:Express. Enter NONE for no Normal End User Procedure.</p>
ADHOC Control	<p>Set this field to Y to allow TSO AD HOC request, with mandatory RACF user and password to be transmitted with the request to the remote Partner. This RACF facility is available for protocol number 5 (PeSIT-E) only, and with another Sterling Connect:Express. Set this field to N to disable TSO AD HOC request for incoming or outgoing transmissions. Set this field to U to allow TSO AD HOC request, with optional RACF user and password to be transmitted with the request to the remote Partner. This is the UNSAFE mode. For incoming calls you can use the RACFUD= field as a default RACF user.</p>
Applications Count and Entries	<p>Indicates how many address spaces can connect to the monitor (Count) with a maximum allowed of 64. For each address space (application), enter the numbers of entries made available with a maximum of 32.</p>

	Description
Timer	The first field is the number of minutes between two call attempts. The second parameter is the number of minutes Sterling Connect:Express waits before restarting a local request interrupted by a network incident or a local request rejected by the Partner with an error code defined in the T1B2PCOD table.
Max Timer Retry Count	This value defines the maximum number of attempts for calling a Partner or restarting a request. STIMOC represents the maximum number of call attempts on one link to another Monitor.
Files Overflow Entries Count	This value represents the maximum number of new entries in the File directory which can be sent dynamically to Sterling Connect:Express. Enter 00 for no dynamic update of the directory. Updates are taken into account on the next monitor restart. Enter a non null value to allow dynamic updates. This value represents the maximum of new entries allowed.
Partner Overflow Entries Count	The value represents the maximum number of new entries in the Partner directory which can be sent dynamically to Sterling Connect:Express. Enter 00 for no dynamic update of the directory. Updates are taken into account on the next monitor restart. Enter a non null value to allow dynamic updates. This value represents the maximum of new entries allowed.
Local TOM's Count	TOMLCL indicates the number of simultaneous SNA sessions with a limit of 16. For no Local Tom, Enter 00 and NONE as TOMACB Value.
TOM Application Name	TOMACB is the name of the VTAM application defined for the monitor for SNA sessions with locals monitors of the same cross-domain. If Sterling Connect:Express is operating alone, Enter NONE and set TOMLCL to 00.
JOB Account	

For Generated and customized Jobstreams like UNLOAD or RELOAD, define Job Card values.

JOB Programmer Name

For Generated and customized Jobstreams like UNLOAD or RELOAD, define Job Card values.

JOB Class

For Generated and customized Jobstreams like UNLOAD or RELOAD, define Job Card values.

JOB MsgClass

For Generated and customized Jobstreams like UNLOAD or RELOAD, define Job Card values.

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