IBM Sterling Connect:Enterprise for z/OS

User's Guide

Version 1.5

This edition applies to the 1.5 Version of IBM® Sterling Connect:Enterprise® for z/OS® and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in *Notices* on page 233.

Contents

Chapter 1

About Sterling Connect:Enterprise

IBM® Sterling Connect:Enterprise® for z/OS® is an online communications and data repository system that enables data transmission between a host computer and remote terminals or computers. Sterling Connect:Enterprise provides a way to collect, distribute, and track data, while protecting the host from unauthorized access.

Transmitting and Collecting Data

Sterling Connect:Enterprise collects and transmits data between the host computer and remote terminals, applications, or computers through the *data repository,* which is designed on the store and forward model. Like a voice mail system, the data repository consists of individual *mailboxes,* or directories*,* where data files are stored for future processing by the host or remote site. The Sterling Connect:Enterprise administrator assigns mailboxes and controls access to the mailboxes through Sterling Connect:Enterprise user IDs and passwords. After a communications session is established between Sterling Connect:Enterprise and a remote site, either the host or the remote users can store, retrieve, or monitor data files in the mailboxes to which they have access. Both the host computer and the remote sites can initiate data collection and distribution. A communications session with the Sterling Connect:Enterprise repository can be initiated using the FTP, SNA, or BSC protocol.

Sterling Connect:Enterprise collects data files from remote sites for a central host site. For example, Sterling Connect:Enterprise can gather data generated by a database application for one remote site, then extract the data at the host site for use by a local application.

Sterling Connect:Enterprise distributes data files from the host to one or more remote sites. The host site can automatically transmit output reports or data to remote sites. For example, if a company needs to send the latest sales report to its 25 regional sales offices, it can either send the report at a predetermined time to its sales offices or deposit the report in the repository and flag the report for transmission to the offices. The remote offices connect to the repository, obtain a listing of the repository contents, and request transmission of reports to their sites.

For a listing of terms used with this product, refer to the *Glossary*.

Sterling Connect:Enterprise also enables you to schedule automated data collection and transmission between the host and an unattended remote site using the Auto Connect feature. You can schedule automated sessions by time of day, day of the week, day of the year, or you can initiate an Auto Connect session by issuing a host site operator command when data is ready for transmission. An Auto Connect activity report is available after the Auto Connect session finishes.

Remote Site Capabilities

When you initiate a communications session with the Sterling Connect:Enterprise data repository from a remote site, you can perform the following functions:

Function	Description
Add batches	Add batches to the data repository by establishing a session with Sterling Connect:Enterprise. Each transmission generates one or more batches. All batches transmitted from a remote site are marked with the mailbox ID supplied or with the remote name of that site. The originating site can also flag batches as transmittable, making them available for transmission requests by other remote sites.
Request batches	Request batches from the data repository by establishing a session with Sterling Connect:Enterprise and requesting a batch by the appropriate batch identifier. Batches requested this way are not deleted. They remain in the data repository and are still available for transmission to other remote sites.
Delete batches	Instructs the Sterling Connect:Enterprise repository to flag a batch as deleted. The batch is logically deleted and not transmitted to remote sites. The batch is displayed in directory listings but is flagged as deleted. Batches are physically removed only by using the ERASE utility, which is not available to remote sites.
List directory of batches	Request a list of all batches in the data repository marked with either their mailbox ID or a given batch ID.

Sterling Connect:Enterprise Communications

Sterling Connect:Enterprise runs on a host mainframe using the Virtual Telecommunications Access Method (VTAM), Basic Telecommunications Access Method (BTAM), or Transmission Control Protocol/Internet Protocol (TCP/IP), and enables data transmission between the host and remote terminals or computers. Sterling Connect:Enterprise supports data transmissions between the host and remote sites using the following types of protocols:

- SNA data transmissions between mainframes using VTAM and various remote devices
- BSC data transmissions between mainframes using BTAM and various other computers
- FTP data transmissions between remote FTP clients and the Sterling Connect:Enterprise FTP server
- FTP data transmissions between remote FTP servers and the Sterling Connect:Enterprise FTP client
- FTP SSL data transmissions between remote FTP clients and the Sterling Connect:Enterprise FTP server
- FTP SSL data transmissions between remote FTP servers and the Sterling Connect:Enterprise FTP client

Also, IBM® Sterling Connect:Enterprise® Gateway provides data transmission between the Sterling Connect:Enterprise host computer and ASYNC, BSC, and FTP remote sites.

Types of Bisychronous Communications Lines

The types of communication lines that you use determine how you connect to the data repository. Bisychronous lines are typically either switched (dialup) or nonswitched (dedicated or leased) lines. A switched line is a temporary connection between two sites for the duration of the session only. A nonswitched line is a permanent connection between sites that does not require dialup to start the communications.

Security

You can implement security in the Sterling Connect:Enterprise system at various points in the processing. The security implementation at the Sterling Connect:Enterprise host affects the requirements at the remote sites.

Ensure you have complete instructions from your host site administrator regarding the security measures that are implemented on your system, the functions that are available to you, and the information you need to access the data repository. Refer to the glossary for security terms and definitions. The following table lists components and topics affecting security and where you can find additional information.

Component or Topic Related to Security	Sterling Connect:Enterprise for z/OS Documentation
Security exits	*IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* *IBM Sterling Connect:Enterprise for z/OS Remote User's Guide*
ODF parameters and configuring for security	*IBM Sterling Connect:Enterprise for z/OS Administration Guide* *IBM Sterling Connect:Enterprise InterConnect Option for z/OS User's Guide*

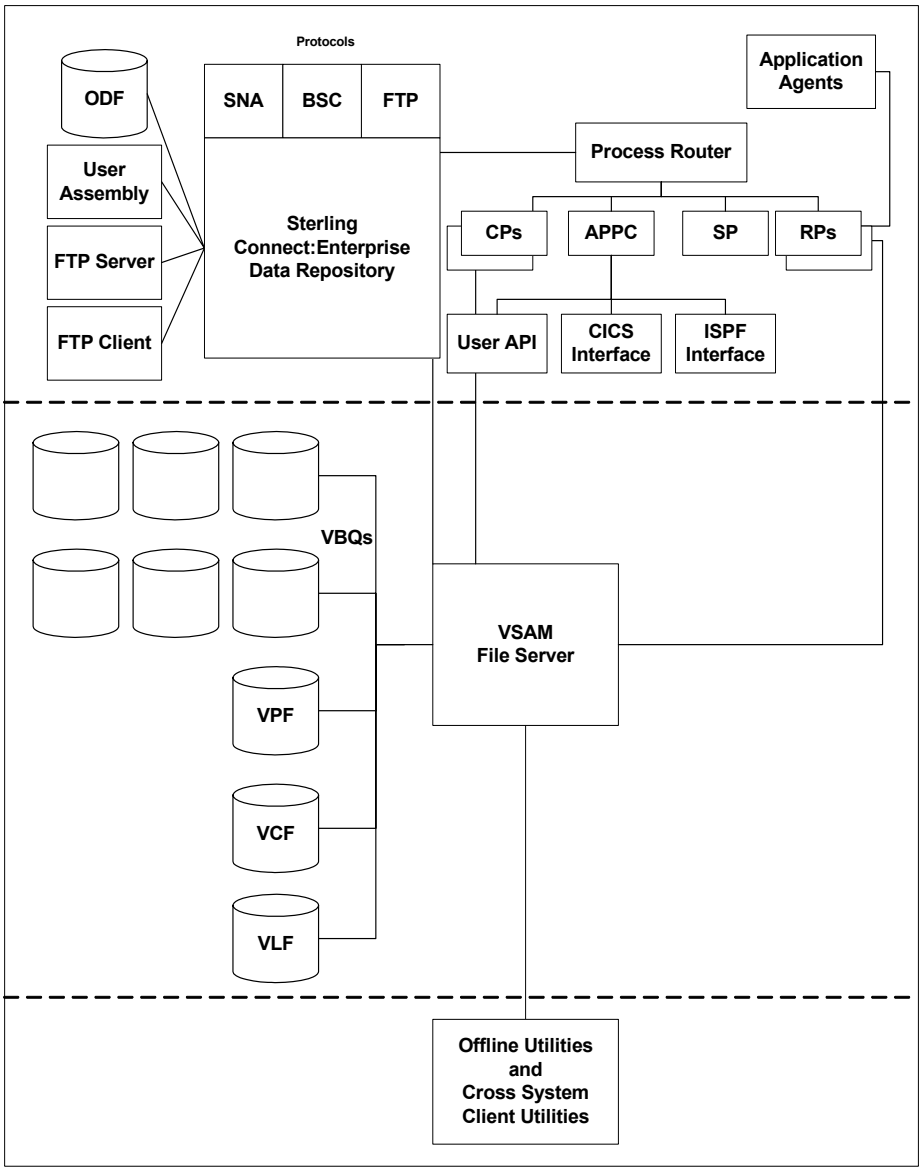
Component or Topic Related to Security	Sterling Connect:Enterprise for z/OS Documentation
Logon and batch functionsecurity	*IBM Sterling Connect:Enterprise for z/OS Administration Guide*
Authenticating user IDs and passwords	*IBM Sterling Connect:Enterprise for z/OS Administration Guide* *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* *IBM Sterling Connect:Enterprise InterConnect Option for z/OS User's Guide* *IBM Sterling Connect:Enterprise for z/OS Remote User's Guide*
Encryption	*IBM Sterling Connect:Enterprise for z/OS Administration Guide* *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* *IBM Sterling Connect:Enterprise for z/OS Remote User's Guide*
Security for FTP connections (and SNA and BSC connections)	*IBM Sterling Connect:Enterprise for z/OS Administraton Guide* *IBM Sterling Connect:Enterprise for z/OS Remote User's Guide*
Sterling Connect:Enterprise Security Interface	*IBM Sterling Connect:Enterprise for z/OS Administration Guide* *IBM Sterling Connect:Enterprise for z/OS Remote User's Guide*
IBM® Sterling Connect:Direct® for z/OS® security	*IBM Sterling Connect:Enterprise for z/OS InterConnect Option User's Guide*

Sterling Connect:Enterprise Components

Sterling Connect:Enterprise has three major components:

- Data repository or Sterling Connect:Enterprise online system
- Virtual Storage Access Method (VSAM) file server
- Offline utilities

The following diagram illustrates these components.



Data Repository

The data repository transmits and collects data from BSC, FTP, and SNA sites. The repository handles all session activity and accepts service requests from the console, the user API, the ISPF interface, the CICS interface, and the Sterling Connect:Enterprise FTP server.

The Sterling Connect:Enterprise data repository consists of the following components:

Component	Description
Options Definition File (ODF)	The ODF contains control information such as passwords, security information, connection definitions, logical unit pooling, remote site definitions for SNA sites, and signon records and BTAM ID verification for BSC sites.
User Assembly	The User Assembly contains macros that define BSC lines to Sterling Connect:Enterprise. This component is used only by BSC connections.
FTP Server	The FTP Server enables remote FTP client sites to access, retrieve, and send data to Sterling Connect:Enterprise through a subset of the standard FTP commands.
FTP Client	The FTP Client enables FTP communication between FTP servers implemented on any platform.
Command Processors (CPs)	The CPs process command requests from the ISPF interface, the CICS interface, and the user API.
Advanced Peer-to-Peer Communications (APPC)	The APPC server provides LU6.2 communications with the ISPF interface, the CICS interface, Cross System Client, and the user API.
Process Router (PR)	The PR routes transactions among the repository, the CPs, the APPC server, and RPs.
Application agents	Application agents are commands that you can use to customize and automate Sterling Connect:Enterprise processing.
Rules Processors (RPs)	The RPs process requests from the application agent interfaces.
Scheduler Processor (SP)	The SP manages timer intervals, which schedule when events are triggered.

The VSAM File Server and VSAM Batch Files

The VSAM file server processes requests from the Sterling Connect:Enterprise data repository to read and write data to the VSAM batch files. The VSAM batch files consist of the VSAM Pointer File (VPF), VSAM Control File (VCF), VSAM batch queues (VBQ), and VSAM log files (VLF). The following table describes the functions of these files.

VSAM Batch File	Function
VSAM Pointer file (VPF) VSAM Control file (VCF)	Index and control the information regarding the batches, such as mailbox ID, status, and location of the batch data within the VSAM batch queues.
VSAM Batch Queue (VBQ)	Multiple files that contain the actual batch data.
VSAM Log files (VLF)	Contain the record of communications sessions and offline utility activity.

The VSAM file server resident task must be active for the repository and offline utilities to run.

Offline Utilities

Offline utilities enable you to maintain VSAM batch files by performing such tasks as adding and extracting batches from the VBQs and reporting. Offline utilities access the VSAM file server to perform these tasks.

Offline utilities must reside in the same logical partitioning (LPAR) as the VSAM file server. However, you can run a subset of the offline utilities, called the Cross System Client Utilities, from a separate LPAR.

Sterling Connect:Enterprise Documentation

See *IBM Sterling Connect:Enterprise for z/OS Release Notes* for a complete list of the product documentation.

Notational Conventions

The Sterling Connect:Enterprise documentation uses certain notational conventions. This section describes the conventions used throughout the documentation set.

Convention	Description
UPPERCASE LETTERS	Uppercase letters in the command format indicate that you type in information as shown.
UPPERCASE and lowercase Letters	A statement, command, or parameter in uppercase letters followed by lowercase letters indicates an alternative to typing the entire command. For example, `SELect PROCess` means that you need only type `SEL PROC` for the command to be valid.
lowercase letters	Lowercase letters or words in commands or syntax boxes require substitution by the user. For example, `PNODE=primary-node-name` indicates that you must provide the name of the primary node.
Bold Letters	Bold print in syntax boxes indicates commands and required parameters. For example, **`NAME=filename`** indicates that the parameter *NAME* is required.
Underlined Letters	Underlining indicates default values for parameters and subparameters. For example, `FTP=Yes|No` specifies that the default for *FTP* is *NO*.
Vertical Bars (|)	Vertical bars indicate that you can supply one of a series of values separated by the vertical bars. For example `HOLD=Yes|No|Call` specifies that *Yes* or *No* or *Call* is valid.
Brackets [	Brackets indicate that information is optional. For example, `STARTT=([date|day][,hh:mm:ssXM])` indicates that you can specify either a date or a day, a date or a day plus a time, or just a time.
Italics	Italic letters are placeholders for information you must provide. Italic font also indicates book, chapter, and section titles and is used for emphasis in the text.

Convention	Description
`Monospaced characters` (characters of equal width)	`Monospaced characters` represent information for screens, commands, Processes, and reports.
Punctuation	Code all commas and parentheses as they appear.

Chapter 2

Console Commands

You control many Sterling Connect:Enterprise functions by entering commands from the system console. This chapter explains how to use the commands and describes each command's syntax. The commands are listed in alphabetical order.

Console Commands Overview

Sterling Connect:Enterprise uses the following console commands:

Command	Description
$$ALLOC	Allocates a VSAM Batch Queue file (VBQ) or a VSAM Log File (VLF) to Sterling Connect:Enterprise.
$$CHG (BSC sites)	Changes the telephone number that is dialed on an autodial BSC switched line. Also enables change of phone number displayed for manual dial modems.
$$CONNECT	Initiates data transmission and collection with remote sites over switched and nonswitched lines.
$$DALLOC	Deallocates a VBQ or VLF from the Sterling Connect:Enterprise system.
$$DELACQ	Deletes one or more Auto Connect sessions queued for reactivation later.
$$DIALOG	Activates or deactivates FTP session dialog tracing.
$$DIRECTORY (or $$DIRECTORY24)	Lists the directory information for data batches on the VSAM batch files. Batches for a single Mailbox ID or all batches can be listed.
$$DUMP	Produces a snapshot dump of a line's current status or a dump of the Sterling Connect:Enterprise address space, without terminating the Sterling Connect:Enterprise job.
$$DISABLE	Turns on the disabled flag on the Auto Connect list. An Auto Connect list with a disabled flag cannot be started.
$$ENABLE	Turns off the disabled flag on the Auto Connect list. An Auto Connect list can only be started if the disabled flag is turned off.

Command	Description
$$INVOKE	Invokes application agents.
$$LIST	Lists: ◆ All SNA sessions established with Sterling Connect:Enterprise ◆ All BSC telecommunications lines defined to the system ◆ All FTP sessions established with Sterling Connect:Enterprise ◆ Status, use, current user or active traces ◆ Any Auto Connect sessions queued for reactivation ◆ Application agents status ◆ All listnames defined in the Options Definition File (ODF) and indicates whether the listname is enabled or disabled ◆ Status of a specific or all SSL/TLS certificates
$$ODFUNLK	Releases the ODF lock, which prevents anyone from updating the ODF while it is being updated by another user.
$$REFRESH	Enables Sterling Connect:Enterprise to recognize files defined with PURGE, INIT=DATA while Sterling Connect:Enterprise is active. Also refreshes application agent rules.
$$SERVER	Shuts down or inquires on the VSAM File Server.
$$SHUTDOWN	Shuts down Sterling Connect:Enterprise.
$$SPACE	Displays the data set space allocation information of any VSAM file defined in Sterling Connect:Enterprise.
$$SPACEX	Displays the data set space allocation information of any VSAM file defined in Sterling Connect:Enterprise. This display is presented in the same format as the ISPF/CICS Option 31.9 Space Display.
$$START	Restarts a BSC line that was closed because of I/O errors, the LU1 VTAM Access Control Block (ACB), the APPC interface, the FTP server, or the application agents.
$$STATFLG	Changes the status flags for batch files.
$$STOP	Stops an active Auto Connect session, remote connect, BSC line, APPC interface, FTP server thread, FTP client thread, or application agents.
$$TRACE	Starts or stops a trace of communications activity to research problems.

Console Command Types

System console controls are categorized as follows:

Type	Command
Application agent control commands	$$START, $$STOP, $$INVOKE, and $$REFRESH
Network control commands	$$CHG (BSC only), $$CONNECT, $$DELACQ, $$LIST, $$START, and $$STOP

Type	Command
Problem research commands	$$DIALOG (FTP only), $$DUMP, and $$TRACE
System control commands	$$SHUTDOWN
VSAM batch control commands	$$DIRECTORY and $$STATFLG
VSAM file control commands	$$ALLOC, $$DALLOC, $$REFRESH, and $$SPACE
VSAM file server commands	$$SERVER

Online System Console Control Interfaces

Sterling Connect:Enterprise uses either the Write To Operator with Reply (WTOR) interface or MODIFY interface to communicate between the z/OS operating system and the system console. The VSAM file server uses only the MODIFY interface for system console commands.

Using the WTOR Interface

WTOR, the default interface, starts automatically Sterling Connect:Enterprise is not started through the console.

To use the Sterling Connect:Enterprise WTOR interface:

1. Verify that MODIFY=NO is specified in the *OPTIONS section of the ODF.
2. Start Sterling Connect:Enterprise as a nonconsole task (from a batch file).

   The following outstanding WTOR message is displayed on the console:

   ```
   CMB001I - ENTER Sterling Connect:Enterprise Vn.n.nn Sterling Connect:Enterprise
   REQUEST WHEN READY
   ```

   If you created a custom message in the ODF, it is displayed in place of this WTOR message. This message acts as the prompt for console commands.
3. Type Sterling Connect:Enterprise console commands directly to the number on the console message.

   If you type an invalid command, Sterling Connect:Enterprise displays the following message on the system console:

   ```
   CMB004I - INVALID Sterling Connect:Enterprise REQUEST
   ```

   The message prompt remains outstanding and you can enter commands at any time.

Using the MODIFY Interface

To use the Sterling Connect:Enterprise MODIFY interface:

1. Specify MODIFY=YES in the *OPTIONS section of the Sterling Connect:Enterprise ODF.
2. Run Sterling Connect:Enterprise as a console-started task.
3. Type the z/OS MODIFY commands at the console.

VSAM Server Commands from the MODIFY Interface

Enter the following commands to interact with the VSAM file server from the MODIFY interface:

Command	Action
$$LIST STORMAP	Displays VSAM file server storage utilization by subpool and task. Storage above the 16-MB line, below the 16-MB line, and totals are displayed.
$$SERVER FILES	Displays all VSAM batch files opened by the VSAM file server.
$$SERVER STOP	Shuts down the VSAM file server if no VSAM batch files are open.
$$SERVER STOP,I	Shuts down the VSAM file server even if VSAM batch files are open.

$$ALLOC Command

The $$ALLOC command allocates a data file to Sterling Connect:Enterprise and optionally assigns the file as the current collection file or the current logging file. You can allocate any VBQs or VLFs defined to Sterling Connect:Enterprise by a previously run PURGE utility. You can specify any VBQ as the current collection file, regardless of the value specified in the VBQROTAT control record in the ODF.

$$ALLOC Syntax

The $$ALLOC command uses the following syntax:

```
$$ALLOC xxxxx[,C]
```

Parameter Descriptions

The parameters for this command are:

Parameter	Description
xxxxx	The file ID name of the file to be allocated. The file ID name is specified during PURGE processing when the VSAM files were initialized.

Parameter	Description
,C	Makes the file the current collection or current logging file.

$$ALLOC Examples

To allocate VBQ05, type the following:

```
$$ALLOC VBQ05
```

To allocate VLF2 as the current collection log file, type the following:

```
$$ALLOC VLF2,C
```

$$CHG Command (BSC Only)

The $$CHG command changes the telephone number dialed on a BSC remote. The new phone number is used the next time the remote site is called using auto dial with the Auto Connect feature. You cannot switch between a SADL and a non-SADL number. The new number stays in effect until Sterling Connect:Enterprise is recycled.

$$CHG Syntax

The $$CHG command uses the following syntax:

```
$$CHG L=xxxxxxxx RMT=xxxxxxxx RRN=nnnnnnn PH=nn...nn
```

Parameter Descriptions

You can only change one remote telephone number per command. Separate the parameters with commas or blanks.

Parameter	Description
L=xxxxxxxx	The name of the Auto Connect list specified in the ODF. This parameter is required.
RMT=xxxxxxxx	Specifies the remote site. If it is not specified, the first remote in the Auto Connect list is used.
RRN=nnnnnnn	Specifies the relative number in the Auto Connect list of the remote whose number you are changing. Its value depends on the number of Auto Connect lists and remote site specification records in the ODF.

Parameter	Description
PH=nn...nn	Specifies the phone number. If the phone number is changed, a console message is written showing the old phone number. The maximum number of digits allowed is 40. The phone number scan ends with the first comma or blank. You cannot switch between SADL and non-SADL numbers. This parameter is required.

$$CONNECT Command

The $$CONNECT command triggers a host-initiated Auto Connect session. You can use this command to establish an Auto Connect session and override certain ODF values (for one $$CONNECT session only). Because of the variety of options for this command, you should have a thorough understanding of the Auto Connect process before using this command. (See *Configuring ODF Records for BSC Connections*, *Configuring ODF Records for SNA Connections,* and *Configuring ODF Records for FTP Connections* in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information about Auto Connect sessions.)

You can use $$CONNECT on auto dial lines, manual dial lines, or nonswitched lines. For manual dial lines only, you are prompted to dial the remote-site phone number after entering the $$CONNECT command.

The $$CONNECT command is used in conjunction with the *CONNECT records in the ODF. These records are created to set up Sterling Connect:Enterprise for operation. Before using the $$CONNECT command, see the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information.

$$CONNECT Syntax

The $$CONNECT command uses the following syntax for SNA sites:

```
$$CONNECT ACQUEUE=YES|NO BATCHID='xx...xx'|#nnnnnnn|"xx...xx"
          BCHSEP=OPT3 CMP=NO|YES ID=xxxxxxxx  L=xxxxxxxx
          MEDIA=CN|PR|PU|EX|BX ONEBATCH=NO|YES TRUNC=NO|YES
```

For a BSC Auto Connect session, the $$CONNECT command uses the following syntax:

```
$$CONNECT ACQUEUE=YES|NO BATCHID='xx...xx'|#nnnnnnn|"xx...xx"
          BCHSEP=NO|OPT1|OPT2|OPT3 BLOCK=NN|*NN CMP=NO|YES ID=xxxxxxxx
          L=xxxxxxxx LINEID=xxxxxxxx  MODE=SR|SO|RS|RO ONEBATCH=NO|YES
          TRANSPAR=NO|YES TRUNC=NO|YES
```

For FTP Auto Connect sessions, the $$CONNECT command uses the following syntax:

```
$$CONNECT L=xxxxxxxx
  [ACQ=N|Y|F],
  [ACSCRIPT=xxxxxxxx],
  [BCHSEP=NONE|OPT3|OPT4],
  [OB=N|Y],
  [ID=xxxxxxxx],
  [BATCHID=NONE|'xxxx.....xxxx'],
  [DATAMODE=B|C|S],
  [DATASTRU=F|R],
  [DATATYPE=A|E|I]
```

You can use either the long form, $$CONNECT, for the command or the short form, $$CON.

Parameter Descriptions

You can use any number of blanks between parameters, but do not use blanks within parameters. Commas can also be used to separate the parameters. Command abbreviations are in parentheses.

Although there are a number of options available for the $$CONNECT command, the most common use requires only the L= (LISTNAME) parameter. The other parameters are supplied to occasionally override an Auto Connect installation option or to send a batch by a specific identifier.

Parameter	Description
ACQUEUE=YES|NO|FORCE	(ACQ=) If an Auto Connect session cannot start, this parameter indicates whether to queue it and start it later. If you specify this parameter, it overrides the global setting (ACQDEFAULT=) in the ODF *OPTIONS section or any Auto Connect value set for this parameter. If ACQ=N, the Auto Connect session fails if resources are not available at activation. If ACQ=Y, and an Auto Connect list is already queued, it is not requeued unless overriding values are specified (for example, a $$CON for the same listname but specifying a different Mailbox ID). If ACQ=F, an FTP Auto Connect session is queued unconditionally, if it cannot be immediately activated. The “Force” option allows unlimited instances of an FTP auto connect to be queued, without checking for any duplicate entries in the queue.
ACSCRIPT=pds.member.name	Overrides the ACSCRIPT value specified in the *CONNECT remote specification record. The value of ACSCRIPT specifies the member of a PDS that contains the Auto Connect Script for all sessions in this Auto Connect session. You must allocate the PDS to DD SYSEXEC in the Sterling Connect:Enterprise JCL. If you do not specify otherwise, the value defaults to the setting of the FTP_AC_SCRIPT_DEFAULT parameter in the *OPTIONS section of the ODF.

Parameter	Description
BATCHID='xx...xx'|#nnnnnnn| "xx...xx"	(BID=) The BATCHID specifically identifies a single batch for the ID entered. If used, the ID parameter is required. (for SNA and BSC sites) 'xx...xx' = Specifies the 1–64 character user batch ID to be transmitted. The value is enclosed in single quotation marks. The format is dependent on your internal standards and is not validated by Sterling Connect:Enterprise. #nnnnnnn = Specifies the unique 7-digit batch number of the batch to be transmitted. Leading zeros are not required. If nnnnnnn is specified, the batch is sent even if marked as already transmitted. The pound sign (#) is optional. "xx...xx" = Specifies a 1–64 character specific or generic user batch ID. All batches that match the characters specified are selected. The value is enclosed in double quotation marks. For FTP sites, specifies the value of the 1–64 character &BID variable that is passed to your FTP AC_SCRIPT. **Note:** If you want this parameter to function the same as for SNA and BSC sites, code your script to implement the &BID variable. The order of setting of the &BID variable is: ◆ Taken from $$CONNECT operator command (BATCHID= or BID= parameter). ◆ Taken from the Sterling Connect:Enterprise remote specification record, in the ODF, at startup.

Parameter	Description
BCHSEP=NO|OPT1|OPT2|OPT3|OPT4	Specifies which method Sterling Connect:Enterprise uses to separate batches sent to remote sites on the line when multiple batches are sent in a single connection. NO = Batches are not separated. If multiple batches are sent in a single connection, they are concatenated and sent as a single batch. If you use this option, remote sites using the line must be able to process concatenated data batches. OPT1 = A common RJE method of separating batches is used. At the end of each batch, Sterling Connect:Enterprise sends an EOT (X'37') to the remote, reads a response from the remote, and then sends ENQ (X'2D') to request use of the line. Do not use this option if the remote site using this line cannot properly respond to this protocol. OPT2 = Sterling Connect:Enterprise separates batches using an ETX (X'03'). Do not use this option unless the remote can properly respond to this protocol. OPT3 = Batches are not separated. If multiple batches are sent in a single connection, they are concatenated and sent as a single batch. However, the individual batches are not flagged as transmitted until the entire transmission is successfully completed. If you use this option, remote sites using this line must be able to process concatenated data batches. OPT4 = Each batch is sent as an individual file. The batches are marked T after each one is transmitted. **Note:** This parameter is not required for JES communications. If you send multiple batches to JES, concatenate them and send as a single transmission, regardless of the BCHSEP option chosen for the line The order of priority for the BCHSEP parameter is: 1 Taken from $$CONNECT operator command. 2 Taken from the remote specification record in the ODF at startup. 3 Taken from the M$LINEX user assembly (BSC only). 4 Taken from the *REMOTE record for the remote site (SNA only). 5 Taken from the console $$CONNECT command (FTP only).
BLOCK=NN|*NN	BSC only. Used only when the ID parameter is also used. Use BLOCK to override the defined number of records sent in a data block during the Auto Connect session. Replace nn with the number of records per block, from 1 to 99. The remote site must be able to deblock the records. If you specify a value greater than 1, insert an asterisk (*) to unblock the first write to the remote site.
CMP=YES|NO	Used only when the ID parameter is also used. Use CMP=Y to specify the use of blank compression for the send to the remote site.

Parameter	Description
DATAMODE=B|C|S|' '	(DM=) sets the value of the &DATAMODE variable that is passed to your AC_SCRIPT. Valid values are: B = Blocked C = Compressed S = Stream BlankSets &DATAMODE to the FTP standard mode default value. Code your AC_SCRIPT to use variable &DATAMODE in order for this override to have any effect on your Auto Connect session. The order of the setting of the &DATAMODE variable is: 1 Taken from $$CONNECT operator command (DATAMODE= or DM= parameter). 2 Taken from the Sterling Connect:Enterprise remote specification record, in the ODF, at startup (&DATAMODE=). If you do not specify DATAMODE in the ODF or on the console, the &DATAMODE variable defaults to S, the value set in the *REMOTE record.
DATASTRU=F|R|' '	(DS=) sets the value of the &DATASTRU variable that is passed to your AC_SCRIPT. Valid values are: F = File R = Record Blank = Specifies that you want to use the FTP standard stru default value. Code your AC_SCRIPT to use variable &DATASTRU in order for this override to have any effect on your Auto Connect session. The order of the setting of the &DATASTRU variable is: 1 Taken from $$CONNECT operator command (DATASTRU= or DS= parameter). 2 Taken from the Sterling Connect:Enterprise remote specification record in the ODF at startup time (&DATASTRU=). If you do not specify DATASTRU in the ODF or on the console, the &DATASTRU variable defaults to F, the value set in the *REMOTE record.

Parameter	Description
DATATYPE=A|E|I|' '	(DT=) sets the value of the &DATATYPE variable that is passed to your AC_SCRIPT. Valid values are: A = ASCII E = EBCDIC I = Image Blank = Specifies that you want to use the FTP standard default for type. Code your AC_SCRIPT to use variable &DATATYPE in order for this override to have any effect on your Auto Connect session. The order of the setting of the &DATATYPE variable is: 1 Taken from $$CONNECT operator command (DATATYPE= or DT= parameter). 2 Taken from the Sterling Connect:Enterprise remote specification record in the ODF at startup time (&DATATYPE=). If you do not specify DATATYPE in the ODF or on the console, the &DATATYPE variable defaults to A, the value set in the *REMOTE record.
ID=xxxxxxxx	(SNA and BSC) Changes the method Sterling Connect:Enterprise uses to determine which batches are transmitted to remote sites. When ID is specified, Sterling Connect:Enterprise can send batches with IDs other than those defined in the *CONNECT records. Replace xxxxxxxx with the 1–8 byte Mailbox ID of the batches to be sent to the remote site. All batches with this ID that were not transmitted yet are sent.
ID=xxxxxxxx	(FTP) Sets the value of the &ID variable that is passed to your AC_SCRIPT. When used on SNA or BSC Auto Connect sessions, this parameter changes the method Sterling Connect:Enterprise uses to determine which batches are transmitted to remote sites. If you want this parameter to work the same way with FTP Auto Connect sessions as it does with SNA/BCS Auto Connect sessions, you must code your script to implement variable &ID in this manner. If you plan to implement this field the same way the SNA and BSC Auto Connect sessions work, replace xxxxxxxx with the 1-8 byte Mailbox ID of the batches to be sent to the remote site and implement your scripts to use variable &ID to send only batches with this ID.
L=xxxxxxxx	Specifies the LISTNAME for the host-initiated Auto Connect session. Replace xxxxxxxx with the 1–8 character LISTNAME for the Auto Connect session as defined in the *CONNECT section of the ODF. This parameter is required.
LINEID=xxxxxxxx	(LID=) BSC only. This parameter is only used with switched lines. It specifies a single line ID to override the LINES parameter in the *CONNECT records in the ODF. This parameter is useful when the defined line for the connection is busy with another transmission. Replace xxxxxxxx with the 1–8 character ID of the line.

Parameter	Description
MEDIA=CN|PR|PU|EX|BX	SNA only. Enables you to direct outbound batches sent during an Auto Connect session to a specific output media on all remote devices. If specified, it overrides the media normally used for the Auto Connect session. CN = Directs output batches to display on the remote console screen. This option causes Sterling Connect:Enterprise to use a X‘15’ (new line) control character as a record separator. PR = Directs output batches to print on the remote printer. This option causes Sterling Connect:Enterprise to use a X‘15’ (new line) control character as a record separator. PU = Directs output batches to the remote card punch. This option causes Sterling Connect:Enterprise to use a X‘1E’ (standard IRS) as a record separator. EX = Directs output batches to the remote exchange diskette and uses the transmission exchange format. BX = Directs output batches to the remote exchange diskette and uses the basic exchange format.
MODE=SENDRECV|SENDONLY| RECVSEND|RECVONLY	BSC only. Overrides the MODE defined in the *CONNECT records for all remote sites in the specified Auto Connect list. The MODE specifies the method that Sterling Connect:Enterprise uses to communicate with the remote site. Do not override the MODE unless the remote site can properly respond to the new MODE. This parameter is used only when the ID parameter is also used. SENDRECV (SR) = Sterling Connect:Enterprise first sends to the remote site, then receives from the remote site. SENDONLY (SO) = Sterling Connect:Enterprise only sends to the remote site. RECVSEND (RS) = Sterling Connect:Enterprise first receives from the remote site, then sends to the remote site. RECVONLY (RO) = Sterling Connect:Enterprise only receives from the remote site.
ONEBATCH=NO|YES	Selects only the first batch found for transmission, when used with BATCHID. NO = Sends all batches that match transmission criteria. YES = Sends only the first matching batch. This parameter overrides the ONEBATCH value in the *CONNECT and *REMOTE sections of the ODF.
TRUNC=NO|YES	Specifies whether Sterling Connect:Enterprise truncates all trailing blanks from records before data transmission. TRUNC=NO indicates that no blanks are truncated. TRUNC=YES indicates that all blanks are truncated prior to data compression and data transmission. At BSC sites, use this parameter only when the ID parameter is also used. At SNA sites, use TRUNC=N when transmitting variable length records; otherwise, the truncated blanks are not recovered at the receiving site.

Parameter	Description
TRANSPAR=YES|NO	(TRSP=) BSC only. Use this parameter only when the ID parameter is also used. TRANSPAR=Y requests Sterling Connect:Enterprise to use BSC transparency when sending to the remote site. Before using this parameter, verify that the remote site is capable of receiving transparent data. YES = Sterling Connect:Enterprise ignores BLOCK, CMP, and TRUNC. NO = Sterling Connect:Enterprise sends data using normal writes.

Using $$CONNECT on Manual Dial Lines (BSC Only)

Use the following procedure to ensure $$CONNECT success on manual dial lines:

1. Enter the $$CONNECT command with the appropriate parameters from the system console.

   Two messages are displayed on the console:

```
CMB033I - YOU MAY DIAL THE REMOTE TERMINAL USING LINE xxxxxxxx WHEN READY
CMB068I - USE PHONE NUMBER nnn...nnn
```

2. Verify that the remote site is ready to respond to your call.
3. Use the telephone connected to the line in the CMB033I message to dial the phone number in the CMB068I message.

   If the remote site responds to your call, the following message is displayed:

```
CMB040I - AUTO CONNECT FOR listname STARTED.
```

   If an error occurs, you can dial again, or you can reenter the $$CONNECT command at a later time.

The Auto Connect feature works well on manual dial lines if you do not have a large volume of transmissions. If the limitations of manual line dialing delay operation or cause errors, consider converting to autodial lines for Auto Connect sessions.

$$CONNECT Examples

Type the following command to start a full Auto Connect session for the Auto Connect list named ECOAST in the *CONNECT record:

```
$$CON L=ECOAST
```

Type the following command to start an Auto Connect session for the batches named ALERT for all remote sites in the ECOAST Auto Connect list:

```
$$CON L=ECOAST ID=ALERT
```

The following two examples start an Auto Connect session for batches named ALERT for all remote sites in the Auto Connect list named CHICAGO:

- For SNA sites, to send all batches to the Basic Exchange media, override the MEDIA parameter by typing the following parameters:

```
$$CON L=CHICAGO ID=ALERT MEDIA=BX
```

- For BSC sites, to send six records per block, override the MODE parameter by typing the following parameters:

```
$$CON L=CHICAGO ID=ALERT MODE=SENDONLY BLOCK=6
```

$$DALLOC Command

The $$DALLOC command deallocates a data or log file from Sterling Connect:Enterprise. You can deallocate any VBQ or VLF file except the current collection VBQ or VLF file, or any batch file that is actually collecting or transmitting data. If you want to deallocate the current collection file, first change to a different VBQ or VLF as the current collection file by using the $$ALLOC command.

$$DALLOC Syntax

The $$DALLOC command uses the following syntax:

```
$$DALLOC xxxxx,[STOUTL=ALLOW|DISALLOW,INUSE=FAIL|RETRY]
```

Parameter Descriptions

The $$DALLOC command uses the following parameters:

Parameter	Description
xxxxx	The Sterling Connect:Enterprise file ID name (VBQ01–VBQ20 or VLF1–VLF8).
STOUTL	Indicates whether or not the deallocated VBQ/VLF will be accessible by STOUTL, after the file is deallocated. After the file is allocated, it will be accessible again to STOUTL. If specified, this value overrides the corresponding ODF *OPTIONS parameters, DALLOC_VBQ_STOUTL or DALLOC_VLF_STOUTL (see the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information). ALLOW = Makes the deallocated VBQ/VLF available to STOUTL. DISALLOW = Makes the deallocated VBQ/VLF unavailable to STOUTL. **Note:** You can set the default behavior of the STOUTL= parameter using the ODF *OPTIONS parameters, DALLOC_VBQ_STOUTL= and DALLOC_VLF_STOUTL=.

Parameter	Description
INUSE	Indicates whether or not to immediately fail the $$DALLOC request if the file is currently in use by any connection or to retain the request and later deallocate the file as soon as it is available during the next retry interval (as specified by the DALLOC_RETRY_INTERVAL). FAIL = Fails the command if the file is currently in-use and unable to immediately deallocate. RETRY = Retries the command later if the file is currently in-use. The file will be deallocated as soon as it is no longer flagged as in-use. **Note:** You can set the default behavior of both the STOUTL= and INUSE= parameters using the ODF *OPTIONS parameters, DALLOC_VBQ_INUSE= and DALLOC_VLF_INUSE=.

$$DALLOC Examples

Type the following from the system console to deallocate VBQ05:

```
$$DALLOC VBQ05
```

Type the following to make the deallocated VBQ05 file unavailable to STOUTL.

```
$$DALLOC VBQ05,STOUTL=DISALLOW
```

Type the following to queue and retry the command if the VLF7 log file is currently in-use.

```
$$DALLOC VLF7,INUSE=RETRY
```

$$DELACQ Command

The $$DELACQ command deletes one or all Auto Connect session entries from the Auto Connect queue.

$$DELACQ Syntax

The $$DELACQ command has the following syntax:

```
$$DELACQ ENTRY=nnnnnnnnnn|ALL
```

Parameter Descriptions

The $$DELACQ command uses the following parameter:

Parameter	Description
ENTRY=nnnnnnnnnn | ALL	The queue entry number. This is displayed as part of the $$LIST ACQUEUE command. Specify one of the following values: nnnnnnnnnn = The unique 10-character entry number. Deletes only this queue entry. ALL = Deletes all Auto Connect queue entries.

$$DELACQ Example

Type the following from the system console to delete entry number 2 from the Auto Connect queue:

```
$$DELACQ ENTRY=2
```

$$DIALOG Command

The $$DIALOG command activates and deactivates FTP session dialog tracing. You can invoke session dialog tracing for one or more specific remote sites, generic remote sites, or all remote sites. A SYSOUT file is dynamically allocated for each captured session dialog. All dialog records for that session are written to the file.

See the chapter on diagnostics in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information about FTP session dialog tracing.

$$DIALOG Syntax

The $$DIALOG command uses the following syntax to turn on session tracing for both FTP_Client and FTP_Server sites:

```
$$DIALOG FTPON=*|remote1[,remote2,remote3,...remote8]
```

The $$DIALOG command uses the following syntax to turn off session tracing:

```
$$DIALOG FTPOFF=*|remote1[,remote2,remote3,...remote8]
```

Parameter Descriptions

The $$DIALOG command uses the following parameters:

Parameter	Description
FTPON	Activates FTP session dialog tracing for the specified remote names.
FTPOFF	Deactivates FTP session dialog tracing for the specified remote names.
*|remote1 [,remote2, remote3,...remote8	Specifies the remote sites to trace. The options are: * (asterisk) = Wildcard character. Use it as part of a remote name or as a stand-alone option. When used as a stand-alone option, it activates or deactivates FTP dialog tracing for all FTP sessions (see the examples following). remote1[,remote2,……remote8] = Specifies the remote names. You can specify up to eight remote names.

$$DIALOG Examples

Type the following from the system console to turn on dialog tracing for all remote sites beginning with RMT1 and for specific remote sites RMT234 and RMT88:

```
$$DIALOG FTPON=RMT1*,RMT234,RMT88
```

Type the following from the system console to turn off dialog tracing for all FTP sessions:

```
$$DIALOG FTPOFF=*
```

$$DIRECTORY (or $$DIRECTORY24) Command

The $$DIRECTORY (or $$DIRECTORY24) command displays a formatted listing of the data batches on the VSAM batch files.

Note: If the VSAM batch files contain many batches, the directory listing can tie up the console for an extended period. Limit online directory inquiries to one Mailbox ID at a time.

$$DIRECTORY Syntax

The $$DIRECTORY command has the following syntax:

```
$$DIRECTORY [ID=xxxxxxxx]
```

To produce the original Sterling Connect:Enterprise display where only the first 24 characters of the Batch ID are accommodated, you can use the following syntax:

```
$$DIRECTORY24 [ID=xxxxxxxx]
```

You can use either the long form, $$DIRECTORY (or $$DIRECTORY24), for the command or the short form, $$DIR (or $$DIR24).

Parameter Descriptions

The $$DIRECTORY command uses the following parameter:

Parameter	Description
ID=xxxxxxxx	The 1–8 byte Mailbox ID. This is an optional parameter. If the ID is not specified, the entire VSAM batch files directory is displayed. If an ID is specified, only the batches associated with the ID are displayed.

Console Response

The directory listing is displayed on the console as console message CMB017I when you use the $$DIRECTORY24 command:

```
CMB017I xxxxxxxx #nnnnnnn CT=nnnnnnnnn BID=x…x HHMMYYDDD ICADNURTEMXBFSZ4012389e
VBQ=xx|[OFFLINE]
```

The directory listing is displayed on the console as console messages CMB017I and CMB427I when you use the $$DIRECTORY command:

```
CMB017I - F38027   #0000057 CT=000000005 BID=|---+----1----+----2---- 2018-08044  A   R              VBQ01
CMB427I -          #0000057              BID=|---+----1----+----2----+----3----+----4----+----5----+----6---|
```

The contents of the listing are:

Field	Description
xxxxxxxx	The 8-byte Mailbox ID associated with the batch.
#nnnnnnn	The 7-digit batch number assigned by Sterling Connect:Enterprise.
CT=nnnnnnnnn	The count of the batch block or record. The ODF parameter COUNT determines if block counts or record counts are displayed. If COUNT=BLOCK is specified in the ODF, the number of physical blocks is displayed. If COUNT=RECORD is specified in the ODF, the number of logical records is displayed. If CT=0, either the batch collection is in progress or was interrupted before completion.

Field	Description
BID=xx...xx	The 64-byte user batch ID assigned to the batch when it was added to the VSAM batch files. If the batch was created because of an online data collection without a $$ADD record, the field reads BID=BATCH WITHOUT $$ADD. If the batch was created in an online data collection with a $$ADD record, but no BATCHID was specified, this field reads BID=NONE.
HHMM	The time the batch was created.
YYDDD	The Julian date that the batch was created. **Note:** If YYDDD is specified and the year portion is less than 80, the twenty-first century is assumed (that is, 45365 specifies the year 2045, day 365)

Field	Description
ICADNURTEMXB FSZ4012389e	Batch status flags. The following are the possible flags: A = The batch was added by the offline ADD utility. B = The batch originated at a BSC remote site. C = The batch was collected from a remote site through online Sterling Connect:Enterprise. D = The batch is flagged for deletion due to an online $$DELETE request or an offline DELETE utility. e = The batch was encrypted when added by the offline ADD utility. E = The batch was extracted by the offline EXTRACT utility. This flag does not inhibit another EXTRACT from running and does not prevent online access to the batch. F = The batch originated at a FTP remote site. I = The batch is incomplete. Either there are no records in the batch, or an online data collection was interrupted due to an error condition. This batch is ignored by Sterling Connect:Enterprise and you can only extract it through the offline utilities EXTRACT utility. M = The batch is available for multiple transmission, can be transmitted to any remote site, and is not marked T when transmitted unless Mailbox ID=AC Listname. N = The batch is non transmittable and is locked for transmissions. When displayed, this status replaces the T status. The status is set immediately after the batch is successfully collected, when the EO=Y option of a $$ADD command is specified. It is also set following successful transmission of a batch added with the TO=Y parameter. R = An online $$REQUEST for this batch from a remote site is allowed, or a host-initiated Auto Connect session can send the batch. S = The batch originated at an SNA remote site. T = The batch was transmitted online to a remote site. U = Sterling Connect:Enterprise cannot extract the batch. When displayed, this status replaces the E status. This status is set immediately after the batch is added, when the TO=Y option added the batch. It is also set following successful extraction of the batch when the EO=Y option added the batch. X = The batch contains transparent data. Z = EBCDIC data added through the APPC user API. 0 = The batch is stored on the VBQ as file-oriented. The batch was added offline or collected online as a contiguous byte string with no logical record delineation. 1 = FTP mode is blocked. 2 = = FTP mode is compressed. 3FTP mode is stream. 4 = SSL Collected. 5 = TLS collected. 8 = FTP structure is file. 9 = FTP structure is record.
VBQxx | [OFFLINE]	Indicates the VBQ where the batch resides, or OFFLINE if the VBQ is not currently allocated by Sterling Connect:Enterprise.

$$DISABLE Command

The $$DISABLE command turns on the disabled flag on a specified Auto Connect list. An Auto Connect list with the disabled flag set, cannot be started.

When a listname is disabled, and a $$CONNECT command is subsequently issued (via a console command, ISPF/CICS interface, or rules) to start that listname, the auto connect will not start and message CMB807I will be issued:

```
CMB807I - AUTO CONNECT FOR xxxxxxxx UNABLE TO START - LISTNAME DISABLED.
```

When a listname is disabled, and a listname TIME=hh:mm parameter starts the listname, the auto connect will not start and message CMB808I will be issued:

```
CMB808I - TIMED AUTO CONNECT FOR xxxxxxxx UNABLE TO START - LISTNAME DISABLE
```

$$DISABLE Syntax

The $$DISABLE command has the following syntax:

```
$$DISABLE (or $$DISA) L=xxxxxxxx
```

Parameter Description

The $$DISABLE command uses the following parameter:

Parameter	Description
L=xxxxxxxx	The name of the Auto Connect list specified in the ODF. This parameter is required.

Console Responses

The following reply messages may occur when a $$DISABLE L=xxxxxxxx command is issued:

- CMB802I - LISTNAME xxxxxxxx DISABLED ON yyyy/mm/dd AT hh:mm:ss BY uuuuuuuu
- CMB806I - LISTNAME xxxxxxxx ALREADY DISABLED
- CMB803I - $$DISABLE INVALID. LISTNAME xxxxxxxx NOT DEFINED

For more information, refer to the *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guide*, Chapter 4, *Online System Console Messages*.

$$DUMP Command

The $$DUMP command takes a snapshot dump of the immediate online Sterling Connect:Enterprise address space. The command does not affect system operation and does not cause Sterling Connect:Enterprise to end prematurely.

Output for the $$DUMP command goes to the SNAPOUT DD statement.

The $$DUMP command is a Sterling Connect:Enterprise problem research tool and should not be used frequently.

$$DUMP Syntax

The $$DUMP command has the following syntax:

```
$$DUMP AC|ACM|ALL|ENQTAB|FCT|GCB|LINEID=xxxxxxxx|PRSCB|RMT=xxxxxxxx|SCB|SRBS|
TCPL|TCPS|TCPT=FTPCnnnn|FTPSnnnn|TSWA
```

Parameter Descriptions

The $$DUMP command uses the following parameters.

Parameter	Description
AC	Takes a snapshot dump of the AC List control blocks and Remote control blocks (*CONNECT and *REMOTE definitions).
ACM	Takes a snapshot dump of the FTP Auto Connect Manager work area.
ALL	Takes a snapshot dump of the entire Sterling Connect:Enterprise region. If Sterling Connect:Enterprise stalls for an unknown reason and the remote sites cannot access the system, use this dump for a snapshot dump of the job's activity. Sterling Connect:Enterprise continues running, and you can try to solve the problem without bringing the system down. Contact Sterling Commerce Customer Support for help in analyzing a $$DUMP ALL region snapshot.
ENQTAB	Takes a snapshot dump of the batch transmission Enqueue Table.
FCT	Takes a snapshot dump of the File Control Table.
GCB	Dumps the contents of the Global Control Block that includes the SCB, PRSCB and FCT.
LINEID= xxxxxxxx	Takes a snapshot dump of activity of the specified line, where xxxxxxxx is the line ID (as defined in M$LINEX in the user assembly). Use this at BSC sites to determine what kind of transaction is running on the line. A possible use is determining why a line defined to Sterling Connect:Enterprise shows an unusual number of errors. A knowledge of BTAM line control and the BTAM control blocks is helpful to understand the $$DUMP LINEID output.
PRSCB	Takes a snapshot dump of the Process Router Control Block.

Parameter	Description
RMT=xxxxxxxx	Takes a snapshot dump of the active SNA session for the remote specified in RMT. The remote must have an active session in progress.
SCB	Takes a snapshot dump of the main Sterling Connect:Enterprise System Control Block .
SRBS	Takes a snapshot dump of the System Request Blocks currently being serviced by CP (Command Processor) tasks.
TCPL	Dumps the contents of the TCP/IP Listener task work area.
TCPS	Dumps the contents of the TCP/IP Scheduler task work area.
TCPT=FTPCnnnn|FTPSnnnn	Takes a snapshot dump of the specified 8-character TCP/IP application thread identifier. Specify FTPCnnnn for FTP client threads and FTPSnnnn for FTP server threads. The TCP/IP Scheduler Work Area (TSWA) and the storage that contains the thread's work area stack, TCP/IP buffers, VBQ buffers and the thread's internal trace table are written to the SNAPOUT data set. This command can be used any time the TCP/IP feature is active and the thread is allocated.
TSWA	Dumps the contents of the TCP/IP Scheduler work area.

$$DUMP Example

Type the following from the console to take a snapshot dump of line BSC001:

```
$$DUMP LINEID=BSC001
```

$$ENABLE Command

The $$ENABLE command turns off the disabled flag on a specific Auto Connect list. An Auto Connect list can only be started if the disabled flag is off.

If an enabled listname gets queued but is disabled by the time the listname is reactivated, message CMB809I will be issued:

```
CMB809I - QUEUED AUTO CONNECT UNSUCCESSFULLY REACTIVATED FOR DISABLED LISTNAME
xxxxxxxx
```

$$ENABLE Syntax

The $$ENABLE command has the following syntax:

```
$$ENABLE (or $$ENA) L=xxxxxxxx
```

Parameter Description

The $$ENABLE command uses the following parameter:

Parameter	Description
L=xxxxxxxx	The name of the Auto Connect list specified in the ODF. This parameter is required.

