

# **Connect:Enterprise® for z/OS**

## **User's Guide**

**Version 1.4**

**Connect:Enterprise for z/OS User's Guide**

**Version 1.4**

**First Edition**

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# About Connect:Enterprise

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

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## Transmitting and Collecting Data

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 Connect:Enterprise administrator assigns mailboxes and controls access to the mailboxes through Connect:Enterprise user IDs and passwords. After a communications session is established between 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 Connect:Enterprise repository can be initiated using the FTP, SNA, or BSC protocol.

Connect:Enterprise collects data files from remote sites for a central host site. For example, 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.

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.

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.

## Connect:Enterprise Terminology

The following table defines the concepts and terminology used with this product. The common synonym for a Connect:Enterprise term is also specified.

<b>Term</b>	<b>Connect:Enterprise Definition</b>
Remote site	Remote terminal, application, or computer which is configured to initiate a communications session with the data repository.
Host site	Connect:Enterprise server on which the data repository resides.
Data repository	Collection of individual mailboxes, or directories, where data files are stored for future processing by the host or remote site.
Batch	Data file residing in a mailbox of the repository on the Connect:Enterprise host computer. When a batch is added to the repository, it is assigned a unique number (from 1 to 9,999,999).
Mailbox ID	An identifier that defines the repository associated with a batch. Remote users access the contents of the VSAM batch files, where the batches are stored, using the Mailbox ID.  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).
Batch ID (BID) or user batch ID	A description of the batch. It is also referred to as the user batch ID because it is assigned by the user.
Auto Connect	Unattended, scheduled communications session initiated by the Connect:Enterprise repository to distribute or collect data.
Remote-initiated session (Remote connect)	Unsolicited communications session with the Connect:Enterprise repository initiated by a remote site.

## Remote Site Capabilities

When you initiate a communications session with the 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 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 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 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.

---

## Connect:Enterprise Communications

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. 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 Connect:Enterprise FTP server
- ◆ FTP data transmissions between remote FTP servers and the Connect:Enterprise FTP client
- ◆ FTP SSL data transmissions between remote FTP clients and the Connect:Enterprise FTP server
- ◆ FTP SSL data transmissions between remote FTP servers and the Connect:Enterprise FTP client

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

## Types of Bisynchronous Communications Lines

The types of communication lines that you use determine how you connect to the data repository. Bisynchronous 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 Connect:Enterprise system at various points in the processing. The security implementation at the 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.