Console Responses

The following reply messages may occur when a $$ENABLE L=xxxxxxxx command is issued:

- CMB800I - LISTNAME xxxxxxxx ENABLED ON yyyy/mm/dd AT hh:mm:ss BY uuuuuuuu
- CMB806I - LISTNAME xxxxxxxx ALREADY ENABLED
- CMB801I - $$ENABLE INVALID. LISTNAME xxxxxxxx NOT DEFINED.

For more information, refer to the *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guide*, Chapter 4, *Online System Console Messages*.

$$INVOKE Command

You can use the $$INVOKE command to invoke the End of Batch (EOB), Console (CON), or Scheduler (SCH) application agent requests. Each agent is discussed in its own section. You can use either the long form, $$INVOKE, for the command or the short form, $$INV.

End of Batch Application Agent

The $$INVOKE command invokes the end-of-batch application agent for a specific batch number or range of batch numbers. This command has three primary purposes:

- Test end-of-batch rules processing flow and execution.
- Recover an application agent request which was not executed during normal online end-of-batch processing. For example, end-of-batch application agent processing was inactive when the batch was collected online.
- Automate processing for offline added batches. For example, you can specify the $$INVOKE command in the AUTOSEND records of the offline ADD utility.

$$INVOKE Syntax

The $$INVOKE command has the following syntax:

```
$$INVOKE (or $$INV) RULES=EOB BATCHNUM=nnnnnnn|nnnnnnn-nnnnnnn
```

Parameter Descriptions

Parameter	Description
RULES=EOB	(R) Indicates a request for end-of-batch rules processing.
BATCHNUM=nnnnnnn | nnnnnnn-nnnnnnn	(BN) The 7-digit batch number or a beginning and ending batch number range. If a single batch number is specified, one application agent request is processed. If a batch number range is specified, multiple requests are processed, one for each batch number. Leading zeroes are not required.

Console Application Agent

The $$INVOKE command invokes the console application agent for a specific console message. The first token (data value in the MSG text) is considered to be the message number/ID searched for in the SELECT statements.

$$INVOKE Syntax

The $$INVOKE command has the following syntax:

```
$$INVOKE RULES=CON,MSG='xxxx...xxxx'
```

Parameter Descriptions

Parameter	Description
RULES=CON	(R) Indicates a request for console rules processing.
,MSG='xxxx...xxxx'	(M) A simulated WTO message. MSG01 is the first blank delimited word. One console application agent request if processed.

Scheduler Application Agent

The $$INVOKE command invokes the scheduler application agent to process up to eight rules or a single SELECT statement.

$$INVOKE Syntax

The $$INVOKE command has the following syntax:

```
$$INVOKE RULES=SCH,RULENAME=xxxxxxxx |(xxxxxxxx,.....,xxxxxxxx)
or
$$INVOKE RULES=SCH,SELECT=nnnnnnnnn
```

Use vertical bars (|) to separate parameters in a $$INVOKE command. For example, the following example shows both a CON and EOB application agent being invoked.

```
$$INVOKE RULES=SCH,SELECT=nnnnnnnnn | RULES=CON,MSG='xxxx.xxxx'
```

Parameter Descriptions

Parameter	Description
RULES=SCH	(R) Indicates a request for scheduler rules processing.
,RULENAME=xxxxxxxx | (xxxxxxxx,.....,xxxxxxxx)	(RN) The 1–8 scheduler rule name(s) to be processed.
,SELECT=nnnnnnnn	(S) The SELECT statement sequence number assigned during system startup or when the rules are refreshed. The nnnnnnnn value can be found in column 73–80 of the SELECT statement in the SYSPRINT listing. Leading zeroes are not required.

$$INVOKE Example

The following is an example of $$INVOKE output:

```
CMB224I - END OF BATCH APPLICATION AGENT INVOKED
CMB255I - SCHEDULER APPLICATION AGENT INVOKED
CMB258I - CONSOLE APPLICATION AGENT INVOKED
```

$$LIST Command

The $$LIST command displays:

- The status of a particular or all SSL/TLS certificates in the SSL/TLS database specified in the ODF
- All listnames in the ODF along with their status
- Application agent status
- Auto Connect Queue entry status
- BSC line status
- FTP session status
- FTP sessions in Auto Connect
- CPU and storage utilization
- ODF lock status
- Storage utilization
- Trace status

- ✦ VSAM batch file status
- ✦ VBQ and VLF files pending deallocation
- ✦ Number of slots allocated to the APPC Event List based on APPC activity level, including the high-used number of slots

$$LIST Syntax

The $$LIST command has the following syntax:

```
$$LIST CERT[,SERVER|ALL] LISTNAME | SESSIONS|LINES|TRACES|ACQUEUE|ALL|FILES[,PD]
|RULES|FTP|FTP ALL|ODFLOCK|RESOURCES[,D]|STORMAP
```

Parameter Descriptions

The $$LIST command uses the following parameters. Command abbreviations are in parentheses.

Parameter	Description
CERT [,SERVER| ALL]	LIsts the status of a particular certificate or all SSL/TLS certificates in the SSL/TLS database specified in the ODF. SERVER = Lists only the certificate identified by the ODF *OPTIONS parameter SSL_SERVER_CERT. This is the default value. ALL = Lists all certificates in the database specified by the ODF *OPTIONS parameter SSL_KEY_DBASE or SSL_KEYRING_NAME.
LISTNAME	Lists all names of Auto Connect lists and the status of the listnames.
SESSIONS	(SESS) Lists current SNA sessions.
LINES	Lists all defined BSC lines.
TRACES	Lists all active traces.
ACQUEUE	Lists all currently queued Auto Connect sessions.
ALL	Lists all current SNA sessions, all FTP sessions, all defined BSC lines, all active traces, all queued Auto Connect sessions, and application agent status. Use this command regardless of whether your system uses SNA or BSC. If you use this command on an SNA system, you receive a message indicating that no BSC lines are defined. Likewise, if you use it on a BSC system, you receive a message indicating that no SNA sessions exist.
FILES [,PD]	Lists all VSAM batch files defined to Sterling Connect:Enterprise with their allocation status. PD = Displays all VBQ and VLF files pending deallocation due to a previous $$DALLOC command that was issued but could not be immediately processed because the file was in-use. Information displayed includes the console name where the $$DALLOC command was issued and the date/time. **Note:** If the $$DALLOC command was issued via the user interface, the userid is displayed in the detail information. If the command was issued via console, the console id taken from the CIBXCNNM field in the Console Input Buffer is displayed.

Parameter	Description
RULES	Lists the status of all application agents.
FTP	Lists all currently connected FTP sessions.
FTP ALL	Lists all connected or disconnected FTP sessions.
ODFLOCK	Displays the user ID/APPLID of the ISPF or CICS user currently updating the ODF.
RESOURCES [,D]	Displays CPU and storage utilization for each task in the Sterling Connect:Enterprise address space. By default, the display shows utilization since Sterling Connect:Enterprise startup. To only show CPU and storage utilization since the last request, specify the ,D option. For high-activity systems, you can specify the ODF *OPTIONS parameter, APPC_EVENT_LIST_SLOTS, to see the number of slots allocated to the APPC Event List, including the high-used number of slots when you use the $$LIST RESOURCES command.
STORMAP	Displays Sterling Connect:Enterprise storage utilization by subpool and task. Storage above the 16-MB line, below the 16-MB line, and totals are displayed.

$$LIST Examples

The following are examples of the $$LIST command.

$$LIST ACQUEUE

The following is an example of $$LIST ACQUEUE output:

```
CMB209I - STATUS OF QUEUED AUTO CONNECTS
CMB210I - LISTNAME  PRIORITY    DATE    TIME  REASON  ENTRY  #
CMB211I - SNA1               0  yyddd   0841  SESSIONS         12
CMB211I - SNA1               0  yyddd   0818  SESSIONS         13
CMB211I - SNA3               0  yyddd   0818  SESSIONS         10
CMB211I - SNA4               0  yyddd   0818  SESSIONS          9
CMB211I - SNA2               0  yyddd   0818  SESSIONS         11
```

$$LIST ALL

The following is an example of $$LIST ALL output:

```
CMB019I -  NO BSC LINES DEFINED
CMB087I - STATUS OF ALL Connect:Enterprise SNA SESSIONS:
CMB088I -  NO SNA SESSIONS EXIST
CMB151I - STATUS OF Connect:Enterprise TRACES:
CMB152I -  NO Connect:Enterprise TRACES ACTIVE
CMB209I - STATUS OF QUEUED AUTO CONNECTS:
CMB212I -  NO Connect:Enterprise AUTO CONNECTS QUEUED
CMB382I - STATUS OF APPLICATION AGENTS
CMB397I -  CONSOLE             NOT ACTIVATED
CMB383I -  END-OF-BATCH        NOT ACTIVATED
CMB384I -  LOGGING             NOT ACTIVATED
CMB385I -  WAKE UP TERMINATE   NOT ACTIVATED
CMB398I -  SCHEDULER           NOT ACTIVATED
CMB386I -  000 REQUESTS IN RULES PROCESSING QUEUE
CMB484I - STATUS OF ALL Connect:Enterprise FTP SESSIONS:
CMB485I - SESS ID=FTPS0001 DISCONNECTED 0 BYTES SENT
          RMTNAME=       INACTIVE     0 BYTES RECV
                           BATCHNUM=    0 XMITS
CMB485I - SESS ID=FTPC0001 DISCONNECTED 0 BYTES SENT
          RMTNAME=       INACTIVE     0 BYTES RECV
          AC LIST=       BATCHNUM=    0 XMITS
CMB489I - END OF FTP REMOTES
```

$$LIST FILES

The following is an example of $$LIST FILES output:

```
CMB234I - VPF   AL    RDXD110.SJV110A.VPF
CMB234I - VCF   AL    RDXD110.SJV110A.VCF
CMB234I - VBQ01 AL    RDXD110.SJV110A.VBQ01
CMB234I - VBQ02 AL    RDXD110.SJV110A.VBQ02
CMB234I - VBQ03 STL=D RDXD110.SJV110A.VBQ03
CMB234I - VBQ04       RDXD110.SJV110A.VBQ04
CMB234I - VBQ05 AL    RDXD110.SJV110A.VBQ05
CMB234I - VBQ06 AL    RDXD110.SJV110A.VBQ06
CMB234I - VBQ07 AL,PD RDXD110.SJV110A.VBQ07
CMB234I - VBQ08 AL,CC RDXD110.SJV110A.VBQ08
CMB234I - VLF1  STL=D RDXD110.SJV110A.VLF1
CMB234I - VLF2  AL,CC RDXD110.SJV110A.VLF2
CMB234I - VLF3  AL    RDXD110.SMSTEST.SJV110A.VLF3
CMB234I - VLF4  AL    RDXD110.SMSTEST.SJV110A.VLF4
CMB234I - VLF5  AL    RDXD110.SMSTEST.SJV110A.VLF5
CMB234I - VLF6        RDXD110.SMSTEST.SJV110A.VLF6
CMB234I - VLF7  AL    RDXD110.SMSTEST.SJV110A.VLF7.DSNAME44.CHAR44
CMB232I - END OF $$LIST FILES
```

AL indicates the file is allocated to Sterling Connect:Enterprise. CC indicates the current collection file for batches (VBQ) and the current log file (VLF). If the file is deallocated, this field is blank.

The following is another example of $$LIST FILES output:

```
11.01.42 STC03204  CMB234I - VPF   AL    RDXD110.SJV110A.VPF
11.01.42 STC03204  CMB234I - VCF   AL    RDXD110.SJV110A.VCF
11.01.42 STC03204  CMB234I - VBQ01       RDXD110.SJV110A.VBQ01
11.01.42 STC03204  CMB234I - VBQ02 AL    RDXD110.SJV110A.VBQ02
11.01.42 STC03204  CMB234I - VBQ03 STL=D RDXD110.SJV110A.VBQ03
11.01.42 STC03204  CMB234I - VBQ04 AL    RDXD110.SJV110A.VBQ04
11.01.42 STC03204  CMB234I - VBQ05 AL,CC RDXD110.SJV110A.VBQ05
11.01.42 STC03204  CMB234I - VBQ06 AL    RDXD110.SJV110A.VBQ06
11.01.42 STC03204  CMB234I - VBQ07 AL,PD RDXD110.SJV110A.VBQ07
11.01.42 STC03204  CMB234I - VBQ08 AL,PD RDXD110.SJV110A.VBQ08
11.01.42 STC03204  CMB234I - VLF1  STL=D RDXD110.SJV110A.VLF1
11.01.42 STC03204  CMB234I - VLF2  AL,CC RDXD110.SJV110A.VLF2
11.01.42 STC03204  CMB234I - VLF3  STL=D RDXD110.SMSTEST.SJV110A.VLF3
11.01.42 STC03204  CMB234I - VLF4  STL=D RDXD110.SMSTEST.SJV110A.VLF4
11.01.42 STC03204  CMB234I - VLF5  AL    RDXD110.SMSTEST.SJV110A.VLF5
11.01.42 STC03204  CMB234I - VLF6  AL    RDXD110.SMSTEST.SJV110A.VLF6
11.01.42 STC03204  CMB234I - VLF7  STL=D RDXD110.SMSTEST.SJV110A.VLF7.DSNAME44.CHAR44
11.01.42 STC03204  CMB232I - END OF $$LIST FILES
```

The following messages are displayed for all outstanding, that is, pending queued $$DALLOC commands if you type $$LIST FILES,PD from a system console.

```
12.58.43 STC03410  CMB343I - VBQ06 DEALLOCATION REQUEST FROM SVAJD1   ORIGINALLY
QUEUED ON 2003-10-17 AT 12:58:38, PENDING
12.58.43 STC03410  CMB343I - VBQ07 DEALLOCATION REQUEST FROM SVAJD1   ORIGINALLY
QUEUED ON 2003-10-17 AT 12:58:39, PENDING
12.58.43 STC03410  CMB232I - END OF $$LIST FILES,PD

-or-

13.01.05 STC03410  CMB232I - END OF $$LIST FILES,PD (NO FILES PENDING DEALLOCATION)
```

The contents of the message are:

Field	Description
mm.yy.dd	The date and time the original $$DALLOC request was issued.
STCxxxx	The ID of the started task.
CMBnnnI	The message ID.
xxxxx	The ID of the file currently pending deallocation.

Field	Description
AL,CC,PD	The allocation status. AL = The file is allocated and available to both the Sterling Connect:Enterprise online system and STOUTL offline utilities. AL,PD = The file is allocated (same as above AL description), and is pending deallocation from a previous request, that is, $$DALLOC was issued with INUSE=RETRY. The file will be deallocated during the next retry interval in which the file is not flagged in-use. AL,CC = The file is allocated as the current collection file for batches (VBQ) or for the current log file (VLF). Blank = The file is deallocated from the online system, but available to the STOUTL offline utilities. STL=D = The file is deallocated and unavailable to both the online system and the STOUTL offline utilities, that is, $$DALLOC was issued with STOUTL=DISALLOW.
xxxxxxxx.xxxxxxxx. xxxxx	The name of the data set contained in the file including the file ID.
x.....x	The reason the file is still pending allocation – specifically the user/console IDs and all SNA/BSC sessions flagged as having the file in-use. $$DALLOC issued by userid on yyyy-mm-dd- at hh:mm:ss IN-USE, BSC LINEID(S)=xxxxxxxx,xxxxxxxx,xxxxxxxx,xxxxxxxx IN-USE, SNA REMOTE(S)=xxxxxxxx,xxxxxxxx,xxxxxxxx,xxxxxxxx

$$LIST CERT

The following is an example of $$LIST CERT output:

```
CMB077I - REQUEST PROCESSED FROM CONSOLE :  $$LIST CERT,ALL
CMB2351I - STATUS of ALL Connect:Enterprise CERTIFICATES:
CMB2353I - Certificate EXPIRED 01/29/1996-00:00:00 01/07/2004-23:59:59  576
           Verisign Class 3 Public Primary Certification Authority
CMB2353I - Certificate EXPIRED 01/29/1996-00:00:00 01/07/2004-23:59:59  577
           Verisign Class 2 Public Primary Certification Authority
CMB2353I - Certificate VALID   01/29/1996-00:00:00 01/07/2020-23:59:59  578
           Verisign Class 1 Public Primary Certification Authority
CMB2353I - Certificate EXPIRED 04/17/1997-00:00:00 01/07/2004-23:59:59  579
           VeriSign Class 3 CA Individual Subscriber-Persona Not Valid
           ated
CMB2353I - Certificate EXPIRED 05/12/1998-00:00:00 01/06/2004-23:59:59  580
           VeriSign Class 2 CA Individual Subscriber-Persona Not Valid
           ated
CMB2353I - Certificate EXPIRED 05/12/1998-00:00:00 05/12/2008-23:59:59  581
           VeriSign Class 1 CA Individual Subscriber-Persona Not Valid
           ated
CMB2353I - Certificate EXPIRED 11/09/1994-00:00:00 01/07/2010-23:59:59  582
           RSA Secure Server Certification Authority
CMB2353I - Certificate VALID   08/01/1996-00:00:00 12/31/2020-23:59:59  583
           Thawte Server CA
CMB2353I - Certificate VALID   08/01/1996-00:00:00 12/31/2020-23:59:59  584
           Thawte Premium Server CA
CMB2353I - Certificate VALID   01/01/1996-00:00:00 12/31/2020-23:59:59  585
           Thawte Personal Basic CA
CMB2353I - Certificate VALID   01/01/1996-00:00:00 12/31/2020-23:59:59  586
           Thawte Personal Freemail CA
CMB2353I - Certificate VALID   01/01/1996-00:00:00 12/31/2020-23:59:59  587
           Thawte Personal Premium CA
CMB2353I - Certificate EXPIRED 05/02/2007-00:00:00 05/01/2010-23:59:59  588
           global5 cert req to Verisign
CMB2353I - Certificate VALID   01/29/1996-00:00:00 08/01/2028-23:59:59  589
           Verisign Root expires 2028
```

A single CMB077I message is displayed, followed by one CMB2351I message, followed by several SMB2353I messages. The listing contents are:

Field	Description
CMB077I - REQUEST PROCESSED FROM CONSOLE : $$LIST CERT,ALL	The $$LIST CERT,ALL operator command originally entered on the console.
CMB2351I - STATUS of ALL Connect:Enterprise CERTIFICATES:	This message precedes subsequent CMB2353I messages, which list the server certificate specified by the ODF SSL_SERVER_CERT parameter.

Field	Description
CMB2353I - Certificate xxxxxxx mm/dd/yyyy-hh:mm:ss (1) [certificate name - 1st 59 bytes] (2) [certificate name - 2nd 59 bytes] (3) [certificate name - 3rd 59 bytes] (4) [certificate name - 4th 59 bytes] (5) [certificate name - last 20 bytes] (6)	The certificate status, begin/end dates, and certificate label name. where: xxxxxxx = 'Valid' | 'Warning' | 'Expired' depending on whether the certificate is still valid, about to expire, or has already expired.

$$LIST FTP

The following is an example of $$LIST FTP output:

```
CMB483I - STATUS OF Connect:Enterprise FTP SESSIONS
CMB485I - SESS ID=FTPC0001CONNECTED             12 BYTES SENT
          RMTNAME=COMPANYBACTIVE                 0 BYTES SENT
          AC LIST=FTPLISTBBATCHNUM=UNKNOWN      12 XMITS
CMB485I - SESS ID=FTPS0001CONNECTED             12 BYTES SENT
          RMTNAME=BREMOTE ACTIVE                 0 BYTES RECV
                          BATCHNUM=0000012      12 XMITS
CMB489I - END OF FTP REMOTES
```

A single CMB483I message is displayed, followed by one CMB485I message per FTP session. The listing contents are:

Field	Description
SESS ID=xxxxxxxx	The ID number assigned to this session.
AC LIST	The name of the AC_SCRIPT controlling the session.
ACTIVE | INACTIVE xxx,xxx BYTES SENT	The FTP session status and the number of bytes sent in this session.
xxx,xxx BYTES RECV	The number of bytes received in this session.
RMTNAME=xxxxxxxx	The name of the remote site participating in this session.
BATCHNUM	The batch number of the active batch.
x,xxx XMITS	The total number of blocks (RUs) transmitted for this session, which can consist of more than one batch.

$$LIST FTP ALL

The following is an example of $$LIST FTP ALL output:

```
CMB484I - STATUS OF ALL Connect:Enterprise FTP SESSIONS:
CMB485I - SESS ID=FTPS0001      CONNECTED                0 BYTES SENT
          RMTNAME=              INACTIVE                 0 BYTES RECV
                                BATCHNUM=                0 XMITS
CMBxxxI - SESS ID=FTPC0001      DISCONNECTED             0 BYTES SENT
          RMTNAME=              INACTIVE                 0 BYTES RECV
          AC LIST=FTPLISTB      BATCHNUM=                0 XMITS
CMBxxxI - END OF FTP REMOTES
```

A single CMB484I message is displayed, followed by one CMB485I message per FTP session. The listing contents are:

Field	Description
SESS ID=xxxxxxxx	The FTP session ID.
NAME=xxxxxxxx	The name of the remote participating in this session.
CONNECTED| DISCONNECTED	Indicates if the remote is logged into Sterling Connect:Enterprise.
ACTIVE | INACTIVE	The FTP session status.
xxx,xxx BYTES SENT	The number of bytes sent in this session.
xxx,xxx BYTES RECD	The number of bytes received in this session.
batch#	The batch number of the active batch.
x,xxx XMITS	The total number of blocks (RUs) transmitted for this session, which can consist of more than one batch.

$$LIST LINES

If you type $$LIST LINES from a system console, the following messages are displayed for all defined BSC lines:

```
CMB018I - STATUS OF ALL Connect:Enterprise LINES:
CMB019I - LINEID=xxxxxxxx OPEN ACTIVE[xxxxxxxx][AC] CLOSED INACTIVE
.
.
.
CMB019I - LINEID=xxxxxxxx OPEN ACTIVE[xxxxxxxx][AC] CLOSED INACTIVE
```

A single CMB018I message is displayed, followed by one CMB019I message per line defined to Sterling Connect:Enterprise. The listing contains the following fields:

Field	Description
LINEID=xxxxxxxx	The line ID defined in the M$LINEX macro in the BSC user assembly.
OPEN|CLOSED	The line can be OPEN or CLOSED. Lines are closed due to hard I/O errors.
xxxxxxxx	The Mailbox ID of the active batch.
AC	If the line is active due to an Auto Connect session, the remote name from the Auto Connect list is displayed, followed by the AC indicator.
ACTIVE | INACTIVE	The line status. If the line is active, additional information is displayed. If the line is inactive (the line does not have current transmission activity), no additional information is displayed.

$$LIST LISTNAME

The following is an example of $$LIST LISTNAME output:

```
CMB804I - STATUS OF LISTNAMES:
      CMB805I -   LISTNAME=FTPACS   DISABLED
      CMB805I -   LISTNAME=FTPLST2  ENABLED
      CMB805I -   LISTNAME=SNALIST  DISABLED
      CMB805I -   LISTNAME=BSCLIST  ENABLED
```

$$LIST ODFLOCK

If you type $$LIST ODFLOCK from a system console and someone is updating the ODF, the following message is displayed:

```
CMB412I - ODF LOCKED BY CICS USER: xxxxxxxx APPLID: xxxxxxxx
```

The contents of the message are:

Field	Description
USER: xxxxxxxx	The user ID of the ISPF or CICS user updating the ODF.
APPLID: xxxxxxxx	The APPLID of the ISPF or CICS user updating the ODF.

If no one is updating the ODF, the following message is displayed:

```
CMB413I - NO ODF LOCK HELD
```

$$LIST RESOURCES

The following is an example of $$LIST RESOURCES output:

```
16.02.37 STC09742 CMB594I - Connect:Enterprise RESOURCE UTILIZATION SINCE START-UP.
16.02.37 STC09742  CMB591I - DURATION=0054:37:29.94  ADDRESS SPACE CPU TIME=0000:00:02.10
SRB CPU TIME=0000:00:00.00
16.02.37 STC09742  CMB591I - TOTAL DYNAMIC STORAGE ALLOCATED: MAXIMUM=0165766K,
CURRENT=0165766K
16.02.37 STC09742 CMB289I - APPC STMAIN STORAGE POOL ALLOCATED/USED PAGES 04500/00037
16.02.37 STC09742 CMB810I - APPC SEMAPHORE LIST ALLOCATED/USED SLOTS 241/005
16.02.37 STC09742 CMB337I - EPVT VSAM SERVER STORAGE POOL ALLOCATED/USED PAGES 02048/00222
16.02.37 STC09742 CMB337I - PVT VSAM SERVER STORAGE POOL ALLOCATED/USED PAGES 00008/00002
16.02.37 STC09742 CMB297I - MAXCP HIGH CURR TOT #TIMES HIGH  CURR  TOT ITEMS 630
  630               MAXRP  BUSY  BUSY  MAX BUSY   HOLDQ  HOLDQ  ON HOLDQ
  630              -----  ----  ----  ----------  -----  -----  ---------
  630               CP=03   01   00   00000000  00000  00000  00000000
  630               RP=03   02   00   00000000  00000  00000  00000000
16.02.37 STC09742 CMB298I - FTP   MAX    HIGH  CURR  TOT #TIMES  BUSY     + 631
  631               TASK   THREADS  BUSY  BUSY  MAX BUSY   REJECT
  631              ------  -------  ----  ----  ----------  --------
  631               SERVER    0020  0000  0000   00000000  00000000
  631               CLIENT    0020  0000  0000   00000000  00000000
16.02.37 STC09742 CMB592I - TASK ID  TASK CPU TIME  DYNAMIC STORAGE CURRENT/MAXIMUM
16.02.37 STC09742 CMB592I - STMAIN  0000:00:00.00  0145597K/0145597K
16.02.37 STC09742 CMB592I - STAPR001 0000:00:00.00  0018464K/0018464K
16.02.37 STC09742 CMB592I - QCP0001  0000:00:00.00  0000032K/0000032K
16.02.37 STC09742  CMB592I - QCP0002   0000:00:00.00   0000032K/0000032K
```

Several CMB messages contain information, which indicate how efficiently your system resources are being used. Use this information to decide if you should adjust any ODF parameters to make your system run more efficiently. The contents of the listing are:

Field	Description
CMB594I	This message is the title line for the individual subtask resource utilization summaries displayed by the $$LIST RESOURCES command.
CMB591I	This message displays the elapsed time that of the Sterling Connect:Enterprise job execution, total CPU time used, and SRB CPU time used.
CMB289I	This message displays the number of 4-KB pages allocated in the APPC/ECSA/CSA storage pool and the maximum number of pages used during execution.
CMB810I	This message displays the number of APPC Event List slots allocated and the highest number of slots used.
CMB337I	This message displays the number of 4K pages allocated in the VSAM Server EPVT/PVT storage pool and the maximum number of pages used during executio

Field	Description
CMB297I	This message lists Command Processor (CP) and Rules Processor (RP) task utilization statistics. MAXCP MAXRP = The MAXCP=nn|MAXRP=nn value specified in the ODF (Options Definition File). HIGH BUSY = The highest number of CP/RP tasks that were busy at any one time, since Sterling Connect:Enterprise was last started. CURR BUSY = The current number of busy CP/RP tasks. TOT #TIMES MAX BUSY = The total number of times MAXCP|RP=nn was reached, since Sterling Connect:Enterprise was last started. HIGH HOLDQ = The highest number of entries on the CP/RP HOLD-Q at any one time, since Sterling Connect:Enterprise was last started. When a request cannot be routed to a CP/RP task, due to all tasks busy, the request is temporarily placed on the corresponding HOLD-Q. When a CP/RP task completes processing its current unit of work, the next entry is removed from the HOLD-Q and routed to the CP/RP task. Eventually, the HOLD-Q count will reach zero. CURR HOLDQ = The current number of entries on the CP/RP HOLD-Q. TOT ITEMS ON HOLDQ = The total number of entries placed on the CP/RP HOLD-Q, since Sterling Connect:Enterprise was last started.
CMB298I	This message provides FTP client/server utilization statistics. FTP TASK = Identifies this as FTP SERVER or CLIENT task type. MAX THREADS = The FTP_MAX_SERVER|CLIENT_THREADS=nnnn value specified in the ODF. HIGH BUSY = The highest number of FTP server/client tasks that were busy at any one time, since Sterling Connect:Enterprise was last started. CURR BUSY = The current number of busy FTP client/server threads. TOT #TIMES MAX BUSY = The total number of times all FTP client/server tasks were busy, since Sterling Connect:Enterprise was last started. BUSY REJECT = The total number of times a connection was rejected due to all client/server threads being busy. When Sterling Connect:Enterprise is acting as the FTP server, this value represents the total number of rejected connection attempts from the remote FTP client, due to all server threads being busy. When Sterling Connect:Enterprise is acting as the FTP client, this value represents the total number of times the FTP Auto Connect Manager tried to activate a session for a remote, but could not due to all client client threads being busy.
CMB592I	TASK ID TASK CPU TIME DYNAMIC STORAGE-CURRENT/MAXIUM This message is the title line for the individual subtask resource utilization summaries. TASK ID = The subtask name running in the Sterling Connect:Enterprise address space. TASK CPU TIME = Total CPU time the task has used. CURRENT DYNAMIC STORAGE = Total amount of storage currently allocated to the task. MAXIMUM DYNAMIC STORAGE = Maximum amount of storage that was allocated to the task at any given time.

$$LIST RULES

The following is an example of $$LIST RULES output:

```
CMB382I - STATUS OF APPLICATION AGENTS:
CMB383I - END-OF-BATCH       ACTIVE
CMB384I - LOGGING            ACTIVE
CMB385I - WAKE UP TERMINATE  ACTIVE
CMB397I - CONSOLE            ACTIVE
CMB398I - SCHEDULER          ACTIVE
CMB386I - 000 REQUESTS IN RULES PROCESSING QUEUE
```

$$LIST SESSIONS

If you type the $$LIST SESSIONS command at the console, the following messages are displayed for current SNA sessions:

```
CMB087I - STATUS OF ALL Connect:Enterprise SNA SESSIONS:
CMB088I - NAME=xxxxxxxx ACTIVE[xxx,xxx RECS ID batch#]
          [x,xxx XMITS] [AC=xxxxxxxx]
     .
     .
     .
CMB088I - NAME=xxxxxxxx INACTIVE
```

One CMB087 message is displayed, followed by one CMB088I message per current SNA session. The contents of the listing are:

Field	Description
NAME=xxxxxxxx	The name of the remote participating in this session.
ACTIVE | INACTIVE	The session status. If the session is active, additional information is displayed. If the session is inactive (the remote is logged on to Sterling Connect:Enterprise, but does not have current transmission activity), no additional information is displayed.
xxx,xxx RECS	The current record count of the active batch. Zero records indicate that the batch was read, but not yet closed.
ID	The Mailbox ID of the active batch.
batch#	The batch number of the active batch.
x,xxx XMITS	If an XMIT count is displayed, it indicates the total number of blocks (RUs) transmitted for this session, which can consist of more than one batch.
AC=xxxxxxxx	The Auto Connect list name. This is displayed if the remote is active due to an Auto Connect session.

$$LIST STORMAP

The following is an example of $$LIST STORMAP output:

```
08.31.58 JOB07194  R 55,$$LIST STORMAP
 08.31.58 JOB07194  CMB595I -  SP ALLOC < 16M ALLOC > 16M TOTAL ALLOC FREE  < 16M FREE  > 16M TOTAL FREE
 08.31.58 JOB07194  CMB596I - 000        296K      3,628K      3,924K          9K          55K          64K
 08.31.58 JOB07194  CMB596I - 001          8K      2,516K      2,524K          8K           8K          16K
 08.31.58 JOB07194  CMB596I - 009          0K         68K         68K          0K           0K           0K
 08.31.58 JOB07194  CMB596I - 010          0K        100K        100K          0K          81K          81K
 08.31.58 JOB07194  CMB596I - 125          0K      4,248K      4,248K          0K           0K           0K
 08.31.58 JOB07194  CMB596I - 131          0K         28K         28K          0K           5K           5K
 08.31.58 JOB07194  CMB597I - TASK: IEAVAR00 TCB@= 008FE0A8 ALLOC:         56K /        404K /        460K
 08.31.58 JOB07194  CMB597I - TASK: IEAVTSDT TCB@= 008FC0E0 ALLOC:          0K /        108K /        108K
 08.31.58 JOB07194  CMB597I - TASK: IEFSD060 TCB@= 008FFD90 ALLOC:         92K /      1,152K /      1,244K
 08.31.58 JOB07194  CMB597I - TASK: IEFIIC   TCB@= 008EA920 ALLOC:        380K /      3,864K /      4,244K
 08.31.59 JOB07194  CMB598I - PVT UNAL BELOW:      7,512K UNAL ABOVE:  1,714,044K UNAL TOTAL:  1,721,556K
 08.31.59 JOB07194  CMB599I -            0.24 CPU TIME IN SECONDS
```

One CMB596I message is shown for each subpool, and one CMB597I message is shown for each task. The display shows storage above the 16-MB line, below the 16-MB line, and total storage. The contents of the listing are:

Field	Description
CMB595I	SP ALLOC < 16M ALLOC > 16M TOTAL ALLOC FREE < 16M FREE > 16M TOTAL FREE These are the column headings for the statistical data for each storage subpool (SP). Column headings including subpool number, subpool space allocated in 4 KB blocks less than 16 MB, greater than 16 MB, and total allocated storage, and free subpool space in 4 KB blocks less than 16 MB, greater than 16 MB, and total free storage space.
CMB596I	nnn aaaaaaaaaK bbbbbbbbbK ccccccccK ddddddddK eeeeeeeeK fffffffffK This message is displayed for each storage subpool used by Sterling Connect:Enterprise. The following information is listed for each storage subpool: ◆ Storage subpool ID number (nnn) ◆ Allocated storage space in 4-KB blocks below the 16-MB line (aaaaaaaaaK) ◆ Allocated storage space in 4-KB blocks above the 16-MB line (bbbbbbbbbK) ◆ Total allocated storage space in 4-KB blocks (ccccccccK) ◆ Unallocated storage space in 4-KB blocks below the 16-MB line (ddddddddK) ◆ Unallocated storage space in 4-KB blocks above the 16-MB line (eeeeeeeeK) ◆ Total unallocated storage space in 4-KB blocks (fffffffffK)
CMB597I	TASK: XXXXXXXX TCB@= XXXXXXXX ALLOC: XXXXXXXX XXXXXXXX XXXXXXXX For each task in the Sterling Connect:Enterprise address space, this message lists the attached program name, the TCB address, the storage space allocated below and above 16 MB, and the total allocated space.

Field	Description
CMB598I	AAA UNAL BELOW: XXXXXXXXXX UNAL ABOVE: XXXXXXXXXX UNAL TOTAL: XXXXXXXXXX where AAA = PVT and CSA This message is displayed once for the address space (PVT) and once for the CSA. It displays the unallocated storage below and above 16 MB and the total for the address space and the common storage area.
CMB599I	XXXXXXXX.XX CPU TIME IN SECONDS. This message is displayed at the end of the storage map display. It accounts for the total CPU time used for storage map displays during the current execution.

$$LIST TRACES

The following is an example of $$LIST TRACE output:

```
CMB151I - STATUS OF Connect:Enterprise TRACES:
CMB154I - T/P IO   TRACES ACTIVE
CMB154I - SNA      TRACES ACTIVE
CMB154I - FTP      TRACES ACTIVE
CMB154I - L/D      TRACES ACTIVE
```

$$ODFUNLK Command

The $$ODFUNLK command releases an ODF lock. The ODF is locked when an ISPF or CICS user performs an ODF update. Normally, this lock is automatically released when the user exits the ODF. However, if the ODF update session is interrupted or the user experiences a time-out, the lock may not automatically reset. In this case, use the $$LIST ODFLOCK command to determine the user ID/APPLID of the user, then issue the $$ODFUNLK command.

$$ODFUNLK Syntax

The $$ODFUNLK command has the following syntax:

```
$$ODFUNLK USER=xxxxxxxx APPLID=xxxxxxxx
```

Parameter Descriptions

The $$ODFUNLK command uses the following parameters:

Parameter	Description
USER	The 1–8 character user ID of the ISPF or CICS user who has the ODF locked. This parameter is required.
APPLID	The 1–8 character APPLID of the ISPF or CICS user who has the ODF locked. This parameter is required.

$$ODFUNLK Example

Type the following from a console to release an ODF lock:

```
$$ODFUNLK USER=PSARM01 APPLID=VENTIN03
```

If the release is successful, the following message is displayed:

```
CMB414I - $$ODFUNLK SUCCESSFUL FOR ISPF USER: PSARM01 APPLID: VENTIN03
```

$$REFRESH Command

The $$REFRESH command enables online Sterling Connect:Enterprise to recognize files defined through PURGE, INIT=DATA.

The $$REFRESH command also updates application agent rules while Sterling Connect:Enterprise is running.

$$REFRESH Syntax

The $$REFRESH command has the following syntax:

```
$$REFRESH FILES|RULES=CON|EOB|LOG|SCH|WKT|ALL
```

You can use either the long form, $$REFRESH, for the command or the short form, $$REF.

Parameter Descriptions

The $$REFRESH command uses the following parameters:

Parameter	Description
FILES	Enables online Sterling Connect:Enterprise to recognize a newly initialized VBQ or VLF. Use this command after you run a PURGE, INIT=DATA utility. If you run a PURGE, INIT=DATA utility and do not use this command afterwards, Sterling Connect:Enterprise does not recognize the newly initialized files until it is cycled
RULES=CON |EOB|LOG| SCH|WKT| ALL	Updates application agent rules while online Sterling Connect:Enterprise is running. The following are the RULES options: CON = Updates Console application agent rules EOB = Updates End-of-Batch application agent rules LOG = Updates Logging application agent rules SCH = Updates Scheduler application agent rules WKT = Updates Wake Up Terminate application agent rules ALL = Updates all application agent rules simultaneously This only refreshes rules of an application agent activated during system startup. The output from the refresh processing is placed in the SYSPRINT file. Any rule syntax errors are included in this file. Refresh rules processing can take several minutes, depending on the size of the rule set. During the refresh, Sterling Connect:Enterprise can still receive application agent requests, but they are queued until the refresh is complete. Any application agent requests in process when you request a refresh are processed with the old rule set. If the rules refresh fails, the old rule set is retained, and all queued application agent requests are released and processed using the old rule set. If you use the $$REFRESH RULES=ALL option and an error occurs for any rule set, none of the rule sets are refreshed. All new rule sets are discarded, and the old rule sets are used. Examine the SYSPRINT data set for messages which describe the rules syntax errors.

$$REFRESH Examples

Type the following from a console to allow Sterling Connect:Enterprise online to recognize a newly initialized VBQ or VLF:

```
$$REF FILES
```

Type the following to refresh all application agent rules simultaneously:

```
$$REF RULES=ALL
```

$$SERVER Command

The $$SERVER command enables you to:

- Shut down the VSAM server
- Display a list of currently open batch files
- Display VSAM server file utilization

This console command must use the MODIFY interface because it is processed by the VSAM file server, not Sterling Connect:Enterprise.

$$SERVER Syntax

The $$SERVER command uses the following syntax:

```
F procname,$$SERVER STOP[,I]|FILES[,LISTDD=xxxxxxxxxxxxx]|LIST STORMAP
```

where *procname* is the PROCLIB member name of the VSAM file server. You can use either the long form, $$SERVER, for the command or the short form, $$SER.

Parameter Descriptions

The $$SERVER command uses the following parameters:

Parameter	Description
STOP[,I]	Shuts down the VSAM file server. Use the STOP parameter without the I option to shutdown the VSAM file server if no VSAM batch files are open. You must first shut down all utilities and online Sterling Connect:Enterprise if you use the STOP parameter without the I option. Use the STOP parameter with the I option to force an immediate shutdown if VSAM batch files are open. All utilities and online Sterling Connect:Enterprise will stop and must be recycled.
FILES [,LISTDD] =xxxxxxxx	Lists all files currently opened by the VSAM file server. LISTDDDisplays the users of the specified file currently identified as opened by the VSAM server. xxxxxxxx is the DDname assigned by the operating system during allocation. You may specify a wildcard, generic, or specific value for the DDname. Examples include: ◆ FILES,LISTDD=* ◆ FILES,LISTDD=SY0006* ◆ FILES,LISTDD=SYS00061 **Note:** You can obtain the DDname from the BTB1441I or BTB007I message. See *$$SERVER FILES Examples* on page 58 for sample output.
LIST STORMAP	Displays VSAM file server storage utilization by subpool and task. Storage above the 16-M line, below the 16-M line, and totals are displayed.

$$SERVER STOP Example

Type the following to shutdown the VSAM file server after all utilities and online Sterling Connect:Enterprise are shut down:

```
F procname,$$SER STOP
```

$$SERVER FILES Examples

Type the following to display files currently opened by the VSAM file server:

```
F procname,$$SER FILES
```

The following is an example of $$SERVER FILES output:

```
BTB007I: Data set = MAILBOX.VPF, Users = 1
BTB007I: Data set = MAILBOX.VCF, Users = 1
BTB007I: Data set = MAILBOX.VLF1, Users = 1
BTB007I: Data set = MAILBOX.VBQ04, Users = 1
BTB007I: 4 data sets listed
```

The following is an example of the $$SERVER FILES, LISTDD=* output:

```
$$SER FILES,LISTDD=*
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VPF, Users = 1, DD = SYS00059
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VCF, Users = 1, DD = SYS00060
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VBQ02, Users = 1, DD = SYS00061
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VBQ04, Users = 1, DD = SYS00062
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VBQ05, Users = 1, DD = SYS00063
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VBQ08, Users = 1, DD = SYS00065
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VLF2, Users = 1, DD = SYS00066
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SMSTEST.SJV110A.VLF5, Users = 1, DD = SYS00067
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SMSTEST.SJV110A.VLF6, Users = 1, DD = SYS00068
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB007I: Data set = RDXD110.SJV110A.VBQ07, Users = 1, DD = SYS00070
13.08.02 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
13.08.02 STC00440  BTB011I: 10 data sets listed
```

The following is an example of the $$SERVER FILES, LISTDD=SYS00005* output:

```
13.08.21 STC00440  BTB007I: Data set = RDXD110.SJV110A.VPF, Users = 1, DD = SYS00059
13.08.21 STC00440  BTB026I: Jobname=RDXSV3A  JobID=STC03410 ASID=00CA TCB=008FF080 Task=STMAIN
```

Note: There will be one or more occurrence of the BTB026I message following each BTB007I message – one for each current user task of the file. In this context, task means a user that currently has the file opened, for example, there may be one or more STOUTL jobs which currently have the file opened. Similarly, there may be multiple tasks within the Sterling Connect:Enterprise online system which currently are using the file, for example, STMAIN and multiple FTP client and/or server tasks. In the examples shown above, the Sterling Connect:Enterprise main task (task=STMAIN) is the only user at the time of the display.

$$SERVER LIST STORMAP Example

Type the following to display VSAM file server utilization:

```
F procname,$$SER LIST STORMAP
```

The output is identical to the $$LIST STORMAP output (see page 53).

$$SHUTDOWN Command

The $$SHUTDOWN command terminates the Sterling Connect:Enterprise online system.

$$SHUTDOWN Syntax

The following is the $$SHUTDOWN syntax:

```
$$SHUTDOWN [,I]
```

Parameter Descriptions

The $$SHUTDOWN command uses the following parameter:

Parameter	Description
,I	Forces an immediate shutdown. If this parameter is omitted, Sterling Connect:Enterprise attempts a quiesced shutdown of the system. All currently active sessions with data collections or transmissions remain active and are flagged for shutdown when no longer in use. Sessions that are not in use are closed.

$$SHUTDOWN Examples

The following are examples of a quiesced shutdown and an immediate shutdown.

Quiesced Shutdown Example

Type the following to perform a quiesced shutdown:

```
$$SHUTDOWN
```

You will see the following response:

```
CMB012I - SHUTDOWN REQUEST ACCEPTED
```

For SNA sites, as each session is stopped, you see the following message on the console:

```
CMB086I - (remote) SESSION STOPPED
```

For BSC sites, as each line is stopped, you see the following message on the console:

```
CMB082I - (lineID) LINE STOPPED
```

If some sessions were not stopped due to active transactions, the following message is displayed on the console:

```
CMB081I - Connect:Enterprise SHUTDOWN PENDING. WAITING FOR nnn REMOTES NOW IN USE
```

If the CMB081I message is displayed, Sterling Connect:Enterprise enters a pending shutdown state that limits the system activity. No new remote site LOGONs are accepted and you cannot start any Auto Connect sessions. You can only enter the $$DIRECTORY (or $$DIRECTORY24), $$DUMP, $$LIST, $$SPACE, $$SHUTDOWN ($$SHUTDOWN,I), $$STATFLG, $$TRACE, and $$STOP commands from the system console. You cannot use any other commands.

After Sterling Connect:Enterprise enters a pending shutdown state, the CMB086I message is displayed as each active session and line completes its transaction. When all sessions and lines are stopped, the console displays the following message:

```
CMB006I - Connect:Enterprise SHUTDOWN COMPLETE
```

Immediate Shutdown Example

If you want to force an immediate shutdown, type the following command (with no spaces) at the system console:

```
$$SHUTDOWN,I
```

Sterling Connect:Enterprise forces an immediate shutdown of the system. Any sessions or lines with current transactions are immediately stopped, and the Sterling Connect:Enterprise job ends.

$$SPACE Command

The $$SPACE command gives the data set space allocation information of any allocated VSAM batch file (VPF, VCF, VBQs, and VLFs) defined to Sterling Connect:Enterprise.

$$SPACE Syntax

The $$SPACE command has the following syntax:

```
$$SPACE [xxxxx|ALL]
```

Parameter Descriptions

The $$SPACE command uses the following parameters:

Parameter	Description
xxxxx	Requests space information for the specified file ID.
All	Requests space information for all files.

$$SPACE Command Output

One of the following messages is displayed on the console in response to the $$SPACE command:

```
CMB235I - File ID %USED=nnn HI-ALLOC-RBA=nnnnnnnnnn HI-USED-RBA=nnnnnnnnn EXTENTS=nnn
```

or

```
CMB235I - File ID %USED=nnn HI-AVAIL-RBA=nnnnnnnnnn HI-USED-RBA=nnnnnnnnn EXTENTS=nnn
```

The output contains the following information:

Information	Description
File ID	Name of the file.
%USED	Percentage of space used.

Information	Description
HI-ALLOC-RBA or HI-AVAIL-RBA	High allocated relative byte address. Highest available relative byte address (displayed if data set is multi-volume)
HI-USED-RBA	High used relative byte address.
EXTENTS	Number of extents.

$$SPACE Examples

Type the following to get space allocation information for VBQ05:

```
$$SPACE VBQ05
```

Type the following to get information for all files defined to Sterling Connect:Enterprise:

```
$$SPACE ALL
```

$$SPACEX Command

The $$SPACEX ($$SPACE extended) command gives the data set space allocation information for multi-volume VBQs/VLFs, to ensure that all volumes are utilized, meaning that user batch data and log records are written to all volumes.

$$SPACEX Syntax

The $$SPACEX command has the following syntax:

```
$$SPACEX
```

Parameter Descriptions

The $$SPACEX command uses the following parameters:

Information	Description
File ID	Name of the file.
%USED	Percentage of space used.

Information	Description
HI-ALLOC-RBA or HI-AVAIL-RBA	High allocated relative byte address. Highest available relative byte address (displayed if data set is multi-volume)
HI-USED-RBA	High used relative byte address.
EXTENTS	Number of extents.

The following three messages are displayed in response to a $$SPACEX command:

- CMB422I - identifies each of the three column heading lines
- CMB423I - identifies each detail line
- CMB232I - identifies end of display

The following is an example of the output displayed as a result of issuing a $$SPACEX command:

```
CMB422I -
File  Pct                          Multi-Volume
 ID   Used  High-Allocated-RBA   High-Available-RBA      High-Used-RBA     Ext
----- ----  -------------------  -------------------  -------------------  ---

CMB423I -
VPF    002      000000068843520                           000000001658880  001
VCF    100      000000222044160                           000000222044160  003
VBQ01  093      000000184549376                           000000173015040  001
VBQ02  100      000000004325376                           000000004325376  001
VBQ03  ***  UNAVAILABLE:         DEALLOCATED USING    STOUTL=DISALLOW      ***
VBQ04  100      000000151388160                           000000151388160  001
VBQ05  095      000000050462720                           000000048300032  001
VBQ06  005      000000014417920                           000000000720896  001
VBQ07  005      000000014417920                           000000000720896  001
VBQ08  005      000000014417920                           000000000720896  001
VBQ09  001      000000014417920      000000043253760      000000000720896  001
VLF1   048      000000089579520                           000000043130880  001
VLF2   090      000000054743040                           000000049766400  001
VLF3   091      000000037324800                           000000034007040  001
VLF4   100      000000005806080                           000000005806080  001
VLF5   100      000000000110592                           000000000110592  001
VLF6   100      000000000110592                           000000000110592  001
VLF7   100      000000000110592                           000000000110592  001
VLF8   100      000000000110592                           000000000110592  001
VCF1P  100      000000222044160                           000000222044160  003
VCF1X  ***  UNAVAILABLE:         VSAM OWNS PHYSICAL   ALT INDEX FILE       ***

CMB232I - END OF $$SPACEX ALL
```

The output contains the following information:

Information	Description
File ID	The identifying name associated with each file. VPF— the VSAM Pointer File, VCF— the VSAM Control File, VBQnn—a VSAM Batch Queue (where nn = 01 through 20) or VLFn—a VSAM Log File (where n = 1–8).
Pct Used	Percentage of the VSAM data component storage capacity that is used. When a VSAM error exists, this field contains ****, indicating VSAM error information is presented in adjacent columns.
High-Allocated-RBA	The high allocated relative byte address (RBA) of the end of the data component. When a VSAM error exists, this field contains VSAM RC=xxxx, where xxxx is the register 15 value in decimal. This value is returned following the VSAM error.
Multi-Volume High-Available-RBA	The multi-volume high avalable RBA of the data component as calculated by Sterling Connect:Enterprise. This value represents the absolute highest RBA that can be allocated to this data set, across the primary allocations on all volumes. A value is displayed only when one of the following conditions is met: ◆ When the file meets the Sterling Connect:Enterprise Multi-Volume criteria. See the "Pct Used" field description for more information. ◆ When a VSAM error occurs. In this case, the VSAM error is displayed along with the Reason Code in hexadecimal ('REAS=xxxxxxxx'). ◆ When the CSI (Catalog Services Interface) was called and an error occurred. In this case, this field displays 'VSAM SERVER CSI ERR,' which indicates that Sterling Connect:Enterprise could not process the catalog entry to determine if this cluster is multi-volume and then calculate High-Available-RBA. Look in the VSAM Server JOBLOG for the corresponding BTB031E message(s) and also in the VSAM Server BTSNAP file for additional diagnostic information. Report this to Sterling Commerce Support for further analysis.
High-Used-RBA	The ending relative byte address of the space used in the data component (the last used byte in the data set at the current time). When a VSAM error exists, this field contains REAS=xxxxxxxx, where xxxxxxxx is the reason code in hexadecimal. This value is returned following the VSAM error.
Ext	Number of extents allocated to the data component as of the last file OPEN issued by the VSAM Server. A plus sign (+) immediately following this value indicates VSAM has allocated one or more additional extents since the server last opened the file. When a VSAM error exists, this field contains ERR=xxxxxxxx, where xxxxxxxx is the VSAM error code in hexadecimal. This value is displayed following the error. Additionally, a description of the failing operation (OPEN, CLOSE, and so on) is displayed.

$$START Command

The $$START command starts the following:

- ✦ BSC lines
- ✦ The VTAM APPL used for SNA sessions

- ✦ The APPC APPL supporting the CICS and ISPF interfaces
- ✦ Application agent rules processing
- ✦ FTP processing

$$START Syntax

The $$START command has the following syntax:

```
$$START xxxxxxxx|SNA|APPC|FTP|RULES=CON|EOB|LOG|SCH|WKT
```

Parameter Descriptions

The $$START command uses the following parameters:

Parameter	Description
xxxxxxxx	The 1–8 byte line ID specified in the M$LINEX macro in the User Assembly. Use this parameter to restart any closed line.
SNA	Opens or reopens the VTAM Access Control Block (ACB). Use this parameter if the VTAM ACB is deactivated and reactivated, or if it was not active when Sterling Connect:Enterprise was started
APPC	Opens the APPC APPLID for ISPF or CICS communications, if the Sterling Connect:Enterprise APPC is implemented.
FTP	Starts all FTP session threads. You must also specify FTP=YES in the ODF *OPTIONS record to enable Sterling Connect:Enterprise FTP and allow FTP sessions.
RULES=CON| EOB| LOG| SCH|WKT	Starts an application agent that was stopped by the $$STOP command. You can only start application agents started during the system startup and then stopped using the $$STOP command. The $$START command does not refresh the application agent rules. The following are the RULES options: CON = Starts Console application agent rules EOB = Starts End-of-Batch application agent rules LOG = Starts Logging application agent rules SCH = Starts Scheduler application agent rules WKT = Starts Wake Up Terminate application agent rules

$$START Examples

This section shows some examples of the $$START command.

Restarting a Closed BSC Line Example

Type the following command to restart a BSC line with the line ID of BOSTON:

```
$$START BOSTON
```

If you typed the correct line ID, you will see the following console message:

```
CMB021I - LINE (BOSTON) OPEN
```

Starting the VTAM ACB Example (SNA)

Type the following command to open the VTAM ACB:

```
$$START SNA
```

Starting APPC Example

Type the following command to open the APPC APPLID for ISPF or CICS communications:

```
$$START APPC
```

Starting Application Agent Rules Example

Type the following command to start the End-of-Batch application agent:

```
$$START RULES=EOB
```

Starting FTP Example

Type the following command to activate the FTP session threads:

```
$$START FTP
```

$$STATFLG Command

The $$STATFLG command changes the status flags for batches on the VSAM batch files.

$$STATFLG Syntax

The $$STATFLG command has the following syntax:

```
$$STATFLG ID=xxxxxxxx BATCHID='xx..xx'|#nnnnnnn ON=RDTEM OFF=RDTEM
```

You can use either the long form, $$STATFLG, for the command or the short form, $$SF. You must specify ID or BATCHID, or both.

Parameter Descriptions

The $$STATFLG command uses the following parameters. Abbreviations are in parentheses:

Parameter	Description
ID=xxxxxxxx	The 1–8 byte Mailbox ID. If only the Mailbox ID is supplied, flags for all batches with that ID are changed.
BATCHID='xx..xx'| #nnnnnnn	(BID=) The batch identifier. The following options are valid: 'xx..xx' = The 1–64 bytes long name of the batch in quotation marks. If the Mailbox ID parameter is also specified, all batches that match the Mailbox ID/Batch ID combination are changed. If the Mailbox ID parameter is not specified, flags for all matching batch IDs are changed regardless of the Mailbox ID. #nnnnnnn = The batch number (1 to 9999999). If you specify this you must also specify a Mailbox ID. Only flags for the specified batch number within the Mailbox ID are changed. The pound sign (#) is optional. Leading zeros are not required.
ON=RDTEM	Turns on status flags. The following flags are valid: R = The batch can be requested by a remote site or transmitted by Auto Connect session. D = The batch was deleted. T = The batch was transmitted to a remote site. It is not transmitted on a transmit all for the remote ID but can be transmitted again by specific batch number. E = The batch was extracted. M = The batch is available for multiple transmission, and any remote site can request it by its Mailbox ID. **Note:** If you turn on the 'M' (MULTXMIT) flag, the 'R' (REQUESTABLE) flag is automatically turned on. If you turn off the 'R' (REQUESTABLE) flag, the 'M' (MULTXMIT) flag is automatically turned off.
OFF=RDTEM	Turns off status flags. All flags valid for the ON parameter are valid for this parameter.

$$STATFLG Examples

Type the following to mark all batches with an ID of MEMOS as deleted:

```
$$STATFLG ID=MEMOS ON=D
```

Type the following to turn off the R and M flags in all batches with an ID of CLAIMS. The batches cannot be requested or available for multi-transmission.

```
$$STATFLG ID=CLAIMS OFF=RM
```

$$STOP Command

The $$STOP command stops a currently running Auto Connect session or remote connected session, including FTP sessions. You can also remove an active or inactive BSC Line ID.

Any active sessions that are ended by the $$STOP command receive a failure code of 70.

The $$STOP command also stops any active application agent.

$$STOP Syntax

The $$STOP command has the following syntax. Note that the syntax varies by use.

```
[SNA]           $$STOP L=listname|L=listname,I|RMT=xxxxxxxx
[BSC]            $$STOP L=listname|L=listname,I|LINE=linename|LINE=linename,R|LINE=linename,FORCE
[APPC]          $$STOP APPC|APPC,I
[FTP]           $$STOP FTP|FTP,I|FTP,F
[FTP]           $$STOP FTP,FTPRMT=xxxxxxxx|FTP,FTPRMT=xxxxxxxx,I|FTP,FTPRMT=xxxxxxxx,F
[FTP]           $$STOP FTP,FTPTHRD=xxxxxxxx|FTP,FTPTHRD=xxxxxxxx,I|FTP,FTPTHRD=xxxxxxxx,F
[Appl. agent]   $$STOP RULES=CON|CON,I|EOB|EOB,I|LOG|LOG,I|SCH|SCH,I|WKT|WKT,I
```

Parameter Descriptions

The following are the $$STOP parameters. Provide at least one parameter.

Parameter	Description
L=listname|L=listname,I	Stops a currently running listname. The following options are valid: listname = Stops a currently running Auto Connect session after the current remote is finished. listname,I = Stops a currently running Auto Connect session immediately.
RMT=xxxxxxx	(SNA only). Stops only the specified remote name, where xxxxxxx is the remote session name. If the remote is part of an Auto Connect list, the Auto Connect session continues with the next remote site.
LINE=linename | LINE=linename,R | LINE=linename,FORCE	(BSC only). Stops the specified BSC line. The following options are valid: linename = Stops the currently running transmission on the specified BSC line ID. The line remains usable for another transmission. linename,R = Stops a currently running or inactive BSC line ID and removes the line from service. linename,FORCE = Stops a currently running, hung, or inactive BSC line ID and removes the line from service. Use this option when the listname or listname,R options fail to stop the line. A $$START line ID name is required to put the line back into service. **Note:** This option will only work if your user assembly uses the M$LINEX and M$ENDX macros. It will not work if the user assembly uses the M$LINE and M$END macros. See the *IBM Sterling Connect:Enterprise for z/OS Installation Guide* for more information about these macros.

Parameter	Description
APPC|APPC,I	Stops an APPC interface. The following options are valid: APPC = Stops the APPC interface as soon as there are no active conversations. APPC,I = Stops the APPC interface immediately.
FTP| FTP,I| FTP,F	Stops FTP processing between Sterling Connect:Enterprise and remote FTP clients. The following options are valid: FTP = Stops all FTP sessions. All FTP sessions in progress are allowed to complete normally. FTP,I = Stops all FTP sessions immediately. All FTP sessions in progress are stopped immediately. FTP,F = Stops all FTP sessions with the force option. Intended to stop a thread that's in session and is not responding to any other STOP option. It will cause an ABEND in the thread with a U0999.
FTP,FTPRMT=xxxxxxxx| FTP,FTPRMT=xxxxxxxx,I| FTP,FTPRMT=xxxxxxxx,F	FTP,FTPRMT=xxxxxxxx = Stops all FTP sessions with the specified remote name. FTP,FTPRMT=xxxxxxxx,I = Stops all FTP sessions for that specified remote name immediately. FTP,FTPRMT=xxxxxxxx,F = Stops all FTP sessions for that specified remote name with the force option. Intended to stop a thread that's in session and is not responding to any other STOP option. It will cause an ABEND in the thread with a U0999.
FTP,FTPTHRD=xxxxxxxx| FTP,FTPTHRD=xxxxxxxx,I| FTP,FTPTHRD=xxxxxxxx,F	FTP,FTPTHRD=xxxxxxxx = Stops the specified FTP thread. The “xxxxxxxx” value is the thread identifier, which is displayed by the $$LIST FTP command. FTP,FTPTHRD=xxxxxxxx,I = Stops the specified FTP thread immediately. The “xxxxxxxx” value is the thread identifier, which is displayed by the $$LIST FTP command. FTP,FTPTHRD=xxxxxxxx,F = Immediately stops the specified FTP thread. The “xxxxxxxx” value is the thread identifier. The “F” option forces the thread to immediately stop. Use this option when the FTPTHRD=xxxxxxxx option fails to end the thread.
RULES=CON|CON,I|EOB| EOB,I|LOG|LOG,I|SCH|SCH,I| WKT|WKT,I	Stops an application agent rules. The following options are valid: CON = Stops Console Application agent rules CON,I = Stops Console Application agent rules immediately EOB = Stops End-of-Batch application agent rules EOB,I = Stops End-of-Batch application agent rules immediately LOG = Stops Logging application agent rules LOG,I = Stops Logging application agent rules immediately SCH = Stops Scheduler application agent rules SCH,I = Stops Scheduler application agent rules immediately WKT = Stops Wake Up Terminate application agent rules WKT,I = Stops Wake Up Terminate application agent rules immediately

$$STOP Examples

Type the following to take a BSC line with a line ID of BSC001 out of service:

```
$$STOP LINE=BSC001,R
```

If this command fails to stop the line, and the line was defined by the M$LINEX macro, type the following command to force the line out of service:

```
$$STOP LINE=BSC001,FORCE
```

Type the following command to stop the end-of-batch application agent:

```
$$STOP RULES=EOB
```

Type the following to stop the end-of-batch application agent and any received and unprocessed end-of-batch application agent requests:

```
$$STOP RULES=EOB,I
```

$$TRACE Command

The $$TRACE command starts or stops a trace of specified activity in the system. Refer to *Configuring *OPTIONS Record for System Resources* and *Diagnostics* in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information about the trace facility.

The $$TRACE command is a Sterling Connect:Enterprise problem research tool. When a trace is activated, a small snapshot dump is written to the Snapshot data set for every trace completed in the system. This can create a lot of output data if your system activity is high. To minimize output data volume, only use the $$TRACE command in a controlled environment.

The $$TRACE system console command overrides any traces defined in the ODF.

$$TRACE Syntax

The $$TRACE command has the following syntax:

```
$$TRACE A2CON|A2COFF APOON|APOOFF APQON|APQOFF CPON|CPOFF CPTTON|CPTTOFF EXITON|EXITOFF
FTPON|FTPOFF ON|OFF PRON|PROFF RPCON|RPCOFF RPEON|RPEOFF RPLON|RPLOFF RPSON|RPSOFF
RPWON|RPWOFF SNAON|SNAOFF TCPSCHON|TCPSCHOFF TCPSCHRMT VSAMON|VSAMOFF
VA2CON|VA2COFF
```

Chapter 3

Offline Utilities

The host site uses the Sterling Connect:Enterprise offline utilities to access the VSAM batch and log files. They contain individual batches of data collected from remote sites, batches available for online transmission to remote sites, and Sterling Connect:Enterprise log records.

The Sterling Connect:Enterprise offline utilities include the following functions:

- ADD
- DELETE
- ERASE
- EXTRACT
- LIST
- MOVE
- PURGE
- REPORT
- STATFLG
- VERIFY

This chapter explains offline utilities and the user message table, including utility inputs, execution information, outputs and sample output reports. Descriptions of all offline utility parameters are in Appendix A, *Offline Utility Parameters*.

Note: A sample member for each offline utility function is provided in the EXAMPLE library. Example member names all begin with the prefix, X, for example, XADD, XDELETE, and so on.

Running an Offline Utility

All offline utilities are executed by the STOUTL program. When you execute STOUTL, you must specify a single parameter that identifies the 4-character name assigned to the VSAM file server during Sterling Connect:Enterprise installation. The 4-character name must be the same name as the

online Sterling Connect:Enterprise. If this parameter is omitted or is not the same, utility open errors occur.

Note: The VSAM file server must be active before you can run offline utilities. Offline utilities must execute on the same system (in the same LPAR) as the VSAM file server.

The following JCL executes the offline utilities. In this example, PARM='SRV1' identifies the VSAM file server.

```
//UTILS    JOB (ACCOUNTING)
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//BTSNAP   DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//SYSPRINT DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//REPORTS  DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//REPORTS2 DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//LOGFILE  DD   DISP=MOD,DSN=ENTPRS.LOGFILE
//PRINT    DD   SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//INFILE   DD   DISP=SHR,DSN=ENTPRS.INPUT.FILE
//OUTFILE  DD   DISP=SHR,DSN=ENTPRS.OUTPUT.FILE
//SYSIN    DD   *   sysin data
//*
```

All functions in STOUTL require an APF-authorized environment to operate correctly. If any STEPLIB library is not APF authorized, the message, CMU984E - STOUTL IS NOT APF AUTHORIZED, will be displayed. Processing will continue but no batches will be processed if security checking is required. Make sure that all STEPLIB libraries are APF authorized.

Enhancing the Performance of STOUTL

Sterling Connect:Enterprise provides utility programs to improve how STOUTL runs the DELETE, ERASE, EXTRACT, LIST, MOVE, and STATFLG offline utilities. These programs maximize the execution of both the STOUTL and VSAM Server tasks by allowing STOUTL to select the most efficient path to access files.

STOUTL can use any of the following entities, which are listed in order of efficiency, to access files when running an offline utility:

- VSAM Control File (VCF). When you supply a batch number in the SYSIN file using the BATCHNUM or BATCHID parameter, STOUTL reads the VCF directly and skips the VPF. The batches specified are processed immediately.
- VCF alternate index. By using the VCF Alternate Index, STOUTL can access batch control file records by User BatchID. The VCF Alternate Index key = [User BatchID + ID + Roll# + Batch#]. Batches are processed in order of batch IDs then by Mailbox IDs
- VSAM Pointer File (VPF). Batches are processed in order of Mailbox IDs.

STOUTL selects the most efficient method of accessing files when running a utility, based on the parameters included in the SYSIN file.

For complete instructions on how to implement the VCF Alternate Index feature, see the *IBM Sterling Connect:Enterprise for z/OS Installation Guide*. To verify the accuracy of the index, see the chapter on file maintenance in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide*.

When you run an offline utility, STOUTL produces a report showing how the utility executed including detailed information on batches. For more information on these reports, see *STOUTL Reports* on page 82. The order in which information is listed in these reports depends on what path STOUTL takes to process a utility. Data in reports appears in the same order in which it is processed, for example, if the VPF file access method is used, information in a report is listed in ascending Mailbox ID order.

To change the order in which data is processed and presented in a report, you can use the FILE_ACCESS parameter to override the path STOUTL selects when running a utility. This parameter is available when running the DELETE, ERASE, EXTRACT, LIST, MOVE, and STATFLG utilities. The physical presentation of the reports is the same–only the ordering of the batch line items is different depending on the file access type used to process the data. See Appendix A, *Offline Utility Parameters*, for more information about the FILE_ACCESS parameter.

Selecting Batches and Mailboxes for Processing

Sterling Connect:Enterprise provides a variety of parameters which let you select the exact batches and mailboxes to process when running an offline utility. Refer to Appendix A, *Offline Utility Parameters* to see which parameters a particular utility supports. These parameters allow you to select batches that match exact IDs and generic ID prefixes, and to use full wildcard capabilities to broaden the number of qualifying matches.

You can use any of the following parameters to select batches and can combine parameters in the same SYSIN input record:

- A single fully-qualified Batch ID (using single quotes): BATCHID='xxxx.....xxxx'

  When single quotes are specified, the full Batch ID is checked for an exact match. If the length of the Batch ID value specified within the quotes is less than 64, trailing blanks are appended to the Batch ID for comparison purposes.

  For example, if BATCHID='My Batch ID' is specified, trailing blanks are appended to the My Batch ID. Sterling Connect:Enterprise compares the full 64-character Batch ID against the 64 character string of: ['My Batch ID' (11 characters) + (53 trailing blanks)] = 64 character Batch ID.

- A generic Batch ID prefix (using double quotes): BATCHID="xxxx……..xxxx"

  When double quotes are specified, only the Batch ID prefix, that is, the string length specified within the double quotes, is checked for a match. For example, if BATCHID="My Batch ID" is coded, only the first 11 characters of each Batch ID is compared to the specified string inside the double quotes.

- A single mailbox ID: ID=xxxxxxxx

  To make the mailbox ID generic, terminate the mailbox ID value with an asterisk (*). For example, to select all Los Angeles mailboxes, you can code MBX-LA*.

- Multiple batches and mailboxes—both exact matches and generic ID matches: BATCHIDM and IDM

BATCHIDM Example: To select batchid 01, batchid 02, batchid 63 (and all other batch IDs which start with the value, batchid 63), and batch 64 (and all other batch IDs which start with the value, batchid 64), you can code the following:

```
BATCHIDM='batchid 01'
BATCHIDM='batchid 02'
BATCHIDM="batchid 63 generic"
BATCHIDM="batchid 64 generic"
```

IDM Example: To select mailboxes mbxid001 and mbxid002, you can code the following:

```
IDM=mbxid001,mbxid002
```

- Multiple batches and mailboxes which match any number of characters (including no characters), including a wildcard mask to match a pattern: BATCHID or ID with WILD_CARD=BID,ID

  BATCHID example: To select all batch IDs that start with the prefix BID and contain the string, ab, with any or no characters before and after the ab string, you would specify BATCHID=BID*ab* with the parameter WILD_CARD=BID.

  ID Example: To select all mailbox IDs which contain exactly 8 characters and start with the string, DALUNIT, you would specify ID=DALUNIT% and add the parameter WILD_CARD=ID.

Examples of Batch and Mailbox ID Wildcards

A wildcard mask allows you to mask out certain characters embedded within a batch or mailbox ID, such as a branch number and date/time stamp in the title of report, such as *'Branch nnn Weekly Sales yyyymmdd-hh:mm:ss Report'*. To select Batch IDs that match this pattern while ignoring the Branch number nnn and the date-time stamp yyyymmdd-hh:mm:ss, you mask out these values.

With full wildcard support, you can accomplish the same result by using both single-character and multi-character wildcards to mask a batch or mailbox BID value. To select almost identical BIDs or IDs, you can use any of the following methods to accomplish the previous branch/time stamp example:

- Single-character wildcard—A single-character wildcard is a string that stands for (masks) exactly one character, no more and no less. In the following example, the single-character wildcard is the default %:

```
BATCHID='Branch %%% Weekly Sales %%%%%%%%-%%:%%:%% Report'
```

- Multi-character wildcard—A multi-character wildcard is a string that stands for (masks) any number of characters, including no characters. In the following example, the multi-character wildcard is the default *.

```
BATCHID='Branch * Weekly Sales *-*:*:* Report'
```

- Both single- and multi-character wildcards—In the following example, both types of wildcard characters are used:

```
BATCHID='Branch %%% Weekly Sales *-*:*:* Report'
```

How to Use Batch and Mailbox ID Wildcards

To use wildcards, first specify the BATCHID or ID as you normally would to indicate a fully-qualified Batch or mailbox ID or a generic BID or ID. To tell Sterling Connect:Enterprise to use the BATCHID as a mask pattern for comparison purposes, add the new parameter, WILD_CARD=BID,ID.

When WILD_CARD=BID,ID is specified, the default wildcard strings are as follows:

- An asterisk (*) for a multi-character wildcard string, which represents 0 to *n* characters in the batch or mailbox ID
- A percentage sign (%) for a single character wildcard string, which represents a single character in the BID or ID

If the BID or ID could contain one or more actual asterisk and/or percentage sign characters, you can change these default wildcard characters by specifying your own using the following parameters:

- WILD_CARD_MULTI_CHAR=
- WILD_CARD_SINGLE_CHAR=

If you do not want the system to check for case-sensitivity when searching for matches, you must also use the CASE_SENSITIVE parameter to turn off this filter. By specifying CASE_SENSITIVE=NO, Sterling Connect:Enterprise uppercases both the search criterion and the actual data before it begins the selection process. By default, Sterling Connect:Enterprise leaves all input values in their original form and treats all data as being case-sensitive so that all matches must be exact.

Where to Specify Wildcards

You can use the WILDCARD=BID,ID and other related parameters wherever you specify the BATCHID or ID parameter to select batches to process including the following situations:

- In the SYSIN input records where you specify how you want a STOUTL utility to run. You can use wildcard checking in these utilities: DELETE, EXTRACT, ERASE, LIST, MOVE, STATFLG, ACDREPORT, OFFREPORT, and RCDREPORT.
- In the SYSIN input records where you specify how you want a CSC or ICO utility to run. You can use wildcard checking in the EXTRACT, LIST, and STATFLG utilities.
- ln an End of Batch, Wake Up Terminate, or Logging rule where you specify the BATCHID= or ID= parameter in a SELECT statement.
- In both the ISPF and CICS user interfaces using the Directory List function (Option 22.1), you can use the default * and % wildcard mask characters. In ISPF, you can also go to the Global Defaults screen (option 10.1) to customize and specify your own wildcard characters. For more information see the *IBM Sterling Connect:Enterprise for z/OS ISPF User's Guide* or *IBM Sterling Connect:Enterprise for z/OS CICS User's Guide.*

Offline Utility Standards

Offline utilities use the following standards:

- An asterisk (*) in column one indicates that the 80-byte record contains only comments.

- The meaning and usage of parameters is consistent across all utilities. Abbreviate all parameters to any short form as long as the short form remains unique within all parameters. Parameters themselves are not case sensitive, but parameter values are case sensitive.
- You can stack multiple utilities in the same job step, without having to submit separate jobs or job steps. You can immediately follow a LIST function with an ADD function.
- All input from and output to the VSAM batch files is done through the VSAM file server instead of by a utility.
- Define step return codes associated with each message issued. Default return codes for utilities are supplied, that can be customized. You can also change message text. Refer to the *User Message Tables* on page 79.
- Offline logging automatically occurs to the current log file in use for online processing.
- The report and message output has been changed to reflect uppercase and lowercase text, additional information, and individual data set names.
- The ERASE function does not erase a batch while it is being transmitted or collected.
- Use the EXTRACT function to define and process multiple record separators.
- While Sterling Connect:Enterprise is active, the PURGE function can initialize files that were not initialized before Sterling Connect:Enterprise went online.
- Elapsed time calculations are included with each log report detail line.

Offline Utilities Files

Sterling Connect:Enterprise offline utilities use the following input and output files at execution:

File Name	Function
BTSNAP	Contains diagnostic information if internal errors occur.
CRONLY	Used by the ERASE and VERIFY utilities only. Specifies that only batch control information be erased or verified. If this parameter is used for the ERASE utility, actual batch data is not erased. If this parameter is not specified, both the control information and the data are erased. If this parameter is used for the VERIFY utility, only those files whose batch control information has been erased previously are included in the Verify report or are actually repaired
INFILE	Defines the sequential input file used only by the offline ADD utility. For FTP or SNA sites, the input file can be any fixed length or variable length sequential file with a maximum record length of 32,742 characters. For BSC sites, INFILE can be any fixed length or variable length sequential file with a maximum record length of 4,096 characters. The INFILE DD points to a list of concatenated data sets. These data sets can have different record lengths and record formats. Dummy and null file data sets are also permitted. Override this DD name with the INFILE= parameter.
INTRDR	Enables you to send JCL and System modifying commands to JES2 or JCL to JES3. This DD statement is used only with the AUTOSEND= parameter.

File Name	Function

LOGFILE	Defines the sequential output log file used by the ADD and EXTRACT utilities when the LOG=YES parameter is specified. Contains log records mapped by the LB$RECRD DSECT (see the M$LOGB member from the source library supplied with the installation tape.) This is a sequential file with LRECL=1024, RECFM=FB.
	Note: Log records written to this file are not used by Sterling Connect:Enterprise or the offline utilities.
	Note: If you use the LOGFILE DD records file for STOUTL post-processing in custom-written programs, modify the programs to reference the long Batch ID to accommodate 64-characters. For example, consider the following batch ID fields in the M$LOGB macro:
	`LB$BCHID DS CL24 USER BATCH ID`
	`*`
	`LB$NFLGS DS XL1 OTHER FLAGS`
	`LB$64SET EQU X'80' LB$BCHID64 IS SET WITH A BID64`
	`*`
	`LB$BCHID24 DS 0CL24 USER BATCH ID (SHORT)`
	`LB$BCHID64 DS CL64 USER BATCH ID (LONG)`
	`If LB$64SET is ON: The log record was created while running in the BID64 environment (Sterling Connect:Enterprise 1.4.00 or later). Obtain the Batch ID from LB$BCHID64.`
	`If LB$64SET is OFF: The log record was created while running in the BID24 environment (Sterling Connect:Enterprise 1.3.00 or prior). Obtain the Batch ID from LB$BCHID.`

MISMATCH	Specifies that only MISMATCH errors be included in the Verify report or be repaired, that is, those files where one or more related files are missing or have different batch numbers.
ORPHAN	Specifies that only ORPHAN errors be included in the Verify report or be repaired, that is, those files, which still retain storage but that no longer appear in the directory of a file system, and where one or more related files are missing.
OUTFILE	Defines the sequential output file used only by the offline utilities EXTRACT utility. For FTP or SNA sites, the output file can be any fixed length or variable length sequential file with a maximum record length of 32,742 characters. For BSC sites, the output file can be any fixed length or variable length sequential file with a maximum record length of 4,096 characters. Override this DD name with the OUTFILE= parameter.
PRINT	Defines the sequential output file used only by the offline utilities EXTRACT utility when processing batches with print carriage control.
REPORTS	Contains 132-character output report records that detail the operation of the requested offline utility function. The last page of the report always contains a job condition code and completion message concerning the success or failure of the run.
REPORTS2	Produces two reports at the end of the STOUTL REPORTS DD output file: the first report identifies all VSAM files that were accessed when the STOUTL utility program was executed and the second report identifies the log files that were accessed.

File Name	Function
SYSIN	Contains 80-character input control records that describe the offline utility and its parameters. The offline utility is defined on the first input control record. Keyword parameters in subsequent control records provide additional execution information. Each keyword parameter is a separate control record. The SYSIN control record formats vary by offline utility.
SYSPRINT	Contains a printout of all SYSIN control records and error messages for the run.
SYSTERM	Contains diagnostic information if internal errors occur.

Syntax Rules

Follow these general syntax rules when you want to run the offline utilities:

Rule	Description
Input Records	Commands and parameters are read through 80-byte SYSIN records. One command or parameter is allowed per 80-byte record. Specify the utility name first, followed by the parameters that are used by that utility, until you reach the end of the file or specify another utility command.
Comments	An asterisk (*) in column one of the 80-byte record denotes that the record holds comments only. Any data specified after the command, or parameter and parameter value on the 80-byte record is considered a comment.
Case Sensitivity	Some parameters are case sensitive. If a parameter is not specified in this document as being case sensitive, you can use uppercase, lowercase, or mixed-case text without causing a change in processing. **Note:** If you are using wildcard checking on BATCHID or BATCHIDV values when selecting batches for processing , case-sensitivity is assumed when matching batch IDs. You can turn case-sensitvity off, in this case, by using the CASE_SENSITIVITY parameter in your SYSIN records and specify NO.
Utility Names	Spell out the entire name of the utility.
Parameter Names	You can abbreviate most parameters to a single character, unless more characters are needed to make it unique from similarly named parameters. No blanks are permitted between parameters names and their values.
Multiple Utilities	You can stack multiple utilities in the same job step. For example, follow an ERASE utility by a LIST utility, thereby removing the need to submit separate jobs.

Syntax Example

The following example shows the correct use of syntax for the commands and parameters:

```
   list
     vpf='entprs.vpf'
     id=TEST
     fromdate=yyddd
or
   LIST
     VPF='ENTPRS.VPF'
     Id=TEST*            GENERIC
     FROMD=yyddd
```

Executing Offline Utilities When Sterling Connect:Enterprise is Online

The host site can run all offline utilities, except PURGE (INIT=ALL), while online Sterling Connect:Enterprise is running. If you try to run PURGE (INIT=ALL) while Sterling Connect:Enterprise is active, the job fails.

User Message Tables

Sterling Connect:Enterprise provides two user message tables which allow you to specify return codes associated with messages generated during processing:

- The STUTAUMT table contains the user message table source for the offline utilities. STOUTL messages begin with the CMUnnnx identifier. For more information on messages associated with offline utilities, see *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guide*, Chapter 5, *Offline Utility User Error Messages*.
- The STOAPIMT table contains the user message table source for Cross System Client/InterConnect Option (CSC/ICO) utilities. CSC/ICO messages begin with the CMAnnnx identifier.

Note: For more information about CSC utilities, see Chapter 4, *Cross System Client Utility*. See *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guid*e, Chapter 8, *Cross System Client Utility Error Messages* for information on messages associated with CSC utilities. See the *IBM Sterling Connect:Enterprise for z/OS InterConnect Option User's Guide* for information on ICO utilities and messages.

Return code values are associated with a message that is issued during the execution of an offline utility. The final step return code is set to the highest of all message return codes issued.

Caution: You can change message text or return code values. However, the system responds differently according to the return code value. Reducing return code values can cause problems. Raising the values can stop processing unnecessarily. Consider your needs carefully before customizing the table.

The return code values are:

Return Code	Description
0	Message is informational. Processing continues.
4	Message is a warning. Processing continues.
8	Message indicates an error. Execution of the current utility is stopped, but execution of other utilities in the job stream continue.
12	Message indicates a severe error. Execution of this utility and any following utilities is stopped.
16	Message indicates the error is terminal. Execution of this utility and any following utilities is stopped (offline utilities only)
32	Message indicates the error is terminal. Execution of this utility and any following utilities is stopped. STOUTL fails with a User 1210 ABEND code. (offline utilities only)

In the beginning of the STUTAUMT and STOAPIMT members, instructions on changing the tables to your specifications are provided. The changes take effect after you successfully assemble and link the members. JCL to assemble and link is in the ASMUMT member for the STUTAUMT user message table and in the ASIMIMT member for the STOAPIMT user message table of the example library.

When the offline and CSC/ICO utilities are executed, the user message tables are loaded into memory and verified for structure. If you make incorrect changes, the utility issues an error message and terminates execution.

User-Defined Fail Codes in the STUTAAMT Table

The Auto Connect Fail Code Table (STUTAAMT) contains the codes generated during Auto Connect and Remote Connect processing. These failure codes along with their descriptions are included in the Auto and Remote Connect Summary and Detail Reports and are also documented in *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guide*. These codes begin with the FAILURE CODE nnn identifier. Failure codes 240–255 have been reserved for user log failure codes related to problems with processing FTP auto connect sessions.

If you are using FTP client commands in AC_SCRIPT and LOGON_SCRIPTS, you can use the USERLOG command to create user log records including pre-defined failure codes. Both system and user-defined Connect Failure codes are printed in Auto Connect summary and detail reports and displayed on screens in the ISPF or CICS user interface. (See *IBM Sterling Connect:Enterprise for z/OS Administration Guide* for more information on the USERLOG command and REXX scripts in general.)

To customize the text associated with user-defined failure codes, edit the STUTAAMT member in the source library. This member also contains instructions on how to change the table. Each

message in the reserved 240–255 message range has generic placeholder text that you can modify to describe the error condition causing the problem. To maintain user-defined failure codes, you may want to keep the list of the codes you create with the chapter in *IBM Sterling Connect:Enterprise for z/OS Messages and Codes* that deals with the system-defined Connect Failure codes.

To see examples of user log failure codes with associated text, see *ACDFTP Sample Report* on page 125.

VSAM Batch Status Flags

Several offline utility reports include the VSAM batch status flags for a given batch. The batch status flags are:

Flag	Description
A	The batch was added by the offline ADD utility.
B	The batch originated at a BSC remote site.
C	The batch was collected from a remote site through online Sterling Connect:Enterprise.
D	The batch is flagged for deletion due to an online $$DELETE request or an offline DELETE utility.
e	The batch was encrypted when added by the offline ADD utility.
E	The batch was extracted by the offline EXTRACT utility. This flag does not inhibit another EXTRACT from running and does not prevent online access to the batch.
F	The batch originated at a FTP remote site.
I	The batch is incomplete. Either there are no records in the batch, or an online data collection was interrupted due to an error condition. This batch is ignored by Sterling Connect:Enterprise and only the EXTRACT utility can extract it.
M	The batch is available for multiple transmission, can be transmitted to any remote site, and is not marked T when transmitted unless Mailbox ID=AC Listname.
N	The batch is non transmittable and is locked for transmissions. When displayed, this status replaces the T status. The status is set immediately after the batch is successfully collected, when the EO=Y option of an $$ADD command is specified. It is also set following successful transmission of a batch added with the TO=Y parameter.
R	A remote site can request the batch or a host-initiated Auto Connect can transmit the batch.
S	The batch originated at an SNA remote site.
T	The batch was transmitted online to a remote site.

Flag	Description
U	Sterling Connect:Enterprise cannot extract the batch. When displayed, this status replaces the E status. This status is set immediately after the batch is added, when the TO=Y option added the batch. It is also set following successful extraction of the batch when the EO=Y option added the batch.
X	The batch contains transparent data.
Z	EBCDIC data added through the APPC user API.
0	The batch is stored on the VBQ as FILE_STRUCTURE (non record oriented). The batch was added offline or collected online as a contiguous byte string with no logical record delineation.
1	FTP mode is blocked.
2	FTP mode is compressed.
3	FTP mode is stream.
4	FTP collected with SSL.
5	FTP collected with TLS.
8	FTP structure is file.
9	FTP structure is record.

Note: The system can transmit a batch more than once. Normally, a batch is flagged as transmitted after the first transmission, so it is not sent a second time on a transmit all request. However, you can retransmit a transmitted batch through a request by the specific batch number.

STOUTL Reports

The STOUTL REPORTS DD output file provides an audit trail, which covers the operation of the requested offline utility function including information about whether or not the utility ran successfully.

The header information for both the VSAM and Log File Usage Reports shows the date on which the report ran, the title of the report and the release number of the STOUTL utility program which executed, the page number, and ID of the subsystem on which the VSAM server is located.

Customizing the Layout of Reports

To accommodate the different lengths of user Batch IDs, three different FORMAT parameters are available for STOUTL and CSCU (and InterConnect Option) utilities, which print a large variety of reports. The reports using the different FORMAT parameters all contain the same information; only the placement of the fields on the report differ. You can choose to print all reports in the same way by specifying the desired format in the *OPTIONS record of the Options Definition File (ODF) using these three parameters:

- CSC_DEFAULT_REPORTS_FORMAT=1 | 1X | 2
- ICO_DEFAULT_REPORTS_FORMAT=1 | 1X | 2
- STOUTL_DEFAULT_REPORTS_FORMAT=1 | 1X | 2

Note: The defaults for these ODF *OPTIONS parameters are set by the DEFAULT_MODE=BID24 | BID64 parameter which is a required parameter in the ODF. If BID24 is specified, 1 is the default for this parameter; if BID64 is specified, 1X is used for this parameter. All three report formats are described in this section. For more information on the DEFAULT_MODE parameter, see the *IBM Sterling Connect:Enterprise for z/OS Release Notes* and *IBM Sterling Connect:Enterprise for z/OS Administration Guide*.

You can override the defaults set in the ODF by specifying the format in the SYSIN file's input control records for a particular utility or report. For example, if you specify the original legacy format (Format 1 in the parameters above) in which only 24 characters are provided for the User Batch ID for each batch using the STOUTL_DEFAULT_REPORTS_FORMAT parameter, you can override that default in the ADD utility input control records and specify a different format (FORMAT=1X or FORMAT=2) to show the full 64 character User Batch ID.

The three different formats are shown below. Format 1 is the original legacy format in which only 24 characters are provided for the User Batch ID for each batch line item. (Most of the reports in the Sterling Connect:Enterprise documentation are shown using this format.) Note the location and amount of space the User Batch Identification field takes up for the single batch line item shown in this example.

```
1***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
1DATE 04/29/08  (08120)        TIME 18:00:51        OFFLINE  ADD  UTILITY  REPORT  (Format 1)        Release 1.4.00       Page 1

 ***  Input File Characteristics:

      Record Format  = Fixed    ,Blocked
      Record Size    = 80
      Block Size     = 80
      INFILE DD Name = INFILE6   DSN =  (Unavailable)
      Control Information obtained from SYSIN
 ***  Batches added to Batch Queues:

 BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
               N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
               X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
               2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
               9=FTP Structure Record, e=Encrypted when offline added
 Mailbox    Batch           User Batch                Input      Input       Output     Output   Date    Time   Status
   ID       Number   <--- Identification ---> VBQ#     Bytes     Records       Bytes     Records  Added   Added  Flags

 Mailbox1      8554  This is a 64 character U  06          400          5          400          5 08120 18:00.51  A   R

 Total Batches Added = 1

 Total Input Records = 5

 CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

To accommodate the additional 40 characters of the 64-character User batch ID (BID), all fields to the right of the User BID are shifted to the right when Format 1X is specified for the Offline Add Utility Report as shown below. Format 1X is the default format for all reports unless you explicitly specify a different format either in the ODF or SYSIN file.

```
1***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
1DATE 04/29/08  (08120)        TIME 18:03:05        OFFLINE  ADD  UTILITY  REPORT  (Format 1X)       Release 1.4.00       Page 1

 ***  Input File Characteristics:

      Record Format  = Fixed    ,Blocked
      Record Size    = 80
      Block Size     = 80
      INFILE DD Name = INFILE6   DSN =  (Unavailable)
      Control Information obtained from SYSIN
 ***  Batches added to Batch Queues:

 BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
               N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
               X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
               2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
               9=FTP Structure Record, e=Encrypted when offline added
 Mailbox    Batch         User Batch Identification                                          Input      Input       Output     Output   Date    Time   Status
   ID       Number   <---+----1----+----2----+----3----+----4----+----5----+----6---> VBQ#     Bytes     Records      Bytes     Records  Added   Added  Flags

 Mailbox1      8555  This is a 64 character User Batch ID. This BID ends right here!!  06          400          5          400          5 08120 18:03:05  A   R

 Total Batches Added = 1

 Total Input Records = 5

 CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

Format 2 combines Format 1 and Format 1X by providing two lines for each batch as shown in the following report sample:

- The first line shows the original 24 character User Batch ID along with the rest of the fields on the same line
- On the second line the 64 character Batch ID is aligned with the 24 character Batch ID immediately above it.

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 06/19/08  (08171)        TIME 11:17:01        OFFLINE  ADD  UTILITY  REPORT  (Format 2)        Release 1.4.00       Page 1

***  Input File Characteristics:

     Record Format  = Fixed    ,Blocked
     Record Size    = 80
     Block Size     = 6320
     INFILE DD Name = INFILE    DSN = CSDMBX.CETEST.$.DATA(SIMPLE80)
     Control Information obtained from SYSIN
***  Batches added to Batch Queues:

BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch           User Batch                 Input      Input       Output     Output   Date    Time   Status
  ID       Number   <--- Identification ---> VBQ#     Bytes     Records       Bytes     Records  Added   Added  Flags
                    <---+----1----+----2----+----3----+----4----+----5----+----6--->

MAILBOX1        25  THIS IS A 64 CHARACTER U  03          720          9          720          9 08171 11:17.01  A   R  M
                    THIS IS A 64 CHARACTER USER BATCH ID. THIS BID ENDS RIGHT HERE!!

Total Batches Added = 1

Total Input Records = 9

CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

For more information on the FORMAT parameter, see Appendix A, *Offline Utility Parameters*. For more information on the *OPTIONS parameters in the ODF, see the *IBM Sterling Connect:Enterprise for z/OS Administration Guide.*

VSAM File Usage Report

This report is produced for all offline utilities except the PURGE and REPORT utilities. The VSAM File Usage Report lists the VSAM data set names contained in the VPF, the allocation and collection status of the VSAM files, and all VBQs and VLFs that were accessed by a particular STOUTL execution.

Output for this report goes to the REPORTS2 DD statement. If the REPORTS2 DD statement is missing, the CMU228I message is written to the SYSPRINT. To eliminate the CMU228I message and ensure that this report is produced, add the REPORTS2 DD statement to the JCL.

```
***  THIS FILE CONTAINS THE FILE USAGE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 10/20/03  (03293)        TIME 14:03:34      VSAM  FILE  USAGE  REPORT        Release 1.4.00      Page 1
Subsystem ID:  SV3A
         Allocation  Collection
File ID    Status      Status    Data Set Name
-------  ----------  ----------  --------------------------------------------
VPF      ALLOCATED               RDXD110.SJV110A.VPF
VCF      ALLOCATED               RDXD110.SJV110A.VCF
VBQ01                            RDXD110.SJV110A.VBQ01
VBQ02                            RDXD110.SJV110A.VBQ02
VBQ03                            RDXD110.SJV110A.VBQ03
VBQ04                            RDXD110.SJV110A.VBQ04
VBQ05    ALLOCATED   CURR COLL   RDXD110.SJV110A.VBQ05
VBQ06    ALLOCATED               RDXD110.SJV110A.VBQ06
VBQ07    (STOUTL=D)              RDXD110.SJV110A.VBQ07
VBQ08                            RDXD110.SJV110A.VBQ08
VBQ09    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ10    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ11    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ12    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ13    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ14    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ15    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ16    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ17    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ18    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ19    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VBQ20    ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
VLF1     (STOUTL=D)              RDXD110.SJV110A.VLF1
VLF2     ALLOCATED   CURR COLL   RDXD110.SJV110A.VLF2
VLF3                             RDXD110.SMSTEST.SJV110A.VLF3
VLF4     (STOUTL=D)              RDXD110.SMSTEST.SJV110A.VLF4
VLF5                             RDXD110.SMSTEST.SJV110A.VLF5
VLF6                             RDXD110.SMSTEST.SJV110A.VLF6
VLF7                             RDXD110.SMSTEST.SJV110A.VLF7.DSNAME44.CHAR44
VLF8     ----------  ----------  -- File Not Initialized (via STOUTL PURGE)
Legend:
Col. 1 (File ID):           Connect:Enterprise File ID (VPF, VCF, VBQ01, etc.)
Col. 2 (Allocation Status): ALLOCATED  = file was accessed by STOUTL during this execution
                            blanks     = file was NOT accessed by STOUTL during this execution
                            (STOUTL=D) = file is deallocated and unavailable to both the online system and STOUTL
                                         ($$DALLOC was issued with STOUTL=DISALLOW parameter)
Col. 3 (Collection Status): CURR COLL  = Current Collection VBQ or VLF file.
Col. 4 (Data Set Name):     VSAM Data Set Name
```

The VSAM File Usage Report contains the following information:

Field	Description	
File ID	The ID of the Sterling Connect:Enterprise file, for example, VPF, VBQ11, or VLF7.	
Allocation Status	The allocation status of the file:	
	ALLOCATED	The file was allocated by STOUTL during this execution.
	Blank	The file was not accessed by STOUTL during this execution.
	(STOUTL=D)	The file was deallocated and unavailable to both the online system and STOUTL ($$DALLOC was issued with STOUTL=DISALLOW parameter).
Collection Status	CURR COLL indicates that this is the current collection VBQ or VLF file.	
Data Set Name	The VSAM data set name.	

Log File Usage Report

This report identifies the log files that were accessed using the LOGNAME= parameter in conjunction with the specific report requested, such as the Auto Connect Detail Report or the Remote Connect Summary Report.

The Log File Usage Report is produced for all report utilities including the following:

- Auto Connect Detail Report (ACDETAIL)
- Auto Connect Detail FTP Report (ACDFTP)
- Auto Connect Queue Report (ACQUEUE)
- Auto Connect Summary Report (ACSUMMARY)
- Offline Utility Log (OFFLOG)
- Remote Connect Detail Report (RCDETAIL)
- Remote Connect Summary Report (RCSUMMARY)
- FTP Remote Connect Detail Report (RCDFTP)
- FTP Long Remote Connect Detail Report (RCDFTPL)

Output for this report goes to the REPORTS2 DD statement. If the REPORTS2 DD statement is missing, the CMU228I message is written to the SYSPRINT. To eliminate the CMU228I message and ensure that this report is produced, add the REPORTS2 DD statement to the JCL.

If a report utility includes the VPF= parameter (in addition to or instead of a LOGNAME= parameter), the VSAM File Usage Report is also produced appearing after the Log File Usage Report.

```
***  THIS FILE CONTAINS THE FILE USAGE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 10/20/08 (08293)        TIME 14:15:51    LOG  FILE  USAGE  REPORT  (AUTO CONNECT SUMMARY
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
DATE 10/20/08 (03293)        TIME 14:15:52    LOG  FILE  USAGE  REPORT  (AUTO CONNECT DETAIL
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
RDXD110.SJV110B.VLF2
DATE 10/20/08 (08293)        TIME 14:15:53    LOG  FILE  USAGE  REPORT  (REMOTE CONNECT SUMMARY
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
DATE 10/20/08 (08293)        TIME 14:16:05    LOG  FILE  USAGE  REPORT  (REMOTE CONNECT DETAIL
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
DATE 10/20/08 (08293)        TIME 14:16:19    LOG  FILE  USAGE  REPORT  (QUEUED AUTO CONNECT
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
DATE 10/20/08 (08293)        TIME 14:16:19    LOG  FILE  USAGE  REPORT  (OFFLINE UTILITY LOG
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
DATE 10/20/08 (08293)        TIME 14:16:19    LOG  FILE  USAGE  REPORT  (FTP AUTO CONNECT DETAIL
REPORT)    Release 1.4.00  Page 1
Subsystem ID:  SV3B
Data Set Name (LOGNAME=)
-------------------------------------------
RDXD110.SJV110B.VLF1
```

The Log File Usage Report contains the following information:

Field	Description
DATE	The date on which the report was run.
TIME	The time at which the report was run.
LOG FILE USAGE REPORT	The name of the STOUTL report – LOG FILE USAGE REPORT.

Field	Description
(Report Name)	The name of the specific report utility run. AUTO CONNECT SUMMARY REPORT AUTO CONNECT DETAIL REPORT REMOTE CONNECT SUMMARY REPORT REMOTE CONNECT DETAIL REPORT QUEUED AUTO CONNECT REPORT OFFLINE UTILITY LOG REPORT FTP AUTO CONNECT DETAIL REPORT FTP REMOTE CONNECT DETAIL REPORT FTP Long REMOTE CONNECT DETAIL REPORT
Release x.x.xx	The release number of the STOUTL utility program, which was executed.
Page x	The page number.
Subsystem ID	The ID of the subsystem on which the VSAM server was located.
Data Set Name (LOGNAME=)	The VSAM data set name of the log file specified in the LOGNAME= parameter.

ADD Utility

You run the ADD utility to add batches of data to the VSAM batch files for transmission to one or more remote sites. Supply the input data in a sequential input file or in a member of a partitioned data set.

Sterling Connect:Enterprise selects the VBQ to hold the added batches by:

- If the VBQ parameter is specified, the specified VBQ is used. However, if the specified VBQ is not currently allocated to online Sterling Connect:Enterprise or if Sterling Connect:Enterprise is no longer running and the VBQ was not allocated when Sterling Connect:Enterprise came down, a warning message is issued.
- If the VBQ parameter is not specified and the VBQROTAT value in the online Sterling Connect:Enterprise ODF is greater than 1, the current collection VBQ is selected. If the current collection VBQ exceeds the VBQPCT value in the online Sterling Connect:Enterprise ODF, the next VBQ in the VBQROTAT scheme is used. If this VBQ also exceeds the VBQPCT value, then the next VBQ is used. This continues until an online VBQ within the VBQROTAT scheme is found. If a VBQ is not found, the current collection VBQ is used.

  If the VBQ parameter is not specified and the VBQROTAT value in the online Sterling Connect:Enterprise ODF is less than 2, the current collection VBQ is used.

The VBQ selection scheme does not affect the online system and does not cause the online system to rotate.

Note: The VBQROTAT and VBQPCT ODF values are retrieved from the VPF (not from the sequential ODF input file). If these values are dynamically changed when the system is running, the new values are used. If the online Sterling Connect:Enterprise comes down, the values used are those set at that time.

Batches added to the VSAM batch files are identified by a Mailbox ID (ID) and an optional user batch ID (BATCHID). Supply these batch identifiers in the ADD utility control records or in the data added to the VSAM batch file.

To remove INFILE records so that they will not be included in the VBQ output file written during the ADD process, use the REMOVECOL and REMOVEVAL parameters. In the example below, any INFILE records with //MYJCL beginning in column 1 will be removed before records are added to the VBQ.

```
ADD
  VPF='CE.VPF'
  ID=EXAMPLE2
  BID='EXAMPLE BATCH'
  REMOVECOL=1
  REMOVEVAL='//MYJCL'
```

Sterling Connect:Enterprise can encrypt data before transmitting it from one Sterling Connect:Enterprise to another. Sterling Connect:Enterprise also calculates a Message Authentication Code (MAC) that is used during EXTRACT processing to validate that data has not been added or removed. The MAC is passed as an additional record, appended to the end of the batch. Before implementing encryption, review the ENCR parameter for ADD and the DECR parameter for EXTRACT.

A security exit is available for the ADD utility to limit user access to batch names. See the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* for information about user exits.

Multiple Transmission Attributes

There are two reasons to assign a batch a multiple transmission attribute:

- Send a batch to one or more remote sites multiple times. This can be a broadcast batch or a batch containing header information that precedes data batches. It could also be a batch that contains SIGNON or other session start up information.

  Transmit a batch created in this way as many times as needed without resetting any status flags. The same remote can request the batch several times if needed. To accomplish this:

  - Add the batch with MULTXMIT=YES.
  - Assign an ID to the batches that correspond to the remote sites that request the batch, or assign a common ID to the batch.

    Note: Do not assign an ID equal to an Auto Connect session list name that may process this batch. This causes the processing to occur as defined in the option following.

- Send a batch to several remote sites as part of an Auto Connect session, but only sending it once to each remote. To accomplish this:
  - Assign an ID to the batch that matches the remote name in the Auto Connect list name that is processing the batch.
  - Specify MULTXMIT=YES when adding the batch to the VSAM batch queues.

    For batches created in this way, and transmitted through an Auto Connect session, the multiple transmission attribute is cancelled after the Auto Connect session processes it. This creates a one-time broadcast batch.

Note: The multiple transmit attribute is cancelled, even if transmission to one or more remote sites is not successful. To retransmit the batch to all remote sites, use the STATFLG utility to turn off the T flag, then reactivate the Auto Connect session.

Creating Multiple Batches Using the ADD Offline Utility

You can create multiple batches in a single execution of an ADD offline utility, through the use of ADD control records or the use of a $$ADD record embedded in the sequential input file. There are two ways to create multiple batches:

- Use SPLITCOUNT with a single batch ADD.
- Use a $$ADD record embedded in the input file.

You can also run multiple ADD utilities in a single execution of STOUTL.

Using SPLITCOUNT to Add a Single Batch

This function enables you to split a large sequential input file into smaller batches with the same batch identifiers. This option is controlled entirely by ADD control records. You must specify ADD, ID, and SPLITCOUNT. You can optionally supply BATCHID and MULTXMIT.

For example, use the following ADD control records to add 3,500 data records in batches of 1,000 records:

```
ADD
VPF='test.vpf'
ID=xxxxxxxx
BATCHID='xxx.xxx'
SPLITCOUNT=1000
```

The ADD offline utility creates four batches of 1,000, 1,000, 1,000 and 500 records, with identical batch identifiers and four different batch numbers. The ADD output report displays status for all four batches.

Splitting a Sequential Input File into Multiple Batches

You can split a sequential input file into several batches under the control of one or more $$ADD records embedded in the sequential input file. The $$ADD record syntax is similar to an online $$ADD from a remote site, allowing unique batch identifiers for each batch.

You must supply the $$ADD record in the sequential input file. There is no limit to the number of $$ADD records, but at least one $$ADD record must be the first record in the data.

When you use this function, the ADD control records must contain a single ADD control record and no batch identifiers (ID and BATCHID). You must supply all batch identifiers in the embedded $$ADD records. Other specified ADD parameters are valid. The $$ADD records parameters override those in the ADD SYSIN.

For example, the following is required:

```
ADD
VPF='test.vpf'
```

The ADD utility adds batches from the input file. Batch identifiers are obtained from the $$ADD records in the file. The sequential input file must contain the $$ADD records. $$ADD records embedded in the sequential input file must observe the following rules:

- Start the $$ADD in the first position of the record.
- Specify both the ID=xxxxxxxx and the BATCHID='xxx...xxx' parameters on the $$ADD record. If a valid ID is not found, the record is treated as data. If BATCHID='xxx...xxx' is not specified, it defaults to a value of 'NONE'.When this occurs, the ADD completes with a condition code X '04' and a warning message.
- Specify MULTXMIT=Y or N. The MULTXMIT value default is MULTXMIT=N (no multiple transmit).
- Separate each parameter by blanks. All fields in the $$ADD records ($$ADD, ID, BATCHID, MULTXMIT, and ENCR) must be in the first 80 characters of a record. They must be on a single record.

Using Symbolic Variables in BIDs When Adding Batches

Sterling Connect:Enterprise provides the ability to use pre-defined symbolic variables as part of the batch ID when you add a batch to the repository using the STOUTL, CSC, or ICO ADD function. By using the BATCHIDV='xxxx….xxxx' parameter, Sterling Connect:Enterprise will scan for specific pre-defined symbolic variables within the coded text string and then substitute these variables with actual data values. The only difference between BATCHID (BID) and BATCHIDV (BIDV) is that when the V suffix is used, the enclosed string is scanned for pre-defined variables, and the values are resolved as part of the final BID value.

Sterling Connect:Enterprise supports more than 20 symbolic variables including the following:

- &DATE—Current date in 5-digit yyddd format
- &DAYUC—UPPER CASE DAY (MONDAY, TUESDAY...)
- &IDFIELD—8-byte Mailbox ID (ID=xxxxxxxx value)
- &MONTHUC—UPPER CASE MONTH(JANUARY, FEBRUARY...)
- &STCNAME—8-byte jobname/taskname
- &YYYYMMDD—Current date in 8-digit yyyymmdd format
- &MM—Current month in 2-digit mm format

For a complete listing of BATCHIDV symbolic variables, see page 198.

Examples of BID Symbolic Variables

Symbolic substitution enables you to substitute information in a user batch ID whenever Sterling Connect:Enterprise encounters the exact symbolic parameter you specify in the BATCHIDV value. For example, to include the Mailbox ID and a date/time stamp in the Batch ID, you could specify the following input control cards, including symbolic variables for the ADD utility to use:

```
ADD
  ID=MBX00001
  BATCHIDV='Report for Mailbox=&IDFIELD on &YYYY-&MM-&DD at   &HOUR:&MIN:&SEC.&TH'
  INFILE=MYINFILE
```

Sterling Connect:Enterprise resolves the BID to a corresponding value, such as the following:

```
BATCHID: Report for Mailbox=MBX0001 on 2008-03-14 at 10:14:43.32
```

How to Use BID Symbolic Variables

To use symbolic variables, use the BATCHIDV='xxxx….xxxx' parameter instead of the BATCHID parameter to tell the system to scan the string enclosed in quotation marks for pre-defined variables to substitute with data from the batches. As with wildcard checking, you can use the BATCHIDV parameter in the SYSIN input records where you tell the system how you want it to add batches using the STOUTLor CSC/ICO utility.

ADD Input Control Records

The SYSIN file contains the input control records for the ADD utility. The following are the valid ADD utility control records:

```
ADD
     APPEND_CHAR=xxx....xxx  or ='xxx...xxx' or ="xxx...xxx" or =0Xhh....hh
     AUTOSEND=1 to 100,E
     BATCHID='xxx...xxx'
     BATCHIDV='xxx...xxx'
     EMPTY_BATCH=ALLOW|DISALLOW
     ENCR=xxxxxxxx
     FORMAT=1|1X|2
     ID=xxxxxxxx
     IGNORE_VBQ_DISALLOW
     IGNORE_TRANSPARENT
     INFILE=xxxxxxxx
     KEEPADD
     LOG=YES|NO
     MULTXMIT=YES|NO
     PADCHAR=Xnn
     RDW=KEEP|REMOVE
     REMOVECOL=nnnnn
     REMOVEVAL='xx...xx'|0xhh.hh
     SPLITCOUNT=nnnn
     STRUCTURE=RECORD|FILE
     TRANSMITONCE=YES
     USERRCD=1 to 9,E
     VBQ=nn
     VBQRECSIZE=1 to 32,742
     VPF='xxx.xxx'
```

VPF= is required.

Generic user batch IDs, batch numbers, or generic Mailbox IDs are not allowed for the ADD utility. If ID and BATCHID are not specified, Sterling Connect:Enterprise assumes that all control information is provided by $$ADD control commands imbedded in the batch data. Include the ID if BATCHID is specified. Specify only a single VBQ number.

Caution: You can use AUTOSEND records to initiate an auto connect to immediately transmit the newly added batches when a STOUTL ADD job has completed. However, be aware that if you specify the BATCHID= parameter in an AUTOSEND record, you are still limited to the 80-character record, which might not accommodate the entire 64-character batch ID.

If the longer Batch ID becomes a restriction with any of your AUTOSEND records, change the BATCHID= value to use either a symbolic variable which resolves either to the newly added Batch ID or batch number, as follows:

// MODIFY RDXCETL,$$CON,L=LSNA001 ID=STLTST01 BATCHID='&BID64'

or

// MODIFY RDXCETL,$$CON,L=LSNA001 ID=STLTST01 BATCHID=&BATCH#

ADD Input Files

The INFILE file is the sequential input file that contains the input batch data. It can contain fixed or variable length records.

Add Utility Sample JCL

The following sample JCL executes the ADD utility:

```
//ADD      JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BATCHES  DD   DISP=SHR,DSN=ENTPRS.INFILE
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
  add
     vpf='entprs.vpf'
     id=ATLANTA1
     bid='Finance data for Atlanta'
     encr=12345678
     structure=record
     infile=batches
     userrcd=4
        TESTDATA1
        TESTDATA2
        TESTDATA3
        TESTDATA4
     autosend=3
//JOBNAME JOB .....................
//BR14    EXEC PGM=IEFBR14
// COMMAND 'F CMBX,$$CON L=LISTNAME'
ZZ
```

The USERRCD=4 parameter creates a single user record from the four cards directly following it and writes it to the front of the data. It truncates or pads to match the LRECL of INFILE.

You can use symbolic parameters.

ADD Output Report

The REPORTS file contains an output report that details ADD utility execution.

The ADD report lists control information accumulated during the ADD utility. Input file characteristics are provided, including the record format (fixed or variable), record size, block size of the INFILE data set, the INFILE DD name used, and whether control information came from the SYSIN file or from $$ADD cards embedded in the input file.

The following is a sample ADD report:

```
DATE 10/21/08 (08294)        TIME 16:35:19        OFFLINE  ADD  UTILITY  REPORT 71
Release 1.3400       Page 1
***  Input File Characteristics:
     Record Format  = Fixed    ,Blocked
     Record Size    = 80
     Block Size     = 80
     INFILE DD Name = INFILE1   DSN =  (Unavailable)
     Control Information obtained from SYSIN
***  Batches added to Batch Queues:
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch          User Batch               Input      Input       Output     Output   Date    Time   Status
  ID       Number       Identification      VBQ#     Bytes     Records       Bytes     Records  Added   Added  Flags
Atlanta2      8597  Monthly Sales Report      08          400          5          400          5 08294 16:35.19  A   R
Total Batches Added = 1
Total Input Records = 5
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The report lists the following information for each batch added:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit number assigned to the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
VBQ #	The number of the VBQ file where the batch was placed.
Input Bytes	The number of input bytes in the batch. If the input file is defined with variable length records, RDW bytes are included.
Input Records	The number of input records in the batch.
Output Bytes	The number of output bytes in the batch. If the input file is variable length, and RDW=KEEP is specified, RDW bytes are included. If ENCR= is specified, 24 extra bytes are included for the MAC record.
Output Records	The number of output records. If KEEPADD is specified, the $$ADD card is included. If ENCR= is specified, the MAC record is included.
Date Added	The date on which the batch was added to the VSAM batch files.
Time Added	The time when the batch was added to the VBQ.
Status Flags	A code describing the batch status. The codes are described on page 81.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

DELETE Utility

Run the DELETE utility to flag batches on the VSAM batch files as deleted. The DELETE utility does not physically erase the batches; the ERASE utility does the actual erasing. The batches marked as deleted still exist on the file and are displayed with a D in subsequent directory listings. You can flag batches as deleted so they are not accessed by a subsequent EXTRACT offline utility or by a $$REQUEST from a remote site.

Caution: The DELETE utility has the capability to delete many batches in a single run. You must use caution in creating the control records for the delete to ensure you are deleting only the intended batches.

A security exit is available for the DELETE utility that limits user access to certain batch names. Refer to the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* for information about user exits.

DELETE Input Control Records

The SYSIN file contains the input control records for the DELETE utility. The following are valid DELETE utility control records. VPF= is required.

```
DELETE
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     FILE_ACCESS=VPF|VCF1P
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     MAXBATCH=nnnnnnn
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn [-nn]
     VPF='xxxx.xxxx'
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

DELETE Utility Sample JCL

The following sample JCL executes the DELETE utility:

```
//DELETE   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
  delete
     vpf='entprs.vpf'
     id=ATLANTA*
     stator=FTP,SSL
ZZ
```

DELETE Output Reports

SYSPRINT contains a report of the DELETE SYSIN control records for the execution. This report lists all batches deleted for the job run. The following is a sample DELETE report:

```
DATE 10/21/03  (03294)       TIME 16:35:20       BATCH  DELETE  REPORT             Release 1.4.00           Page 1
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch      Block     Record      Byte              User Batch         Time   Date  VBQ# New Batch Status
Flags
   ID      Number     Count      Count      Count          Identification        Added  Added
Atlanta2      8592          5          5          400  Monthly Sales Report      15:50  03294  06   AD  R
Total number of batches deleted  1, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The DELETE report contains the following information:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Block Count	The number of blocks in the batch.
Record Count	The number of records in the batch.
Byte Count	The number of bytes in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Time Added	The time the batch was added.
Date Added	The date the batch was added to the VSAM batch files.

Field	Description
VBQ Number	The number of the VBQ file where the batch was placed.
VSAM Status Flags	A code describing the batch status. The codes are described on page 81.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

ERASE Utility

The ERASE utility physically erases selected batches from the VSAM batch files. The control information stored in the VPF and VCF files is also erased when you use ERASE. Also, you have the option of erasing the actual batch data stored in the VBQ files.

Caution: The ERASE utility is a powerful tool. When a batch is erased, it no longer exists; online or offline Sterling Connect:Enterprise cannot access it. If the CRONLY option is not specified (see page 201 for more information on this parameter), both control information and actual batch data are erased. To recover VCF records that were deleted with the STOUTL ERASE CRONLY utility, see *VERIFY Utility* on page 147.

Based on the specified criteria, ERASE may select a batch currently being transmitted or collected. If so, the selected batch is bypassed and is not erased. A warning message is issued.

Note: The ERASE utility is disabled during the system backup process. No batches can be erased until the backup finishes and the ERASE utility is re-enabled.

If an error occurs during a batch collection, it is possible for the collection in progress flag to remain set for the batch. ERASE continues to bypass the batch unless BATCHNUM is specified. Only specify BATCHNUM after confirming the collection is no longer in progress. If the collection is still in progress, the batch specified could be erased.

Caution: Verify that you are only erasing the intended batches when creating the control records for the ERASE. The ERASE utility has the capability to erase many batches in a single run. If multiple batches exist for the specified control records, all batches that meet all the criteria are erased.

A security exit is available for the ERASE utility that limits user access to certain batch names. See the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits* for more information.

ERASE Input Control Records

The SYSIN file contains the input control records for the ERASE utility. The following control records are valid for the ERASE utility function:

```
ERASE
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     CRONLY
     FILE_ACCESS=VPF|VCF1P
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     IGNORE_VBQ_DISALLOW
     MAXBATCH=nnnnnnn
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE,VBQBLOCKED
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn [-nn]
     VPF='xxxx.xxxx'
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

VPF is required. At least one other parameter is required in addition to VPF.

ERASE Utility Sample JCL

The following sample JCL executes the ERASE utility:

```
//ERASE    JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
  erase
     VPF='entprs.vpf'
     id=ATLANTA*
     status=FTP,SSL
ZZ
```

ERASE Output Reports

The REPORTS file contains a report detailing ERASE utility execution. The following is a sample ERASE utility report:

```
DATE 10/21/03  (03294)       TIME 16:35:20       BATCH  ERASE  REPORT             Release 1.4.00          Page 1
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch      Block      Record     Byte             User Batch        Time   Date  VBQ# Batch Status Flags
  ID       Number     Count      Count      Count          Identification        Added  Added
Atlanta2      8591          5          5          400  Monthly Sales Report      15:50  03294  08   A   R
Total number of batches erased   1,  Total number of blocks erased   5, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following information is provided in the ERASE report:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Block Count	The number of blocks in the batch.
Record Count	The number of records in the batch.
Byte Count	The number of bytes in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Time Added	The time the batch was added.
Date Added	The date the batch was added to the VSAM batch files.
VBQ Number	The number of the VBQ file where the batch was placed.
VSAM Status Flags	A code describing the batch status. The codes are described on page 81.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

EXTRACT Utility

The EXTRACT utility extracts batches from the VSAM batch files. Batches are extracted to a fixed length or variable length sequential output file or to a member of a PDS. Knowledge of the control record input options and the output reporting messages ensures proper EXTRACT utility use.

If multiple batches are selected, the batch data for all batches is concatenated and extracted to the output file. Override this feature with ONEBATCH=YES if you want to extract only a single batch for an ID. If you use this override, only the first batch selected is extracted.

Caution: Only 512 OUTFILE data sets are allocated during the execution of a single offline utilities step. This does not limit the number of batches that can be extracted, only the number of output files. If you need to extract data to more than 512 output files, divide the execution into multiple job steps.

When data is sent to the host computer from remote sites, the remote can optimize the data communications lines by compressing, truncating, and blocking records. Also, the remote site may have inserted transmission control characters that must be removed before data manipulation. These functions are handled automatically in the EXTRACT utility.

Record Separators

Default EXTRACT processing detects the following record separators:

SNA

Default record separators are based on the media type assigned to the batch. Use the following table to determine the default record separators by media type:

Media Type	Record Separators
Transmission Exchange (EX)	X'1E' End of nonspanned RU
Basic Exchange (BX)	X'1E'
Card Punch (PU)	X'1E' X'1F' X'15' X'0C' X'0D' End of nonspanned RU
Printer (PR)	X'1E' X'1F' X'15' X'0C' X'0D' End of nonspanned RU

Media Type	Record Separators
Console (CN)	X’1E’ X’15’ End of nonspanned RU

Note: Sterling Connect:Enterprise recognizes more record separators than is normally allowed for each media type. This provides greater flexibility during EXTRACT processing. To strictly adhere to the record separators defined to each media type, use the RECSEP parameter.

BSC

Nontransparent data deblocking recognizes X’1E’, X’1F’ and X’1F02’ record separators or the X’26’ ETB or X’03’ ETX as the end of records.

Transparent data extracted to fixed-length records can be padded or might split into multiple records if the data is an even multiple of the fixed length.

FTP

When a batch is not recordized, nontransparent data deblocking detects an X’15’ record separator.

When a batch is recordized, nontransparent data deblocking has no implied record separators, because data is stored in the repository as logical records (user data only). By default, FTP batches collected as text data (that is, for File data structures transferred in stream mode with an ASCII data type or EBCDIC data type) are recordized.

When a batch is recordized, but the NL X'15' is preserved at the end of each logical record, nontransparent data deblocking routines will not detect an X'15' record separator.

For a detailed description of FTP recordized versus non-recordized data, refer to the chapter in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* that deals with configuring ODF records for FTP connections.

Batch Extraction

If the batch selected for extraction was identified as print media during collection and a PRINT data set is allocated, it is extracted to the PRINT data set. If no PRINT data set is allocated, the batch is extracted to the OUTFILE data set.

As each batch is extracted from the VSAM batch files, the batch status flags are set to an E status. The E status does not prevent a subsequent EXTRACT utility from re-extracting the batch. To prevent subsequent batch extraction, specify DELETE=YES on the EXTRACT control records. When a batch is flagged with both E and D flags, future extracts by Mailbox ID and Batch ID do not access the batch.

When a batch contains transparent data, Sterling Connect:Enterprise does not examine the data for control characters (inter-record separators). This places some restrictions on transparent data extraction. The VSAM batch record size must be an even multiple of the sequential output file

record size. Sterling Connect:Enterprise deblocks the VSAM batch based on the record size of the output file.

Note: To extract transparent data, you must specify the following parameters:

- VPF='xxxx.xxxx'
- ID=xxxxxxxx
- RECSEP=Tnnnnn
- TRANSP=YES|BOTH

Fatal errors halt the EXTRACT. All batches extracted to that point are flagged as extracted and, optionally, flagged as deleted.

By default, EXTRACT does not process incomplete batches. To extract a batch marked incomplete, specify either the STATUS parameter, the STATOR parameter, or the BATCHNUM parameter.

To remove records so that they will not be included in the OUTFILE written during the EXTRACT process, use the REMOVECOL and REMOVEVAL parameters. In the example below, any VBQ records with //*SPC BINASC */ beginning in column 1 will not be written to the OUTFILE.

```
EXTRACT
  VPF='CE.VPF'
  ID=EXAMPLE1
  BATCHID=#44
  REMOVECOL=1
  REMOVEVAL='//* SPC BINASC */'
```

To limit the number of hex record separators processed, you can use the MAX_RECSEP_CX=nnnnnn parameter in conjunction with the RECSEP=Cnnnn,Xhh parameter. The first nnnnnn record separators are processed and then all remaining record separator characters are treated as data. In the example below, after the first 100 record separators are processed, the subsequent record separator characters are handled as user data. For more information, see page 211.

```
EXTRACT
  VPF='CE.VPF'
  ID=EXAMPLE1
  RECSEP=C80,X25
  MAX_RECSEP_CX=100
```

A security exit is available for the EXTRACT utility that limits user access to certain batch names. See the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits Guide* for additional information.

EXTRACT Input Control Records

The following control records are valid for the EXTRACT utility function:

```
EXTRACT
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     DECR=xxxxxxxx
     FILE_ACCESS=VPF|VCF1P
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     GPLUS=YES
     ID=xxxxxxxx
     IGNORE_VBQ_DISALLOW
     LOG=YES|NO
     MAX_RECSEP_CX=0|nnnnnn
     MAXBATCH=nnnnnnn
     MEDIA=PR|PU|CN|EX|BX
     ONEBATCH=YES
     OUTFILE=xxxxxxxx
     PADCHAR=Xnn
     PCC=KEEP|REMOVE|CONVERT
     RDW=BUILD|NOBUILD
     RECSEP=Xnn[,nn,...nn]|Tnnnnn|Cnnnnnn|Cnnnnn,Xnn[,nn,...nn]
     RECSEPIN=NO|YES
     REMOVECOL=nnnnn
     REMOVEVAL='xx...xx'|0xhh..hh
     DELETE=YES
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     TRANSPARENT=YES|NO|BOTH
     USERRCD=1 to 9,E
     VBQ=nn[-nn]
     VPF='xxxx.xxxx'
     ZERO_LENGTH_RECORD=KEEP|REMOVE
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

VPF is required. At least one other parameter is required in addition to VPF.

EXTRACT Utility Sample JCL

The following sample JCL executes the EXTRACT utility:

```
//EXTRACT  JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//OUTFILE  DD   DISP=SHR,DSN=ENTPRS.OUTFILE
//PRINT    DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     extract
     VPF='entprs.vpf'
     Status=FTP,SSL
     id=ROME1
ZZ
```

EXTRACT Output Reports

The REPORTS file contains the following output file characteristics:

- Record format (fixed or variable)
- Record size
- Block size of the OUTFILE data set
- OUTFILE DD name

The following is a sample EXTRACT report:

```
DATE 10/21/03  (03294)       TIME 16:35:20    OFFLINE  EXTRACT  UTILITY  REPORT           Release 1.4.00      Page 1
***  Output File Characteristics:
     Record Format   = Fixed    ,Blocked
     Record Size     = 80
     Block Size      = 8000
     OUTFILE DD Name = OUTFILE1
***  Batches extracted from Batch Queues:
Mailbox    Batch           User Batch          XmitBlk    XmitRec    XmitByte    ExtractRec ExtractByte  Time  Date
Type  DD Name
  ID       Number        Identification         Count      Count      Count        Count      Count      Added Added
Atlanta2      8593  Monthly Sales Report             5          5          400          5          400  15:50 03294
HOST  OUTFILE1
Total number of batches extracted  1,  Total number of blocks extracted  5, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The report contains the following information for each extracted batch:

Field	Description
Mailbox ID	The 1–8 character Mailbox identifier.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
User Batch Identification	The 1–64 character user-assigned batch identifier.

Field	Description
XmitBlk Count	The number of blocks in the transmitted batch.
XmitRec Count	The number of records in the transmitted batch.
XmitByte count	The number of bytes in the transmitted batch.
ExtractRec Count	The number of records in the batch, once the batch has been extracted.
ExtractByte Count	The number of bytes in the batch, once the batch has been extracted.
Time Added	The time when the batch was added to the VSAM batch files.
Date Added	The date when the batch was added to the VSAM batch files.
Type	Specifies an API, BSC, FTP, SNA, or host remote type.
DD Name	The DD of the sequential output file to which the batch was extracted.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

EXTRACT Output Files

The following output files are used during EXTRACT utility execution:

- OUTFILE

  The OUTFILE file is the sequential output file that contains the extracted batches. It can contain fixed or variable length records. When you extract multiple batches (all batches for a specified set of IDs, or batch IDs), the batches are concatenated in the OUTFILE. You can override this DD name by using the OUTFILE parameter.

- PRINT

  The data is selected for inclusion in the PRINT file if valid print control characters are present.

LIST Utility

The LIST utility produces a formatted report of all batches in the VSAM batch files that meet selection criteria. You can produce either a detail or summary report.

LIST Input Control Records

The SYSIN file contains the input control records for the LIST utility. The following control records are valid for the LIST utility function:

```
LIST
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     DETAIL=NO|YES
     FILE_ACCESS=VPF|VCF1P
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     MAXBATCH=nnnnnnn
     ID=xxxxxxxx
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn [-nn]
     VPF='xxxx.xxxx'
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

VPF is required.

LIST Utility Sample JCL

The following sample JCL executes the LIST utility:

```
//LIST     JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     list
     VPF='entprs.vpf'
     id=*
     Status=FTP,SSL
ZZ
```

LIST Output Reports

The REPORTS file contains the reports that provide LIST utility batch information. You can produce either a detail or a summary report.

Sample Detail Report

If you specify the DETAIL=YES parameter for the LIST utility, it creates a report that displays detail information about each batch selected by the LIST utility. The following is a sample detail LIST report:

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 04/22/08  (08113)       TIME 09:25:59       BATCH  DIRECTORY  LIST  (Format 1X)      Release 1.4.00   Page 1

Mailbox ID=F38027    User Batch ID=|---+----1----+----2----+----3----+----4----+----5----+----6---|
Batch#=00008368
Total Bytes=00000000400  Total Records=000000005  Total Blocks=000000005  Total VSAM Blocks=000000001
Creation Date/Time=2008.081/15:35:06           VBQ#=06   VBQ Status=Online
Input RECFM=FB  Input LRECL=00080  Input BLOCKSIZE=00080  Largest Record=00080
System ID=CSGB       Job Name=CTESJVXY       Mailbox Name=SVAJD3

Status Flags:

Offline Added.........=Y  Online Collected.......=N  Requestable...........=Y  Transmitted...........=N
Incomplete............=N Collection In Progress.=N  Deleted.................=N  EOB Exit Driven........=N
Compressed............=N  Truncated..............=N  Transparent...........=N  Multi-Transmittable....=N
Extracted.............=N  Erased.................=N  Previously Transmitted.=N  File Structure.........=N
Transmit Once Set.....=N  Transmit Once Locked...=N  Extract Once Set.......=N  Extract Once Locked....=N
Empty Batch...........=N  Encrypted..............=N  Collected via A/C......=N  Collected via R/C......=N
ICO ROUTE Issued.......=N  VBQ Blocked............=Y  SSL.....................=N  TLS.....................=N
Recordized Batch.......=N   Ignore Transparent.....=N

Origination and Protocol Information:

Batch Creator=SVAJD4       Protocol=N/A
Mailbox Remote=N/A
No $$ADD Found
BSC Information:
Line ID=N/A
SNA Information:
Media=N/A
ERCL=N/A
FTP Information:
Data Structure=N/A
Transmission=N/A
Data Type=N/A
SSL/TLS Used=N/A

Batch Detail Information:

Batch Statistics:
Total Time Transmitted=00000000  Total Times Extracted=00000000  Total Statflag Changes=00000004
First Transmission Date/Time=N/A                    First Transmission Remote=N/A
Most Recent Transmission Date/Time=N/A              Most Recent Transmission Remote=N/A

Total number of batches listed  1,  VSAM File Access via VCF

CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following data is listed:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
User Batch ID	The 1–64 character user-assigned batch identifier.
Batch#	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Total Bytes	The total number of bytes in the batch.
Total Records	The total number of records in the batch.
Total Blocks	The total number of blocks in the batch.

Field	Description
Total VSAM Blocks	The total number of VSAM blocks in the batch.
Creation Date/Time	The date and time that the batch was created.
VBQ#	The number of the VBQ file where the batch was placed.
VBQ Status	Indicates if the VBQ is online or offline.
Input RECFM	The record format of the input records in the batch.
Input LRECL	The record length of the input records in the batch.
Input BLOCKSIZE	The block size of the input records in the batch.
Largest Record	The size in bytes of the largest record in the batch.
System ID	The 4-character name assigned to the VSAM file server.
Job Name	The name of the job that added the batch.
Mailbox Name	The name of the repository where that batch was added.
Status Flags	The value of each batch status flag. The flags are described on page 81. **Note:** The Recordized Batch indicator shows whether or not Sterling Connect:Enterprise broke the batch into records or left it as one contiguous byte string retaining the original file structure. For more information on how Sterling Connect:Enterprise processes batches while supporting $$ADD processing, see the chapter in the *IBM Sterling Connect:Enterprise for z/OS Administration Guide* on how to configure ODF records for FTP connections.
Origination and Protocol Information:	
Batch Creator	The user ID assigned to the person who added the batch to the repository.
Protocol	The protocol used to add the batch to Sterling Connect:Enterprise.
Mailbox Remote	The remote site name.
$$ADD Information	Specifies if $$ADD was found in the data that was used to create this batch. Valid value are: ◆ $$ADD Found ◆ $$ADD without parameters ◆ No $$ADD Found If Status is "$$ADD Found," all valid $$ADD parameters are listed, and those that were found in the data are flagged with *, and the value specified in the data is shown. Parameters listed without * were not found in the data.
BSC Information:	
Line ID	The ID of the line used for file transmission.

Field	Description
SNA Information:	
Media	The output media used by the remote. The valid codes are: CN = Directs output batches to be displayed on the remote console screen. This option causes Sterling Connect:Enterprise to use a X‘15’ (new line) control character as a record separator. PR = Prints output batches on the remote printer. This option causes Sterling Connect:Enterprise to use a X‘15’ (new line) control character as a record separator. PU = Directs output batches to the remote card punch. This option causes Sterling Connect:Enterprise to use a X‘1E’ (standard IRS) as a record separator. Sterling Connect:Enterprise Gateway remote sites should select this option. EX = Directs output batches to the remote exchange diskette and uses Transmission Exchange format. BX = Directs output batches to the remote exchange diskette and uses Basic Exchange format.
ERCL	The ERCL for basic exchange batches.
FTP Information:	
Data Structure	Indicates the batch’s data structure. Sterling Connect:Enterprise supports the following structures: File = The data has no internal structure and is a continuous sequence of bytes. Record = The data is sent as a set of sequential records.
Transmission	Indicates how the data was transferred. Sterling Connect:Enterprise supports the following modes: STREAM = Data is transferred as a stream of bytes. BLOCK = Data is transferred as a series of blocks. COMPRESSED = Data is transferred as a series of blocks in a compressed format.
Data Type	Indicates if the batch was received as ASCII, EBCDIC, or Image (non character data).
SSL/TLS Used	Indicates if SSL or TLS was used for the FTP transmission.
Batch Detail Information: **Batch Statistics:**	
Total Times Transmitted	The total number of times that the batch was transmitted.
Total Times Extracted	The total number of times that the batch was extracted.
Total Statflag Changes	The total number of STATFLG changes in the batch.
First Transmission Date/Time	The date and time that the batch was first transmitted.

Field	Description
First Transmission Remote	The remote name that the first transmission was sent to.
Most Recent Transmission Date/Time	The date and time that the batch was last transmitted.
Most Recent Transmission Remote	The remote name that the most recent transmission was sent to.
Total number of batches listed	The total number of batches listed in the report.

Sample Summary Report

If you specify the DETAIL=NO parameter for the LIST utility, or omit the DETAIL parameter, Sterling Connect:Enterprise creates a summary report about each batch selected by the LIST utility. The following is a sample summary LIST report:

```
DATE 10/21/03  (03294)       TIME 16:35:20       BATCH  DIRECTORY  LIST            Release 1.4.00          Page 1
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
*** Maximum Batches Allowed 9999,  Current Number Of Used Batches 9120, Number Of Times Batch Numbers Rolled 1 ***
Mailbox    Batch      Block      Record     Byte            User Batch          Time   Date  VBQ# Batch Status Flags
  ID       Number     Count      Count      Count           Identification        Added  Added
Atlanta2      8593          5          5          400  Monthly Sales Report      15:50  03294  08   A   R E
Atlanta2      8594          5          5          400  Monthly Sales Report      15:50  03294  08   A   R
Atlanta2      8595          5          5          400  Monthly Sales Report      16:22  03294  08   A   R
Atlanta2      8596          5          5          400  Monthly Sales Report      16:30  03294  08   A   R
Atlanta2      8597          5          5          400  Monthly Sales Report      16:35  03294  08   A   R
Atlanta2      8592          5          5          400  Monthly Sales Report      15:50  03294  06   AD  R
CMU021W - Warning, Run ERASE ASAP,  91 percent of the batch numbers have been used.
Total number of batches listed 6, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 4,  this JOB Step 4.
```

The following data is listed:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Block Count	The number of blocks in the batch.
Record Count	The number of records in the batch.
Byte Count	The number of bytes in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Time Added	The time the batch was added.
Date Added	The date the batch was added to the VSAM batch files.
VBQ #	The number of the VBQ file where the batch was placed.
VSAM Status Flags	A code describing the batch status. The codes are described on page 81.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

MOVE Utility

The MOVE utility relocates batches from one VBQ to another. After each selected batch is copied, the original batch data is erased. The optional NOERASE parameter retains the data in the original VBQ, eliminating the time required to erase the old batch data. MOVE can move incomplete batches and transmitting batches. MOVE can also move batches being collected if BATCHNUM is specified.

The NOERASE parameter keeps data records that Sterling Connect:Enterprise cannot access. Use this parameter only when clearing a VBQ before deleting it.

A security exit is available for the MOVE utility that limits user access to certain batch names. See the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits* for additional information.

Note: The MOVE utility is disabled during the system backup process. No batches can be relocated until the backup finishes and the MOVE utility is renabled.

MOVE Input Control Records

The following control records are valid for the MOVE utility function:

```
MOVE
      BATCHID='xxxx....xxxx'|"yyyy....yyyy"|nnnnnnn
      BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
      CASE_SENSITIVE=YES|NO
      FILE_ACCESS=VPF|VCF1P
      FORMAT=1|1X|2
      FROMBLK=nnnnnnnnn
      FROMDATE=yyyyddd|yyddd|nnn
      FROMTIME=hhmmD
      ID=xxxxxxxx
      IGNORE_VBQ_DISALLOW
      MAXBATCH=nnnnnnn
      NOERASE
      STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
         INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
         TRANSMITTED,UNEXTRACTABLE
      STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
         INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
         TRANSMITTED,UNEXTRACTABLE
      TOBLK=nnnnnnnnn
      TODATE=yyyyddd|yyddd|nnn
      TOTIME=hhmmD
      VBQ=nn[-nn]
      VBQOUT=nn
      VBQBLOCK
      VBQUNBLOCK
      VPF='xxxxxx.xxxxxx'
      WILD_CARD=BID,ID
      WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
      WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

VPF, VBQOUT, and at least one other parameter are required to run the MOVE utility.

MOVE Utility Sample JCL

The following sample JCL executes the MOVE utility:

```
//MOVE     JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL  EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     MOVE
     ID=*
     Status=FTP,SSL
     VBQ=9
     VBQOUT=02
     VPF='ENTPRS.VPF'
ZZ
```

MOVE Output Reports

The REPORTS file contains information that details the operation of the MOVE utility. The following is a sample REPORT file:

```
DATE 10/21/03  (03294)        TIME 16:35:20        BATCH  MOVE  REPORT              Release 1.4.00           Page 1
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch      Block      Record     Byte              User Batch         Time   Date  Input Output Batch Status
Flags
  ID       Number     Count      Count      Count          Identification        Added  Added  VBQ#  VBQ#
Atlanta2      8593          5          5          400  Monthly Sales Report      15:50  03294   08    06   A   R E
Total number of batches moved    1,  Total number of blocks moved    5, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 4.
```

The report displays the following information:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned to the batch by Sterling Connect:Enterprise.
Block Count	The number of blocks in the batch.
Record Count	The number of records in the batch.
Byte Count	The number of bytes in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Time Added	The time the batch was added.
Date Added	The date the batch was added to the VSAM batch files.
Input VBQ#	The number of the input VBQ file.
Output VBQ#1	The number of the output VBQ file.
Batch Status Flags	The code describing the batch status. The codes are described on page 81.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

PURGE Utility

During installation, the PURGE utility defines and initializes the VSAM files to Sterling Connect:Enterprise. All defined files are dynamically allocated by the VSAM file server. After installation, PURGE can define additional VSAM data files to Sterling Connect:Enterprise.

Two types of purges are available:

- INIT=ALL - Initializes all VSAM files to Sterling Connect:Enterprise.
- INIT=DATA - Initializes additional data files. You can only define VBQ and VLF files that are not currently defined to Sterling Connect:Enterprise.

Note: The $$REFRESH console command notifies Sterling Connect:Enterprise of the newly defined files using INIT=DATA. See the *$$REFRESH Command* on page 55 more information.

Before running PURGE for the first time, verify that:

- All files are deleted and defined with IDCAMS.
- All files have an initial record with a key of X'00's copied into them using the REPRO command.

If you want to execute PURGE INIT=ALL a second time, you must again delete and define the VSAM files before executing PURGE.

Caution: Never run the PURGE utility with INIT=ALL while Sterling Connect:Enterprise is online.

The PURGE utility provides the full data set names of all VSAM files used by Sterling Connect:Enterprise. You cannot change the data set names after the PURGE utility runs and the names are provided.

When PURGE INIT=ALL is executed, the VCF is initialized with the same number of records as defined in the MAXBNO parameter. A high MAXBNO value makes a PURGE run longer. The exact run length is affected by the z/OS performance groups assigned to the PURGE jobs and VSAM file server.

A security exit is available for the PURGE utility that limits user access to run the job. See the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits* for additional information.

PURGE Input Control Records

The SYSIN file contains the input control records for the PURGE utility. The following control records are valid for the PURGE utility function:

```
PURGE
      INIT=ALL|DATA|BID64
      MBXNAME=xxxxxxxx
      MAXBNO=nnnnnnn
      VBQ01='xxxx.xxxx'
      VBQ02='xxxx.xxxx'
           .
           .
           .
      VBQ20='xxxx.xxxx'
      VBQALLOC=nn
      VCF='xxxx.xxxx'
      VCF1P='xxxx....xxxx'
      VCF1X='xxxx....xxxx'
      VLFn='xxxx.xxxx'
      VLFALLOC=nn
      VPF='xxxx.xxxx'
```

VCF, VLFn, VBQ01 and VPF are required when INIT=ALL is specified. Specify any additional VBQnn and VLFn parameters in numerical order. VPF is required when INIT=DATA is specified. Specify any additional VBQnn and VLFn parameters in numerical order if they have not already been specified in previous PURGE executions for this VPF. The VCF1P and VCF1X parameters are used to create a VCF alternate index to enable STOUTL to execute offline utility programs more efficiently. For more information on this feature, see the chapter on creating the VSAM file server in *IBM Sterling Connect:Enterprise for z/OS Installation Guide.*

PURGE Utility Sample JCL

The following sample JCL executes the PURGE utility:

```
//PURGE    JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP   DD   SYSOUT=*
//INTRDR   DD   SYSOUT=(A,INTRDR)
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
   purge
   init=all
   MAXBNO=50000
   MBXNAME=PRODSNA1
   VPF='entprs.vpf'
   VCF='entprs.vcf'
   VBQ01='entprs.vbq01'
   VBQ02='entprs.vbq02'
   VBQ03='entprs.vbq03'
   VBQ04='entprs.vbq04'
   VBQ05='entprs.vbq05'
   VBQ06='entprs.vbq06'
   VLF1='entprs.vlf1'
   vbqalloc=6
   vlfalloc=1
ZZ
```

PURGE Output Reports

The REPORTS file contains a report that describes PURGE utility operation. A message prints for each output file initialized. The following is a sample PURGE report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
   purge
   init=all
   MAXBNO=50000
   MBXNAME=PRODSNA1
   VPF='entprs.vpf'
   VCF='entprs.vcf'
   VBQ01='entprs.vbq01'
   VBQ02='entprs.vbq02'
   VBQ03='entprs.vbq03'
   VBQ04='entprs.vbq04'
   VBQ05='entprs.vbq05'
   VBQ06='entprs.vbq06'
   VLF1='entprs.vlf1'
   vbqalloc=6
   vlfalloc=1
-------------------------------------------------------------------------------------------------------------
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE mm/dd/yy (yyddd)       TIME  12:19:33      OFFLINE  PURGE  UTILITY  REPORT                          Page 1
Purge Activity
VSAM Pointer File (VPF)     - ENTPRS.VPF Successfully Initialized
VSAM Control File (VCF)     - ENTPRS.VCF Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ01 Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ02 Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ03 Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ04 Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ05 Successfully Initialized
VSAM Batch Queue File (VBQ) - ENTPRS.VBQ06 Successfully Initialized
VSAM Log File (VLF)         - ENTPRS.VLF1 Successfully Initialized
CMUO13I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

PURGE Output Files

The following are the PURGE output files:

File	Description
VPF	After PURGE runs, the VPF contains an initial record with a key of all hexadecimal zeroes and 30 file control records, one for every possible VSAM file that can be defined to Sterling Connect:Enterprise.
VCF	Contains an initial record with a key of all hexadecimal zeroes, a master control record and the MAXBNO value of preallocated slots for batch control records.
VBQ	After PURGE runs, the VBQ files contain an initial record with a key of all hexadecimal zeroes and a record with the file ID and data set name.
VLF	After PURGE runs, the files contain an initial record with a key of all hexadecimal zeros, a record with the file ID and data set name.

REPORT Utility

The following reports are available through the offline utilities.

- ✦ Auto Connect Detail Report (ACDETAIL)

- Auto Connect Detail FTP Report (ACDFTP)
- Auto Connect Queue Report (ACQUEUE)
- Auto Connect Summary Report (ACSUMMARY)
- Offline Utility Log (OFFLOG)
- Remote Connect Detail Report (RCDETAIL)
- Remote Connect Summary Report (RCSUMMARY)
- FTP Remote Connect Detail Report (RCDFTP)
- FTP Long Remote Connect Detail Report (RCDFTPL)

You create each report by specifying REPORT and supplying the required TYPE parameter. The TYPE parameter must be the first noncomment card after the REPORT control card.

The VPF file control records communicate the current file allocation status of each of the VSAM files to STOUTL. The following scenarios depict the processing results for reports when the VPF= and the LOGNAME= parameters are used together and separately:

- If the VPF= parameter and the LOGNAME= parameter are specified and a VLF file specified by the LOGNAME= parameter is de-allocated with the STOUTL=DISALLOW option, the job fails.
- If only the LOGNAME= parameter is specified, and a VLF file is deallocated with the STOUTL=DISALLOW option, the job does not fail because STOUTL cannot determine the file allocation status. This option may be useful if you have copied the log files that you want to run the report utility against.
- If only the VPF= parameter is specified, a report is generated which contains data from the current collection VLF file only.

Auto Connect Detail Report

The Auto Connect Detail Report is a detailed report of data batches handled by the Auto Connect session. This includes a remote name, Mailbox ID, batch ID, completion, and batch type information.

ACDETAIL Input Control Records

The SYSIN file contains the input control records for Auto Connect Detail Report.

The following control records are valid:

```
ACDREPORT               (THIS CARD ONLY OR)
REPORT                  (THESE TWO        )
     TYPE=ACDETAIL      (CARDS            )
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     BATCHTYPE=ALL|TRANSMITTED|COLLECTED
     CASE_SENSITIVE=YES|NO
     COMPLETION=ALL|SUCCESS|FAILURE
     COUNT=RECORD|BYTE
     DATETYPE=START|COMPLETION
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     IDM=xxxxxxxx[, ........, xxxxxxxx]
     LINEID=xxxxxxxx
     LISTNAME=xxxxxxxx
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     LUNAME=xxxxxxxx
     REMOTE=xxxxxxxx
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=ACDETAIL is required as the next noncomment card after the REPORT control card. You can replace REPORT, TYPE=ACDETAIL with a single ACDREPORT control card.

ACDETAIL Sample JCL

The following sample JCL executes an Auto Connect Detail Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=acdetail
     logname=('entprs.vlf1')
     completion=all
ZZ
```

ACDETAIL Output Reports

The REPORTS file contains the ACDETAIL output report. The report contains detail information about each batch sent to or received from remote sites during an Auto Connect session.

ACDETAIL Sample Report

The following is a sample Auto Connect Detail Report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
     report
     type=acdetail
     logname=('entprs.vlf1')
     completion=all
-------------------------------------------------------------------------------------------------------------
*** THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED
DATE mm/dd/yy  (yyddd)   TIME 17:32:35   AUTO CONNECT DETAIL REPORT
             Remote   Start          Complete       Elasped  Status    Mailbox Batch  Blk/Rec     User Batch
Listname AC# Name     Date-Time      Date-Time      time     Code      ID      Number Count    Identification
SNAATL01 74  ATLRMT41 yyddd-18:44.06 yyddd-18:44:36 00:00:30 T F(011)             0       0
SNAATL01 75  ATLRMT41 yyddd-18:46.06 yyddd-18:46:36 00:00:30 T S       ATLRMT41     3     100  Payroll Data
FTPDAL01 76  DALRMT01 yyddd-15:34.25 yyddd-15:34.25 00:00:00 S         DALRMT01     0
FTPDAL01 76  DALRMT01 yyddd-15:34.26 yyddd-15:34.26 00:00:00 K         DALRMT01     0
FTPDAL01 76  DALRMT01 yyddd-15:34.26 yyddd-15:34.26 00:00:00 L         DALRMT01     0
FTPDAL01 76  DALRMT01 yyddd-15:34.26 yyddd-15:34.26 00:00:00 L         DALRMT01     0
FTPDAL01 76  DALRMT01 yyddd-15:34.26 yyddd-15:34.26 00:00:00 D         DALRMT01     0
FTPDAL01 76  DALRMT01 yyddd-15:34.26 yyddd-15:34.26 00:00:00 E         DALRMT01     0
SNAATL02 80  ATLRMT44 yyddd-19:46.06 yyddd-19:46:36 00:00:30 T S       ATLRMT44     8     400  Expense Report
SNABOS01 82  BOSRMT08 yyddd-20:46.06 yyddd-20:46:36 00:00:30 T S       BOSRMT08    44    1000  Inventory
FTPNY001 83  NYRMT001 yyddd-21:34.25 yyddd-21:34.25 00:00:00 S         NYRMT001     0
FTPNY001 83  NYRMT001 yyddd-21:34.26 yyddd-21:34.26 00:00:01 E F(011)

Total number of log records selected  12
1st Column: T-Transmitted,  C=Collected, S-Session Start, K-Connect, D-Disconnect, E-Session End, U-User Log
L=Logon
2nd Column: S-Successful, F-Failure
Rtn
Code-Description
011 - Connect:Enterprise was requested to send to a remote site, but no batches were found ready for
CMU013I - Utility completed, highest Return Codes are, this utility 0, this Job Step 0.
```

The following information is listed in the report:

Field	Description
Listname	The 1–8 character LISTNAME for the Auto Connect list.
Auto Connect Number	An 8-digit number, sequentially assigned by Sterling Connect:Enterprise online when the Auto Connect session begins processing.
Remote Name	The 1–8 character remote name of the remote site contacted for transmission or collection of the batch.
Start Date-Time	The date and time that Sterling Connect:Enterprise started processing the Auto Connect batch.
Complete Date-Time	The date and time that Sterling Connect:Enterprise completed processing the Auto Connect batch.
Elapsed Time	The length of the session in hours, minutes, and seconds.

Field	Description
Status Code	The 2-column field that describes the status of the batch processed. In the first column, one of the following codes is displayed: T = Transmitted C = Collected S = Session Start K = Connect D = Disconnect E = Session End U = User Log L = Logon In the second column, either **S**, which stands for successful processing, or **F**, which stands for failed processing, is displayed. If **F** is displayed, it is followed by a 3-digit failure code that gives the reason for the failure. If any failure codes are displayed, the detail report displays a list of failure codes and an explanation of their meaning.
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned to the batch by Sterling Connect:Enterprise.
BLK/Rec Count -or- Byte Count	For batch data transmissions, the number of RECORDS sent to the remote site for the batch. For batch data collections, the count is the number of BLOCKS received from the remote site for the batch. The number of bytes sent or received depending upon if the batch was transmitted or collected.
User Batch Identification	The 1–64 character user-assigned batch identifier.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Auto Connect Detail FTP Report

The Auto Connect Detail FTP report is a detailed report of data batches handled by FTP Auto Connect sessions.

ACDFTP Input Control Records

The SYSIN file contains the input control records for the FTP Auto Connect Detail Report. The following control records are valid:

```
ACDFTP  (THIS CARD ONLY OR)
REPORT  (THESE TWO        )
  TYPE=ACDFTP (CARDS            )
  BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
  BATCHNUM=nnnnnnn[-nnnnnnn]
  BATCHTYPE=ALL|START|CONNECT|DISCONNECT|END|LOG
  CASE_SENSITIVE=YES|NO
  COMPLETION=ALL|SUCCESS|FAILURE
  DATETYPE=START|COMPLETION
  FORMAT=1|1X|2
  FROMDATE=yyddd|nnn|yyyyddd
  FROMTIME=hhmmD
  ID=xxxxxxxx
  IDM=xxxxxxxx[, ........, xxxxxxxx]
  IPADDR=nnn.nnn.nnn.nnn/xxxx...xxxx
  LISTNAME=xxxxxxxx
  LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
  REMOTE=xxxxxxxx
  TODATE=yyddd|nnn|yyyyddd
  TOTIME=hhmmD
  WILD_CARD=BID,ID
  WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
  WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=ACDFTP is required as the next noncomment card after the REPORT control card. You can replace REPORT, TYPE=ACDFTP with a single ACDFTP control card.

ACDFTP Sample JCL

The following sample JCL executes an FTP Auto Connect Detail Report:

```
//REPORT   JOB   ...AS REQUIRED BY YOUR SITE
//STOUTL   EXEC  PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD    DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD    SYSOUT=(A,INTRDR)
//SYSTERM  DD    SYSOUT=*
//BTSNAP   DD    SYSOUT=*
//PRINT    DD    SYSOUT=*
//SYSPRINT DD    SYSOUT=*
//REPORTS  DD    SYSOUT=*
//REPORTS2 DD    SYSOUT=*
//BTSNAP   DD    SYSOUT*
//SYSIN    DD    DATA,DLM=ZZ
  report
  type=acdftp
  logname=('ENTPRS.vlf1')
  completion=all
ZZ
```

ACDFTP Output Reports

The REPORTS file contains the ACDFTP output report. The report contains detailed information about each FTP Auto Connect session.

ACDFTP Sample Report

The following is a sample FTP Auto Connect Detail Report, which shows excerpts from a 25-page report:

```
DATE 06/16/05  (05167)       TIME 13:58:38    FTP AUTO  CONNECT  DETAIL  REPORT        Release 1.4.00      Page 1

                     Remote       Start          Complete     Elapsed   Status    Mailbox
 Listname    AC #      Name      Date-Time       Date-Time       Time    Codes       ID       IP Address
 FTP              2  FTPSRV    05165-11:05.02  05165-11:05.02  00:00.00  SS S      FTPSRV
 FTP              2  FTPSRV    05165-11:05.02  05165-11:05.02  00:00.00  CC S              MVSA
 FTP             21  FTPSRV    05165-11:14.23  05165-11:14.23  00:00.00  CD S
 FTP             32  FTPSRV    05165-11:17.11  05165-11:17.11  00:00.00  T  S      T00024X
 FTP             49  FTPSRV    05166-09:08.47  05166-09:08.48  00:00.01  CC S              10.20.201.2
 FTP             49  FTPSRV    05166-09:08.48  05166-09:08.48  00:00.00  LG S
 FTP             62  FTPSRV    05166-10:06.33  05166-10:06.33  00:00.00  CD  (145)
 FTP             63  FTPSRV    05166-10:08.14  05166-10:08.14  00:00.00  SS S      FTPSRV
 FTP             67  FTPSRV    05166-10:17.56  05166-10:17.56  00:00.00  UL F(240)
 LOG: Script FTPLOGON failed after 1 OPEN attempt(s).
 FTP             88  FTPSRV    05166-11:25.39  05166-11:25.39  00:00.00  UL S
 LOG: Script FTPLOGON failed on PASS command, RC=4 for USER FTPRMTB.
 SFTP            98  SFTPSRV   05166-14:17.50  05166-14:17.51  00:00.01  C   (021) T00031R
..
..
DATE 06/16/05  (05167)       TIME 13:58:38    FTP AUTO  CONNECT  DETAIL  REPORT        Release 1.4.00      Page 25
                     Remote       Start          Complete     Elapsed   Status    Mailbox
 Listname    AC #      Name      Date-Time       Date-Time       Time    Codes       ID       IP Address
 T00024          33  T00024MY  05165-11:17.36  05165-11:17.37  00:00.01  SE S      T00024X
 T00024          33  T00024MN  05165-11:17.38  05165-11:17.38  00:00.00  SS S      T00024MN
 Total number of log records selected  1142
 SS-Session Start, CC-Client Connect, CD-Client Disconnect, SE-Session End, UL=User Log
 LG=Logon, F-Failure
 Rtn
 Code- Description
 011 - Connect:Enterprise was requested to send to a remote site, but no batches were found ready for
transmission.
 021 - An I/O error occurred during data collection.  Batch collection may be incomplete.
 145 - FTP session terminated by the client before sending the QUIT comand
 146 - FTP session terminated because a disconnect timeout occurred
 152 - An FTP client session start failed for the AC list.
 159 - Negative response received from Remote Server.
 164 - Script reported non-zero return code.
 CMU013I - Utility completed, highest Return Codes are 240, this utility 0,  this JOB Step 0.
```

The following information is listed in the report:

Field	Description
Listname	The 1–8 character LISTNAME for the Auto Connect list.
Auto Connect Number (AC #)	An 8-digit number, sequentially assigned by Sterling Connect:Enterprise online when the Auto Connect session begins processing.
Remote Name	The 1–8 character remote name of the remote site contacted for transmission of collections of the batch.
Start Date-Time	The date and time that Sterling Connect:Enterprise started processing the Auto Connect batch.
Complete Date-Time	The date and time that Sterling Connect:Enterprise completed processing the Auto Connect batch.
Elapsed Time	The amount of time Sterling Connect:Enterprise takes to complete processing the Auto Connect batch.

Field	Description
Status Code	Specifies the status of the FTP Auto Connect session. One of the following codes is displayed: SS = Session Start CC = Client Connect CD = Client Disconnect LG = Logon UL = User Log SE = Session End F = Failure If F is displayed, it is followed by a 3-digit failure code that gives the reason for the failure. If any failure codes are displayed, the detail report displays a list of failure codes and an explanation of their meaning. **Note:** If UL is displayed, the text string that was entered using the USERLOG command (see the *FTP Auto Connect* chapter of the *IBM Sterling Connect:Enterprise for z/OS Administration Guide*) is displayed beneath. For example, in the sample report above, `LOG: PRM453S - Begin Collection of Payroll Data`, is one of the userlog text strings.
Mailbox ID	The 1-8 character Mailbox ID.
IP Address	The IP address of the FTP remote site connected to during this Auto Connect session.

The last page of the report displays a job condition code and a completion message indicating if the utility was executed correctly.

Auto Connect Queue Report

The Auto Connect Queue Report is a detailed report of Auto Connect sessions that have been queued.

ACQUEUE Input Control Records

The SYSIN file contains the input control records. The following control records are valid:

```
ACQREPORT               (THIS CARD ONLY OR)
REPORT                  (THESE TWO        )
     TYPE=ACQUEUE       (CARDS            )
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     LISTNAME=xxxxxxxx
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     QREASON=ALL|LINE|ACTIVE|SESSION|THREAD
     QSTATUS=ALL|QUEUE|START|DELETE
     RTYPE=ALL|SNA|BSC|FTP
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
```

TYPE=ACQUEUE is required and must be the next noncomment card after the REPORT control card. You can replace REPORT, TYPE=ACQUEUE by a single ACQREPORT control card.

ACQUEUE Sample JCL

The following sample JCL executes the Auto Connect Queue Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=acqueue
     logname=('entprs.vlf1')
     qreason=all
     rtype=FTP
ZZ
```

ACQUEUE Output Reports

The REPORTS file contains the ACQUEUE output report. This report contains information about each Auto Connect session that was queued.

The following is a sample Auto Connect Queue Report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
     REPORT
      TYPE=ACQUEUE
     LOGNAME=('MAILBOX.VLF1')
     QREASON=ALL
     RTYPE=FTP
***  THIS FILE CONTAINS THE REPORTS FOR ALL
OF THE OFFLINE UTILITIES EXECUTED
***DATE mm/dd/yy  (yyddd)     TIME 17:49:35       QUEUED  AUTO  CONNECT  REPORT        Page 1
          Last        Queue          Start/Dlt     Elapsed          Line      Queue           CICS      CICS
Listname  Event      Date-Time      Date-Time      Time       RMT   ID        Reason       Initiated Deleted
FTPL01    Started  yyddd-16:47.46  yyddd-16:48.09  00:00.23    FTP        Auto Connect Busy   STONE
FTPL01    Started  yyddd-17:17.52  yyddd-17:18.55  00:01.03    FTP        Auto Connect Busy   STONE
FTPL01    Started  yyddd-17:18.56  yyddd-17:21.03  00:02.07    FTP        Auto Connect Busy   STONE
FTPl01    Started  yyddd-16:12.08  yyddd-16:13.29  00:01.21    FTP        No Thread Available STONE
Total number of log records selected  4
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Ste
```

The following information is listed in the report:

Field	Description
Listname	The 1–8 character LISTNAME for the Auto Connect list.
Last Event	An indicator of whether the listname was last started, queued, or deleted.

Field	Description
Queue Date-Time	The date and time the Auto Connect session was queued.
Start/DLT Date-Time	The date and time the Auto Connect session was reactivated or deleted, depending on the last event.
Elapsed Time	The length of the queue time in hours/minutes/seconds.
Remote Type	The remote type; BSC, FTP, or SNA.
Line ID	The line ID supplied on the $$CONNECT command (BSC only).
Queue Reason	The reason the Auto Connect session was queued: The Auto Connect session was busy, the BSC line was busy (BSC only), no SNA sessions were available (SNA only), or no FTP threads were available (FTP only).
CICS Initiated	The USERID of the CICS or ISPF user that activated the Auto Connect session.
CICS Deleted	The USERID of the CICS or ISPF user who deleted the Auto Connect session from the queue before it could be reactivated, or CONSOLE if deleted by the console operator.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Auto Connect Summary Report

The Auto Connect Summary Report is a summary report of all host-initiated sessions. Compare to the Auto Connect Detail Report.

ACSUMMARY Input Control Records

The SYSIN file contains the input control records for the Auto Connect Summary Report. Parameters select appropriate log records from processing. The following control records are valid:

```
ACSREPORT               (THIS CARD ONLY OR)
REPORT                  (THESE TWO        )
     TYPE=ACSUMMARY     (CARDS            )
     DATETYPE=START|COMPLETION
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     LISTNAME=xxxxxxxx
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
```

TYPE=ACSUMMARY is required and must be the next noncomment card after the REPORT control card. You can replace REPORT, TYPE=ACSUMMARY with a single ACSREPORT control card.

ACSUMMARY Sample JCL

The following sample JCL executes an Auto Connect Summary Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=acsummary
     logname=('entprs.vlf1')
ZZ
```

ACSUMMARY Output Reports

The REPORTS file contains the ACSUMMARY output report. The following is a sample Auto Connect Summary Report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
     report
     type=acsummary
     logname=('entprs.vlf1')
------------------------------------------------------------------------------------------------------------------------
---
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE mm/dd/yy  (yyddd)        TIME 17:32:35       AUTO  CONNECT  SUMMARY  REPORT                          Page 1
                    Start             End           Elapsed        Successful             Failed        Failure
Listname  AC #    Date-Time         Date-Time       Time      Transmit   Collect   Transmit   Collect    Code
SNAATL01  104   yyddd-18:44.06   yyddd-18:44.06   00:00.00      0         0         0          0        000
SNAATL01  112   yyddd-18:44.00   yyddd-18:44.00   00:00.00      5         0         0          0        000
SNAATL01  110   yyddd-18:44.10   yyddd-18:44.12   00:00.02      5         0         0          0        000
SNADAL01   61   yyddd-18:44.40   yyddd-18:44.42   00:00.02      0         0         0          0        000
SNADAL01   76   yyddd-18:44.46   yyddd-18:44.48   00:00.02      0         0         0          0        000
SNADAL01   78   yyddd-18:44.44   yyddd-18:44.44   00:00.00      2         1         0          0        000
SNAPHI07   30   yyddd-18:44.33   yyddd-18:44.33   00:00.00      0         0         0          0        000
SNAPHI08   41   yyddd-18:44.55   yyddd-18:44.55   00:00.00      0         0         0          0        000
SNABOS02  104   yyddd-18:45.27   yyddd-18:45.27   00:00.00      0         0         0          0        000
SNABOS02   49   yyddd-18:44.46   yyddd-18:44.46   00:00.00      0         0         0          0        002
SNABOS02   91   yyddd-18:45.27   yyddd-18:45.27   00:00.00      0         1         0          0        000
SNABOS02   49   yyddd-18:44.46   yyddd-18:44.46   00:00.00      0         0         0          0        000
Total number of log records selected   12
Rtn
Code- Description
002 - Auto Connect failed.  BSC lines were not available, Auto Connect was busy, or SNA sessions not established.
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following information is listed in the report:

Field	Description
Listname	The 1–8 character LISTNAME for the Auto Connect list.
Auto Connect Number	An 8-digit Auto Connect number, sequentially assigned by Sterling Connect:Enterprise online when the Auto Connect session begins processing.
Start Date-Time	The date and time the Auto Connect session started.
Complete Date-Time	The date and time the Auto Connect session ended.

Field	Description
Elapsed Time	The length of the session in hours, minutes, and seconds.
Successful Transmits	The total number of successful batch transmissions from Sterling Connect:Enterprise to remote sites in the Auto Connect list.
Successful Collections	The total number of successful batch collections from remote sites in the Auto Connect list to Sterling Connect:Enterprise.
Failed Transmits	The total number of failed batch transmissions from Sterling Connect:Enterprise to remote sites in the Auto Connect list.
Failed Collections	The total number of failed batch collections from remote sites in the Auto Connect list to Sterling Connect:Enterprise.
Failure Code	A 3-digit failure code for the entire Auto Connect process (does not always relate to failed transmits or failed collections). If any failure codes are displayed in this column, the summary report lists the failure codes and explanations of their meaning.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Offline Utility Log Report

The Offline Utility Log Report is designed to format detail records written to the log by the offline utilities. The offline utilities are logged to the same log files as online processing.

OFFLOG Input Control Records

The SYSIN file contains the input control records for OFFLOG report. The following control records are valid:

```
OFFREPORT               (THIS CARD ONLY OR)
REPORT                  (THESE TWO         )
     TYPE=OFFLOG        (CARDS             )
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     COUNT=RECORD|BYTE
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     UTYPE=ADD,ALL,DELETE,ERASE,EXTRACT,MOVE,STATFLG
     ID=xxxxxxxx
     IDM=xxxxxxxx[, ........, xxxxxxxx]
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=OFFLOG is required and must be the first noncomment card following the REPORT control card. You can replace REPORT, TYPE=OFFLOG with a single OFFREPORT control card.

OFFLOG Sample JCL

The following sample JCL executes an OFFLOG report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=offlog
     logname=('entprs.vlf1')
     utype=add
ZZ
```

OFFLOG Output Reports

The REPORTS file contains the OFFLOG report output. The following is a sample OFFLOG report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
     report
     type=offlog
     logname=('entprs.vlf1')
     utype=add
------------------------------------------------------------------------------------------------------------------------
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE mm/dd/yy  (yyddd)        TIME 18:29:13       OFFLINE  UTILITY  LOG  REPORT                          Page 1
                     Start      Completed   Utility  Mailbox   Batch   Rcd/Blk          User Batch
Jobname   Userid    Date-Time    Date-Time    Type    Id        Number  Count          Identification
PAYROLL   ACCT01   yyddd-17:02   yyddd-17:08   ADD    ATLANTA1     1     6 RCD     Finance Data for Atlanta
PAYROLL   ACCT01   yyddd-17:06   yyddd-17:08   ADD    ATLANTA1     2     6 RCD     Finance Data for Atlanta
PAYROLL   ACCT01   yyddd-17:06   yyddd-17:08   ADD    ATLANTA1     3     6 RCD     Finance Data for Atlanta
PAYROLL   ACCT01   yyddd-17:06   yyddd-17:08   ADD    ATLANTA1     4     6 RCD     Finance Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA1     5     6 RCD     Finance Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA2     6     6 RCD     Payroll Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA2     7     6 RCD     Payroll Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA2     8     6 RCD     Payroll Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA2     9     6 RCD     Payroll Data for Atlanta
PAYROLL   ACCT01   yyddd-17:07   yyddd-17:08   ADD    ATLANTA2    10     6 RCD     Payroll Data for Atlanta
PAYROLL   ACCT01   yyddd-17:08   yyddd-17:08   ADD    DALLAS2     11     6 RCD     Payroll Data for Dallas
PAYROLL   ACCT01   yyddd-17:08   yyddd-17:08   ADD    DALLAS2     12     6 RCD     Payroll Data for Dallas
PAYROLL   ACCT01   yyddd-17:08   yyddd-17:08   ADD    DALLAS2     13     6 RCD     Payroll Data for Dallas
Total number of log records selected   13
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following information is listed in the report:

Field	Description
Jobname	The 1–8 character job name.
Userid	The 1–8 character userid for the job.
Start Date-Time	The date and time the utility started execution.
Completion Date-Time	The date and time the utility completed execution.

Field	Description
Utility Type	The name of the utility (ADD, EXTRACT, ERASE, STATFLG, DELETE, MOVE).
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Rcd/Blk Count	The number of records in the batch. If the record count is not available, this field displays the number of blocks.
Byte Count	The number of bytes sent or received depending upon whether the batch was transmitted or collected.
User Batch Identification	The 1–64 character user-assigned batch identifier.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Remote Connect Detail Report

The Remote Connect Detail Report is a detailed report of all activity handled by remote connection.

RCDETAIL Input Control Records

The SYSIN file contains the input control records. The following control records are valid:

```
RCDREPORT                (THIS CARD ONLY OR)
REPORT                   (THESE TWO        )
     TYPE=RCDETAIL       (CARDS            )
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     COMPLETION=ALL|SUCCESS|FAILURE
     COUNT=RECORD|BYTE
     DATETYPE=START|COMPLETION
     FAILCODE=nnn
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     FTYPE=ADD,ALL,CONNECT,DELETE,DIRECTORY,DISCONNECT,NOADD,REQUEST,SIGNON
     ID=xxxxxxxx
     IDM=xxxxxxxx[, ........, xxxxxxxx]
     LINEID=xxxxxxxx
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     OPTION=ALLFORCONN
     REMOTE=xxxxxxxx
     RTYPE=ALL|SNA|BSC|FTP
     SSL=YES|NO
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=RCDETAIL is required as the first noncomment card after the REPORT control card. You can replace REPORT, TYPE=RCDETAIL with a single RCDREPORT control card.

RCDETAIL Utility Sample JCL

The following sample JCL executes the REPORT utility for a Remote Connection Detail Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=rcdetail
     logname=('entprs.vlf1')
     rtype=ftp
     ssl=yes
ZZ
```

RCDETAIL Output Report

The REPORTS file contains the RCDETAIL report output. This report contains information about each batch sent or received by the remote. Detail records containing connect, disconnect, delete, directory, and signon requests are also on the report. The following is a sample Remote Connect Detail Report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
   Report
   type=rcdetail
   logname=('entprs.vlf1')
   fromdate=yyddd
-------------------------------------------------------------------------------------------------------------
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE mm/dd/yy  (yyddd)        TIME 13:22:09       REMOTE  CONNECT  DETAIL  REPORT                        Page 1
Remote  Lineid  Start           End             Elapsed           Func Mailbox   Batch    User Batch     Block Record
        (BSC)   Date-Time       Date-Time       Time     Status   Type ID        Number Identification    Count Count
SUPR8           yyddd-22:38.47  yyddd-22:38.48 00:00.01   S      CONN             0                        0    0
SUPR8           yyddd-22:38.51  yyddd-22:38.51 00:00.00   F(022) ADD  GALA        0     TEST *SECUR CHK    0    0
SUPR8           yyddd-22:39.04  yyddd-22:39.04 00:00.00   S      DISC             0                        0    0
RMT001  LINE4   yyddd-23:48.21  yyddd-23:48.21 00:00.00   S      CONN             0                        0    0
RMT001  LINE4   yyddd-23:48.21  yyddd-23:48.21 00:00.00   S      SGON             0                        0    0
RMT001  LINE4   yyddd-23:48.22  yyddd-23:48.23 00:00.01   S      ADD  OAK       700     OAK FROM SUP8      2    2
RMT001  LINE4   yyddd-23:48.23  yyddd-23:48.24 00:00.01   S      ADD  PAYROLL   701     SANFRAN            2    2
RMT001  LINE4   yyddd-23:48.24  yyddd-23:48.24 00:00.00   S      DISC             0                        0    0
        LINE02  yyddd-11:21.43  yyddd-11:21.43 00:00.00   S      CONN             0                        0    0
        LINE02  yyddd-11:21.43  yyddd-11:21.45 00:00.02   S      ADD  ACCTRECV   45     SANFRAN 9/20       2    2
        LINE02  yyddd-11:21.46  yyddd-11:21.50 00:00.04   S      REQ  STATUS    120     STATUS REPORT      6    5
        LINE02  yyddd-11:21.50  yyddd-11:21.50 00:00.00   S      DISC             0                        0    0
Total number of log records selected  11
S=Successful, F=Failure
Rtn
Code- Description
022 - An ID validation error occurred during data collection from a remote site.  All data from the remote is ignored.
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following information is listed in the report:

Field	Description
Remote	The 1–8 character name of the remote.
Line ID	The line ID used for the Remote Connect (BSC only).
Start Date-Time	The date and time the remote function started.
End Date-Time	The date and time the remote function ended.
Elapsed Time	The length in hours, minutes, and seconds of the requested function.
Status	The 1-byte character code describing the status of the function. S = Successful processing F = Failed processing. If F displays, it is followed by a 3-digit failure code that gives the reason for the failure. If any failure codes are displayed, the Remote Connect Detail Report shows a list of applicable failure codes and an explanation of their meaning.
Func Type	A 3–4 byte field that describes the requested function. Types are as follows: ADD Batch containing a $$ADD control card CONN = Connect DEL = $$DELETE from the BSC/SNA remote site, or DELETE from the FTP remote site DIR = $$DIRECTORY (or $$DIRECTORY24) request from the BSC/SNA remote site, or LIST/NLST from the FTP remote site DISC = Disconnect NOAD = Batch without a $$ADD control card from the BSC/SNA remote site, or STOR from the FTP remote site REQ = $$REQUEST from the BSC/SNA remote site, or RETR from the FTP remote site SGON = BSC SIGNON or FTP logon (USER/PASS commands)
Mailbox ID	The 1–8 byte Mailbox ID name associated with the function. **Note:** If a remote site enters the $$DIRECTORY PASSWORD=XXXXXXXX form of the $$DIRECTORY command, this field contains the constant PASSWORD.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Block Count	For batch data transmissions, the number of blocks sent or received from the remote site.
Record Count	For batch data transmissions, the estimated record count sent or received from the remote.
Byte Count	The number of bytes sent or received depending upon whether the batch was transmitted or collected.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Remote Connect Summary Report

The Remote Connect Summary Report is a summary report of all batch processing handled by remote connection.

RCSUMMARY Input Control Records

The SYSIN file contains the input control records. The following control records are valid:

```
RCSREPORT               (THIS CARD ONLY OR)
REPORT                  (THESE TWO        )
     TYPE=RCSUMMARY     (CARDS            )
     DATETYPE=START|COMPLETION
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     IDM=xxxxxxxx[, ........, xxxxxxxx]
     LINEID=xxxxxxxx
     LOGNAME=('xxxx.xxxx'[,'xxxx.xxxx','xxxx.xxxx'])
     REMOTE=xxxxxxxx
     RTYPE=ALL|SNA|BSC|FTP
     SSL=YES|NO
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
```

TYPE=RCSUMMARY is required as the next record after the REPORT control card. The single RCSREPORT control record can replace both REPORT and TYPE=RCSUMMARY.

RCSUMMARY Utility Sample JCL

The following sample JCL creates a Remote Connect Summary Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=rcsummary
     logname=('entprs.vlf1')
     fromdate=yyddd
     rtype=ftp
     ssl=yes
ZZ
```

RCSUMMARY Output Reports

The REPORTS file contains the RCSUMMARY output. The following is a sample Remote Connect Summary report:

```
DATE mm/dd/yy  (yyddd)  TIME hh:mm:ss  IBM Sterling Connect:Enterprise for z/OS Offline Utilities  Page 1
Control Records For This Run:
   report
   type=rcsummary
   logname=('entprs.vlf1')
   fromdate=yyddd
------------------------------------------------------------------------------------------------------------------------
-----------
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE mm/dd/yy  (yyddd)        TIME 14:35:30      REMOTE  CONNECT  SUMMARY  REPORT                                    Page 1
Remote or  Lineid   Start            End             Elapsed    Succ. Fail.  Succ. Fail.   Succ. Fail.  Succ.  Fail. Succ.
Fail.
Mailbox ID (BSC)    Date-Time        Date-Time       Time      $$ADD $$ADD  W/OADD W/OADD  $$REQ $$REQ  $$DIR $$DIR  $$DEL
$$DEL
R=SUPR8            yyddd-22:38.47   yyddd-22:39.04  00:00.17    0     1      0      0        0    0      0      0      0    0
R=RMT001   LINE4    yyddd-23:48.21   yyddd-23:48.24  00:00.03    2     0      0      0        0    0      0      0      0    0
I=ACCTRECV LINE02   yyddd-11:21.43   yyddd-11:21.50  00:00.07    1     0      0      0        1    0      0      0      0    0
Total number of log records selected  3
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The following information is listed in the report:

Field	Description
Remote or Mailbox ID	The 1–8 character name of the remote site or the first Mailbox ID encountered during the remote connect (BSC remote sites that are not using BSC SIGNON).
Lineid (BSC)	The 1–8 character name of the line used for the remote connection.
Start Date-Time	The date and time the remote function started.
End Date-Time	The date and time the remote function ended.
Elapsed Time	The length of the session in hours, minutes, and seconds.
SUCC.$$ADD	The total number of batches containing $$ADD control cards that were successfully collected during the Remote Connect.
FAIL.$$ADD	The total number of batches containing $$ADD control cards that failed and were not successfully collected.
SUCC. W/O ADD	The total number of batches that did not contain a $$ADD control card, but were successfully collected during the remote connection.
FAIL. W/O ADD	The total number of batches that did not contain a $$ADD control card, and failed during the remote connection.
SUCC. $$REQ	The total number of batches that were successfully transmitted due to a $$REQUEST command from the remote site during the remote connection.
FAIL. $$REQ	The number of $$REQUEST commands received from the remote site that failed during the remote connection.
SUCC. $$DIR	The total number of $$DIRECTORY commands received from the remote site that completed successfully during the remote connection.

Field	Description
FAIL. $$DIR	The number of $$DIRECTORY commands received from the remote site that failed during the remote connection.
SUCC. $$DEL	The total number of $$DELETE commands received from the remote site that completed successfully during the remote connection.
FAIL. $$DEL	The number of $$DELETE commands received from the remote site that failed during the remote connection.

Note: All batches collected through FTP are included in the SUCC. W/O ADD and FAIL W/O ADD counts.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

FTP Remote Connect Detail Report (RCDFTP)

The FTP Remote Connect Detail Report is a detailed report of all activity handled by remote FTP connection.

RCDFTP Input Control Records

The SYSIN file contains the input control records.

The following control records are valid:

```
REPORT
     TYPE=RCDFTP
     BATCHID= xxx...xxx |nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     COMPLETION=ALL|SUCCESS|FAILURE
     DATETYPE=START|COMPLETION
     FAILCODE=nnn
      FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     FTYPE=ADD,ALL,CONNECT,DELETE,DIRECTORY,DISCONNECT,NOADD,REQUEST,SIGNON
     ID=xxxxxxxx
      IDM=xxxxxxxx[, ........, xxxxxxxx]
     IPADDR=nnn.nnn.nnn.nnn
     LOCAL_CNTL_IPADDR=nnn.nnn.nnn.nnn
     LOCAL_CNTL_PORT=ppppp
     LOCAL_DATA_IPADDR=nnn.nnn.nnn.nnn
     LOCAL_DATA_PORT=ppppp
     LOGNAME=( xxxx.xxxx [, xxxx.xxxx , xxxx.xxxx ])
     OPTION=ALLFORCONN
     PORT=ppppp
     REMOTE=xxxxxxxx
     REMOTE_CNTL_IPADDR=nnn.nnn.nnn.nnn
     REMOTE_CNTL_PORT=ppppp
     REMOTE_DATA_IPADDR=nnn.nnn.nnn.nnn
     REMOTE_DATA_PORT=ppppp
     SSL=YES|NO
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
      WILD_CARD=BID,ID
      WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
      WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=RCDFTP is required as the first noncomment card after the REPORT control card.

RCDFTP Utility Sample JCL

The following sample JCL executes the REPORT utility for an FTP Remote Connection Detail Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=rcdftp
     logname=('entprs.vlf1')
     ssl=yes
ZZ
```

RCDFTP Output Report

The REPORTS file contains the RCDFTP report output. This report contains information about each batch sent or received by the remote. Detail records containing connect, disconnect, delete, directory, and signon requests are also on the report. The following is a sample FTP Remote Connect Detail Report:

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 11/03/10  (10307)        TIME 08:55:52       FTP REMOTE CONNECT DETAIL REPORT     Release 1.4.00      Page 1

Remote       Start           End              Func  Mailbox  Batch
          Date-Time      Date-Time     Status Type    ID     Number

SVAJD1   10284-10:18.18 10284-10:18.24  S      CONN               0  Remote Control: 010.020.081.138,01699
                                                                    Local  Control: 010.020.201.003,05554
                                                                    Remote Data   :
                                                                    Local  Data   :

SVAJD1   10284-10:18.24 10284-10:18.24  S      SGON               0  Remote Control: 010.020.081.138,01699
                                                                    Local  Control: 010.020.201.003,05554
                                                                    Remote Data   :
                                                                    Local  Data   :

SVAJD1   10284-10:19.20 10284-10:20.03  S      ADD  SVAJD1     17448  Remote Control: 010.020.081.138,01699
                                                                    Local  Control: 010.020.201.003,05554
                                                                    Remote Data   : 010.020.081.138,01710
                                                                    Local  Data   : 010.020.201.003,59380

SVAJD1   10284-10:35.18 10284-10:35.18  S      DISC               0  Remote Control: 010.020.081.138,01699
                                                                    Local  Control: 010.020.201.003,05554
                                                                    Remote Data   :
                                                                    Local  Data   :
```

The following information is listed in the report:

Field	Description
Remote	The 1–8 character name of the remote.

Field	Description
Start Date-Time	The date and time the remote function started.
End Date-Time	The date and time the remote function ended.
Status	The 1-byte character code describing the status of the function. S = Successful processing F = Failed processing. If F displays, it is followed by a 3-digit failure code that gives the reason for the failure. If any failure codes are displayed, the Remote Connect Detail Report shows a list of applicable failure codes and an explanation of their meaning.
Func Type	A 3–4 byte field that describes the requested function. Types are as follows: ADD Batch containing a $$ADD control card CONN = Connect DEL = $$DELETE from the BSC/SNA remote site, or DELETE from the FTP remote site DIR = $$DIRECTORY (or $$DIRECTORY24) request from the BSC/SNA remote site, or LIST/NLST from the FTP remote site DISC = Disconnect NOAD = Batch without a $$ADD control card from the BSC/SNA remote site, or STOR from the FTP remote site REQ = $$REQUEST from the BSC/SNA remote site, or RETR from the FTP remote site SGON = BSC SIGNON or FTP logon (USER/PASS commands)
Mailbox ID	The 1–8 byte Mailbox ID name associated with the function. **Note:** If a remote site enters the $$DIRECTORY PASSWORD=XXXXXXXX form of the $$DIRECTORY command, this field contains the constant PASSWORD.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Remote Control Local Control Remote Data Local Data	The IP address and port number of the Remote Control, Local Control, Remote Data, or Local Data connection.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

FTP Long Remote Connect Detail Report (RCDFTPL)

The FTP Long Remote Connect Detail Report contains the same information as the FTP Remote Connect Detail plus additional information including: Elapsed Time, User Batch ID, Record Count, Block Count, and Byte Count.

RCDFTPL Input Control Records

The SYSIN file contains the input control records. The following control records are valid:

```
REPORT
     TYPE=RCDFTP
     BATCHID= xxx...xxx |nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     COMPLETION=ALL|SUCCESS|FAILURE
     DATETYPE=START|COMPLETION
     FAILCODE=nnn
      FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     FTYPE=ADD,ALL,CONNECT,DELETE,DIRECTORY,DISCONNECT,NOADD,REQUEST,SIGNON
     ID=xxxxxxxx
      IDM=xxxxxxxx[, ........, xxxxxxxx]
     IPADDR=nnn.nnn.nnn.nnn
     LOCAL_CNTL_IPADDR=nnn.nnn.nnn.nnn
     LOCAL_CNTL_PORT=ppppp
     LOCAL_DATA_IPADDR=nnn.nnn.nnn.nnn
     LOCAL_DATA_PORT=ppppp
     LOGNAME=( xxxx.xxxx [, xxxx.xxxx , xxxx.xxxx ])
     OPTION=ALLFORCONN
     PORT=ppppp
     REMOTE=xxxxxxxx
     REMOTE_CNTL_IPADDR=nnn.nnn.nnn.nnn
     REMOTE_CNTL_PORT=ppppp
     REMOTE_DATA_IPADDR=nnn.nnn.nnn.nnn
     REMOTE_DATA_PORT=ppppp
     SSL=YES|NO
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
      WILD_CARD=BID,ID
      WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
      WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

TYPE=RCDFTPL is required as the first noncomment card after the REPORT control card.

RCDFTPL Utility Sample JCL

The following sample JCL executes the REPORT utility for an FTP Long Remote Connection Detail Report:

```
//REPORT   JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
     report
     type=rcdftpl
     logname=('entprs.vlf1')
     ssl=yes
ZZ
```

RCDFTPL Output Report

The REPORTS file contains the RCDFTPL report output. This report contains information about each batch sent or received by the remote. Detail records containing connect, disconnect, delete, directory, and signon requests are also on the report.

The following is a sample FTP Long Remote Connect Detail Report:

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 11/03/10  (10307)      TIME 08:45:51  FTP LONG REMOTE CONNECT DETAIL REPORT    Release 1.4.00     Page 1

Remote=SVAJD1                       Mailbox=            Batch Number=0
Start Date-Time=10284-10:18.18      Type=CONN           Record Count=0
End   Date-Time=10284-10:18.24      Status=S            Block Count=0
Elapsed    Time=00:00.06                                Byte Count=0
Remote Control Connection=010.020.081.138,01699
Local  Control Connection=010.020.201.003,05554
Remote Data    Connection=
Local  Data    Connection=
User Batch Identification=

Remote=SVAJD1                       Mailbox=            Batch Number=0
Start Date-Time=10284-10:18.24      Type=SGON           Record Count=0
End   Date-Time=10284-10:18.24      Status=S            Block Count=0
Elapsed    Time=00:00.00                                Byte Count=0
Remote Control Connection=010.020.081.138,01699
Local  Control Connection=010.020.201.003,05554
Remote Data    Connection=
Local  Data    Connection=
User Batch Identification=

Remote=SVAJD1                       Mailbox=SVAJD1      Batch Number=17448
Start Date-Time=10284-10:19.20      Type=ADD            Record Count=10
End   Date-Time=10284-10:20.03      Status=S            Block Count=1
Elapsed    Time=00:00.43                                Byte Count=210
Remote Control Connection=010.020.081.138,01699
Local  Control Connection=010.020.201.003,05554
Remote Data    Connection=010.020.081.138,01710
Local  Data    Connection=010.020.201.003,59380
User Batch Identification=xxxtest.txt

Remote=SVAJD1                       Mailbox=            Batch Number=0
Start Date-Time=10284-10:35.18      Type=DISC           Record Count=0
End   Date-Time=10284-10:35.18      Status=S            Block Count=0
Elapsed    Time=00:00.00                                Byte Count=0
Remote Control Connection=010.020.081.138,01699
Local  Control Connection=010.020.201.003,05554
Remote Data    Connection=
Local  Data    Connection=
User Batch Identification=
```

The following information is listed in the report:

Field	Description
Remote	The 1–8 character name of the remote.
Start Date-Time	The date and time the remote function started.
End Date-Time	The date and time the remote function ended.
Elapsed Time	The amount of time Sterling Connect:Enterprise takes to complete processing the Auto Connect batch.
Remote Control Local Control Remote Data Local Data	The IP address and port number of the Remote Control, Local Control, Remote Data, or Local Data connection.
User Batch Identification	The 1–64 character user-assigned batch identifier.

Field	Description
Mailbox	The 1–8 byte Mailbox ID name associated with the function. **Note:** If a remote site enters the $$DIRECTORY PASSWORD=XXXXXXXX form of the $$DIRECTORY command, this field contains the constant PASSWORD.
Type	A 3–4 byte field that describes the requested function. Types are as follows: ADD Batch containing a $$ADD control card CONN = Connect DEL = $$DELETE from the BSC/SNA remote site, or DELETE from the FTP remote site DIR = $$DIRECTORY (or $$DIRECTORY24) request from the BSC/SNA remote site, or LIST/NLST from the FTP remote site DISC = Disconnect NOAD = Batch without a $$ADD control card from the BSC/SNA remote site, or STOR from the FTP remote site REQ = $$REQUEST from the BSC/SNA remote site, or RETR from the FTP remote site SGON = BSC SIGNON or FTP logon (USER/PASS commands)
Status	The 1-byte character code describing the status of the function. S = Successful processing F = Failed processing. If F displays, it is followed by a 3-digit failure code that gives the reason for the failure. If any failure codes are displayed, the Remote Connect Detail Report shows a list of applicable failure codes and an explanation of their meaning.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Record Count	The number of records in the batch.
Block Count	The number of blocks in the batch.
Byte Count	The number of bytes sent or received depending upon whether the batch was transmitted or collected.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

STATFLG Utility

The STATFLG Utility changes the batch status flags in the VPF and VCF files. The status flags identify characteristics of each batch. If a batch meets all selection criteria and already has the specified status flags set, it is not processed or listed in the output report.

The STATFLG utility can change many batches in a single run. When creating the input control records for STATFLG, be careful to only change the intended batches. The status codes you can

change are documented in the ONFLAGS and OFFFLAGS parameters listed in Appendix A, *Offline Utility Parameters*.

A security exit is available for the STATFLG utility to limit user access to certain batch names. Refer to the *IBM Sterling Connect:Enterprise for z/OS Application Agents and User Exits* for additional information.

STATFLG Input Control Records

The SYSIN file contains the input control records for the STATFLG utility. The following are the valid STATFLG control records:

```
STATFLG
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,.....nnnnnnn-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     FILE_ACCESS=VPF|VCF1P
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     MAXBATCH=nnnnnnn
     OFFFLAGS=REQUESTABLE,DELETED,TRANSMITTED,EXTRACTED,MULTXMIT
     ONFLAGS=REQUESTABLE,DELETED,TRANSMITTED,EXTRACTED,MULTXMIT
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn[-nn]
     VPF='xxxx.xxxx'
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

VPF is required. You must specify either ONFLAGS or OFFFLAGS, and another parameter in addition to VPF. Both ONFLAGS and OFFFLAGS can be used in the same SYSIN file. If both are used, the flags are processed in the order specified in the input control records.

Note: If you turn on the 'M' (MULTXMIT) flag, the 'R' (REQUESTABLE) flag is automatically turned on. If you turn off the 'R' (REQUESTABLE) flag, the 'M' (MULTXMIT) flag is automatically turned off.

STATFLG Utility Sample JCL

The following sample JCL executes the STATFLG utility. You can combine the preceding STATFLG utility control record keyword parameters in several ways to change a variety of ID and BATCHID combinations.

```
//STATFLG  JOB   ....  AS REQUIRED BY YOUR SITE
//STOUTL   EXEC PGM=STOUTL,PARM='SRV1',REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INTRDR   DD   SYSOUT=(A,INTRDR)
//SYSTERM  DD   SYSOUT=*
//BTSNAP   DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS  DD   SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN    DD   DATA,DLM=ZZ
   statflg
   vpf='entprs.vpf'
   id=ATLANTA*
   status=FTP,SSL
   offflags=deleted
ZZ
```

STATFLG Output Reports

The REPORTS file contains a report detailing STATFLG operation. The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly. The following is a sample STATFLG report:

```
DATE 10/21/03  (03294)       TIME 16:35:20       BATCH  STATFLG  REPORT             Release 1.4.00          Page 1
***  Batches added to Batch Queues:
BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion,
              N=NonTransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted, M=Multixmt,
              X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File, 1=FTP MODE Blocked,
              2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File,
              9=FTP Structure Record, e=Encrypted when offline added
Mailbox    Batch      Block     Record      Byte             User Batch        Time   Date  VBQ# New Batch Status Flags
   ID      Number     Count      Count      Count           Identification       Added  Added
Atlanta2      8593          5          5          400  Monthly Sales Report      15:50  03294  06   A   R EM
Atlanta2      8594          5          5          400  Monthly Sales Report      15:50  03294  08   A   R  M
Atlanta2      8595          5          5          400  Monthly Sales Report      16:22  03294  08   A   R  M
Atlanta2      8596          5          5          400  Monthly Sales Report      16:30  03294  08   A   R  M
Atlanta2      8597          5          5          400  Monthly Sales Report      16:35  03294  08   A   R  M
Atlanta2      8592          5          5          400  Monthly Sales Report      15:50  03294  06   AD  R  M
Total number of batches changed  6, VSAM File Access via VPF
CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 4.
```

The report includes the following:

Field	Description
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Block Count	The number of blocks in the batch.
Record Count	The number of records in the batch.

Field	Description
Byte Count	The number of bytes in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Time Added	The time the batch was added.
Date Added	The date the batch was added to the VSAM batch files.
VBQ #	The number of the VBQ file where the batch was placed.
New Batch Status Flags	A code describing the batch status. The codes are described on page 81.

VERIFY Utility

The VERIFY Utility allows you to validate and, if necessary, resync VSAM VPF, VCF, and VBQ files. This utility produces a report listing inconsistencies between VCF, VPF, and VBQ files including:

- CRONLY deleted batches, that is, those batches where only the batch control information was erased.
- Orphans, that is, files, which still retain storage but that no longer appear in the directory of a file system, and where one or more related files are missing.
- Mismatches, that is, files where one or more related files are missing or have different batch numbers. For example, the VBQ# for a particular batch does not match the VBQ# of its related VPF or VCF or no VBQ data was found.

For optimum performance, follow these guidelines:

- Run the VERIFY utility as follows:
  - First, set TYPE=REPORT. Include allocated DDs, CRONLY, ORPHAN, and MISMATCH so the batch key information is written to the specified data set name. This approach produces a report listing batch inconsistencies that you can review prior to making corrections or repairs to the batches.
  - Next, run the VERIFY utility with TYPE=REPAIR. These DDs will be used to make corrections quickly and efficiently
- Run the VERIFY utility during off-peak processing times to limit impacting other Sterling Connect:Enterprise activity that needs access to the VSAM server.

VERIFY Input Control Records

The SYSIN file contains the input control records for the VERIFY utility. The following are the valid VERIFY control records:

```
VERIFY
            TYPE=REPORT|REPAIR
            ALLERRORS
            BATCHNUM=nnnnnnnn[-nnnnnnnn]
            CRONLY
            FORMAT=1|1X|2
            FROMDATE=yyyyddd|nnn|yyddd          (REPAIR/CRONLY only)
            FROMTIME=hhmmD                      (REPAIR/CRONLY only)
            ID=xxxxxxxx
            JOBNAME=xxxxxxxx                    (REPAIR/CRONLY only)
            MISMATCH
            ORPHAN
            TODATE=yyyyddd|nnn|yyddd            (REPAIR/CRONLY only)
            TOTIME=hhmmD                        (REPAIR/CRONLY only)
            VBQ=nn[-nn]
            VPF='data.set.name'                 (REQUIRED)
```

You must specify the VPF data set. Setting VERIFY TYPE=REPORT produces a report listing the inconsistencies. You must also specify what kind of error you want to correct (CRONLY, ORPHAN, MISMATCH, ALLERRORS). If you specify BATCHNUM, the VERIFY utility looks only for those batch numbers to report and/or repair. If you specify BATCHNUM, ID, and VBQ, they are treated in an AND fashion. For example, if both VBQ and ID are supplied, only those batches who have the specified ID and are in the specified VBQ are reported and/or repaired.

When repairs are made, VCF values take precedence over VPF values. For example, if a VCF has a batch ID of MYBATCH1 and the VPF has a batch ID of MYBATCH2, the VERIFY utility sets the VPF batch ID to MYBATCH1.

Whenever there is a discrepancy between the number of records in the VBQ versus the number specified in the VCF, the VBQ value is used if its record number count is less than the VCF. In this case, the VCF is updated with the VBQ record number value and the batch is marked incomplete. If the VCF number is less than the VBQ number, the batch is not corrected.

You can only use the FROMDATE/TODATE, FROMTIME/TOTIME and JOBNAME parameters when repairing CRONLY batches. FROMDATE/TODATE, FROMTIME/TOTIME, and JOBNAME refer to the date and time and jobname of the job that did the original CRONLY ERASE. When the ERASE utility is run with the CRONLY parameter, a copy of the VCF record is stored as VBQ batch record 0. An ERASE date/time and jobname is written to this copy of the VCF so that the VERIFY TYPE=REPAIR utility can restore only those batches that were erased on a specific date or date range by a specific job.

VERIFY Utility Sample JCL

The following sample JCL executes the VERIFY utility with the REPORT option specified.

```
//VERIFY     JOB ...... AS REQUIRED BY YOUR SITE
//STOUTL    EXEC  PGM=STOUTL,PARM='SRV1',REGION=7M
//STEPLIB      DD      DISP=SHR, DSN=ENTPRS.LOAD
//BTSNAP       DD      SYSOUT=*
//REPORTS      DD      SYSOUT=*
//REPORTS2     DD      SYSOUT=*
//SYSPRINT     DD      SYSOUT=*
//CRONLY       DD     DISP=SHR, DSN=ENTPRS.CRONLY.BATCHES
//ORPHAN       DD     DISP=SHR, DSN=ENTPRS.ORPHAN.BATCHES
//MISMATCH     DD     DISP=SHR,DSN=ENTPRS.MISMATCH.BATCHES
//SYSTERM      DD     SYSOUT=*
//SYSIN        DD     DATA,DLM=ZZ
          VERIFY
          TYPE=REPORT
          ALL ERRORS
          VPF='entprs.vpf'
```

The following sample JCL executes the VERIFY utility with the REPAIR option specified.

```
//VERIFY     JOB ...... AS REQUIRED BY YOUR SITE
//STOUTL    EXEC  PGM=STOUTL,PARM='SRV1',REGION=7M
//STEPLIB     DD      DISP=SHR,DSN=ENTPRS.LOAD
//BTSNAP      DD      SYSOUT=*
//REPORTS     DD      SYSOUT=*
//SYSPRINT    DD      SYSOUT=*
//CRONLY      DD     DISP=SHR, DSN=ENTPRS.CRONLY.BATCHES
//ORPHAN      DD     DISP=SHR, DSN=ENTPRS.ORPHAN.BATCHES
//MISMATCH    DD     DISP=SHR,DSN=ENTPRS.MISMATCH.BATCHES
//SYSTERM     DD      SYSOUT=*
//SYSIN       DD     DATA,DLM=ZZ
        VERIFY
        TYPE=REPAIR
        ALL ERRORS
        VPF='entprs.vpf'
ZZ
```

Note: If any VBQ is deallocated with DISALLOW, the VERIFY utility will not run with either the REPORT or REPAIR option specified.

When the DDs, CRONLY, ORPHAN and/or MISMATCH, are included in the JCL for the VERIFY TYPE=REPORT option, CRONLY deleted batch, orphaned batch and mismatched batch key information is written to the specified data set name. Then, when the VERIFY TYPE=REPAIR option is run, these data sets are used to quickly make corrections and save time since the entire VCF and VBQs do not need to be searched for errors again. These DDs are not required but they can save a lot of processing time if you are going to run the REPORT option followed soon after by the REPAIR option.

When the CRONLY, ORPHAN and/or MISMATCH DDs are supplied in the VERIFY TYPE=REPAIR utility JCL, the key information in these files is verified that it can be restored to its original condition before corrections are made. The VERIFY TYPE=REPAIR parameter

keywords, CRONLY, ORPHAN, and /or MISMATCH are required if the utility is to use the data sets. For example, if DD ORPHAN is found in the JCL but the VERIFY TYPE=REPAIR does not specify ORPHAN, no orphans are deleted.

Note: When you include the CRONLY, ORPHAN, and MISMATCH DDs in the VERIFY utility JCL, allocate them as RECFM=FB and LRECL=80.

VERIFY Output Reports

The REPORTS file contains a report detailing the VERIFY operation for both the TYPE=REPORT and TYPE=REPAIR reports. Samples of both reports are shown in this section. On the last page of both reports, the following totals are given:

- Total number of MISMATCH batches found
- Total number of MISMATCH VBQ# values
- Total number of MISMATCH Create Date values
- Total number of MISMATCH Create Time values
- Total number of MISMATCH Records values
- Total number of MISMATCH User Batch Identification values
- Total number of MISMATCH Transmittable values
- Total number of MISMATCH batches repaired
- Total number of MISMATCH batches un-repairable
- Total number of CRONLY batches found
- Total number of CRONLY batches repaired
- Total number of CRONLY batches un-repairable
- Total number of ORPHAN batches found
- Total number of ORPHAN batches deleted
- Total number of ORPHAN batches un-repairable

A job condition code and a completion message indicating if the utility executed correctly is also shown on the last page of both the REPORT and REPAIR type reports.

VERIFY TYPE=REPORT Output Report

The VERIFY TYPE=REPORT listing is divided into three sections: the first shows information for MISMATCH Batches, the second for CRONLY and ORPHAN Batches, and the last section shows totals. The sample below includes excerpts from a report originally containing 14 pages with data representative of the three major sections.

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 10/17/03  (03290)        TIME 13:54:23               VERIFY TYPE=REPORT                  Release 1.4.00      Page 1

BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 *=Inconsistent Values

                                                    MISMATCH Batches

          Batch   Mailbox                                  Create  Create              User Batch
    File  Number    ID          Batch Status       VBQ#    Date    Time     Records  Identification          Transmittable
 ================================================================================================================================
    VCF        8  SNDCTB    ( A   RT M           )  01    02190  114549          1   LRECL 80                  No
    VPF        8  SNDCTB    (                n/a) *04    02190  114549        n/a   LRECL 80                  No
    VBQ        8  SNDCTB    (                n/a)  01    n/a    n/a             1   n/a                       n/a
 ================================================================================================================================
    VCF       25  LREC40    (IA   R E X       )  02    02191  172130          7   LRECL 40                  No
    VPF       25  LREC40    (                n/a)  02    02191  172130        n/a   LRECL 40                 *Yes
    VBQ       25  LREC40    (                n/a)  02    n/a    n/a             6   n/a                       n/a
 ================================================================================================================================
    VCF      155  LRECVB    (IA   R           )  04    02232  165239          1   LRECL VB                  No
    VPF      155  LRECVB    (                n/a)  04    02232  165239        n/a   LRECL VB                 *Yes
    VBQ  *** No VBQ Batch Data Found ***
 ================================================================================================================================
    VCF      156  LRECVB    (IA   R           )  04    02232  165428          1   LRECL VB                  No
    VPF      156  LRECVB    (                n/a)  04    02232  165428        n/a   LRECL VB                 *Yes
    VBQ  *** No VBQ Batch Data Found ***
 ================================================================================================================================
    VCF      157  LRECVB    (IA   R           )  04    02232  165455          1   LRECL VB                  No
    VPF      157  LRECVB    (                n/a)  04    02232  165455        n/a   LRECL VB                 *Yes
    VBQ  *** No VBQ Batch Data Found ***
 ================================================================================================================================
    VCF      161  LRECVB    (IA   R           )  04    02233  095048          1   LRECL VB                  No
    VPF      161  LRECVB    (                n/a)  04    02233  095048        n/a   LRECL VB                 *Yes
    VBQ  *** No VBQ Batch Data Found ***
 ================================================================================================================================
DATE 10/17/03  (03290)        TIME 13:54:23               VERIFY TYPE=REPORT                  Release 1.4.00      Page 2

BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 *=Inconsistent Values

                                                    MISMATCH Batches

          Batch   Mailbox                                  Create  Create              User Batch
    File  Number    ID          Batch Status       VBQ#    Date    Time     Records  Identification          Transmittable
 ================================================================================================================================
    VCF      163  LRECVB    (IA   R           )  01    02233  105845          0   LRECL VB                  No
    VPF  *** Missing VPF Record      ***
    VBQ  *** No VBQ Batch Data Found ***
 ================================================================================================================================
    VCF      172  LRECVB    ( A   R   X       )  04    02233  125142         45   LRECL VB                  Yes
    VPF      172  LRECVB    (                n/a) *02   *02244 *115142       n/a  *LRECL VB AND MORE          Yes
    VBQ      172  LRECVB    (                n/a)  04    n/a    n/a            45   n/a                       n/a
 ================================================================================================================================
    VCF      184  LRECL80   ( A  UR           )  01    02252  140110          2   LREC 80                   No
    VPF      184  LRECL80   (                n/a)  01    02252  140110        n/a   LREC 80                  *Yes
    VBQ      184  LRECL80   (                n/a)  01    n/a    n/a             2   n/a                       n/a
 ================================================================================================================================
    VCF      189  LRECL80   ( A  UR           )  03    02254  140513          2   LREC 80                   No
    VPF      189  LRECL80   (                n/a)  03    02254  140513        n/a   LREC 80                  *Yes
    VBQ      189  LRECL80   (                n/a)  03    n/a    n/a             2   n/a                       n/a
 ================================================================================================================================
    VCF      190  LRECL80   ( A  UR           )  03    02254  142442          2   LREC 80                   No
    VPF      190  LRECL80   (                n/a)  03    02254  142442        n/a   LREC 80                  *Yes
    VBQ      190  LRECL80   (                n/a)  03    n/a    n/a             2   n/a                       n/a
 ================================================================================================================================
    VCF      290  COMPANYB  ( C        F  038   )  04    02268  165158   *      2   LIST                      No
    VPF      290  COMPANYB  (                n/a)  04    02268  165158        n/a   LIST                     No
    VBQ      290  COMPANYB  (                n/a)  04    n/a    n/a             1   n/a                       n/a
 ================================================================================================================================
    VCF      291  COMPANYB  ( C        F  038   )  04    02268  165159   *      2   YOUR GET BATCH ID         No
    VPF      291  COMPANYB  (                n/a)  04    02268  165159        n/a   YOUR GET BATCH ID         No
    VBQ      291  COMPANYB  (                n/a)  04    n/a    n/a             1   n/a                       n/a
                                                                                                          Continued
```

```
DATE 10/17/03  (03290)        TIME 13:54:23               VERIFY TYPE=REPORT                    Release 1.4.00      Page 14

BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 *=Inconsistent Values


                                              CRONLY and ORPHAN Batches

         Batch   Mailbox                                  Create  Create              User Batch
   File  Number    ID          Batch Status       VBQ#    Date    Time     Records  Identification           Transmittable
=============================================================================================================================
   ORPHANed
   VBQ      402  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a
=============================================================================================================================
   CRONLY ERASED on Date:       at Time:      by Jobname:          RESTORABLE

   VBQC     403  COMPANYB  ( C        F  038    )  04  02323 101946             2  YOUR GET BATCH ID          No
   VBQ      403  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a
=============================================================================================================================
   CRONLY ERASED on Date: 03162 at Time: 1028 by Jobname: SPLAT1E2 RESTORABLE

   VBQC     405  COMPANYB  ( C        F  038    )  04  02323 102122             2  LIST                          No
   VBQ      405  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a
=============================================================================================================================

 ***  End Of CRONLY and ORPHAN Section  ***

Total number of MISMATCH batches found 96.
Total number of MISMATCH VBQ# values: 2.
Total number of MISMATCH Create Date values: 2.
Total number of MISMATCH Create Time values: 2.
Total number of MISMATCH Records values: 77.
Total number of MISMATCH User Batch Identification values: 2.
Total number of MISMATCH Transmittable values:  15.
Total number of MISMATCH batches repaired 0.
Total number of MISMATCH batches un-repairable  0.

Total number of CRONLY batches found 2.
Total number of CRONLY batches repaired 0.
Total number of CRONLY batches un-repairable  0.

Total number of ORPHAN batches found 9.
Total number of ORPHAN batches deleted 0.
Total number of ORPHAN batches un-repairable  0.

CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The report includes the following information:

Field	Description
File	The type of file: VCF, VPF, VBQ, or VBQC (a VBQ file with a copy of the VCF record appended as Record 0). ORPHANed VBQ files are also listed. For CRONLY files, the date and time on which the VCF control record was erased is shown along with the Jobname that executed the ERASE utility and whether or not the file is restorable.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Mailbox ID	The 1–8 character Mailbox ID.
Batch Status	A code describing the batch status. The codes are described on page 81.
VBQ#	The number of the VBQ file where the batch was added.
Create Date	The date the batch was created.
Create Time	The time the batch was created.

Field	Description
Records	The number of records in the batch.
User Batch Identification	The 1–64 character user-assigned batch identifier.
Transmittable	Indicates whether the file is available for transmission to a remote site. No=The file is not available for transmission. Yes=The file is available for transmission. n/a=Not applicable.

VERIFY TYPE=REPAIR Output Report

Like the TYPE=REPORT output report, the VERIFY TYPE=REPAIR output report is divided into three sections for MISMATCH Batches, CRONLY and ORPHAN Batches, and totals. The sample below includes excerpts from a report originally containing 22 pages with data representative of the three major sections.

```
***  THIS FILE CONTAINS THE REPORTS FOR ALL OF THE OFFLINE UTILITIES EXECUTED  ***
DATE 10/17/03  (03290)        TIME 14:00:29                VERIFY TYPE=REPAIR                   Release 1.4.00      Page 1

  BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 S:B=Before Repair Values, A=After Repair Values   *=Repaired Values

                                                            MISMATCH Batches

          Batch   Mailbox                                        Create  Create              User Batch
 S  File  Number    ID         Batch Status       VBQ#   Date    Time     Records  Identification          Transmittable

==============================================================================================================================
 B  VCF       8  SNDCTB    ( A   RT M          )  01    02190  114549         1   LRECL 80                    No
 B  VPF       8  SNDCTB    (                n/a) *04    02190  114549       n/a   LRECL 80                    No
 B  VBQ       8  SNDCTB    (                n/a)  01    n/a    n/a            1   n/a                         n/a

 A  VCF       8  SNDCTB    ( A   RT M          )  01    02190  114549         1   LRECL 80                    No
 A  VPF       8  SNDCTB    (                n/a) *01    02190  114549       n/a   LRECL 80                    No
 A  VBQ       8  SNDCTB    (                n/a)  01    n/a    n/a            1   n/a                         n/a

==============================================================================================================================
 B  VCF      25  LREC40    (IA   R E X         )  02    02191  172130         7   LRECL 40                    No
 B  VPF      25  LREC40    (                n/a)  02    02191  172130       n/a   LRECL 40                   *Yes
 B  VBQ      25  LREC40    (                n/a)  02    n/a    n/a            6   n/a                         n/a

 A  VCF      25  LREC40    (IA   R E X         )  02    02191  172130         7   LRECL 40                    No
 A  VPF      25  LREC40    (                n/a)  02    02191  172130       n/a   LRECL 40                   *No
 A  VBQ      25  LREC40    (                n/a)  02    n/a    n/a            6   n/a                         n/a

==============================================================================================================================
 B  VCF      42  SNDCTB    ( C       F  038    )  01    02217  094437         1   LIST                        No
 B  VPF      42  SNDCTB    (                n/a)  01    02217  094437       n/a  *LIST AND MORE               No
 B  VBQ      42  SNDCTB    (                n/a)  01    n/a    n/a            1   n/a                         n/a

 A  VCF      42  SNDCTB    ( C       F  038    )  01    02217  094437         1   LIST                        No
 A  VPF      42  SNDCTB    (                n/a)  01    02217  094437       n/a  *LIST                        No
 A  VBQ      42  SNDCTB    (                n/a)  01    n/a    n/a            1   n/a                         n/a

==============================================================================================================================
 B  VCF     154  LRECVB    (IA   R             )  04    02232  165222         1   LRECL VB                    No
 B  VPF     154  LRECVB    (                n/a)  04    02232  165222       n/a   LRECL VB                   *Yes
 B  VBQ  *** No VBQ Batch Data Found ***

 A  VCF     154  LRECVB    (IA   R             )  04    02232  165222         1   LRECL VB                    No
 A  VPF     154  LRECVB    (                n/a)  04    02232  165222       n/a   LRECL VB                   *No
 A  VBQ  *** No VBQ Batch Data Found ***

==============================================================================================================================
B  VCF     155  LRECVB    (IA   R             )  04    02232  165239         1   LRECL VB                    No
B  VPF     155  LRECVB    (                n/a)  04    02232  165239       n/a   LRECL VB                   *Yes
B  VBQ  *** No VBQ Batch Data Found ***

A  VCF     155  LRECVB    (IA   R             )  04    02232  165239         1   LRECL VB                    No
A  VPF     155  LRECVB    (                n/a)  04    02232  165239       n/a   LRECL VB                   *No
A  VBQ  *** No VBQ Batch Data Found ***
```

Continued

```
================================================================================================================================
1DATE 10/17/03  (03290)        TIME 14:00:29               VERIFY TYPE=REPAIR                    Release 1.4.00      Page 2

  BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 S:B=Before Repair Values, A=After Repair Values   *=Repaired Values


                                                    MISMATCH Batches

          Batch   Mailbox                                 Create  Create              User Batch
 S  File  Number    ID          Batch Status       VBQ#   Date    Time     Records  Identification          Transmittable

================================================================================================================================
 B  VCF      156  LRECVB    (IA   R              )  04    02232  165428         1   LRECL VB                  No
 B  VPF      156  LRECVB    (                 n/a)  04    02232  165428       n/a   LRECL VB                 *Yes
 B  VBQ  *** No VBQ Batch Data Found ***

 A  VCF      156  LRECVB    (IA   R              )  04    02232  165428         1   LRECL VB                  No
 A  VPF      156  LRECVB    (                 n/a)  04    02232  165428       n/a   LRECL VB                 *No
 A  VBQ  *** No VBQ Batch Data Found ***

================================================================================================================================
 B  VCF      157  LRECVB    (IA   R              )  04    02232  165455         1   LRECL VB                  No
 B  VPF      157  LRECVB    (                 n/a)  04    02232  165455       n/a   LRECL VB                 *Yes
 B  VBQ  *** No VBQ Batch Data Found ***

 A  VCF      157  LRECVB    (IA   R              )  04    02232  165455         1   LRECL VB                  No
 A  VPF      157  LRECVB    (                 n/a)  04    02232  165455       n/a   LRECL VB                 *No
 A  VBQ  *** No VBQ Batch Data Found ***

================================================================================================================================
 B  VCF      161  LRECVB    (IA   R              )  04    02233  095048         1   LRECL VB                  No
 B  VPF      161  LRECVB    (                 n/a)  04    02233  095048       n/a   LRECL VB                 *Yes
 B  VBQ  *** No VBQ Batch Data Found ***

 A  VCF      161  LRECVB    (IA   R              )  04    02233  095048         1   LRECL VB                  No
 A  VPF      161  LRECVB    (                 n/a)  04    02233  095048       n/a   LRECL VB                 *No
 A  VBQ  *** No VBQ Batch Data Found ***
```

Continued

```
DATE 10/17/03  (03290)        TIME 14:00:29               VERIFY TYPE=REPAIR                    Release 1.4.00      Page 21

  BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 S:B=Before Repair Values, A=After Repair Values   *=Repaired Values


                                              CRONLY and ORPHAN Batches

           Batch   Mailbox                                 Create  Create              User Batch
 S  File  Number    ID          Batch Status       VBQ#    Date    Time     Records  Identification          Transmittable

==========================================================================================================================================
    ORPHANed
 B  VBQ      498  BREMOTE   (                 n/a)  02    n/a    n/a             1  n/a                           n/a

 A  VBQ  ****************** ORPHANed Batch     498 On VBQ02 Successfully Deleted ******

==========================================================================================================================================
    ORPHANed
 B  VBQ      499  BREMOTE   (                 n/a)  02    n/a    n/a             1  n/a                           n/a

 A  VBQ  ****************** ORPHANed Batch     499 On VBQ02 Successfully Deleted ******

==========================================================================================================================================
    ORPHANed
 B  VBQ       55  SNDCTB    (                 n/a)  02    n/a    n/a             3  n/a                           n/a

 A  VBQ  ****************** ORPHANed Batch      55 On VBQ02 Successfully Deleted ******

==========================================================================================================================================
    ORPHANed
 B  VBQ      400  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a

 A  VBQ  ****************** ORPHANed Batch     400 On VBQ04 Successfully Deleted ******

==========================================================================================================================================
    ORPHANed
 B  VBQ      402  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a

 A  VBQ  ****************** ORPHANed Batch     402 On VBQ04 Successfully Deleted ******

==========================================================================================================================================
CRONLY ERASED on Date:       at Time:      by Jobname:          RESTORABLE

 B  VBQC     403  COMPANYB  ( C        F  038    )  04  02323 101946             2  YOUR GET BATCH ID             No
 B  VBQ      403  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a

 A  VCF      403  COMPANYB  ( C        F  038    )  04  02323 101946             2  YOUR GET BATCH ID             No
 A  VPF      403  COMPANYB  (                 n/a)  04  02323 101946           n/a  YOUR GET BATCH ID             No
 A  VBQ      403  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a
 *** Warning - This restored batch has MISMATCH errors.
 *** Run VERIFY TYPE=REPORT with ID=COMPANYB, BATCHNUM=    403 and MISMATCH to see errors (and/or TYPE=REPAIR to correct them.)

==========================================================================================================================================
    CRONLY ERASED on Date: 03162 at Time: 1028 by Jobname: SPLAT1E2 RESTORABLE

 B  VBQC     405  COMPANYB  ( C        F  038    )  04  02323 102122             2  LIST                          No
 B  VBQ      405  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a

1A  VCF      405  COMPANYB  ( C        F  038    )  04  02323 102122             2  LIST                          No
 A  VPF      405  COMPANYB  (                 n/a)  04  02323 102122           n/a  LIST                          No
 A  VBQ      405  COMPANYB  (                 n/a)  04    n/a    n/a             1  n/a                           n/a
 *** Warning - This restored batch has MISMATCH errors.
 *** Run VERIFY TYPE=REPORT with ID=COMPANYB, BATCHNUM=    405 and MISMATCH to see errors (and/or TYPE=REPAIR to correct them.)
```

Continued

```
================================================================================================================================
DATE 10/17/03  (03290)        TIME 14:00:29               VERIFY TYPE=REPAIR                    Release 1.4.00      Page 22

  BATCH STATUS: I=Incomplete, C=Collected Online, A=Added Offline, D=Flagged For Deletion, N=NonTransmittable, U=Unextractable,
  R=Requestable, T=Transmitted, E=Extracted, M=Multixmt, X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Structure File,
  1=FTP MODE Blocked, 2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 5=TLS, 8=FTP Structure File, 9=FTP Structure Record
  e=Encrypted when offline added

 S:B=Before Repair Values, A=After Repair Values   *=Repaired Values


                                          CRONLY and ORPHAN Batches

         Batch   Mailbox                          Create  Create              User Batch
 S  File Number    ID          Batch Status       VBQ#   Date    Time     Records  Identification          Transmittable
================================================================================================================================

  ***  End Of CRONLY and ORPHAN Section  ***

 Total number of MISMATCH batches found 96.
 Total number of MISMATCH VBQ# values: 2.
 Total number of MISMATCH Create Date values: 2.
 Total number of MISMATCH Create Time values: 2.
 Total number of MISMATCH Records values: 77.
 Total number of MISMATCH User Batch Identification values: 2.
 Total number of MISMATCH Transmittable values:  15.
 Total number of MISMATCH batches repaired 96.
 Total number of MISMATCH batches un-repairable  0.

 Total number of CRONLY batches found 2.
 Total number of CRONLY batches repaired 2.
 Total number of CRONLY batches un-repairable  0.

 Total number of ORPHAN batches found 9.
 Total number of ORPHAN batches deleted 9.
 Total number of ORPHAN batches un-repairable  0.

 CMU013I - Utility completed, highest Return Codes are, this utility 0,  this JOB Step 0.
```

The report includes the following information:

Field	Description
S	State of the file B = Before Repair Values A = After Repair values
File	The type of file: VCF, VPF, VBQ, or VBQC (a VBQ file with a copy of the VCF record appended as Record 0). ORPHANed VBQ files are also listed. For CRONLY files, the date and time on which the VCF control record was erased is shown along with the Jobname that executed the ERASE utility and whether or not the file is restorable.
Batch Number	The unique 7-digit batch number assigned by Sterling Connect:Enterprise.
Mailbox ID	The 1–8 character Mailbox ID.
Batch Status	A code describing the batch status. The codes are described on page 81.
VBQ#	The number of the VBQ file where the batch was added.
Create Date	The date the batch was created.
Create Time	The time the batch was created.
Records	The number of records in the batch.

Field	Description
User Batch Identification	The 1–64 character user-assigned batch identifier.
Transmittable	Indicates whether the file is available for transmission to a remote site. No = The file is not available for transmission. Yes = The file is available for transmission. n/a = Not applicable.

Chapter 4

Cross System Client Utility

This chapter describes the following:

- Setting up and running the Cross System Client Utility
- Cross System Client Utility syntax rules
- The Cross System Client Utility ADD, EXTRACT, LIST, and STATFLG utilities

Cross System Client Utility Overview

The Sterling Connect:Enterprise Cross System Client Utility (CSCU) enables you to use a subset of the offline utilities to access the VSAM batch and log files from a remote LPAR, unlike offline utilities which must run from the same LPAR as the Sterling Connect:Enterprise VSAM File Server. CSCU control and output is similar to the offline utilities.

Note: Online Sterling Connect:Enterprise must be running to use CSCU.

CSCU enables you to run the following cross system client utilities from a remote LPAR:

- ADD
- EXTRACT
- LIST
- STATFLG

Like the offline utilities, you create and submit JCL to run cross system client utilities. You specify the utility parameter either through a user exit named STCSCUSR (provided in the sample library) or through an input file named SYSIN2. These are described later in this chapter. You can also customize the return codes associated with certain messages which are generated during processing by altering entries in the STOAPIMT table (for more information, see *User Message Tables* on page 79).

There are several differences between cross system client utilities and offline utilities:

- CSCU does not support encryption or decryption.

- CSCU writes information to SYSPRINT that is similar, but not identical, to the information that the offline utilities write.
- CSCU does not support User Exits, except for the STCSCUSR exit that provides input parameters.
- CSCU supports the End-of-Batch and Wake Up Terminate application agents for added batches.
- CSCU permits user data associated with the USERRCD parameter to be in any case, except for "&" variables used for symbolic substitution, which must be upper case.
- CSCU flags added batches as "API Added" in $$DIRectory and similar displays.
- CSCU does not support file-oriented I/O.
- CSCU does not support AUTOSEND.
- CSCU does not support all of the parameters used by the corresponding STOUTL utilities. See the next section, *CSCU/STOUTL Parameter Cross-References* on page 160. These exceptions are also noted in Appendix A, *Offline Utility Parameters*.
- CSCU does not support the short form for all parameters. If the short form for a particular parameter cannot be used by CSCU, this exception is noted in Appendix A, *Offline Utility Parameters*.

CSCU/STOUTL Parameter Cross-References

The following tables indicate which STOUTL parameters are valid for use with CSCU for the ADD, EXTRACT, LIST, and STATFLG utilities. A blank under the CSCU column indicates that particular parameter cannot be used with the CSCU utility in question.

ADD Utility		
Parameter	**STOUTL**	**CSCU**
APPEND_CHAR	X	X
AUTOSEND	X	
BATCHID	X	X
BATCHIDV	X	X
EMPTY_BATCH	X	X
ENCR	X	
FORMAT	X	X
ID	X	X
IGNORE_VBQ_DISALLOW	X	
IGNORE_TRANSPARENT	X	X

ADD Utility		
Parameter	**STOUTL**	**CSCU**
INFILE	X	
KEEPADD	X	X
LOG	X	X
MULTXMIT	X	X
PADCHAR	X	
RDW	X	X
REMOVECOL	X	
REMOVEVAL	X	
SPLITCOUNT	X	X
STRUCTURE	X	X
TRANSMITONCE	X	X
USERRCD	X	X
VBQ	X	X
VBQRECSIZE	X	
VPF	X	

The following table identifies the STOUTL EXTRACT utility parameters that are valid with the CSCU program.

EXTRACT Utility		
Parameter	**STOUTL**	**CSCU**
BATCHID	X	X
BATCHNUM	X	X
CASE_SENSITIVE	X	X
DECR	X	
FORMAT	X	X
FROMDATE	X	X
FROMTIME	X	X
GPLUS	X	X

EXTRACT Utility		
Parameter	**STOUTL**	**CSCU**
ID	X	X
IGNORE_VBQ_DISALLOW	X	
LOG	X	X
MAX_RECSEP_CX	X	X
MAXBATCH	X	X
ONEBATCH	X	X
OUTFILE	X	X
PADCHAR	X	X
PCC	X	X
RDW	X	X
RECSEP	X	X
RECSEPIN	X	X
REMOVECOL	X	
REMOVEVAL	X	
DELETE	X	X
STATOR	X	X
STATUS	X	X
TODATE	X	X
TOTIME	X	X
TRANSPARENT	X	X
USERRCD	X	X
VBQ	X	X
VPF	X	
WILD_CARD	X	X
WILD_CARD_MULTI_CHAR	X	X
WILD_CARD_SINGLE_CHAR	X	X
WRAP		X
ZERO_LENGTH_RECORD	X	X

The following table identifies the STOUTL LIST utility parameters that are valid with the CSCU program.

LIST Utility		
Parameter	**STOUTL**	**CSCU**
BATCHID	X	X
BATCHNUM	X	X
CASE_SENSITIVE	X	X
DETAIL	X	
FORMAT	X	X
FROMDATE	X	X
FROMTIME	X	X
ID	X	X
MAXBATCH	X	X
STATOR	X	X
STATUS	X	X
TODATE	X	X
TOTIME	X	X
VBQ	X	X
VPF	X	
WILD_CARD	X	X
WILD_CARD_MULTI_CHAR	X	X
WILD_CARD_SINGLE_CHAR	X	X

The following table identifies the STOUTL STATFLG utility parameters that are valid with the CSCU program.

STATFLG Utility		
Parameter	**STOUTL**	**CSCU**
BATCHID	X	X
BATCHNUM	X	X

STATFLG Utility		
Parameter	**STOUTL**	**CSCU**
CASE_SENSITIVE	X	X
ID	X	X
FORMAT	X	X
FROMDATE	X	X
FROMTIME	X	X
MAXBATCH	X	X
OFFFLAGS	X	X
ONFLAGS	X	X
STATOR	X	X
STATUS	X	X
TODATE	X	X
TOTIME	X	X
VBQ	X	X
VPF	X	
WILD_CARD	X	X
WILD_CARD_MULTI_CHAR	X	X
WILD_CARD_SINGLE_CHAR	X	X

CSCU Setup

This section describes the following topics:

- VTAM setup
- CSCU Parameter setup

VTAM Setup

CSCU requires a VTAM LU 6.2 connection from the remote LPAR to Sterling Connect:Enterprise. You must make the following VTAM definitions in the VTAM list for CSCU:

- You must define a local VTAM ACB for CSCU that starts an LU 6.2 conversation between the remote LPAR and Sterling Connect:Enterprise.

The following is a sample local VTAM ACB definition:

```
                                                                      72
MBXLP000 APPL  ACBNAME=MBXLP000,          CROSS SYSTEM CLIENT 1       X
               AUTH=ACQ,                                              X
               APPC=YES,                                              X
               PARSESS=YES,                                           X
               VPACING=7,                                             X
               AUTOSES=6,                                             X
               DLOGMOD=TESTLU62,                                      X
               DMINWNL=3,                                             X
               DMINWNR=3,                                             X
               DRESPL=ALLOW,                                          X
               DDRAINL=ALLOW,                                         X
               DSESLIM=12,                                            X
               MODETAB=MODEAPPC
```

- You must define a local VTAM Logon Mode Table for CSCU. The following is an example table:

```
                                                                      72
LU 6.2    MODEENT   LOGMODE=TESTLU62,FMPROF=X'13',TSPROF=X'07',       X
               SECPROT=X'B0',COMPROT=X'D0B1',RUSIZES=X'8989',         X
               PRIPROT=X'B0',PSERVIC=X'060200000000000000000300'
SNASVCMG MODEENT   LOGMODE=SNASVCMG,FMPROF=X'13',TSPROF=X'07',       X
               SECPROT=X'B0',COMPROT=X'D0B1',RUSIZES=X'8585',         X
               PRIPROT=X'B0',PSERVIC=X'060200000000000000000300'
         MODEND
```

CSCU Parameter Setup

The SYSIN2 sequential file contains parameters used when you start CSCU. These are also known as preprocessing parameters. The following table lists these parameters:

Parameter	Description
SYSINDD	The DD name of the control input file that specifies the function to execute and the supporting values. Contains 80-character input control records that describe the offline utility and its parameters. The SYSIN control record formats vary by offline utility. This parameter is required. The default is SYSIN.
PRINTDD	The DD name of the sequential output file used by the CSCU EXTRACT function to process batches with print carriage control. This parameter is required if the output is sent to print. The default is PRINT
INPUTDD	The DD name of the sequential input file used by the ADD function. The input file can be any fixed, variable, or undefined-length sequential file with a maximum record length of 32,620 characters. This parameter is required. The default is INPUT
OUTPUTDD	The DD name of the sequential output file used by the CSCU EXTRACT function. The output file can be any fixed, variable, or undefined-length sequential file with a maximum record length of 32,620 characters. This parameter is required. The default is OUTPUT.

Parameter	Description
SYSPRTDD	The DD name of the file to contain a printout of all SYSIN control records and error messages for the run. This parameter is required. The default is SYSPRINT.
LOGFILDD	The DD name of the sequential output log file used by the ADD and EXTRACT functions when the LOG=YES parameter is specified in the function. The log file characteristics are DSORG=PS, LRECL=1024, RECFM=FB. **Note:** If you use the LOGFILE DD records file for STOUTL post-processing in custom-written programs, modify the programs to reference the long Batch ID to accommodate 64-characters. For more information, see the information on the LOGFILE in *Offline Utilities Files* on page 76.
REPORTS	Contains 172-character output report records that detail the operation of the requested offline utility function. The last page of the report always contains a job condition code and completion message concerning the success or failure of the run. The following three reporting formats are available for the REPORTS DD (depending on the report format being used, the required minimum LRECL value is either 132 or 172): ◆ FORMAT=1 uses LRECL=132 (one detail line; displays the first 24 characters of the Batch ID) ◆ FORMAT=1X uses LRECL=172 (one detail line extended; displays the full 64 character Batch ID) ◆ FORMAT=2 uses LRECL=132 (two detail lines; displays the 1st line same as FORMAT=1 and a second line with only the full 64 character Batch ID, aligned below the 24 character Batch ID on line one. If you do not use the extended report format (1X), you can change the LRECL value to 132 in the JCL to save 40 bytes per output line. For more information on report formats, see *STOUTL Reports* on page 82. For more information on the FORMAT= parameter, see Appendix A, *Offline Utility Parameters*. For more information on report formats, see *Customizing the Layout of Reports* on page 82.
SNAPOUDD	The DD name of the file that contains a printout of storage. It is used to diagnose problems and identify special conditions. This parameter is optional. The default is SNAPOUT.
LOCAPPL	The local (CSCU) VTAM APPL ACB name (created in *VTAM Setup* on page 164). This parameter is required. There is no default.
MBAPPL	The Sterling Connect:Enterprise VTAM ACB name. This is the value in the Sterling Connect:Enterprise APPCAPPL ODF parameter. This parameter is required. There is no default.
LOGMODNM	The name of the VTAM logmode table that describes the LU 6.2 session characteristics. This parameter is required. There is no default.
MBOXUID	The 8-character Sterling Connect:Enterprise user ID. This parameter is required if you use the Security Interface. There is no default.
MBOXPWD	The 8-character Sterling Connect:Enterprise password. This parameter is required if you use the Security Interface. The default is PASSWORD.
MBNAME	The value in the MBXNAME ODF parameter. This parameter is optional. The default is MAILBOX.

Observe the following preprocessing parameter conventions:

- Specify each parameter as a separate record in the input file, beginning in the first position of the record.
- Specify parameter names in any case or mix of cases.
- You do not have to specify continuation or punctuation.
- An asterisk in the first non-blank position of the record indicates comments, and does not affect CSCU execution.
- To specify the report format depending on the length of your User Batch ID, use the FORMAT=1|1X|2 parameter in the SYSIN file. For more information and to see sample report output, see *Customizing the Layout of Reports* on page 82. To use the same report format for all CSCU functions, specify the CSC_DEFAULT_REPORTS_FORMAT parameter in the ODF *OPTIONS record . For more information, see the *IBM Sterling Connect:Enterprise for z/OS Administration Guide*.

You can specify or override the SYSIN2 parameter values by:

- Supplying the correct values in the SYSIN2 file.
- Adding override cards to the CSCU JCL.
- Using the optional STCSUSR user exit.

Running CSCU

To run CSCU, create and submit the JCL to run CSCU. See the description of the individual CSCU utilities beginning on page 169 for JCL examples.

After you submit the JCL, CSCU displays, on SYSOUT2, the default values for preprocessing parameters. CSCU then loads the STCSCUSR user exit, if available. If the load is successful, CSCU overrides any preprocessing values with the STCSUSR exit values. CSCU displays any changed parameters on SYSOUT2.

CSCU then reads any parameter overrides from SYSIN2. If overrides exist, CSCU lists them on SYSOUT2.

The following is an example of the SYSOUT2 display:

```
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)           PAGE: 0001
                                          PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
    SYSINDD=SYSIN
    PRINTDD=PRINT
    INPUTDD=INPUT
    OUTPUTDD=OUTPUT
    SYSPRTDD=SYSPRINT
    LOGFILDD=LOGFILE
    SNAPOUDD=SNAPOUT
    LOCAPPL=
    MBAPPL=
    LOGMODNM=
    MBOXUID=
    MBOXPWD=????????   -
    MBNAME=MAILBOX

STCSC000 - PARM VALUES AFTER EXIT:
    LOGFILDD=USRLOG

 THESE DEFAULTS MAY BE CHANGED BY THE FOLLOWING OVERRIDE CARDS...

       SYSINDD=SYSINXXX                                                  00150004  *OVERRIDES DEFAULT
       PRINTDD=PRINT                                                     00160004    *NO CHANGE*
       INPUTDD=INPUT                                                     00170004    *NO CHANGE*
       OUTPUTDD=OUTPUT                                                   00180004    *NO CHANGE*
       SYSPRTDD=SYSPRINT                                                 00190004    *NO CHANGE*
       LOGFILDD=LOGFILE                                                  00200004  *OVERRIDES USER EXIT
       SNAPOUDD=SNAPOUT                                                  00210004    *NO CHANGE*
       LOCAPPL=MBXLP                                                     00220007  *OVERRIDES DEFAULT
       MBAPPL=MBXDRDRC                                                   00230006  *OVERRIDES DEFAULT
       LOGMODNM=TESTLU62                                                 00240004  *OVERRIDES DEFAULT
       MBOXUID=RRAIN1                                                    00250004  *OVERRIDES DEFAULT
       MBOXPWD=????????                                                  00260004  *OVERRIDES DEFAULT, ACTUAL TEXT
OVERLAYED
       *TPBUFSZ=...                                                      00270004  ***COMMENT***
       MBNAME=MBXDRDR                                                    00280006  *OVERRIDES DEFAULT

  14 PARM OVERRIDES READ.
   7 PARM OVERRIDES USED.

*** PREPROCESSING SUCCESSFULLY COMPLETED. EXECUTION CONTINUES.
```

CSCU executes the requested functions (ADD, EXTRACT, LIST or STATFLG), then terminates.

Syntax Rules

Follow these general syntax rules to run the CSCU utilities:

Rule	Description
Input Records	Commands and parameters are read through 80-byte SYSIN records. One command or parameter is allowed per 80-byte record. Specify the utility name first, followed by the parameters that are used by that utility, until you reach the end of the file or specify another utility command.
Comments	An asterisk (*) in column one of the 80-byte record denotes that the record holds comments only. Any data specified after the command, or parameter and parameter value on the 80-byte record is considered a comment.

Rule	Description
Case Sensitivity	If a parameter is not specified as being case sensitive, you can use uppercase, lowercase, or mixed-case text without causing a change in processing.
Utility Names	Spell out the entire name of the utility.
Parameter Names	You can abbreviate most parameters to a single character, unless more characters are needed to make it unique from similarly named parameters. No blanks are permitted between parameter names and their values.

CSCU ADD

Run the CSCU ADD to add batches of data to the VSAM batch files for transmission across systems. Supply the input data in a sequential input file or in a member of a partitioned data set.

Sterling Connect:Enterprise selects the VBQ to hold the added batches by one of the following:

- If the VBQ parameter is specified, the specified VBQ is used. However, if the specified VBQ is not currently allocated to online Sterling Connect:Enterprise or if Sterling Connect:Enterprise is no longer running and the VBQ was not allocated when Sterling Connect:Enterprise came down, a warning message is issued.
- If the VBQ parameter is not specified, the current collection VBQ is selected.

Batches added to the VSAM batch files are identified by a Mailbox ID (ID) and an optional user batch ID (BATCHID). Supply these batch identifiers in the ADD utility control records or in the data added to the VSAM batch file.

Multiple Transmission Attributes

There are two reasons to assign a batch a multiple transmission attribute:

- Sending a batch to one or more remote sites multiple times. This can be a broadcast batch or a batch containing header information that precedes data batches. It can also be a batch that contains SIGNON or other session startup information.

  Transmit a batch created in this way as many times as needed without resetting any status flags. The same remote can request the batch several times if needed. To accomplish this:

  - Add the batch with MULTXMIT=YES.
  - Assign an ID to the batches that correspond to the remote sites that request the batch, or assign a common ID to the batch.

  Note: Do not assign an ID equal to an Auto Connect list name that may process this batch. This causes the processing to occur as defined in the option following.

- Sending a batch to several remote sites as part of an Auto Connect session, but only sending it once to each remote. To accomplish this:

- Assign an ID to the batch that matches the remote name in the Auto Connect list name that is processing the batch.
- Specify MULTXMIT=YES when adding the batch to the VSAM Batch Queues.

  For batches created in this way, and transmitted through an Auto Connect session, the multiple transmission attribute is cancelled after the Auto Connect session processes it. This creates a one-time broadcast batch.

Note: The multiple transmit attribute is cancelled, even if the transmission to one or more remote sites is unsuccessful. To retransmit the batch to all remote sites, use the STATFLG utility to turn off the T flag, then reactivate the Auto Connect session.

Multiple Batches in a Single ADD Offline Utility

There are two ways to create multiple batches:

- ADD control records containing SPLITCOUNT with a single batch ADD.
- $$ADD records embedded in the input file.

SPLITCOUNT with Single Batch ADD

This function enables you to split a large sequential input file into smaller batches with the same batch identifiers. This option is controlled entirely by ADD control records. You must specify ADD, ID, and SPLITCOUNT. You can optionally supply BATCHID and MULTXMIT.

For example, use the following ADD control records to add 3,500 data records in batches of 1,000 records:

```
ADD
     ID=xxxxxxxx
     BATCHID='xxx.xxx'
     SPLITCOUNT=1000
```

The ADD offline utility creates four batches of 1000, 1000, 1000 and 500 records, with identical batch identifiers and four different batch numbers. The ADD output report displays status for all four batches.

$$ADD Records Embedded in an Input File

You can split a sequential input file into several batches under the control of one or more $$ADD records embedded in the sequential input file. The $$ADD record syntax is similar to an online $$ADD from a remote site, allowing unique batch identifiers for each batch.

You must supply the $$ADD record in the sequential input file. There is no limit to the number of $$ADD records, but at least one $$ADD record must be the first record in the data.

When you use this function, the ADD control records must contain a single ADD control record and no batch identifiers (ID and BATCHID). You must supply all batch identifiers in the embedded $$ADD records. Other specified ADD parameters are valid. The $$ADD records parameters override those in the ADD SYSIN.

For example, the following is required:

```
ADD
VPF='test.vpf'
```

The ADD utility adds batches from the input file. Batch identifiers are obtained from the $$ADD records in the file. The sequential input file must contain the $$ADD records. $$ADD records embedded in the sequential input file must observe the following rules:

- Start the $$ADD in the first position of the record.
- Specify both the ID=xxxxxxxx and the BATCHID='xxx...xxx' parameters on the $$ADD record. If a valid ID is not found, the record is treated as data. If BATCHID='xxx...xxx' is not specified, it defaults to a value of 'NONE'.When this occurs, the ADD ends with a condition code X '04' and a warning message.
- Specify MULTXMIT=Y or N. The default is MULTXMIT=N (no multiple transmit).
- Separate each parameter by blanks. All fields in the $$ADD records ($$ADD, ID, BATCHID, and MULTXMIT) must be in the first 80 characters of a record, as a single record.

ADD Input Control Records

The SYSIN file contains the input control records for the CSCU ADD. The following are the valid CSCU ADD control records:

```
ADD
     APPEND_CHAR=xxx....xxx  or ='xxx...xxx' or ="xxx...xxx" or =0Xhh....hh
     BATCHID='xxx...xxx'
     BATCHIDV
     EMPTY_BATCH=ALLOW|DISALLOW
     FORMAT=1|1X|2
     ID=xxxxxx
     IGNORE_TRANSPARENT
     KEEPADD
     LOG=YES|NO
     MULTXMIT=YES|NO
     RDW=KEEP|REMOVE
     SPLITCOUNT=nnnn
     STRUCTURE= FILE
     TRANSMITONCE=YES|NO
     USERRCD=1 to 9,E
     VBQ=nn
```

See Appendix A, *Offline Utility Parameters*, for parameter descriptions.

Generic user batch IDs, batch numbers, or generic Mailbox IDs are not allowed for the CSCU ADD. If ID and BATCHID are not specified, Sterling Connect:Enterprise assumes that all control information is provided by $$ADD control commands imbedded in the batch data. Include the ID if BATCHID is specified. Specify only a single VBQ number.

ADD Utility Sample JCL

The following sample JCL executes the CSCU ADD. A sample ADD is also in the CSCADD member in the EXAMPLE library.

```
//ADD      JOB   ....  AS REQUIRED BY YOUR SITE
//CSC      EXEC PGM=STCSC000,REGION=4096K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//INPUT    DD   DISP=SHR,DSN=ENTPRS.INPUT
//LOGFILE  DD   DISP=SHR,DSN=ENTPRS.LOG
//OUTPUT   DD   DISP=SHR,DSN=ENTPRS.OUTPUT
//SNAPOUT  DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSOUT2  DD   SYSOUT=*
//SYSUDUMP DD   SYSOUT=*
//*
//SYSIN2   DD   DATA,DLM=XX
LOCAPPL=CORP1                    LOCAL APPLID
MBAPPL=CORP2                     REMOTE APPLID
LOGMODNM=TSTLU62B                LOGMODE TABLE NAME
XX
//SYSIN    DD   DATA,DLM=ZZ
   add
       id=TESTMJD1
ZZ
//
```

The following table explains the JCL parameters:

Parameter	Description
STEPLIB	The load library name.
INPUT	The DD name of the sequential input file used only by the CSCU ADD. The input file can be any fixed, variable, or undefined-length sequential file with a maximum record length of 32,620 characters.
LOGFILE	The DD name of the sequential output log file used by CSCU ADD and CSCU EXTRACT when the LOG=YES parameter is specified in the function. The log file characteristics are DSORG=PS, LRECL=1024, RECFM=FB.
OUTPUT	The DD name of the sequential output file used only by the CSCU EXTRACT. The output file can be any fixed, variable, or undefined-length sequential file with a maximum record length of 32,620 characters.
SNAPOUT	The DD name of the file containing a printout of storage, that is used to diagnose problems and identify special conditions.
SYSPRINT	The DD name of the file that contains a printout of all SYSIN control records and error messages for the run.
SYSOUT2	The DD name of the file that contains any preprocessing messages.
SYSUDUMP	The DD name of the file that contains system dump information
SYSIN2	The DD name of the file that contains default CSCU parameters.

Parameter	Description
SYSIN	The DD name of the control input file that specifies the function to execute and the supporting values.
LOCAPPL	The local (CSCU) VTAM APPL ACB name (created in *VTAM Setup* on page 164).
MBAPPL	The Sterling Connect:Enterprise VTAM ACB name. This is the value in the Sterling Connect:Enterprise APPCAPPL ODF parameter.
LOGMODNM	The name of the VTAM logmode table that describes the LU 6.2 session characteristics.

ADD Output Report

The CSCU ADD creates a two stage report:

- Information from the preprocessing stage is written to SYSOUT2. This part of the report details any parameter overrides that occurred in the preprocessing stage.
- Information from the utility execution stage is written to SYSPRINT. This information lists control information accumulated during the ADD utility. Input file characteristics are provided, including the record format (fixed or variable), record size, block size of the INFILE data set, the INFILE DD name used, and whether control information came from the SYSIN file or from $$ADD cards embedded in the input file.

The following is a sample CSCU ADD report:

```
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001
                                      PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
    SYSINDD=SYSIN
    PRINTDD=PRINT
    INPUTDD=INPUT
    OUTPUTDD=OUTPUT
    SYSPRTDD=SYSPRINT
    LOGFILDD=LOGFILE
    SNAPOUDD=SNAPOUT
    LOCAPPL=
    MBAPPL=
    LOGMODNM=
    MBOXUID=
    MBOXPWD=????????              - ACTUAL TEXT OVERLAYED
    MBNAME=MAILBOX

 THESE DEFAULTS MAY BE CHANGED BY THE FOLLOWING OVERRIDE CARDS...

        sysINdd=SYSinXXX                          00150017  *OVERRIDES DEFAULT
        PRINTDD=PRINT                             00160017    *NO CHANGE*
        INPUTDD=INPUT                             00170017    *NO CHANGE*
        OUTPUTDD=OUTPUT                           00180017    *NO CHANGE*
        SYSPRTDD=SYSPRINT                         00190017    *NO CHANGE*
        LOGFILDD=LOGFILE                          00200017    *NO CHANGE*
        SNAPOUDD=SNAPOUT                          00210017    *NO CHANGE*
        LOCAPPL=MBXLP                             00220043  *OVERRIDES DEFAULT
        MBAPPL=SBLDUB75                           00230042  *OVERRIDES DEFAULT
        LOGMODNM=TESTLU62                         00240017  *OVERRIDES DEFAULT
        MBNAME=CAUC75                             00250030  *OVERRIDES DEFAULT
        MBOXUID=*                                 00260020  *OVERRIDES DEFAULT
        MBOXPWD=????????                          00270040  *OVERRIDES DEFAULT, ACTUAL TEXT OVERLAYED
       *TPBUFSZ=                                  00280020  *** COMMENT ***

  14 PARM OVERRIDES READ.
   7 PARM OVERRIDES USED.

*** PREPROCESSING SUCCESSFULLY COMPLETED. EXECUTION CONTINUES.
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001

CMA100 -- CONTROL RECORDS FOR THIS RUN:

==========>>>    ADD                                                                  00310046 <<<==========
==========>>>      ID=TSTSRCMV                                                        00320046 <<<==========
==========>>>      BID='SRC'                                                          00330046 <<<==========
==========>>>      LOG=YES                                                            00340046 <<<==========
==========>>> *    SNAPS=YES                                                          00350046 <<<==========
==========>>> *  STATFLG                                                            00370012 <<<==========
==========>>> *  EXTRACT                                                            00380046 <<<==========
==========>>> *  LIST                                                               00390046 <<<==========
==========>>> *    ID=*                                                             00400046 <<<==========

***  INPUT  FILE CHARACTERISTICS:

     RECORD FORMAT  : F,B
     RECORD SIZE    :      80
     BLOCK SIZE     :  27,920
     INFILE  DDNAME : INPUT      DSN: MBXDEV.V320RDR.ASMNR                    MEMBER:STCSC000
     LOCAL ACBNAME  : MBXLP000
     C:M ACB NAME   : SBLDUB75

REQ     MAIL BOX ------ MAIL BOX ------   -BATCH-   BYTES     INFILE    REQUESTS   BYTES     OUTFILE   RESPONSES  --ELASPED TIMES---
TYPE    -- ID -- ------ BATCH ID ------   - NUM - -- SENT -- -RECORDS-- - SENT - -- RCVD -- -RECORDS-- -- RCVD -- ----IN SECOND'S---

ADD     TSTSRCMV SRC                     0000002   72,360        879        3        348          0          1        1.13      1.12

CMA127 --  FUNCTION SUCCESSFULLY PROCESSED. CONDITION CODE = 00.
```

The report lists the following information:

Field	Description
REQ TYPE	The requested CSCU function: ADD, EXTRACT, LIST, or STATFLG.

Field	Description
MAILBOX ID	The 1–8 character Mailbox ID.
MAILBOX BATCH ID	The 1–64 character user-assigned batch identifier.
BATCH NUM	The unique 7-digit number assigned to the batch.
BYTES SENT	The number of bytes sent to Sterling Connect:Enterprise.
INFILE RECORDS	The number of records sent from Sterling Connect:Enterprise to CSCU.
REQUESTS SENT	The number of requests sent to Sterling Connect:Enterprise.
BYTES RCVD	The number of bytes received from Sterling Connect:Enterprise.
OUTFILE RECORDS	The number of records sent to Sterling Connect:Enterprise.
RESPONSES RCVD	The number of responses received from Sterling Connect:Enterprise.
ELAPSED TIMES	The time required to complete the function, expressed in seconds.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

CSCU EXTRACT

CSCU EXTRACT extracts batches from the VSAM batch files. Batches are extracted to a fixed length or variable length sequential output file or to a member of a PDS. Knowledge of the control record input options and the output reporting messages ensures proper EXTRACT utility use.

If multiple batches are selected, the batch data for all batches is concatenated and extracted to the output file. Override this feature with ONEBATCH=YES if you want to extract only a single batch for an ID. If you use this override, only the first batch selected is extracted.

Caution: Only 512 OUTFILE data sets are allocated during the execution of a single offline utilities step. This does not limit the number of batches that can be extracted, only the number of output files. If you need to extract data to more than 512 output files, divide the execution into multiple job steps.

When data is sent to the host computer from remote sites, the remote can optimize the data communications lines by compressing, truncating, and blocking records. Also, the remote site may have inserted transmission control characters that must be removed before data manipulation. These functions are handled automatically in the EXTRACT utility.

Record Separators

Default record separators are based on the media type assigned to the batch. Default EXTRACT processing recognizes the following record separators:

Media Type	Record Separators
Transmission Exchange (EX)	X'1E' End of nonspanned RU
Basic Exchange (BX)	X'1E'
Card Punch (PU)	X'1E' X'1F' X'15' X'0C' X'0D' End of nonspanned RU
Printer (PR)	X'1E' X'1F' X'15' X'0C' X'0D' End of nonspanned RU
Console (CN)	X'1E' X'15' End of nonspanned RU

Note: Sterling Connect:Enterprise recognizes more record separators then is normally allowed for each media type. This provides greater flexibility during EXTRACT processing. To strictly adhere to the record separators defined to each media type, use the RECSEP parameter.

Batch Extraction

If the batch selected for extraction was identified as print media during collection and a PRINT data set is allocated, it is extracted to the PRINT data set. If no PRINT data set is allocated, the batch is extracted to the OUTPUT data set.

As each batch is extracted from the VSAM batch files, the batch status flags are set to an E status. The E status does not prevent a subsequent EXTRACT utility from re-extracting the batch. To prevent subsequent batch extraction, specify DELETE=YES on the EXTRACT control records. When a batch is flagged with both E and D flags, future extracts by Mailbox ID and Batch ID do not access the batch.

When a batch contains transparent data, Sterling Connect:Enterprise does not examine the data for control characters (inter-record separators). This places some restrictions on transparent data extraction. The VSAM batch record size must be an even multiple of the sequential output file record size. Sterling Connect:Enterprise deblocks the VSAM batch based on the record size of the output file.

Fatal errors halt the EXTRACT. All batches extracted to that point are flagged as extracted and, optionally, flagged as deleted.

By default, EXTRACT does not process incomplete batches. To extract a batch marked incomplete, specify either the STATUS parameter, the STATOR parameter, or the BATCHNUM parameter.

EXTRACT Input Control Records

The following control records are valid for the CSCU EXTRACT:

```
EXTRACT
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     GPLUS=YES
     ID=xxxxxxxx
     LOG=YES|NO
     MAX_RECSEP_CX=0|nnnnnn
     MAXBATCH=nnnnnnn
     ONEBATCH=YES
     PADCHAR=Xnn
     PCC=KEEP|REMOVE|CONVERT
     RDW=BUILD|NOBUILD
     RECSEP=Xnn[,nn,...nn]|Tnnnnn|Cnnnnnn
     RECSEPIN=NO|YES
     DELETE=YES
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     TRANSPARENT=YES|NO|BOTH
     USERRCD=1 to 9,E
     VBQ=nn[-nn]
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
     WRAP=NO|YES
```

See Appendix A, *Offline Utility Parameters*, for parameter descriptions.

EXTRACT Utility Sample JCL

The following sample JCL executes a CSCU EXTRACT. A sample EXTRACT is also in the CSCEXT member in the EXAMPLE library.

```
//EXTRACT  JOB   ....  AS REQUIRED BY YOUR SITE
//CSC      EXEC PGM=STCSC000,REGION=4096K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//LOGFILE  DD   DISP=SHR,DSN=ENTPRS.LOG
//OUTPUT   DD   DISP=SHR,DSN=ENTPRS.OUTPUT
//SNAPOUT  DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSOUT2  DD   SYSOUT=*
//SYSUDUMP DD   SYSOUT=*
//*
//SYSIN2   DD   DATA,DLM=XX
LOCAPPL=CORP1                    LOCAL APPLID
MBAPPL=CORP2                     REMOTE APPLID
LOGMODNM=TSTLU62B                LOGMODE TABLE NAME
XX
//SYSIN    DD   DATA,DLM=ZZ
   extract
       id=*
ZZ
//
```

See *ADD Utility Sample JCL* on page 172 for a description of the JCL parameters.

EXTRACT Output Reports

The CSCU EXTRACT creates a two stage report:

- Information from the preprocessing stage is written to SYSOUT2. This part of the report details any parameter overrides that occurred in the preprocessing stage.
- Information from the utility execution stage is written to SYSPRINT. This information lists control information accumulated during the EXTRACT. Output file characteristics are provided, including the record format (fixed or variable), record size, block size of the OUTFILE data set and the OUTFILE DD name used.

The following is a sample CSCU EXTRACT report:

```
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001
                                                PARAMETER OVERRIDE PROCESSING LOG
*** CROSS SYSTEM CLIENT PARM VALUES:
    SYSINDD=CSCTF001
    PRINTDD=PRINT
    INPUTDD=INPUT
    OUTPUTDD=OUTPUT
    SYSPRTDD=SYS00001
    LOGFILDD=LOGFILE
    SNAPOUDD=SNAPOUT
    LOCAPPL=
    MBAPPL=
    LOGMODNM=
    MBOXUID=
    MBOXPWD=????????              - ACTUAL TEXT OVERLAYED
    MBNAME=MAILBOX
** END OF CROSS SYSTEM CLIENT PARM VALUES ***
NOTE: *** VALUES MAY BE ALTERED BY THESE OVERRIDES:
       ************** this job is from control stream "x1" ************       00210000  *** COMMENT ***
       * sysINdd=csctf001      COMMENT                                       00220000  *** COMMENT ***
       * PRINTDD=PRINT                                                       00230000  *** COMMENT ***
         OUTPUTDD=OUTPUT                                                     00250000    *NO CHANGE*
       * INPUTDD=INPUT                                                      00250000  *** COMMENT ***
       * SYSPRTDD=sys00001                                                  00260000  *** COMMENT ***
         LOGFILDD=LOGFILE                                                    00270000    *NO CHANGE*
         SNAPOUDD=SNAPOUT                   mixed-case parmid                00280000    *NO CHANGE*
         LOCAPPL=MBICO                                                       00291004  *OVERRIDES DEFAULT
         MBAPPL=SBLDUB88                                                     00301000  *OVERRIDES DEFAULT
         LOGMODNM=TESTLU62                                                   00310000  *OVERRIDES DEFAULT
         MBNAME=E100                                                         00320000  *OVERRIDES DEFAULT
       * MBOXUID=*                                                          00330000  *** COMMENT ***
       * MBOXPWD=SECRET                                                     00340000  *** COMMENT ***
       *TPBUFSZ=                                                           00350000  *** COMMENT ***
    15 PARM OVERRIDES READ.
     4 PARM OVERRIDES USED.
*** PREPROCESSING OK; EXECUTION CONTINUES.
 FUNCTION    #1 IS EXTRACT    #1 IN RECORD    #2
*** ISOLATED FUNCTION:
+-------------------------------------------------------------------------------+
|************** this job is from control stream "x1" ************       00380000|  ***   1
|   EXTRACT                                                                     00410000|  ***   2
|     ID=ADD                                                                    00420005|  ***   3
|     BATCHNUM=6                                                                00430005|  ***   4
|     LOG=YES                                                                   00450000|  ***   5
+-------------------------------------------------------------------------------+
**** END OF JOB:NORMAL TERMINATION *****
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001
CMA100I - CONTROL RECORDS FOR THIS RUN:
============>>    EXTRACT                                                      00410000 <<<==========
============>>      ID=ADD                                                     00420005 <<<==========
============>>      BATCHNUM=6                                                 00430005 <<<==========
============>>      LOG=YES                                                    00450000 <<<==========
***  OUTPUT FILE CHARACTERISTICS:
     RECORD FORMAT  : F,B
     RECORD SIZE    :      80
     BLOCK SIZE     :   6,320
     OUTFILE DDNAME : OUTPUT     DSN: TEST1.PDS.CNTL                          MEMBER:TESTCSC
     LOCAL ACBNAME  : MBICO000
     C:M ACB NAME   : SBLDUB88

REQ     MAIL BOX ------ MAIL BOX ------   -BATCH-   BYTES     INFILE    REQUESTS   BYTES     OUTFILE   RESPONSES  --ELASPED TIMES---
TYPE    -- ID -- ------ BATCH ID ------   - NUM - -- SENT -- -RECORDS-- - SENT - -- RCVD -- -RECORDS-- -- RCVD -- ----IN SECOND'S---

EXTRACT ADD      ADDED OFFLINE            0000006        490          0        2      1,558         12          2     0.22      0.22

CMA127I -  FUNCTION SUCCESSFULLY PROCESSED. CONDITION CODE = 00.
```

The report lists the following information:

Field	Description
REQ TYPE	The requested CSCU function: ADD, EXTRACT, LIST, or STATFLG.
MAILBOX ID	The 1–8 character Mailbox ID.

Field	Description
MAILBOX BATCH ID	The 1–64 character user-assigned batch identifier.
BATCH NUM	The unique 7-digit number assigned to the batch.
BYTES SENT	The number of bytes sent to Sterling Connect:Enterprise.
INFILE RECORDS	The number of records received from Sterling Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Sterling Connect:Enterprise.
BYTES RCVD	The number of bytes received from Sterling Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from Sterling Connect:Enterprise.
ELAPSED TIMES	The time required to complete the function, expressed in seconds.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

CSCU LIST

The CSCU LIST produces a formatted report of all batches in the VSAM batch files that meet selection criteria. You can produce either a detail or summary report.

LIST Input Control Records

The SYSIN file contains the input control records for the CSCU LIST. The following control records are valid for the CSCU LIST:

```
LIST
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     ID=xxxxxxxx
     MAXBATCH=nnnnnnn
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn [-nn]
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

See Appendix A, *Offline Utility Parameters*, for parameter descriptions.

LIST Utility Sample JCL

The following sample JCL executes the CSCU. A sample LIST is also in the CSCLIST member in the EXAMPLE library.

```
//LIST     JOB   ....  AS REQUIRED BY YOUR SITE
//CSCU     EXEC PGM=STCSC000,REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//SNAPOUT  DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSOUT2  DD   SYSOUT=*
//SYSIN2   DD   *
LOCAPPL=DALLAS1
MBAPPL=ATLANTA2
/*
//SYSIN    DD   DATA,DLM=ZZ
                  list
                  id=*
ZZ
//
```

See *ADD Utility Sample JCL* on page 172 for a description of the JCL parameters.

LIST Output Report

The CSCU LIST creates a two stage report:

- Information from the preprocessing stage is written to SYSOUT2. This part of the report details any parameter overrides that occurred in the preprocessing stage.
- Batch information is written to SYSPRINT.

The following is a sample CSCU LIST report:

```
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001
                                          PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
    SYSINDD=SYSIN
    PRINTDD=PRINT
    INPUTDD=INPUT
    OUTPUTDD=OUTPUT
    SYSPRTDD=SYSPRINT
    LOGFILDD=LOGFILE
    SNAPOUDD=SNAPOUT
    LOCAPPL=
    MBAPPL=
    LOGMODNM=
    MBOXUID=
    MBOXPWD=????????              - ACTUAL TEXT OVERLAYED
    MBNAME=MAILBOX

 THESE DEFAULTS MAY BE CHANGED BY THE FOLLOWING OVERRIDE CARDS...

        sysINdd=SYSinXXX                                 00150017  *OVERRIDES DEFAULT
        PRINTDD=PRINT                                    00160017    *NO CHANGE*
        INPUTDD=INPUT                                    00170017    *NO CHANGE*
        OUTPUTDD=OUTPUT                                  00180017    *NO CHANGE*
        SYSPRTDD=SYSPRINT                                00190017    *NO CHANGE*
        LOGFILDD=LOGFILE                                 00200017    *NO CHANGE*
        SNAPOUDD=SNAPOUT                                 00210017    *NO CHANGE*
        LOCAPPL=MBXLP                                    00220043  *OVERRIDES DEFAULT
        MBAPPL=SBLDUB75                                  00230042  *OVERRIDES DEFAULT
        LOGMODNM=TESTLU62                                00240017  *OVERRIDES DEFAULT
        MBNAME=CAUC75                                    00250030  *OVERRIDES DEFAULT
        MBOXUID=*                                        00260020  *OVERRIDES DEFAULT
        MBOXPWD=????????                                 00270040  *OVERRIDES DEFAULT, ACTUAL TEXT OVERLAYED
       *TPBUFSZ=                                         00280020  *** COMMENT ***

  14 PARM OVERRIDES READ.
   7 PARM OVERRIDES USED.

*** PREPROCESSING SUCCESSFULLY COMPLETED. EXECUTION CONTINUES.
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0001

CMA100 -- CONTROL RECORDS FOR THIS RUN:

==========>>>    LIST                                          <<<==========
==========>>>      ID=*                                        <<<==========
     LOCAL ACBNAME  : MBXLP000
     C:M ACB NAME   : SBLDUB75
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0002
BATCH STATUS:   I=Incomplete Collection, C=Collected Online, A=Added Offline, D=Flagged For Deletion
                N=Nontransmittable, U=Unexctractable, R=Requestable, T=Transmitted, E=Extracted,  M=Multixmit,
                X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Strucure File, 1=FTP MODE Blocked,
                2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 8=FTP Structure File, 9=FTP Structure Record,
                e=Encrypted when offline added

MAILBOX  BATCH      BLOCK      RECORD           USER BATCH         TIME   DATE  VBQ         BATCH
  ID     NUMBER     COUNT      COUNT     <--- IDENTIFICATION --->  ADDED  ADDED  #  <--- STATUS FLAGS --->

CASE     0000001          21          21 TEST BATCH-CURR           13:07 2004062 01  A   R
TSTSRCMV 0000002         879         879 SRC                       16:33 2004166 01  C   R    Z

CMA175 -- TOTAL NUMBER OF BATCHES LISTED:          2

CMA127 --  FUNCTION SUCCESSFULLY PROCESSED. CONDITION CODE = 00.
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)            PAGE: 0003

REQ     MAIL BOX ------ MAIL BOX ------   -BATCH-   BYTES     INFILE    REQUESTS   BYTES     OUTFILE   RESPONSES  --ELASPED TIMES---
TYPE    -- ID -- ------ BATCH ID ------   - NUM - -- SENT -- -RECORDS-- - SENT - -- RCVD -- -RECORDS-- -- RCVD -- ----IN SECOND'S---

FINAL CNTS ADD:          0   EXTRACT:          0           0          0        0          0          0          0     0.00      0.00

CMA154 --  PROCESSING COMPLETE, HIGHEST CONDITION CODE = 00
```

The report lists the following information:

Field	Description
REQ TYPE	The requested CSCU function: ADD, EXTRACT, LIST, or STATFLG.
MAILBOX ID	The 1–8 character Mailbox ID.
BATCH NUMBER	The unique 7-digit number assigned to the batch.
BLOCK COUNT	The number of blocks in the batch.
RECORD COUNT	The number of records in the batch.
USER BATCH IDENTIFICATION	The 1–64 character user-assigned batch identifier.
TIME ADDED	The time that the batch was added.
DATE ADDED	The date that the batch was added.
VBQ #	The number of the VBQ file where the batch was placed.
VSAM Status Flags	A code describing the batch status. The codes are described on page 81.
MAILBOX ID	The 1–8 character Mailbox ID.
MAILBOX BATCH ID	The 1–64 character user-assigned batch identifier.
BATCH NUM	The unique 7-digit number assigned to the batch.
BYTES SENT	The number of bytes sent to Sterling Connect:Enterprise.
INFILE RECORDS	The number of records received from Sterling Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Sterling Connect:Enterprise.
BYTES RCVD	The number of bytes received from Sterling Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from Sterling Connect:Enterprise.
ELAPSED TIMES	The time required to complete the function, expressed in seconds.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

CSCU STATFLG Utility

The CSCU STATFLG changes the batch status flags in the VPF and VCF files. The status flags identify batch characteristics.

CSCU STATFLG can change many batches in a single run. When creating the input control records for STATFLG, be careful to only change the intended batches. The status codes you can change are documented in the ONFLAGS and OFFFLAGS parameters listed in Appendix A, *Offline Utility Parameters*.

If a batch meets all selection criteria and already has the specified status flags set, it is not processed or listed in the output report.

STATFLG Input Control Records

The SYSIN file contains the input control records for CSCU STATFLG. The following are the valid STATFLG control records:

```
STATFLG
     BATCHID='xxx...xxx'|nnnnnnnn|"yyy...yyy"
     BATCHNUM=nnnnnnn[-nnnnnnn]
     CASE_SENSITIVE=YES|NO
     ID=xxxxxxxx
     FORMAT=1|1X|2
     FROMDATE=yyddd|nnn|yyyyddd
     FROMTIME=hhmmD
     MAXBATCH=nnnnnnn
     OFFFLAGS=REQUESTABLE,DELETED,TRANSMITTED,EXTRACTED,MULTXMIT
     ONFLAGS=REQUESTABLE,DELETED,TRANSMITTED,EXTRACTED,MULTXMIT
     STATOR=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     STATUS=ADDED,BSC,COLLECTED,DELETED,EBCDIC,EXTRACTED,FILE_STRUCTURE,FTP,
        INCOMPLETE,MULTXMIT,NONTRANSMITTABLE,REQUESTABLE,SNA,SSL,TRANSPARENT,
        TRANSMITTED,UNEXTRACTABLE
     TODATE=yyddd|nnn|yyyyddd
     TOTIME=hhmmD
     VBQ=nn[-nn]
     WILD_CARD=BID,ID
     WILD_CARD_MULTI_CHAR=*|x[xxxxxxx]
     WILD_CARD_SINGLE_CHAR=%|x[xxxxxxx]
```

You must specify either ONFLAGS or OFFFLAGS and one other parameter. Both ONFLAGS and OFFFLAGS can be used in the same SYSIN file. If both are used, the flags are processed in the order specified in the input control records.

Note: If you turn on the 'M' (MULTXMIT) flag, the 'R' (REQUESTABLE) flag is automatically turned on. If you turn off the 'R' (REQUESTABLE) flag, the 'M' (MULTXMIT) flag is automatically turned off.

STATFLG Utility Sample JCL

The following sample JCL executes the CSCU STATFLG. You can combine the STATFLG input control record parameters in several ways to change the ID and BATCHID combinations.

A sample STATFLG is also in the CSCSTFLG member in the EXAMPLE library.

```
//MBSTATFL JOB   ....  AS REQUIRED BY YOUR SITE
//CSCU     EXEC PGM=STCSC000,REGION=4000K
//STEPLIB  DD   DISP=SHR,DSN=ENTPRS.LOAD
//SNAPOUT  DD   SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//SYSTERM  DD   SYSOUT=*
//PRINT    DD   SYSOUT=*
//SYSOUT2  DD   SYSOUT=*
//SYSIN2   DD   *
LOCAPPL=DALLAS1
MBAPPL=ATLANTA2
/*
//SYSIN    DD   DATA,DLM=ZZ
         statflg
         id=atlanta*
         status=delete
         offflags=deleted
ZZ
//
```

STATFLG Output Reports

CSCU STATFLG creates a two stage report:

- Information from the preprocessing stage is written to SYSOUT2. This part of the report details any parameter overrides that occurred in the preprocessing stage.
- STATFLG operation information is written to SYSPRINT.

The following is a sample CSCU STATFLG report:

```
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)           PAGE: 0001
                                        PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
    SYSINDD=SYSIN
    PRINTDD=PRINT
    INPUTDD=INPUT
    OUTPUTDD=OUTPUT
    SYSPRTDD=SYSPRINT
    LOGFILDD=LOGFILE
    SNAPOUDD=SNAPOUT
    LOCAPPL=
    MBAPPL=
    LOGMODNM=
    MBOXUID=
    MBOXPWD=????????              - ACTUAL TEXT OVERLAYED
    MBNAME=MAILBOX

 THESE DEFAULTS MAY BE CHANGED BY THE FOLLOWING OVERRIDE CARDS...

        sysINdd=SYSinXXX                              00150017  *OVERRIDES DEFAULT
        PRINTDD=PRINT                                 00160017    *NO CHANGE*
        INPUTDD=INPUT                                 00170017    *NO CHANGE*
        OUTPUTDD=OUTPUT                               00180017    *NO CHANGE*
        SYSPRTDD=SYSPRINT                             00190017    *NO CHANGE*
        LOGFILDD=LOGFILE                              00200017    *NO CHANGE*
        SNAPOUDD=SNAPOUT                              00210017    *NO CHANGE*
        LOCAPPL=MBXLP                                 00220043  *OVERRIDES DEFAULT
        MBAPPL=SBLDUB75                               00230042  *OVERRIDES DEFAULT
        LOGMODNM=TESTLU62                             00240017  *OVERRIDES DEFAULT
        MBNAME=CAUC75                                 00250030  *OVERRIDES DEFAULT
        MBOXUID=*                                     00260020  *OVERRIDES DEFAULT
        MBOXPWD=????????                              00270040  *OVERRIDES DEFAULT, ACTUAL TEXT OVERLAYED
       *TPBUFSZ=                                      00280020  *** COMMENT ***

  14 PARM OVERRIDES READ.
   7 PARM OVERRIDES USED.

*** PREPROCESSING SUCCESSFULLY COMPLETED. EXECUTION CONTINUES.
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)           PAGE: 0001

CMA100 -- CONTROL RECORDS FOR THIS RUN:

==========>>>    STATFLG                                  00370012 <<<==========
==========>>>      ID=*                                           <<<==========
==========>>>      ONFLAGS=DELETED                                <<<==========
     LOCAL ACBNAME  : MBXLP000
     C:M ACB NAME   : SBLDUB75

BATCH STATUS:   I=Incomplete Collection, C=Collected Online, A=Added Offline, D=Flagged For Deletion
                N=Nontransmittable, U=Unextractable, R=Requestable, T=Transmitted, E=Extracted,  M=Multixmit,
                X=Transparent Data, B=BSC, F=FTP, S=SNA, Z=EBCDIC, 0=Strucure File, 1=FTP MODE Blocked,
                2=FTP MODE Compressed, 3=FTP MODE Streamed, 4=SSL, 8=FTP Structure File, 9=FTP Structure Record,
                e=Encrypted when offline added

MAILBOX  BATCH      BLOCK      RECORD           USER BATCH         TIME   DATE  VBQ     NEW  BATCH
  ID     NUMBER     COUNT      COUNT     <--- IDENTIFICATION --->  ADDED  ADDED  #  <--- STATUS FLAGS --->

CASE     0000001          21          21 TEST BATCH-CURR           13:07 2004062 01  AD  R    Z
TSTSRCMV 0000002         879         879 SRC                       16:33 2004166 01  CD  R    Z

CMA176 -- NUMBER OF BATCHES CHANGED:          2 OUT OF          2

CMA127 --  FUNCTION SUCCESSFULLY PROCESSED. CONDITION CODE = 00.
------------------------------------------------- Page Break ---------------------------------------------------
DATE:  2/09/2011  TIME:  21:52:58    IBM Sterling Connect:Enterprise for z/OS CROSS LPAR UTILITY (CSC)           PAGE: 0002

REQ     MAIL BOX ------ MAIL BOX ------   -BATCH-   BYTES     INFILE    REQUESTS   BYTES     OUTFILE   RESPONSES  --ELASPED TIMES---
TYPE    -- ID -- ------ BATCH ID ------   - NUM - -- SENT -- -RECORDS-- - SENT - -- RCVD -- -RECORDS-- -- RCVD -- ----IN SECOND'S---

FINAL CNTS ADD:          0   EXTRACT:          0         0          0        0          0          0          0     0.00      0.00

CMA154 --  PROCESSING COMPLETE, HIGHEST CONDITION CODE = 00
```

The report lists the following information:

Field	Description
REQ TYPE	The requested CSCU function: ADD, EXTRACT, LIST, or STATFLG.
MAILBOX ID	The 1–8 character Mailbox ID.
BATCH NUMBER	The unique 7-digit number assigned to the batch.
BLOCK COUNT	The number of blocks in the batch.
RECORD COUNT	The number of records in the batch.
USER BATCH IDENTIFICATION	The 1–64 character user-assigned batch identifier.
TIME ADDED	The time that the batch was added.
DATE ADDED	The date that the batch was added.
VBQ #	The number of the VBQ file where the batch was placed.
VSAM Status Flags	A code describing the batch status. The codes are described on page 81.
MAILBOX ID	The 1–8 character Mailbox ID.
MAILBOX BATCH ID	The 1–64 character user-assigned batch identifier.
BATCH NUM	The unique 7-digit number assigned to the batch.
BYTES SENT	The number of bytes sent to Sterling Connect:Enterprise.
INFILE RECORDS	The number of records received from Sterling Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Sterling Connect:Enterprise.
BYTES RCVD	The number of bytes received from Sterling Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from Sterling Connect:Enterprise.
ELAPSED TIMES	The time required to complete the function, expressed in seconds.

The last page of the report displays a job condition code and a completion message indicating if the utility executed correctly.

Chapter 5

BSC Considerations

This chapter covers the following considerations for BSC sites:

- Use of $TURNLINE$ in batches
- Use of END-OF-FILE in batches
- Temporary Text Delay (TTD)

Using $TURNLINE$ in Batches

Sterling Connect:Enterprise supports the use of $TURNLINE$ in data batches sent to a remote site. The $TURNLINE$ capability provides limited conversational transmissions between the remote site and Sterling Connect:Enterprise at the host site. Instead of a single send-receive communication mode, $TURNLINE$ provides any number of send-receive-send-receive transmissions. $TURNLINE$ is supported only when Sterling Connect:Enterprise sends a data batch to a remote site, and can be used in remote-initiated data transmissions or in host-initiated Auto Connect sessions.

To use this option, the send-receive sequence must be coordinated with the remote site operation. A typical use is sending a signon record to the remote site, receiving data from the remote site, then sending data to the remote site. In this case, the remote site must be able to receive the signon record, send data to the host site, then receive data from the host site. Changing from receive to send, and vice versa, is called a line turnaround.

To use the $TURNLINE$ feature, you must properly prepare data batches to be sent to the remote sites. The host-site data batch controls when the line turnaround occurs. The data batch must contain a $TURNLINE$ record at appropriate places in the data. When the host site detects a $TURNLINE$ record, it stops sending and does a line turnaround to receive data. After the receive is completed, the host site can do a line turnaround again to send data, or it can disconnect the line.

$TURNLINE$ Records

$TURNLINE$ records are placed as needed in Sterling Connect:Enterprise data batches that are sent to a remote site. Sterling Connect:Enterprise supports three formats for $TURNLINE$ records:

```
$TURNLINE$
$TURNLINE$=END
$TURNLINE$=RMDC
```

The following table explains each format:

Format	Description
$TURNLINE$	$TURNLINE$ must begin in column 1 of the record, and the remainder of the record is ignored. When $TURNLINE$ is detected during data transmission to a remote site, Sterling Connect:Enterprise transmits a data block ending with ETX and then sends an EOT to the remote. If the remote responds to the EOT with an ENQ, Sterling Connect:Enterprise issues a READ to the line to receive data from the remote site. After all data is received (EOT is received from the remote site), Sterling Connect:Enterprise continues sending any data after the $TURNLINE$ record in the original batch, if additional data records exist. Any number of $TURNLINE$ records can exist in the Sterling Connect:Enterprise batch, as long as the remote site can properly respond to the resulting line turnarounds.
$TURNLINE$=END	$TURNLINE$=END must begin in column 1 of the record, and the remainder of the record is ignored. When $TURNLINE$=END is detected during data transmission to a remote site, Sterling Connect:Enterprise transmits a data block ending with ETX and then sends an EOT to the remote. If the remote responds to the EOT with an ENQ, Sterling Connect:Enterprise issues a READ to the line to receive data from the remote site. After all data is received (EOT is received from the remote site), Sterling Connect:Enterprise ends the connection by disconnecting the line.
$TURNLINE$=RMDC	$TURNLINE$=RMDC must begin in column 1 of the record, and the remainder of the record is ignored. When $TURNLINE$=RMDC is detected during data transmission to a remote site, Sterling Connect:Enterprise transmits a data block ending with ETX and then sends an EOT to the remote. If the remote responds to the EOT with an ENQ, Sterling Connect:Enterprise issues a READ to the line to receive data from the remote site. $TURNLINE$=RMDC differs from $TURNLINE$ only if the *OPTIONS parameter RMDC=YES is specified. If RMDC=NO (the default), Sterling Connect:Enterprise sends the remaining batch records after receiving one EOT, the same as $TURNLINE$. When RMDC=YES, $TURNLINE$=RMDC enables you to receive multiple files, separated by EOTs. Sterling Connect:Enterprise in the receive mode after a $TURNLINE$=RMDC responds to an EOT with an EOT. If the remote then sends a ENQ, Sterling Connect:Enterprise continues to receive. If the remote sends another EOT or does not respond (resulting in one or two timeouts), Sterling Connect:Enterprise issues an ENQ to transmit the batch records following the $TURNLINE$=RMDC.

Sample $TURNLINE$ Batch

The following data batch sends a $$SIGNON record to a remote site, receives data from the remote site, sends three data records to the remote site, receives more data from the remote site, then ends the connection.

```
$$SIGNON
$TURNLINE$
Data Record 1
Data Record 2
Data Record 3
$TURNLINE$=END
```

Your remote site must be set up to:

- Receive the $$SIGNON record
- Send data to the host site
- Receive the 3 data records from the host site
- Send data to the host site
- Allow the host site to end the connection

END-OF-FILE in Batches

Sterling Connect:Enterprise supports the use of END-OF-FILE in data batches sent to a remote site. END-OF-FILE provides the capability of using the BSC control character ETX to separate files within the same batch.

To use this option. add the END-OF-FILE card after the batch record to be framed with the ETX control character. In Auto Connect mode, the record preceding the END-OF-FILE card is framed with an ETX. In non-Auto Connect mode or a session initiated by a remote site, the END-OF-FILE card causes a null write or a X'0203' to be sent after the record preceding this control card.

END-OF-FILE Records

END-OF-FILE records must be placed as needed in Sterling Connect:Enterprise data batches to be sent to a remote site. END-OF-FILE must begin in column 1 of the record, and the remainder of the record is ignored. When END-OF-FILE is detected during a data transmission to a remote site, Sterling Connect:Enterprise sends a block ending in ETX to the remote site, indicating end-of-file to the remote site. Sterling Connect:Enterprise continues sending data after the END-OF-FILE card if additional records exist. You do not have to put the END-OF-FILE as the last record in a batch; Sterling Connect:Enterprise automatically frames the last record or block with ETX.

Sample END-OF-FILE Batch

The following batch sends three files to a remote site:

```
File 1
  data record 1
  data record 2
  data record 3
  last data record
  END-OF-FILE
File 2
  data record 1
  data record 2
  data record 3
  END-OF-FILE
File 3
  data record 1
  data record 2
  data record 3
  last data record
```

The last data record is sent to the remote site framed with the BSC control character ETX in Auto Connect mode. In non-Auto Connect mode, the last data record is followed by 0203.

Temporary Text Delay (TTD)

Sterling Connect:Enterprise sends a BSC 3780 TTD to remote sites when file I/O requires a longer set period of time to complete (usually 3 seconds). TTD processing can be invoked when Sterling Connect:Enterprise is searching for a transmittable batch or when flagging batches that match the Auto Connect list name as transmitted.

The format of the TTD is STX ENQ or X’022D’. The remote must reply with a BSC NAK or X’3D’.

BTAM issues a console message to the z/OS operator indicating that a unit exception (UEX) occurs each time Sterling Connect:Enterprise issues a TTD. This is due to the nature of BTAM TTD processing and is normal.

Appendix A

Offline Utility Parameters

This appendix is an alphabetical list of all offline utility parameters, their abbreviated and short form (if applicable), and the offline utilities that use the parameter. Default values are underlined.

Parameter	Definition
ALLERRORS	Short form:N/A Abbreviated form: AL Offline Utilities: VERIFY Specifies that all error types be included in the Verify report or be repaired including mismatched and orphaned files and CRONLY files. CRONLY files are those files whose batch control information has been erased previously.

Parameter	Definition
APPEND_CHAR=xxx....xxx or ='xxx...xxx' or ="xxx...xxx" or =0Xhh....hh	Short form: N/A Abbreviated form: N/A Offline Utilities: ADD Specifies data that will be appended to each logical record written to the VBQ, including the USERRCD= record and all INFILE records. A minimum of 1 byte and maximum of 4096 bytes can be appended to each VBQ record. Multiple APPEND_CHAR= SYSIN parameters may be specified for each ADD command, in order to obtain the desired character string. The appended data in each VBQ record will be in the same relative order as specified in the APPEND_CHAR= SYSIN record(s). There are 4 variations of syntax, to allow for every possible data byte combination. You may specify as many APPEND_CHAR= SYSIN records as needed, using any combinations of the following syntax: xxx....xxx (blank delimiter) = Displayable characters, excluding embedded blanks. The first blank detected is presumed to be the end of string delimiter. 'xxx....xxx' (single quote delimiter) = Displayable characters, including embedded blanks. You can enclose the string in single quotes to allow embedded blanks. "xxx....xxx" (double quote delimiter) = Displayable characters, including embedded blanks. You can enclose the string in double quotes to allow embedded blanks. 0Xhhhh...hhhh (hex data specification) = Hex character values 0–9 and A–F. You must specify the hex characters in even pairs. Each 2-byte pair specified is converted into the corresponding 1-byte hex data value. **Note:** If using single quote or double quote delimiters, make sure both the left and right enclosing quotes are specified. If either quote is omitted, the one which is specified is treated as part of the character string (same as blank delimiter described above).

Parameter	Definition
AUTOSEND=*n* | *n*,E	Short form: AS= Abbreviated form: AU= Offline Utilities: ADD, except the CSCU ADD utility Specifies that the next *n* (1–100) cards in the SYSIN input stream are sent to the INTRDR DD file immediately following the successful completion of the specified utility. The AUTOSEND feature requires that you add a //INTRDR DD SYSOUT=(*,INTRDR) card to the Sterling Connect:Enterprise execution JCL. The addition of the card enables sending JCL and system modify commands to JES. If you use this feature, use //SYSIN DD DATA,DLM=ZZ to prevent the SYSIN data stream from ending prematurely. The data provided in the AUTOSEND records is case sensitive. Modify commands for Autosend are not currently supported on JES 3 systems. Use the following symbolic parameters in any AUTOSEND record. No abbreviations are permitted. Each parameter must be in uppercase text. ◆ E (EVERY) a single user-supplied data record is written to the output file (for EXTRACT) or to the VSAM Batch queue (for ADD), for each batch before the data is processed. Similar to the USERRCD parameter. ◆ &TIM is replaced by the hour and minute (HHMM) of the current time. ◆ &DATE is replaced by the current Julian date (YYDDD). ◆ &DATE07 is replaced by the current 4-digit year Julian date (YYYYDDD). ◆ &IDFIELD is replaced by the 8-byte Mailbox ID. ◆ &BATCH# is replaced by the 8-digit batch number. It includes the leading zeros. ◆ &BID24 is replaced by the 24-byte BID. Be aware the symbolic substitution starts with & and overlays the next 24 bytes. ◆ &BID64 is replaced by the 64-byte BID. Be aware the symbolic substitution starts with & and overlays the next 64 bytes. **Note:** If yyddd is specified and the year portion is less than 80, the 21st century is assumed (that is, 45365 specifies the year 2045, day 365).

Parameter	Definition
BATCHID='xxx...xxx'| |nnnnnnn|#nnnnnnn| "yyy...yyy"	Short form: BID= Abbreviated form: BATCHI= Offline utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG The user BID of the batch or batches to process. This ID is either a specific batch number or a generic name. The value of this parameter is case sensitive. **Note:** For maximum efficiency running STOUTL programs run, use the BATCHID or BATCHNUM parameter whenever possible. 'xxx...xxx' = Specifies the user BID of the batches to process. The user BID is 1–64 characters, and should conform to the standards in use by your site. The user BID can contain blanks and must be enclosed in single quotation marks. There can be more than one batch with this user BID in the VSAM batch files. This name is padded to 64 bytes with blanks. This value is used when adding a batch. nnnnnnn = Specifies the number to process. Replace nnnnnnn with the 1–7 digit batch number assigned by Sterling Connect:Enterprise (leading zeros are not required). **Note:** Generic user BIDs or batch numbers are not permitted for the ADD utility. "yyy...yyy" = Specifies a generic name for selecting the batches for processing. The user BID is 1–64 characters, and should conform to the standards in use by your site. The user BID can contain blanks and must always be enclosed in double quotation marks. There can be more than one batch with this user BID in the VSAM batch files. **Note:** When selecting by batch ID, you may optionally use full wildcard search capability, instead of performing an exact string comparison on the 64-character Batch ID (or a generic Batch ID prefix). To activate wildcard checking, the WILD_CARD=BID parameter must be specified. For more information, see *Examples of Batch and Mailbox ID Wildcards* on page 74.

Parameter	Definition
BATCHIDM=’xxx...xxx’| ”yyy...yyy”	Short form: BIDM= Abbreviated form: N/A Offline utilities: LIST The user BIDs of the multiple batches to process. By selecting on multiple BIDs, the number of VCF reads is reduced to only those records matchingon any of the specified BIDs thus improving VCF I/O processing. These IDsmay be either a specific user BID or a generic name. The value of this parameter is case sensitive. You can specify up to 62 user Batch IDs per LIST command, and include both BATCHID and BATCHIDM parameters in the same LIST command. **Note:** Specific batch numbers are not allowed, for example, BATCHIDM=#28694. ’xxx...xxx’ = Specifies the user BID of the batches to process. The user BID is 1–64 characters, and should conform to the standards in use by your site. The user BID can contain blanks and must be enclosed in single quotation marks. There can be more than one batch with this user BID in the VSAM batch files. This name is padded to 64 bytes with blanks. This value is used when adding a batch. “yyy...yyy” = Specifies a generic name for selecting the batches for processing. The user BID is 1–64 characters, and should conform to the standards in use by your site. The user BID can contain blanks and must always be enclosed in double quotation marks. There can be more than one batch with this user BID in the VSAM batch files. Example: LIST VPF=’YOUR.VPF.DSN’ BATCHIDM=’batchid 01 specific’ BATCHIDM=’batchid 02 specific’ . . BATCHIDM=”batchid 63 generic” BATCHIDM=”batchid 64 generic” **Note:** For more information on using wildcards when selecting BIDs, see *Examples of Batch and Mailbox ID Wildcards* on page 74.

Parameter	Definition
BATCHIDV='xxx...xxx'	Short form: BIDV= Offline utilities: ADD The user BID of the batch or batches to process. This parameter and BATCHID are treated exactly the same except when BATCHIDV is specified, batch IDs are scanned for pre-defined symbolic variables that you can include. All symbolic variables are resolved and substituted into the Batch ID. For more information, see *How to Use BID Symbolic Variables* on page 93. 'xxx...xxx' = Specifies the user BID of the batch to be added to the repository. The user BID is 1-64 characters, and should conform to the standards in use by your site. The value of this parameter is case sensitive. The user BID, which must be enclosed in single quotation marks, can contain blanks. There can be more than one batch with this user BID in the VSAM batch files. This name is padded to 64 bytes with blanks. **Note:** If any resolved symbolic variable causes the length of the Batch ID to exceed 64 bytes, the ADD function will fail. Use any of the following symbolic parameters in the BATCHIDV value. No abbreviations are permitted. Each symbolic variable must be specified in uppercase text. &DATE—Current date in 5-digit yyddd format &DATE07—Current date in 7-digit yyyyddd format &DAYUC—UPPER CASE DAY (MONDAY, TUESDAY..) &DAY—Mixed Case Day (Monday, Tuesday..) &IDFIELD—8-byte Mailbox ID (ID=xxxxxxxx value) &MONTHUC—UPPER CASE MONTH(JANUARY, FEBRUARY.) &MONTH—Mixed Case Month(January, February.) &OSNAME—4 to 6 byte operating system name (for example, z/OS) &OSVER—Operating system version in 6-digit vvrrmm format &STCNAME—8-byte jobname/taskname &YYYYDDD—Current date in 7-digit yyyyddd format &YYDDD—Current date in 5-digit yyddd format &YYYYMMDD—Current date in 8-digit yyyymmdd format &MMDDYYYY—Current date in 8-digit mmddyyyy format &DDMMYYYY—Current date in 8-digit ddmmyyyy format &YYYY—Current year in 4-digit yyyy format &YY—Current year in 2-digit yy format &MM—Current month in 2-digit mm format &DD—Current day in 2-digit dd format &HHMMSSTH—Current time in 8-digit hhmmssth format &HHMMSS—Current time in 6-digit hhmmss format &HHMM—Current time in 4-digit hhmm format &HOUR—Current time in 2-digit (hours) hh format &MIN—Current time in 2-digit (minutes) mm format &SEC—Current time in 2-digit (seconds) ss format &TH—Current time in 2-digit (tenths/hundredths) th format

Parameter	Definition
BATCHNUM=nnnnnnn [-nnnnnnn][,nnnnnnn, nnnnnnn,..... nnnnnnn-nnnnnnn]	Short form: N/A Abbreviated form: BN= Offline utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY **Note:** You cannot specify multiple items for the REPORT and VERIFY utilties. For those utilities only, use the format, nnnnnnn | nnnnnnn-nnnnnnn. One or more 7-digit batch numbers or beginning and ending batch number ranges. Leading zeros are not required. You may specify up to 64 items. One item is considered to be either a single batch number or a single range of batches. You may use multiple BATCHNUM= statements to specify additional batch numbers. **Note:** For maximum efficiency running STOUTL programs run, use the BATCHID or BATCHNUM parameter whenever possible. You may use both the BATCHID and BATCHNUM parameters in the same set of SYSIN control statements. BATCHID is limited to a single batch number per statement and counts as a single item. You may use any combination of multiple BATCHID and BATCHNUM statements, but are limited to a maximum of 64 batch number items. In addition, you may specify the same batch number more than once, but the batch is only processed one time. The LIST utility is the only exception, that is, the same batch number line item can be listed multiple times.
BATCHTYPE=ALL| TRANSMITTED| COLLECTED| START|CONNECT| DISCONNECT|END|LOG	Short form: BTYPE= Abbreviated form: BATCHT= A | T | C | S | K | D | E | L Offline utilities: ACDETAIL, ACDFTP Selects the batch types, data transmissions, or data collections for processing. ALL = Processes either collected or transmitted batches. The default is ALL. TRANSMITTED = Processes only transmitted batches. COLLECTED = Processes only collected batches. START = Processes FTP session start log records. CONNECT = Processes FTP client connect log records. DISCONNECT = Processes FTP client disconnect log records. END = Processes FTP session end records. LOG = Processes FTP User log records.

Parameter	Definition
CASE_SENSITIVE=YES|NO	Short form: N/A Abbreviated form: N/A Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL|ACDFTP|OFFLOG|RCDETAIL, STATFLG Specifies whether characters are to be treated as case-sensitive when performing a wild card comparison. The default value is yes. YES = Treats the tested string and mask pattern as case-sensitive, that is, leaves the input value as is when performing the wildcard comparison. NO = Uppercases both the tested character string and the mask pattern, prior to performing the wild card comparison. **Note:** You must specify the WILD_CARD=BID parameter when using this parameter.
COMPLETION=ALL| SUCCESS|FAILURE	Short form: N/A Abbreviated form: CO=A | S | F Offline Utilities: ACDETAIL, ACDFTP, RCDETAIL The specific completion status of batches selected for processing. ALL = Processes all batches, regardless of completion status. The default is ALL. SUCCESS = Processes only successfully transmitted batches. FAILURE = Processes only batches that failed transmission.
COUNT=RECORD|BYTE	Short form: N/A Abbreviated form: N/A Offline Utilities: REPORT (ACDETAIL, OFFLOG, RCDETAIL) Specifies whether block/record count or byte count is to be printed on the report. RECORD = The record/block count appears in the report. BYTE = The byte count appears in the report.

Parameter	Definition
CRONLY	Short form: N/A Abbreviated form: CR Offline Utilities: ERASE, VERIFY Specifies that only batch control information be erased or verified. If this parameter is used for the ERASE utility, actual batch data is not erased. If this parameter is not specified, both the control information and the data are erased. If this parameter is used for the VERIFY utility, only those files whose batch control information has been erased previously are included in the Verify report or are actually repaired. **Note:** The STOUTL ERASE utility creates a copy of the VCF record as a 0 batch record on the VBQ when CRONLY is specified. The VCF is copied to the VBQ before it is cleared for reuse. The date that the ERASE CRONLY was run is added to the VCF copy in the VBQ and is used by the VERIFY utility's FROMDATE/TODATE parameters. The VERIFY utility recovers any batches erased using the ERASE CRONLY utility as long as a copy of the VCF is found in the VBQ and data in the VBQ is still valid. **Note:** If you use the ALLERRORS parameter with the VERIFY utility, this parameter is not necessary.
DATETYPE=START| COMPLETION	Short form: N/A Abbreviated form: N/A Offline Utilities: REPORT (ACDETAIL, ACDFTP, ACSUMMARY, RCDETAIL, RCSUMMARY) Specifies whether the start date/time or the completion date/time is to be used for selection. START = Selects all items based on start date/time. COMPLETION = Selects all items based on completion date/time.
DECR=xxxxxxxx	Short form: N/A Abbreviated form: DEC= Offline Utilities: EXTRACT **Note:** This parameter cannot be used with the CSCU EXTRACT utility. Specifies the 1–8 byte alphanumeric decryption key used to decrypt the batch data. To specifically process encrypted batch data, you specify the same encryption key used when the batch data was added. When Sterling Connect:Enterprise processes multiple batches, the specified decryption key decrypts all the batches for that request. You cannot specify the RECSEP parameter when decrypting data. Decryption cannot occur if the data is truncated. **Note:** Sterling Connect:Enterprise must reside at both the sending and receiving sites when using encryption.

Parameter	Definition
DELETE=YES	Short form: N/A Abbreviated form: DEL=Y Offline Utilities: EXTRACT Specifies that a batch is marked as deleted after it is processed. This is a logical delete only and does not physically erase the data from the file. You can reprocess the batch by specifying the 7-digit batch number.
DETAIL=YES|NO	Short form: N/A Abbreviated form: DET= Offline Utilities: LIST **Note:** This parameter cannot be used with the CSCU LIST utility. Specifies the format of the report. NO = specifies that single-line summary records are written to the report. YES = specifies that multi-line detail information is written to the report.
EMPTY_BATCH=ALLOW| DISALLOW	Specifies whether or not to allow empty batches to be added to the repository if the INFILE is empty or if the INFILE contains $$ADD records but no subsequent user data records. If the INFILE contains user data, this parameter is ignored and the ADD function is processed as normal. ALLOW = allows an empty batch to be added to the repository, if the INFILE is empty. An empty batch contains no user data bytes (i.e. no VBQ batch data records). The batch control (VCF) record will indicate this is a valid empty batch. DISALLOW = fails the add, if the INFILE is empty. This is the default value.

Parameter	Definition
ENCR=xxxxxxxx	Short form: N/A Abbreviated form: E= Offline Utilities: ADD **Note:** This parameter cannot be used with the CSCU ADD utility. Indicates that the batch data is encrypted, limiting unauthorized access to it. This record specifies the 1–8 alphanumeric encryption key used to encrypt the batch data. Only the actual batch data is encrypted. Imbedded control records used by Sterling Connect:Enterprise ($$ADD, $$REQ) are not encrypted. The batch data is maintained in its encrypted form while residing in the VSAM batch files and during transmission. When extracting the batch data, you must supply the same key in the DECR parameter so that the batch data can be decrypted. **Note:** Sterling Connect:Enterprise must reside at both the sending and receiving sites when using encryption. When encrypting data, the following limitations exist: ◆ If multiple batches are processing, all the batches are encrypted. ◆ If a $$ADD record is embedded in the input file with ENCR specified, the encryption key from the $$ADD record is used instead of the key specified with the ADD. ◆ Do not truncate data during transmission or extraction. This causes decryption or MAC validation errors. ◆ The encryption key is not sent with the batch data. ◆ The encryption key is not in the utility report.
FAILCODE=nnn	Short form: N/A Abbreviated form: FA= Offline Utilities: RCDETAIL Specifies a 3-digit fail code to list only those remote connect records that failed with the specified fail code. See the *IBM Sterling Connect:Enterprise for z/OS Messages and Codes Guide* for a description of fail codes. If you specify this parameter, you must specify COMPLETION=FAILURE.

Parameter	Definition
FILE_ACCESS=VPF|VCF1P	Short form: N/A Abbreviated form: FILE_ACC= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG Specifies the file access path STOUTL should use to process the batch control files. VPF = Access batches via the VPF (VSAM Pointer File). Batches are processed and reported in ID order. VCF1P = Access batches via the VCF Alternate Index. If the VCF Alternate index is available, batches are accessed using the VCF alternate index path. Batches are processed and reported in [BatchID, ID, Roll#, Batch#] order. If the VCF Alternate Index is unavailable and one or more batch numbers are specified, batches are accessed using the VCF. Batches are processed and reported in the same batch number/range order as specified. If the VCF Alternate Index is unavailable and no batch number is specified, batches are be accessed using the VPF. Batches are processed and reported in [ID, Roll#, Batch#) order. All of the transmittable batches for each ID are presented first, followed by all non-tranmittable batches for each ID.
FORMAT=1|1X|2	Short form: none Abbreviated form: none Offline utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL|OFFLOG|RCDETAIL, STATFLG, VERIFY Specifies the reports format for the STOUTL REPORTS DD file, and CSC (Cross System Client) and ICO (InterConnect Option) SYSPRINT and REPORTS DD files. This parameter allows you to override the global format setting specified by the required DEFAULT_MODE parameter along with the default values specified in the CSC_DEFAULT_REPORTS_FORMAT, ICO_DEFAULT_REPORTS_FORMAT, and STOUTL_DEFAULT_REPORTS_FORMAT parameters in the Options Definition File (ODF). For more information and to see sample report output, see *Customizing the Layout of Reports* on page 82. 1 = Prints the normal (original) report's single detail line items, which display only 24 characters of the User Batch ID. 1X = Prints single line extended detail items to accommodate the full 64 character User Batch ID. 2 = Prints two lines for each detail item. The first detail line is formatted using format 1 (i.e., the original format with the 24 character User Batch ID). The second detail line item prints only the fully qualified 64 character User BatchID, aligned with the 24 character Batch ID on line one above.
FROMBLK=nnnnnnnnn	Short form**:** N/A Abbreviated form: FROMB= Offline Utilities: MOVE Specifies the 9-digit number that determines the starting range of blocks contained in the batch. Leading zeroes are not required. The batch is selected if the number of blocks is equal to or greater than the specified value. The default is 000000000.

Parameter	Definition
FROMDATE=yyyyddd| nnnyyddd	Short form: FD= Abbreviated form: FROMD= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY Specifies the starting Julian date range for all data selected for processing. The nnn (1–3 digit number) value calculates dates relative to the current date. If nnn is specified, the FROMDATE value is calculated as today-nnn (for example, FROMDATE=3 is resolved to the date three days ago). The default is 1980001. **Note:** The TODATE and FROMDATE parameters are used in tandem, even if only one is specified. For the parameter that is not specified, the default value is used. For example, if TODATE=1997031 and FROMDATE is not specified, a FROMDATE value of 19800001 is assumed. The opposite is true if only FROMDATE was specified. **Note:** If yyddd is specified and the year portion is less than 80, the 21st century is assumed (that is, 45365 specifies the year 2045, day 365).
FROMTIME=hhmmD	Short form: FT= Abbreviated form: FROMT= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY Specifies the starting military time range for all data selected for processing. The default is 0001. ◆ To specify a time window within a given date range (using FROMDATE and TODATE), code the time. For example, to select all data generated after 8:00 am for each day in a date range, code FROMTIME=0800. ◆ To specify an absolute start time for a date range, code the time with the D suffix. For example, to select all data generated after 8:00 am on date 92350, code FROMDATE=92350 and FROMTIME=0800D. If the D suffix is used on either the FROMTIME or TOTIME parameters, it is assumed for both.

Parameter	Definition
FTYPE=ALL,CONNECT, DISCONNECT,ADD,NOAD, REQUEST, DELETE, DIRECTORY, SIGNON	Short form: N/A Abbreviated form: FT=AL,C, D,AD,N,R, DE,DI,S Offline Utilities: RCDetail Specifies the remote connect function type for data select for processing. You can specify one or more of the function type values, separated by commas. ADD = Processes data only from the ADD function type. ALL = Processes data from all function types. If specified, no other operands are needed. The default is ALL. CONNECT = Processes data only from the CONNECT function type. DELETE = Processes data only from the $$DELETE function type. DIRECTORY = Processes data only from the $$DIRECTORY function type. DISCONNECT = Processes data only from the DISCONNECT function type. NOAD = Processes data that was added without a $$ADD card. REQUEST = Processes data only from the $$REQUEST function type. SIGNON = Processes data only from the BSC SIGNON function type.
GPLUS=YES	Short form: N/A Abbreviated form: G=Y Offline Utilities: EXTRACT Specifies that you need to insert a ####PLUS batch number header record at the beginning of the batch output file during utility processing. For additional information, contact your GENTRAN technical support representative. By default, this header record is not inserted.
ID=xxxxxxxx	Short form: N/A Abbreviated form: ID= Offline Utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY Specifies the 1–8 character Mailbox ID used when processing data. The ID does not have to be unique. If you terminate the Mailbox ID value with an asterisk (*), the Mailbox ID is considered generic. The value of this parameter is case sensitive. **Note:** The ADD utility does not permit Generic Mailbox IDs. **Note:** When selecting by mailbox ID, you may optionally use full wildcard search capability, instead of performing an exact string comparison on the eight-character ID (or a generic ID prefix). To activate wildcard checking, the WILD_CARD=ID parameter must be specified. For more information, see *Examples of Batch and Mailbox ID Wildcards* on page 74.

Parameter	Definition
IDM=xxxxxxxx[, ..., xxxxxxxx]	Short form: N/A Abbreviated form: N/A Offline Utilities: REPORT TYPE=ACDETAIL, ACDFTP, OFFLOG, RCDETAIL, RCDFTP, RCDFTPL Specifies one or more (up to 200) 1–8 character Mailbox ID(s) when processing data. If you terminate the Mailbox ID value with an asterisk, the Mailbox ID is considered generic. The value of this parameter is case sensitive. You can code as many IDM= parameters per command as you need to specify up to 200 Mailbox ID's. Each IDM= parameter may specify either single or multiple Mailbox ID(s)—each separated by a comma. You can specify both the ID= and IDM= parameters in the same REPORT function, allowing for a total 201 mailbox ID values, as shown in the following example: RCDREPORT VPF='YOUR.VPF.DSN' IDM=mbxid001,mbxid002,mbxid003,mbxid004,mbxid005 IDM=mbxid006,mbxid007,mbxid008,mbxid009,mbxid010 .... IDM=mbxid196,mbxid197,mbxid198,mbxid199,mbxid200 ID=mbxid201 **Note:** For more information on using wildcards when selecting IDs, see *Examples of Batch and Mailbox ID Wildcards* on page 74.
IGNORE_TRANSPARENT	Short form: N/A Abbreviated for: IGNORE_TRANSP Offline Utilities: ADD Specifies that the added batch should not be marked transparent even if the data has transparent characters.
IGNORE_VBQ_DISALLOW	Short form: N/A Abbreviated form: IGNORE_VBQ_D Offline Utilities: ADD, ERASE, EXTRACT, MOVE Specifies that the current STOUTL function is allowed to access a VBQ that was previously deallocated using $$DALLOC VBQnn,STOUTL=DISALLOW.
INFILE=xxxxxxxx	Short form: N/A Abbreviated form: INF= Offline Utilities: ADD **Note:** This parameter cannot be used with the CSCU ADD utility. Specifies the DD name that allocates the batch input data file. The default is INFILE.

Parameter	Definition
INIT=ALL|DATA	Short form: N/A Abbreviated form: INI=AL|D Offline Utilities: PURGE Specifies the type of utility processing to perform. All = A full initialization of the VSAM files occurs. The file control records portion of the VPF is created, the VCF is initialized, and all VBQ and VLF files defined have their control records written to them. This option is used when installing a Sterling Connect:Enterprise system. DATA = Adds new data collection files (VBQs and VLFs) to a Sterling Connect:Enterprise system. Add only VBQ and VLF files that were not previously defined with PURGE INIT=ALL or PURGE INIT=DATA. When DATA is used, you cannot specify the VBQALLOC=, the VLFALLOC=, the MAXBNO=, or the MBXNAME parameters.
IPADDR=nnn.nnn.nnn.nnn	Short form: N/A Abbreviated form: IPADDR= Offline Utilities: ACDFTP, RCDFTP, RCDFTPL Specifies the 12-digit numeric IP address of the remote user to be used as a selection criteria. **Note:** Do not use IPADDR with any other parameter which specifies a connection type. IPADDR and all xxxxxx_xxxx_IPADDR parameters (REMOTE_CNTL_IPADDR, REMOTE_DATA_IPADDR, LOCAL_CNTL_IPADDR, LOCAL_DATA_IPADDR) are mutually exclusive. Specifiying IPADDR means any log record with the specified IP address, whether the IP address is for a Remote or Local, Data or Control connection, is selected.
JOBNAME	Short form: N/A Abbreviated form: JO= Offline Utilities: VERIFY Specifies the job that erased the batch control information for CRONLY erased batches.
KEEPADD	Short form: N/A Abbreviated form: K Offline Utilities: ADD Specifies that you use a $$ADD card in the data file as input for the utility and also kept as data for transmission to the remote site. By default, the $$ADD card is discarded after processing. **Note:** When the KEEPADD parameter is used during an offline add process that transmits multiple batches, the remote site may process the $$ADD cards embedded in the batches as data records under the following conditions: (1) batches are transmitted with SNA using spanned RUs and (2) the SNA BCHSEP=OPT3 parameter is set. To avoid this situation, set SNA BCHSEP=NO.

Parameter	Definition
LINEID=xxxxxxxx	Short form: LID= Abbreviated form: LIN= Offline Utilities: ACDETAIL, RCDETAIL BSC only. Specifies the 1–8 character BSC Line ID used for selecting data. If you terminate the line ID value with an asterisk (*), the line ID is considered generic. For SNA data, see REMOTE= and LUNAME=.
LISTNAME=xxxxxxxx	Short form: N/A Abbreviated form: LIS= Offline Utilities: REPORT Specifies the 1–8 character Auto Connect list name used for selecting data. If the list name value is terminated with an asterisk (*), the list name is considered generic
LOCAL_CNTL_IPADDR= nnn.nnn.nnn.nnn	Short form: N/A Abbreviated form: LC_IPADDR Offline Utilities: RCDFTP, RCDFTPL Specifies the 12-digit numeric IP address of the local control connection to be used as a selection criteria. **Note:** Do not use LOCAL_CNTL_IPADDR with IPADDR. IPADDR and all xxxxxx_xxxx_IPADDR parameters (REMOTE_CNTL_IPADDR, REMOTE_DATA_IPADDR, LOCAL_CNTL_IPADDR, LOCAL_DATA_IPADDR) are mutually exclusive. Specifiying IPADDR means any log record with the specified IP address, whether the IP address is for a Remote or Local, Data or Control connection, is selected.
LOCAL_CNTL_PORT= ppppp	Short form: N/A Abbreviated form:LC_PORT= Offline Utilities: RCDFTP, RCDFTPL Specifies the 1–5 digit port of the local control connection to be used as a selection criteria. **Note:** Do not use LOCAL_CNTL_PORT with PORT. PORT and all xxxxxx_xxxx_PORT parameters (REMOTE_CNTL_PORT, REMOTE_DATA_PORT, LOCAL_CNTL_PORT, LOCAL_DATA_PORT) are mutually exclusive. Specifiying PORT= means any log record with the specified port number, whether the port number is for a Remote or Local, Data or Control connection, is selected.

Parameter	Definition
LOCAL_DATA_IPADDR= nnn.nnn.nnn.nnn	Short form: N/A Abbreviated form: LD_IPADDR= Offline Utilities: RCDFTP, RCDFTPL Specifies the 12-digit numeric IP address of the local data connection to be used as a selection criteria. **Note:** Do not use LOCAL_DATA_IPADDR with IPADDR. IPADDR and all xxxxxx_xxxx_IPADDR parameters (REMOTE_CNTL_IPADDR, REMOTE_DATA_IPADDR, LOCAL_CNTL_IPADDR, LOCAL_DATA_IPADDR) are mutually exclusive. Specifiying IPADDR means any log record with the specified IP address, whether the IP address is for a Remote or Local, Data or Control connection, is selected.
LOCAL_DATA_PORT= ppppp	Short form: N/A Abbreviated form: LD_PORT= Offline Utilities: RCDFTP, RCDFTPL Specifies the 1–5 digit port of the local data connection to be used as a selection criteria. **Note:** Do not use LOCAL_DATA_PORT with PORT. PORT and all xxxxxx_xxxx_PORT parameters (REMOTE_CNTL_PORT, REMOTE_DATA_PORT, LOCAL_CNTL_PORT, LOCAL_DATA_PORT) are mutually exclusive. Specifiying PORT= means any log record with the specified port number, whether the port number is for a Remote or Local, Data or Control connection, is selected.
LOG=YES|NO	Short form: N/A Abbreviated form: LOG= Offline Utilities: ADD, EXTRACT Specifies that you write a log record mapped by the LB$RECRD DSECT to the LOGFILE DD specified in the utility JCL. Refer to the M$LOGB member from the source library supplied with the installation tape. The LOGFILE is a DD that must be allocated as a fixed block physical sequential data set with a record size of 1024 bytes.
LOGNAME=('xxxx.xxxx' [,'xxxx.xxxx','xxxx.xxxx'])	Short form: N/A Abbreviated form: LOGN= Offline Utilities: REPORT The VLFs to scan for log record selection and processing. You can specify 1–20 log file names, each separated by commas. The log files are processed in the order specified. This parameter can span several input cards.
LUNAME=xxxxxxxx	Short form: N/A Abbreviated form: LOGN= Offline Utilities: ACDETAIL SNA only. Specifies the 1–8 character SNA LU name used for selecting data. If you terminate the LUNAME with an asterisk (*), the LUNAME is considered generic, For BSC data, see LINEID=.

Parameter	Definition
MAX_RECSEP_CX=0 | nnnnnn	Short form: N/A Abbreviated form: MA= Offline Utilities: EXTRACT Sets a maximum limit of record separators to be scanned for and processed, when extracting a batch. This parameter is used in conjunction with the RECSEP= parameter and is only valid when RECSEP=Cnnnn,Xhh[hh] is specified (that is, when both a byte count value and hex record separator(s) are specified). See page 218. 0 = Indicates there is no limit to the number of hex Xhh[hh] record separators to scan for and process. In other words, all record separators in each extract will be processed. The default value is 0. nnnnnn = The maximum number of hex record separators (1–999999999) that will be scanned for and processed. If a batch is extracted and the specified value is not reached, all records separators are processed. If a batch is extracted and the specified value is reached, all remaining record separators are treated as user data.
MAXBATCH=nnnnnnn	Short form: N/A Abbreviated form: MAXBATCH= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG Specifies the maximum number of batches when processing data. Only the first nnnnnnn batches, which meet the selection criteria, will be processed. **Note:** MAXBATCH=1 is the same as ONEBATCH=YES for the EXTRACT utility. Either ONEBATCH=YES or MAXBATCH=nnnnnnn may be specified, but not both.
MAXBNO=nnnnnnn	Short form: N/A Abbreviated form: MA= Offline Utilities: PURGE Specifies the maximum number of batches that Sterling Connect:Enterprise can create for the system. A value of 1–9,999,999 is permitted. The default is 9999. This parameter is not allowed with INIT=DATA. **Note:** A VCF control record is written for each batch number possible in the Sterling Connect:Enterprise system.
MBXNAME=xxxxxxxx	Short form: N/A Abbreviated form: MB= Offline Utilities: PURGE Specifies the unique 1–8 character name for the Sterling Connect:Enterprise system. It is used for batch and function security checks (if the security interface is active) within online Sterling Connect:Enterprise and the offline utilities. You can also specify this parameter in the *OPTIONS section of the ODF and override any value specified in the offline utilities. The default name is MAILBOX if no name is specified. This parameter is not allowed with INIT=DATA.

Parameter	Definition
MEDIA=PR|PU|CN|EX|BX	Short form: N/A Abbreviated form: ME= Offline Utilities: EXTRACT For SNA auto connect sessions, specifies the media to which outbound batches are sent. PR = Printer PU = Card punch CN = Console screen EX = Exchange disk using the transmission exchange format BX = Exchange disk using the basic exchange format
MISMATCH	Short form: N/A Abbreviated form: MI Offline Utilities: VERIFY Specifies that only MISMATCH errors be included in the Verify report or be repaired. MISMATCH errors involve those files where one or more related files are missing or have different batch numbers.
MULTXMIT=YES|NO	Short form: MX= Abbreviated form: MU=Y|N Offline Utilities: ADD YES = You can send the batch to multiple sites. The batch is not marked **T** when transmitted by a $$REQUEST from the remote site. As a result, you can request batches multiple times by any or all of the remote sites. To stop transmitting a batch marked for multiple transmission, it must be marked as deleted. A multiple transmission batch is marked **T** only when the batch completes transmission to all remote sites in an Auto Connect list during a host-initiated transmission session and the remote name is the same as the list name of the Auto Connect list. NO = The batch can only be sent once. This is the default. **Note:** The value of this parameter is automatically set to NO if TRANSMITONCE=YES is specified.
NOERASE	Short form: N/A Abbreviated form: NOE Offline Utilities: MOVE Specifies that source batch data is not erased after it is copied to the destination VBQ.

Parameter	Definition
OFFFLAGS= REQUESTABLE, DELETED,TRANSMITTED, EXTRACTED, MULTXMIT	Short form: N/A Abbreviated form: OF=R,D,T,E,M Offline Utilities: STATFLG Specifies which batch status flags are turned off for a selected batch by the utility. Specify any or all, separated by commas. REQUESTABLE = The batch cannot be selected by a remote site. DELETED = The batch is no longer flagged for deletion. TRANSMITTED = The batch was not transmitted to a remote site. EXTRACTED = The batch was not extracted from the VSAM batch files. MULTXMIT = The batch is not available for multiple transmission. **Note:** If you turn on the 'M' (MULTXMIT) flag, the 'R' (REQUESTABLE) flag is automatically turned on. If you turn off the 'R' (REQUESTABLE) flag, the 'M' (MULTXMIT) flag is automatically turned off.
ONEBATCH=YES	Short form: N/A Abbreviated form: ONE=Y Offline Utilities: EXTRACT Specifies that only the first complete non deleted batch is selected for processing. Use DELETE=YES with ONEBATCH=YES to ensure that you do not process the same batch more than once. **Note:** MAXBATCH=1 is the same as ONEBATCH=YES for the EXTRACT utility. Either ONEBATCH=YES or MAXBATCH=nnnnnnn may be specified, but not both.
ONFLAGS=REQUESTABLE, DELETED,TRANSMITTED, EXTRACTED, MULTXMIT	Short form: N/A Abbreviated form: ON=R,D,T, E,M Offline Utilities: STATFLG Specifies which batch status flags are turned on for a selected batch by the utility. Specify any or all, separated by commas. REQUESTABLE = A remote site can request the batch. DELETED = The batch is flagged for deletion. TRANSMITTED = The batch was transmitted to a remote site. EXTRACTED = The batch was extracted from the VSAM batch files. MULTXMIT = The batch is available for multiple transmission to any remote site. **Note:** If you turn on the 'M' (MULTXMIT) flag, the 'R' (REQUESTABLE) flag is automatically turned on. If you turn off the 'R' (REQUESTABLE) flag, the 'M' (MULTXMIT) flag is automatically turned off.

Parameter	Definition
OPTION=ALLFORCONN	Short form: N/A Abbreviated form: OP=A Offline Utilities: REPORT Specifies that all activity for a single Auto Connect session is displayed if any Mailbox ID used during the connection matches the Mailbox ID specified in the ID parameter. The ID parameter is required if this parameter is specified. All other parameters are ignored, if specified.
ORPHAN	Short form: N/A Abbreviated form: OR Offline Utilities: VERIFY Specifies that only ORPHAN errors be included in the Verify report or be repaired. ORPHAN errors involve those files, which still retain storage but that no longer appear in the directory of a file system, and where one or more related files are missing.
OUTFILE=xxxxxxxx	Short form: N/A Abbreviated form: OU= Offline Utilities: EXTRACT Specifies the DD name that allocates the batch output data. The default is OUTFILE.
PADCHAR=Xnn	Short form: N/A Abbreviated form: PA= Offline Utilities: ADD, EXTRACT **Note:** This parameter cannot be used with the CSCU ADD utility. Specifies the pad character used when the DCB OUTFILE LRECL is greater than the batch data being processed. Code X plus a 2-digit HEX value that represents the pad character desired in the output file. For example, XFF specifies that all records processed to the output file that are shorter than the LRECL specified in the DCB are padded to the LRECL length using a hexadecimal FF. The default is X40 (blanks). **Note:** For the ADD utility, this parameter is valid only if VBQRECSIZE is specified.
PCC=KEEP|REMOVE|CONVERT	Short form: N/A Abbreviated form: PC=K|R|C Offline Utilities: EXTRACT Specifies the method of handling BSC Print Carriage Control (PCC) ESC sequences that are in batches from remote sites (3780 and 2780 RJE terminals) when processed. These characters are present in some print files created for printing at the remote site. PCC enables you to keep, remove, or convert these special characters. KEEP = Maintains all PCC ESC sequences in the file. The default is KEEP. REMOVE = Removes all PCC ESC sequences. Examines all processed data and removes the following 2-byte codes. ESC / (X'2761')

Parameter	Definition			
	ESC F	(X'27C6')		
	ESC S	(X'27E2')		
	ESC G	(X'27C7')		
	ESC T	(X'27E3')		
	ESC A	(X'27C8')		
	ESC I	(X'27C9')		
	ESC B	(X'27C2')		
	ESC J	(X'27D1')		
	ESC C	(X'27C3')		
	ESC K	(X'27D2')		
	REMOVE =			
	ESC D	(X'27C4')		
	ESC L	(X'27D3')		
	ESC E	(X'27C5')		
	ESC M	(X'27D4')		
	CONVERT = Converts all PCC ESC sequences to the associated ASA print control shown, allowing the data to print at the host.			
	Remote PCC		**Host PPC Converted Code**	**Function to Perform before Printing**
	ESC M	(X'27D4')	(X'4E)	Suppress Space
	ESC /	(X'2761')	(blank) (X'40')	Space 1 line
	ESC S	(X'27E2')	0 (X'F0')	Space 2 lines
	ESC T	(X'27E3')	–(X60')	Space 3 lines
	ESC A	(X'27C1')	1 (X'F1')	Skip to Channel 1
	ESC B	(X'27C2')	2 (X'f2')	Skip to Channel 2
	ESC C	(X'27C3')	3 (X'F3')	Skip to Channel 3
	ESC D	(X'27C4')	4 (X'F4')	Skip to Channel 4
	ESC E	(X'27C5')	5 (X'F5')	Skip to Channel 5
	ESC F	(X'27C6')	6 (X'F6')	Skip to Channel 6
	ESC G	(X'27C7')	7 (X'F7')	Skip to Channel 7
	ESC H	(X'27C8')	8 (X'f8')	Skip to Channel 8

Parameter	Definition			
	ESC I	(X'27C9')	9 (X'f9')	Skip to Channel 9
	ESC J	(X'27D1')	A (X'C1')	Skip to Channel 10
	ESC K	(X'27D2')	B (X'C2')	Skip to Channel 11
	ESC L	(X'27D3')	C (X'C3')	Skip to Channel 12
PORT=ppppp	Short form: N/A Abbreviated form:N/A Offline Utilities: RCDFTP, RCDFTPL Specifies the 1–5 digit port for any type connection to be used as a selection criteria. Must be in the range of 1–65535 **Note:** Do not use PORT with any other parameter which specifies a connection type. PORT and (RD_PORT, RC_PORT, LD_PORT, LC_PORT) are mutually exclusive. Specifiying PORT= means any log record with the specified port number, whether the port number is for a Remote or Local, Data or Control connection, is selected.			
QREASON=ALL|LINE| ACTIVE|SESSION|THREAD	Short form: N/A Abbreviated form: QR=AL|L|AC|S|T Offline Utilities: REPORT Specifies the reason to select queued sessions for processing. ALL = Processes all queued Auto Connect sessions. The default is ALL. LINE = Processes Auto Connect sessions queued for BSC lines. ACTIVE = Processes Auto Connect sessions queued because they were already initiated and running. SESSION = Processes Auto Connect sessions queued because no SNA session is established. THREAD = Processes Auto Connect sessions queued because no FTP threads were available.			
QSTATUS=ALL|QUEUE| START|DELETE	Short form: N/A Abbreviated form: QS=A|Q|S|D Offline Utilities: REPORT Specifies which queuing events that have taken place for a queued Auto Connect session. ALL = Processes all Auto Connect sessions placed in the queue. The default is ALL. QUEUE = Processes all Auto Connect sessions queued but not started. START = Processes all Auto Connect sessions that were successfully restarted and removed from the queue. DELETE = Processes all Auto Connect sessions manually deleted from the queue.			

Parameter	Definition
RDW=KEEP|REMOVE	Short form: N/A Abbreviated form: RD=K|R Offline Utilities: ADD Specifies how record descriptor words (RDW) of variable length input data are processed. KEEP = Keeps the 4-byte RDW if the batch input file is determined to have variable length records (from the DCB). By default, RDWs are automatically removed. KEEP is only allowed for ADD. REMOVE = Removes RDWs by default for ADD.
RDW=BUILD|NOBUILD	Short form: N/A Abbreviated form: RD=B|N Offline Utilities: EXTRACT Specifies how to process record descriptor words (RDW) of variable length output data. BUILD = Adds RDWs by default for EXTRACT. NOBUILD = If the batch output file is determined to have variable length records (from the DCB) do not build the 4-byte RDW. If RDW=NOBUILD is specified and the records do not contain RDW information, a S002 abend occurs, indicating that the records do not contain valid RDW information. By default, RDWs are automatically built for variable length records. NOBUILD is only allowed for EXTRACT.

Parameter	Definition
RECSEP=Xnn[,nn,...nn] | Tnnnnn | Cnnnnn | Cnnnn,Xnn[,nn...nn]	Short form: N/A Abbreviated form: RECSEP= Offline Utilities: EXTRACT The record separators searched for as the record delimiter when processing data to the output file. Xnn[,nn,...nn] = When you specify this form, the code X, plus up to 24 two-digit and four-digit HEX values, represents the desired record separators. **Note:** CSC/ICO EXTRACT supports up to eight two-digit and/or four-digit HEX values. For SNA, this parameter overrides standard 3770 deblocking. Only this HEX character separates records. For example, if RECSEP=X0A0D,1E specifies that either the <carriage return><line feed> characters (x'0A0D') or the standard SNA Punch/Print/Exchange character (x'1E') is used by EXTRACT to delimit logical records. Tnnnnn = When you specify this form, the numeric value is used as the number of characters counted to determine record separation. You can specify a maximum value of 32,742. If the RECSEP value is less than the DCB OUTFILE LRECL specified, the LRECL value is padded with the value specified in PADCHAR. If the RECSEP value is greater than the DCB OUTFILE LRECL specified, the output file is truncated. No communication control characters are removed. For example, RECSEP=T120 specifies that the utility counts 120 characters as one logical record and writes the record to the OUTFILE. **Note:** To extract transparent data, you must also specify YES or BOTH for the TRANSP parameter in conjunction with the RECSEP=Tnnnnn parameter. For more information, see *Batch Extraction* on page 103. Cnnnnn = When you specify this form, the numeric value is used as the number of characters that is counted to determine record separation. The maximum value is 32,742. If the RECSEP value is less than the DCB OUTFILE LRECL specified, the LRECL is padded with the value specified in PADCHAR. If the RECSEP value is greater than the DCB OUTFILE LRECL specified, the output record is truncated. All BSC and SNA communication control characters are removed. For example, RECSEP=C80 specifies that the utility counts 80 characters as one logical record and writes the record to the outfile. The data written to the OUTFILE contains no communication control characters. For BSC batches, record separators x'1E', x'1F' and x'1F02' are stripped. For SNA batches, record separators are stripped based on the incoming media type: ◆ Punch and Print - x'0C', x'0D', x'15', x'1E', and x'1F'. ◆ Console - x'15'. ◆ Exchange - x'1E'. Cnnnnn,Xnn = When you specify this form, the numeric value and the hexadecimal value together determine the record separator. The rules for Cnnnn and Xnn apply except that no communication control characters are removed by default. To limit the number of hex record separators processed, use the MAX_RECSEP_CX parameter (see page 211).

Parameter	Definition
RECSEPIN=YES|NO	Short form: N/A Abbreviated form: RECSEPI=Y|N Offline Utilities: EXTRACT The value specified in RECSEP=Xnn is retained in the record when the record is written to the OUTFILE. The default is NO.
REMOTE=xxxxxxxx	Short form: N/A Abbreviated form: RE= Offline Utilities: REPORT Specifies the 1–8 character remote name used for selecting data for processing. If you terminate the remote name value with an asterisk (*), the remote name is considered generic. (If BSC remote sites do not use BSC SIGNON, their remote names are blank. Use LINEID=.)
REMOTE_CNTL_IPADDR= nnn.nnn.nnn.nnn	Short form: N/A Abbreviated form: RC_IPADDR Offline Utilities: RCDFTP, RCDFTPL Specifies the 12-digit numeric IP address of the remote control connection to be used as a selection criteria. **Note:** Do not use REMOTE_CNTL_IPADDR with IPADDR. IPADDR and (RD_IPADDR, RC_IPADDR, LD_IPADDR, LC_IPADDR) are mutually exclusive. Specifiying IPADDR means any log record with the specified IP address, whether the IP address is for a Remote or Local, Data or Control connection, is selected.
REMOTE_CNTL_PORT= ppppp	Short form: N/A Abbreviated form:RC_PORT= Offline Utilities: RCDFTP, RCDFTPL Specifies the 1–5 digit port of the remote control connection to be used as a selection criteria. **Note:** Do not use REMOTE_CNTL_PORT with PORT. PORT and (RD_PORT, RC_PORT, LD_PORT, LC_PORT) are mutually exclusive. Specifiying PORT= means any log record with the specified port number, whether the port number is for a Remote or Local, Data or Control connection, is selected.
REMOTE_DATA_IPADDR= nnn.nnn.nnn.nnn	Short form: N/A Abbreviated form: RD_IPADDR= Offline Utilities: RCDFTP, RCDFTPL Specifies the 12-digit numeric IP address of the remote data connection to be used as a selection criteria. **Note:** Do not use REMOTE_DATA_IPADDR with IPADDR. IPADDR and (RD_IPADDR, RC_IPADDR, LD_IPADDR, LC_IPADDR) are mutually exclusive. Specifiying IPADDR means any log record with the specified IP address, whether the IP address is for a Remote or Local, Data or Control connection, is selected.

Parameter	Definition
REMOTE_DATA_PORT= ppppp	Short form: N/A Abbreviated form: RD_PORT= Offline Utilities: RCDFTP, RCDFTPL Specifies the 1–5 digit port of the remote data connection to be used as a selection criteria. **Note:** Do not use REMOTE_DATA_PORT with PORT. PORT and (RD_PORT, RC_PORT, LD_PORT, LC_PORT) are mutually exclusive. Specifiying PORT= means any log record with the specified port number, whether the port number is for a Remote or Local, Data or Control connection, is selected.
REMOVECOL=nnnnn	Short form: N/A Abbreviated form: REMOVEC= Offline Utilities: ADD, EXTRACT, except the CSCU ADD or EXTRACT utility For the ADD utility, removes VBQ output records based on the presence of data beginning in the specified column. For example, if REMOVECOL=01 and REMOVEVAL=$$ADD, any output record formatted to be written to the VBQ that has the characters $$ADD in column 1 will not be written to the VBQ. Maximum value of REMOVECOL is 32742. For the EXTRACT utility, removes OUTFILE records based on the presence of data beginning in the specified column. For example, if REMOVECOL=01 and REMOVEVAL=$$ADD, any output record formatted to be written to OUTFILE that has the characters $$ADD in column 1 will not be written to OUTFILE. Maximum value of REMOVECOL is 32742. **Note:** If REMOVECOL is set, REMOVEVAL is required.
REMOVEVAL='xx..xx'| 0xhh..hh	Short form: N/A Abbreviated form: REMOVEV= Offline Utilities: ADD, EXTRACT, except the CSCU ADD or EXTRACT utility For the ADD utility, if REMOVECOL is specified, this value determines which VBQ output records are not to be written to the VBQ. For example, if REMOVECOL=01 and REMOVEVAL=$$ADD, any output record formatted to be written to the VBQ that has the characters $$ADD in column 1 will not be written to the VBQ. Can be expressed as a 20-character string (enclosed in single or double quotes if embedded blanks) or a 20 2-digit hexadecimal string beginning with 0X (0Xnnnnnn...nn). For the EXTRACT utility, if REMOVECOL is specified, this value determines which OUTFILE output records are not to be written to OUTFILE. For example, if REMOVECOL=01 and REMOVEVAL=$$ADD, any output record formatted to be written to OUTFILE that has the characters $$ADD in column 1 will not be written to OUTFILE. Can be expressed as a 20-character string (enclosed in single or double quotes if embedded blanks) or a 20 2-digit hexadecimal string beginning with 0X (0Xnnnnnn...nn). **Note:** If REMOVEVAL is set, REMOVECOL is required.

Parameter	Definition
RETRY	Short form: N/A Abbreviated form: RET Offline Utilities: MOVE Specifies that the MOVE utility retry moving a batch if an I/O error occurs on the output VBQ. This deletes any records on the output VBQ for that batch number and Mailbox ID, and restart the move from the beginning. Use this parameter for old data records left over from an ERASE of an incomplete batch MOVE. RETRY erases the input data records.
RTYPE=ALL|SNA|BSC|FTP	Short form: N/A Abbreviated form: RT=A|S|B|F Offline Utilities: RCDETAIL, RCSUMMARY, ACQUEUE Specifies the remote type used for selecting data for processing. ALL = Processes all remote types. The default is ALL. SNA = Processes only SNA remote types. BSC = Processes only BSC remote types. FTP = Processes only FTP remote types.
SPLITCOUNT=nnnn	Short form: SC= Abbreviated form: SP= Offline Utilities: ADD Specifies the 1–4 digit numeric count of records in a processed batch, allowing you to split a large sequential input file into several smaller batches with the same batch identifiers. Sequential input records are read and are added to the output batch until the SPLITCOUNT limit is reached. Sterling Connect:Enterprise then closes out the batch and begins a batch with the same identifiers.
SSL=YES|NO	Short form: N/A Abbreviated form: N/A Offline Utilities: RCDETAIL, RCSUMMARY Specifies selection based on secure or non secure sessions, using SSL/TLS protocol. If this parameter is not specified, both secure and non secure connections are selected. YES = Select only sessions using a secure SSL or TLS connection. NO = Select only sessions using a non secure connection.

Parameter	Definition
STATOR=ADDED,BSC, COLLECTED,DELETED, EBCDIC,EXTRACTED, FILE_STRUCTURE, FTP, INCOMPLETE, MULTXMIT, NONTRANSMITTABLE, REQUESTABLE,SNA, SSL, TRANSPARENT, TRANSMITTED, UNEXTRACTABLE	Short form: N/A Abbreviated form: STATO= A, B, C, D, EB, EX, FILE, FTP, I, M, NON, R, S, SSL, TRANSP, TRANSM, U Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG Specifies one or more batch status codes to select batches for processing. Each batch with any of the specified STATOR codes are processed. STATUS and STATOR are mutually exclusive parameters. You must use this parameter or STATUS in EXTRACT to override the rules that prevent processing of deleted or incomplete batches. Precede the status with an exclamation mark (!) to indicate batch codes NOT to match. For example, STATOR=!DELETED,!EXTRACTED indicates to select batches that are not deleted or not extracted. ADDED = The batch was added offline. BSC = The batch was collected from a BSC transmission. COLLECTED = The batch was collected online. DELETED = The batch was deleted. EBCDIC = The batch was collected from the APPC API. EXTRACTED = The batch was extracted. FILE_STRUCTURE = The batch is nonrecord oriented (one contiguous byte string). FTP = The batch was collected from an FTP transmission. INCOMPLETE = The batch was incomplete (not successfully collected). MULTXMIT = The batch is available for multiple transmissions. NONTRANSMITTABLE = The batch cannot be transmitted. REQUESTABLE = The batch is available for online requests by remote sites or for transmission by host-initiated auto connect sessions. SNA = The batch was collected from an SNA transmission. SSL = The batch was collected over a secure connection using SSL or TLS. TRANSMITTED = The batch was transmitted. TRANSPARENT = The batch contains transparent data. UNEXTRACTABLE = The batch cannot be extracted.

Parameter	Definition
STATUS=ADDED,BSC, COLLECTED,DELETED, EBCDIC,EXTRACTED, FILE_STRUCTURE, FTP, INCOMPLETE, MULTXMIT, NONTRANSMITTABLE, REQUESTABLE,SNA, SSL, TRANSPARENT, TRANSMITTED, UNEXTRACTABLE	Short form: N/A Abbreviated form: STATU=A, B, C, D, EB, EX, FILE, FTP, I, M, NON, R, S, SSL, TRANSP, TRANSM, U Offline Utilities: DELETE,ERASE,EXTRACT,LIST,MOVE, STATFLG Specifies one or more batch status codes to select batches for processing. Only those batches with all the specified batch status indicators are processed. STATUS and STATOR are mutually exclusive parameters. You must use this parameter or STATOR in EXTRACT to override the rules that prevent processing of deleted or incomplete batches. Precede the status with an exclamation mark (!) to indicate batch codes NOT to match. For example, STATUS=!DELETED,!EXTRACTED indicates to select batches that are not deleted or not extracted. ADDED = The batch was added offline. BSC = The batch was collected from a BSC transmission. COLLECTED = The batch was collected online. DELETED = The batch was deleted. EBCDIC = The batch was collected from the APPC API. EXTRACTED = The batch was extracted. FILE_STRUCTURE = The batch is nonrecord oriented (one contiguous byte string). FTP = The batch was collected from an FTP transmission. INCOMPLETE = The batch was incomplete (not successfully collected). MULTXMIT = The batch is available for multiple transmissions. NONTRANSMITTABLE = The batch cannot be transmitted. REQUESTABLE = The batch is available for online requests by remote sites or for transmission by host-initiated auto connect sessions. SNA = The batch was collected from an SNA transmission. SSL = The batch was collected over a secure connection using SSL or TLS. TRANSMITTED = The batch was transmitted. TRANSPARENT = The batch contains transparent data. UNEXTRACTABLE = The batch cannot be extracted.
STRUCTURE=RECORD|FILE	Short form: N/A Abbreviated form: STRUCT Offline Utilities: ADD Specifies that batches are added to the VBQ using one of the following structures: RECORD = All input data records are written to the VBQ with the same logical record size as detected on the input file. This is how data is normally added. FILE = All input data records are written to the VBQ as one continuous byte stream (no logical record delineation).

Parameter	Definition
TOBLK=nnnnnnnnn	Short form: N/A Abbreviated form: TOB= Offline Utilities: MOVE Specifies the 9-digit number that determines the ending range of blocks contained in the batch. Leading zeroes are not required. The batch is selected if the number of blocks is equal to or greater than the specified value. The default is 999999999.
TODATE=yyyyddd|yyddd|nnn	Short form: TD= Abbreviated form: TOD= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY Specifies the ending Julian date range for all data selected for processing. The nnn (1–3 digit number) value calculates dates relative to the current date. If nnn is specified, the TODATE value is calculated as today-nnn. The default is the current date. **Note:** The TODATE and FROMDATE parameters are used in tandem, even if only one is specified. For the parameter that is not specified, the default value is used. For example, if TODATE=1997031 and FROMDATE is not specified, the system assumes a FROMDATE value of 1980001. The opposite is true if only FROMDATE is specified. **Note:** If yyddd is specified and the year portion is less than 80, the 21st century is assumed (for example, 45365 specifies the year 2045, day 365).
TOTIME=hhmmD	Short form: TT= Abbreviated form: TOT= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY Specifies the ending military time range for all data selected for processing. To specify a time window within a given date range (using FROMDATE and TODATE), code the time. For example, to select all data generated up to 8:00 p.m. for each day in a date range, code TOTIME=2000. To specify an absolute end time for a date range, code the time with the D suffix (for example, to select all data generated up to 8:00 p.m. on date 92360, code TODATE=92360 and TOTIME=2000D). If the D suffix is used on either the FROMTIME or TOTIME parameters, it is assumed for both. The default is 2359.
TRANSMITONCE=YES	Short form: TO= Abbreviated form: TRANSM= Offline Utilities: ADD Flags processed batches so that they are only transmitted once. They are also flagged unextractable. If TRANSMITONCE=YES is specified, MULTXMIT=NO is enforced.

Parameter	Definition
TRANSPARENT=YES|NO| BOTH	Short form: N/A Abbreviated form: TRANSP=Y|N|B Offline Utilities: EXTRACT Specifies whether transparent batches are processed. YES = Processes only transparent batches, without the need for batch numbers. NO = Processes only nontransparent batches, unless the batch number is specified. The default is NO. BOTH = Processes both transparent and nontransparent batches into the same output file. All batch record lengths must be the same. **Note:** To extract transparent data, you must also specify YES or BOTH for the TRANSP parameter in conjunction with the RECSEP=Tnnnnn parameter. For more information, see *Batch Extraction* on page 103
TYPE=ACDETAIL | ACDFTP | ACQUEUE | ACSUMMARY |OFFLOG| RCDETAIL | RCDFTP | RCDFTPL | RCSUMMARY|	Short form: N/A Abbreviated form: TY=ACD|ACDFTP| ACQ|ACS|OFF|RCD|RCDFTP| RCDFTPL|RCS| Offline Utilities: REPORT Specifies the report type to execute. This parameter is the first noncomment card following the REPORT control card. ACDETAIL = Executes the Auto Connect Detail Report. ACDFTP = Executes the Auto Connect FTP Detail Report ACQUEUE = Executes the Auto Connect Queue Report. ACSUMMARY = Executes the Auto Connect Summary Report. OFFLOG = Executes the Offline Log Report. RCDETAIL = Executes the Remote Connect Detail Report. RCDFTP = Executes the FTP Remote Connect Detail Report. RCDFTPL = Executes the FTP Long Remote Connect Detail Report. RCSUMMARY = Executes the Remote Connect Summary Report.

Parameter	Definition
USERRCD=1 to 9,E	Short form: UR= Abbreviated form: US= Offline Utilities: ADD,EXTRACT Specifies that a single user-supplied data record is written to the output file (for EXTRACT) or the VSAM Batch queue (for ADD) before the data is processed. The record consists of the next 1 to 9 data cards in the SYSIN input stream. As an example, if USERRCD=3 is specified, the utility builds a 240-byte record from the next three 80-byte cards and writes the record to the output file or VSAM batch queue before the data. If the LRECL on the OUTFILE DD (or INFILE DD for ADD) is 200, the last 40 bytes are truncated. If the LRECL is 250, the record is padded with ten blanks. If PADCHAR is used, it is padded with the pad character. If **E** (EVERY) is specified, the user record is written in front of every batch that is processed. You can use the following symbolic parameters in the USERRCD record. No abbreviations are permitted. Each parameter must be uppercase text. ◆ &TIM is replaced by the hour and minute (HHMM) of the current time. ◆ &DATE is replaced by the current Julian date (YYDDD). ◆ &DATE07 is replaced by the current 4-digit year Julian date (YYYYDDD). ◆ &IDFIELD is replaced by the 8-byte Mailbox ID. ◆ &BATCH# is replaced by the 7-digit batch number. It includes the leading zeros. ◆ &BID24 is replaced by the 24-byte BID. Be aware that the symbolic substitution starts with the & and overlays the next 24 bytes. ◆ &BID64 is replaced by the 64-byte BID. Be aware the symbolic substitution starts with & and overlays the next 64 bytes. Symbolic parameters are updated before the user record is written. The data provided in the USERRCD record is case sensitive. You can specify USERRCD multiple times for a single utility execution. This results in multiple user records being written with the batch data. If you specify multiple USERRCD parameters, the user records are written in the order in which they were specified. If you specify multiple USERRCD parameters and E is specified on any one parameter, all user records are written in front of every batch that is processed.

Parameter	Definition
UTYPE=ALL,ADD,DELETE, ERASE,EXTRACT,MOVE, STATFLG	Short form: N/A Abbreviated form: UT=AL,AD,D,ER,EX,M,S Offline Utilities: REPORT Specifies the utility log data for processing. You can specify one or more utility names, separated by commas. ALL = Processes log data from all utilities. If specified, no other operands are needed. The default is ALL. ADD = Processes only log data from the ADD utility. DELETE = Processes only log data from the DELETE utility. ERASE = Processes only log data from the ERASE utility. EXTRACT = Processes only log data from the EXTRACT utility. MOVE = Processes only log data from the MOVE utility. STATFLG = Processes only log data from the STATFLG utility.
VBQ=nn[-nn]	Short form: N/A Abbreviated form: VBQ= Offline Utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG, VERIFY Specifies the VBQ number or range of VBQ numbers to select data for processing. If a single VBQ number is specified, a batch is processed if it resides on the specified VBQ. If a range is specified, the batch is processed if it resides on a VBQ within that range. The maximum number allowed is 20. The value 00 indicates to use the current collection file for processing. You cannot use a value of 00 if a range is specified.
VBQ01='xxxx.xxxx'	Short form: N/A Abbreviated form: VBQ01= Offline Utilities: PURGE Specifies the full data set name of the first VSAM Batch Queue File (VBQ01). This parameter is required when INIT=ALL is specified. This parameter is not permitted when INIT=DATA is specified.
VBQ02='xxxx.xxxx' . . . VBQ20='xxxx.xxxx'	Short form: N/A Abbreviated form: VBQ02=...VBQ20= Offline Utilities: PURGE Specifies the full data set name of the VBQ02-VBQ20 VBQ files. Use VBQ02-VBQ20 with INIT=DATA to define additional files to Sterling Connect:Enterprise at a later time. After you specify this parameter in PURGE, you cannot specify it again.

Parameter	Definition
VBQALLOC=nn	Short form: N/A Abbreviated form: VBQA Offline Utilities: PURGE Specifies the number of VSAM Batch Queue Files (VBQ) that online Sterling Connect:Enterprise allocates when it is brought up for the first time. Sterling Connect:Enterprise allocates, starting from VBQ01, up to the number specified. The maximum number allowed is 20. The number specified cannot exceed the number of VBQs defined. Use this parameter only when INIT=ALL is specified. It is not permitted when INIT=DATA is specified. The default is 1.
VBQBLOCK	Short form: N/A Abbreviated form: VBQB= Offline Utilities: MOVE Specifies that all batches are VBQ Blocked when moved to the destination VBQ. VBQ blocking blocks multiple records or collection buffers into a single VBQ record, up to the maximum logical VSAM record size defined for the VBQ.
VBQOUT=nn	Short form: N/A Abbreviated form: VBQO= Offline Utilities: MOVE Specifies the output (destination) VBQ for batches. The value is from 00–20. The value 00 indicates to use the current collection file processing. A range of values is not supported by this parameter.
VBQRECSIZE=1 to 32,742	Short form: N/A Abbreviated form: VBQR= Offline Utilities: ADD **Note:** This parameter cannot be used with the CSCU ADD utility. Specifies the logical record length of the output data on the VBQ. Used to either combine small logical input records into larger records, or to split large logical input records into smaller records before adding them to the VBQ.
VBQUNBLOCK	Short form: N/A Abbreviated form: VBQU= Offline Utilities: MOVE Specifies that all batches are unblocked when moved to the destination VBQ. When a batch is unblocked, one physical VBQ VSAM record contains one logical data record or one online collection buffer.
VCF=’xxxx.xxxx’	Short form: N/A Abbreviated form: VC= Offline Utilities: PURGE Specifies the full data set name of the VSAM Control File (VCF). This parameter is required when INIT=ALL is specified and not permitted when INIT=DATA is specified.

Parameter	Definition
VCF1P='xxxx....xxxx'	Short form:N/A Abbreviated form: N/A Offline Utilities: PURGE Specifies the PATH that associates the VCF alternate index and VCF base cluster. Use the same value in the IDCAMS DEFINE PATH (NAME (YOUR.ENTPRS.VCF1P.DSNAME) statement. **Note:** Both VCF1P and VCF1X must be specified when identifying the alternate index to Sterling Connect:Enterprise.
VCF1X='xxxx....xxxx'	Short form:N/A Abbreviated form: N/A Offline Utilities: PURGE Specifies the VCF alternate index cluster name. Use the same value in the IDCAMS DEFINE PATH PATHENTRY (YOUR.ENTPRS.VCF1X.DSNAME)) statement. **Note:** Both VCF1P and VCF1X must be specified when identifying the alternate index to Sterling Connect:Enterprise.
VLFn=’xxxx.xxxx’	Short form: N/A Abbreviated form: VLF= Offline Utilities: PURGE Specifies the full data set name of the available VSAM Log File (VLFn). This parameter is required when INIT=ALL is specified. Use VLF2 through VLF8 with INIT=DATA to define additional files to Sterling Connect:Enterprise at a later time. If you specify this parameter in the PURGE utility, you cannot specify it again.
VLFALLOC=n	Short form: N/A Abbreviated form: VLFA= Offline Utilities: PURGE Specifies how many VLFs to allocate when the online Sterling Connect:Enterprise system is initially brought up. Sterling Connect:Enterprise can allocate up to eight VLFs (VLF1... VLF8). The number specified cannot exceed the number of VLFs defined. You can only use this parameter when INIT=ALL is specified. The default is one.
VPF=’xxxx.xxxx’	Short form: N/A Abbreviated form: VP= Offline Utilities: ADD, DELETE, ERASE, EXTRACT, MOVE, LIST, PURGE, STATFLG, VERIFY **Note:** This parameter cannot be used with any CSCU EXTRACT utility. Specifies the full data set name of the VPF. If specified more than once in a single job step executing multiple utilities, it must always identify the same VPF data set name. For the PURGE utility, you can only use this parameter when INIT=ALL is specified.

Parameter	Definition
WILD_CARD=BID,ID	Short form: N/A Abbreviated form: N/A Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL|ACDFTP|OFFLOG|RCDETAIL, STATFLG Turns on wildcard checking using the specified BATCHID, ID, or IDM value as the criterion for selecting batches. BID = Performs wildcard checking on the User Batch ID You can place wildcard mask characters (multi character and single character) anywhere in the selection pattern. To treat the tested string and mask pattern as case-sensitive, use the CASE_SENSITIVE parameter with this parameter. For more information, see page 200. For more information on using wildcards when selecting BIDs, see *Examples of Batch and Mailbox ID Wildcards* on page 74.
WILD_CARD_MULTI_CHAR =* | x[xxxxxxx]	Short form: N/A Abbreviated form: N/A Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL|ACDFTP|OFFLOG|RCDETAIL, STATFLG Specifies the pattern of 1-8 special characters used to represent zero or more characters in the field being compared with the specified BATCHID value as the criterion for selecting batches. A contiguously repeating multi-wildcard character has no additional effect, for example, 'A*' is identical to 'A**' , 'A***', and so on. The default value is '*'. **Note:** You must specify the WILD_CARD=BID,ID parameter when using this parameter.
WILD_CARD_SINGLE_ CHAR=% | x[xxxxxxx]	Short form: N/A Abbreviated form: N/A Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL|ACDFTP|OFFLOG|RCDETAIL, STATFLG Specifies a single character used to represent exactly one character in the field being compared with the specified BATCHID value as the criterion for selecting batches. The default value is '%'. **Note:** You must specify the WILD_CARD=BID,ID parameter when using this parameter.

Parameter	Definition
WRAP=NO|YES	Short form: N/A Abbreviated form: N/A Offline Utilities: EXTRACT Specifies whether or not to wrap when a VBQ batch data record is longer than the OUTFILE LRECL value. NO = Do not wrap longer VBQ records across multiple OUTFILE records. NO is the default value. YES = Wrap longer VBQ records across two or more OUTFILE records. If the OUTFILE RECFM is Fixed, then longer VBQ data records are wrapped across as many output records as required to accommodate the entire input data record. The normal rule of padding applies to the final (Nth) output record. If the OUTFILE RECFM is Variable, then longer VBQ data records are wrapped across as many output records as required to accommodate the the entire input data record. If the OUTFILE RECFM is Undefined, the parameter is ignored and the record will be truncated as normal.
ZERO_LENGTH_RECORD= KEEP|REMOVE	Short form: ZLR Abbreviated form: N/A Offline Utilities: EXTRACT Specifies how zero length records are processed when writing to the OUTFILE. KEEP = Writes the zero length record to the OUTFILE. If RECFM=F|FB, the entire output record is padded with the specified PADCHAR= value (default is x'40') for a length of the LRECL=nnnnn value. If RECFM=V|VB, a zero length record is written to the OUTFILE, containing only a 4-byte RDW (Record Descriptor Word), but no user data bytes. If RECFM=U, a zero length record is not written to the OUTFILE, since RECFM=U files cannot contain a zero length. KEEP is ignored, when RECFM=U. REMOVE = Bypasses all zero length records when writing to the OUTFILE.

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Glossary

A

ACQUEUE

Specifies the disposition of an Auto Connect session that is unable to be initiated because there is no BSC line, SNA session, or FTP thread available or the Auto Connect session is currently active. When the parameter ACQUEUE=YES is specified, the Auto Connect session is queued and initiation is attempted at a later time. Otherwise, the Auto Connect session is terminated with an error condition.

ADD Utility

A set of instructions used to submit the Sterling Connect:Enterprise ADD utility. The ADD utility is used to add batches to the VSAM batch files for access by the remote sites.

APPL (Application)

See *VTAM Application Program*.

Application Agent

A Sterling Connect:Enterprise interface that allows the customization of Sterling Connect:Enterprise execution. Each application agent is driven by a user-defined set of rules. The rules can display system console messages, issue system console commands, execute programs, and submit jobs. Sterling Connect:Enterprise supports the following application agents: Console, End Of Batch, Logging, Scheduler, and Wake Up Terminate.

Auto Connect

An unattended, scheduled communications session initiated by the Sterling Connect:Enterprise repository to distribute or collect data.

Auto Dial

Refers to the capability of the host computer to automatically dial the remote site to establish a connection on a switched line. The Auto Dial feature is usually generated for the Transmission Control Unit or front-end processor of the host site on a line-by-line basis.

B

Batch

A data file residing in a mailbox of the repository on the Sterling Connect:Enterprise host computer. When a batch is added to the repository, it is assigned a unique number (from 1 to 9,999,999).

Batch ID

A description of the batch. It is also referred to as the user batch ID because it is assigned by the user (see *User Batch ID).*

Batch Number

A unique 7-digit number assigned internally by Sterling Connect:Enterprise to each individual batch on the VSAM Batch Files. The number may be obtained by the $$DIRECTORY function or the offline utilities LIST function.

Batch Queue

See *VBQ (VSAM Batch Queue)*.

Batch Security

Optional Sterling Connect:Enterprise method of providing security for remote site access to the system. Mailbox IDs are assigned to remote sites and defined as valid at the host site. If Batch Security is used, remote sites must supply a valid ID as part of the $$ commands that access the Sterling Connect:Enterprise data files. (Formerly called ID Validation.)

Batch Status

A set of flags maintained for each batch on the VSAM Batch Files. The Batch Status flags are displayed in the LIST offline utility report or the $$DIRECTORY output data. Some of the Batch Status indicators are incomplete batch, deleted batch, batch transmitted to remote site, and batch extracted at the host site.

Batch Type

Used to indicate which batches to recall from Sterling Connect:Enterprise. Types include batches containing data received from remote sites and batches containing data to be transmitted.

Blank Compression

A method of replacing strings of contiguous blanks with control characters indicating the number of blanks removed. Commonly used to shorten the amount of data sent over telecommunications lines. Sterling Connect:Enterprise uses standard 3780 blank compression techniques on BSC lines and standard SNA blank and character compression on SNA sessions.

Blank Truncation

A method of dropping trailing blanks from the end of fixed length data records before sending the data over telecommunications lines. Used by Sterling Connect:Enterprise as an option to shorten the amount of data sent over telecommunications lines.

BSC (Binary Synchronous)

A standard telecommunications line protocol used to transmit blocks of data over telecommunications lines between host computers and remote sites. Binary Synchronous (also known as bisync) allows a faster transmission rate than a start/stop protocol, because its ratio of data bits to checking bits is higher. This line protocol is used by Sterling Connect:Enterprise.

BTAM (Basic Telecommunications Access Method)

A standard IBM access method used by Sterling Connect:Enterprise to read and write data over telecommunications lines to a variety of terminals and devices.

BTAM ID Verification

An optional BTAM feature that enables the exchange and verification of host site and remote site IDs. Available on switched lines only, the feature provides added security in a Sterling Connect:Enterprise system. Both the host site and the remote site must be capable of implementing the option. Sterling Connect:Enterprise allows the host site ID to be sent, the remote site ID to be received, or both IDs to be exchanged.

C

Clear Control Channel (CCC)

A command that enables Sterling Connect:Enterprise to negotiate a clear-text control channel after the user ID and password have been transmitted in encrypted format. The control channel remains in clear-text until the connection ends. All data and objects transferred between the client and server remain encrypted. Both ends of the connection must support the use of this command.

Compression

See *Blank Compression*.

Connection ID

The CICS definition that describes the remote system in terms of Netname (APPLID). The connection ID is a local name (within the local CICS only) that is used to define the remote partner system (Sterling Connect:Enterprise).

Cross System Client Utility (CSCU)

A Sterling Connect:Enterprise utility that enables you to use a subset of the offline utilities to access the VSAM batch and log files from a remote logical partitioning (LPAR), unlike offline utilities which must run from the same LPAR as the Sterling Connect:Enterprise VSAM File Server. CSCU control and output is similar to the offline utilities.

D

Data Collection

The process in which Sterling Connect:Enterprise collects data from remote sites and stores it in the VSAM Batch Files. Data Collection means data is input from a remote site to Sterling Connect:Enterprise at the host computer.

Data Repository

A collection of individual mailboxes, or directories, where data files are stored for future processing by the host or remote site.

Data Transmission

The process in which Sterling Connect:Enterprise transmits data from the VSAM Batch Files to remote sites. Data transmission means data is output from Sterling Connect:Enterprise at the host computer to the remote site.

Directory

A formatted listing of control information for batches on the Sterling Connect:Enterprise VSAM Batch Files. It is obtained from the $$DIRECTORY command.

Disconnect Interval

The number of seconds a session may be inactive before forcing session termination. This may differ for each remote site defined to Sterling Connect:Enterprise. This safety feature, which is implemented using the DISCINTV parameter, is used to reduce the use of resources by remote sites that have no current activity and to prevent an Auto Connect session from suspending if a remote site does not respond.

EXTRACT Utility Model

A set of JCL statements and parameter (specification) data submitted by Sterling Connect:Enterprise CICS or ISPF interface to initiate execution of the Sterling Connect:Enterprise EXTRACT utility. The EXTRACT utility is used to retrieve batches from VSAM batch files to a sequential output file.

F

FMH (Function Management Header)

A standard SNA feature that allows a data stream to be sent to a specific destination and controls the way the data is presented at the destination. Sterling Connect:Enterprise supports FMH Type 1, a 6-character field sent at the start and the end of a data stream. This FMH selects the media used for the data, marks the beginning and end of a Sterling Connect:Enterprise batch, and further describes the format of the data.

FTP (File Transfer Protocol)

An international standard for reading and writing files across a TCP/IP network.

FTP Server

The capability of Sterling Connect:Enterprise to function as an FTP server. This enables remote FTP client sites to access, retrieve, and send data to the Sterling Connect:Enterprise batch queues through standard FTP commands.

G

GSKKYMAN

An IBM utility that is used to create and maintain the SSL key database.

H

Host (also Host Site)

The Sterling Connect:Enterprise server on which the data repository resides.

I

IRS (Inter-Record Separator)

A special character used to separate multiple records in a block of data being transmitted over a telecommunications line. Sterling Connect:Enterprise allows either X'1E' or X'1F' as the inter-record separator on BSC lines, and allows only X'1E' for SNA sessions. Also referred to as an IRS.

J

Job Entry Subsystem (JES)

A system facility for spooling, job queuing, and managing job-related data.

L

Leased Line

Refers to telecommunications lines on which connection is not established through a switched network. Sterling Connect:Enterprise Leased Line support is point-to-point and therefore allows data to be exchanged only between the host site and a single remote site. Leased Multipoint lines are not supported by BSC connections in Sterling Connect:Enterprise.

Line ID

Uniquely identifies a BSC line that is accessed during Auto and Remote Connects. This is a BSC-only entry generated by a nonswitched M$LINE or M$LINEX macro in the User Assembly.

List Name

The Auto Connect List Name defined in the Sterling Connect:Enterprise ODF.

Log Facility

A Sterling Connect:Enterprise feature that provides file logging and full reporting for remote-initiated transactions. An additional option provides host system console log messages both for host-initiated and for remote-initiated connections and disconnections.

LOGOFF

The process of ending a remote site session with a host site program such as Sterling Connect:Enterprise. A LOGOFF may be a text command or a control function from a remote device.

LOGON

The process of establishing a session between a remote site and a host site program such as Sterling Connect:Enterprise. A LOGON may be automatic after a connection is established, or may be entered as a text command or a control function. In Sterling Connect:Enterprise, either the remote site or the host site may attempt to initiate the LOGON process.

Logon Mode Table

A table defined to VTAM containing a set of entries that provide session parameters, or the rules for controlling SNA communications. The LOGON that attempts to establish a session causes access to this table to obtain the session rules.

LOGON Security

An optional Sterling Connect:Enterprise/SNA method of providing security during a remote site's attempt to LOGON to Sterling Connect:Enterprise. The LUNAME (assigned to the remote site as part of the VTAM definition process) is provided to and validated by Sterling Connect:Enterprise when a LOGON is attempted.

LU (Logical Unit)

A logical unit provides the port for user access to an SNA network. Each remote device that can establish a session with Sterling Connect:Enterprise is a logical unit.

LU1RJE (LU Type 1 RJE)

A device emulating 3770, or a similar device or software package that uses Logical Unit Type 1 protocols and is used primarily for data transfer or RJE (Remote Job Entry) purposes. The devices typically have multiple I/O devices, such as printers, card readers, and storage devices. An operator console for messages or interactive use is often present.

M

Mailbox ID

The 1–8 character ID which defines batches in the VSAM Batch Files. A user can have access to a single mailbox (individual mailbox), a group mailbox (accessible by multiple users), and multiple mailboxes (accessible by a single user or trading partner).

Mailbox Name

The 8-character symbolic name used to identify individual Sterling Connect:Enterprise systems to the user interface.

Mailbox Password

A security password used to control access to Sterling Connect:Enterprise systems.

Mailbox User ID

An 8-character field used to identify each user to Sterling Connect:Enterprise. In order for a user to access a Sterling Connect:Enterprise system, the User ID must be defined and assigned. The CICS and ISPF Interface panel displays the current user in the upper right corner.

Manual Dial

Refers to the method the host site uses to dial remote sites to establish a connection on a switched line. With Manual Dial, an operator at the host site must manually dial the telephone number of the remote site if the connection is initiated by the host site.

If the connection is initiated by the remote site, the manual dialing at the host is not used.

Media

An input/output device on a terminal, such as a printer, card reader, card punch, keyboard, display, or diskette. Commonly available on LU Type 1 RJE terminals, and supported by Sterling Connect:Enterprise/SNA.

MLU (Multiple Logical Unit)

A terminal designed to allow the operation of more than one session between a remote terminal and a host site such as Sterling Connect:Enterprise. A single terminal may actually appear as multiple devices, and may have concurrent inbound and outbound data streams active for each. Some 3770-type devices have this capability. Sterling Connect:Enterprise supports up to six MLU sessions per remote site.

N

NCP (Network Control Program)

The Network Control Program, generated by host site personnel, that controls the operations of a communications controller such as a 37x5.

Non-Switched Line

A telecommunications line on which connection is not established through a switched network. Sometimes referred to as a Leased Line.

NPSI (Network Control Program Packet Switching Interface)

An IBM licensed program that allows SNA users to communicate over packet switching data networks that have interfaces complying with CCITT Recommendation X.25. It allows SNA programs to communicate with SNA or non-SNA equipment over such networks.

O

(ODF) Options Definition File

A file containing Sterling Connect:Enterprise control records and keyword parameters that specify options in effect for the current execution of online Sterling Connect:Enterprise. The file contains options that control security, password, Auto Dial telephone numbers, SIGNON records, Auto Connect, SNA sites, and other system options.

Offline Utilities

The Sterling Connect:Enterprise utilities used to access and maintain the data batches on the VSAM Batch Files. The offline utilities allow you to LIST control information for batches, ADD batches, EXTRACT batches, DELETE batches, ERASE batches, alter batch status flags (STATFLG), MOVE batches from one VBQ to another, and REPORT on session activity.

P

Password

See *Mailbox Password*.

PLU (Primary Logical Unit)

In a particular session between two LUs, one LU adheres to a set of SNA-defined primary protocols and is known as the primary logical unit (PLU) for that session. The other LU adheres to a set of secondary protocols and is known as the secondary logical unit (SLU) for that session. More than one session can exist between two LUs. Multiple concurrent sessions between the same two LUs are referred to as parallel sessions. Not all LUs have parallel session capability.

Point-to-Point Line

A telecommunications line connection that allows data exchange between two points on the connection, usually the host site and a remote site. When a dialed connection is established on a switched network, the connection is considered point-to-point. Leased lines where the remote site is a single station are also considered point-to-point.

R

RDW (Record Descriptor Word)

A 4-byte field used to define the length of variable length records within a data file. For batch data coming into Sterling Connect:Enterprise (ADD), the RDW may be removed or retained. For batch data sent from Sterling Connect:Enterprise (REQUEST) the RDW may be created or not created.

Remote Connect

Unsolicited communications session with the Sterling Connect:Enterprise repository initiated by a remote site. Also referred to as a remote-initiated session.

Remote Name

A 1–8 character name assigned to identify a remote site that may be contacted by the host site during an Auto Connect session. Also used to identify every remote site that can establish a session with Sterling Connect:Enterprise.

Remote Site

Remote terminal, application, or computer which is configured to initiate a communications session with the data repository.

REXX (Restructured Extended Executor) Language

A general-purpose, procedural language for scripting end-user programs designed for IBM systems.

RFC (Request for Comments)

One of a series, begun in 1969, of numbered Internet informational documents and standards widely followed by commercial software and freeware in the Internet and UNIX communities.

S

Session

A logical connection between Sterling Connect:Enterprise at the host site and another logical unit, such as a 3770 device. When a LOGON is completed between Sterling Connect:Enterprise and a remote site, they are said to be in session.

SIGNON

A special format data record sent by some remote BSC terminals designed to communicate with RJE software (such as JES or VSE POWER) in the host computer. The SIGNON record may be required by Sterling Connect:Enterprise provided Sterling Connect:Enterprise has been configured to do so when installed. The SIGNON format(s) used must also be specified at installation. A SIGNON is not required and not supported for SNA remote sites.

SLU (Secondary Logical Unit)

See *PLU (Primary Logical Unit)*.

SNA (Systems Network Architecture)

A set of rules, procedures, and structures for a communications network.

Socket Number

A two way connection identified by the unique combination of IP addresses and port numbers in a given connection. For example, the following combination illustrates the unique ID representing a complete socket: Client IPAddress/Port Number - Server IPAddress/Port Number.

SPLITCOUNT

Specifies a 1–4 digit numeric count of records to be contained in an added batch, allowing you to split a large sequential input file into several smaller batches with the same batch identifiers. Sequential input records are read and added to the output batch until the SPLITCOUNT limit is reached. Sterling Connect:Enterprise then closes out the batch and begins a new batch with the same identifiers.

SSL (Secure Sockets Layer)

A protocol for transmitting private documents over the Internet. SSL uses a private key to encrypt data that is transferred over the SSL connection.

Status Codes

The status flag indicators for a batch. Codes include the following: D, deleted; T, transmitted; R, Requestable; E, Extracted; M, Multxmit (for a list of these codes, see information on VSAM Batch Status Flags in the *IBM Sterling Connect:Enterprise for z/OS User's Guide*).

Switched Line

A telecommunications line on which connection is established over a switched (dialup) telephone line.

T

TLS (Transport Layer Security)

A protocol based on SSL 3.0 protocol specification and designed to provide privacy and data integrity between two communicating applications.

TRACE

In Sterling Connect:Enterprise, the capability to create a snapshot dump of internal Sterling Connect:Enterprise control information for communications activity, User Exit calls, or VSAM Batch Files access.

Transparency

A method of transmitting data over a telecommunications line wherein special line control characters embedded in the data are transparent and do not function in their normal capacity as line control characters. Transparency is used when non-text data (such as object modules or other binary data) must be sent over telecommunications lines. Sterling Connect:Enterprise supports both BSC transparency and SNA transparency.

Truncation

See *Blank Truncation*.

$TURNLINE$

An optional feature in Sterling Connect:Enterprise that provides for a limited conversational mode transmission. When a $TURNLINE$ record is encountered in data being sent to a remote site, the sender temporarily stops sending and issues the proper BSC protocol to turn around the line and begin receiving. After all data is received, sending resumes with the record following $TURNLINE$.

U

User

See *Mailbox User ID*.

User Assembly

A series of macros used to define a network of BSC lines to be used by Sterling Connect:Enterprise. The macros are generated by each user to define their requirements and input to the Assembler to create a module for use by Sterling Connect:Enterprise BSC connections. A User Assembly is not required by SNA connections.

User Batch ID

A 1–64 character free-form batch identifier used to describe the contents of a batch of data on the Sterling Connect:Enterprise VSAM Batch Files. Also known as Batch ID (or BID).

User Exits

A user-written program called by online Sterling Connect:Enterprise, offline utilities, and the CICS interface at appropriate times during the processing of a transaction. The user-supplied program can thereby alter the standard processing done by Sterling Connect:Enterprise. User Exits may be supplied to examine all input data from a remote site, to examine output data to a remote site, to provide unique security processing, or to examine and alter data in Sterling Connect:Enterprise $$ commands. No alteration of data is possible by a user exit in the offline utilities and the CICS interface processing.

USS Table

A table defined to VTAM that provides conversion of character-coded LOGON or LOGOFF to field-formatted LOGON or LOGOFF. You may need to provide this table to VTAM to allow a remote site to establish and terminate SNA sessions with Sterling Connect:Enterprise.

V

VBQ (VSAM Batch Queue)

The Sterling Connect:Enterprise data set used for storing batches of data collected from remote sites during online Sterling Connect:Enterprise. These batches may be available for transmission to remote sites, and are always available for extraction at the host site. The VSAM Batch Queue may be defined as a single VSAM cluster or up to 20 VSAM clusters that are processed as a single repository for batch data. The VSAM Batch Queue contains multiple individual batches of data which can be accessed by their Mailbox ID.

VBQ Blocking

A Sterling Connect:Enterprise feature that blocks multiple records or collection buffers into a single VBQ record for transmission. This improves transmission performance by reducing the disk I/O overhead.

VCF (VSAM Control File)

The Sterling Connect:Enterprise data set that contains control information for batches stored on the VSAM Batch Queue.

VLF (VSAM Log File)

The Sterling Connect:Enterprise data set that contains logged information on the progress of a Sterling Connect:Enterprise execution.

VPF (VSAM Pointer File)

The Sterling Connect:Enterprise data set that contains control information for every file defined in the Sterling Connect:Enterprise system and locator information for every existing batch.

VSAM (Virtual Storage Access Method)

A standard IBM access method for creating and maintaining data sets at the host. Used by Sterling Connect:Enterprise for the VSAM Batch Files.

VSAM Batch Files

A term used for the group of up to 24 files used by the Sterling Connect:Enterprise system for storing and maintaining data. The VSAM Batch Files consist of the VSAM Control File, the VSAM Pointer File, the VSAM Batch Queue Files (up to 20), and the VSAM Log Files (up to 2).

VTAM (Virtual Telecommunications Access Method)

An SNA access method used by Sterling Connect:Enterprise to receive and send data to a variety of SNA devices or application programs.

VTAM Application Program

A program, such as Sterling Connect:Enterprise, that is defined to VTAM and can establish sessions with SNA devices or other VTAM application programs.

X

Xmit once

Specifies that the batch cannot be extracted and that it can be transmitted only one time. After a successful transmit, the batch is permanently locked.

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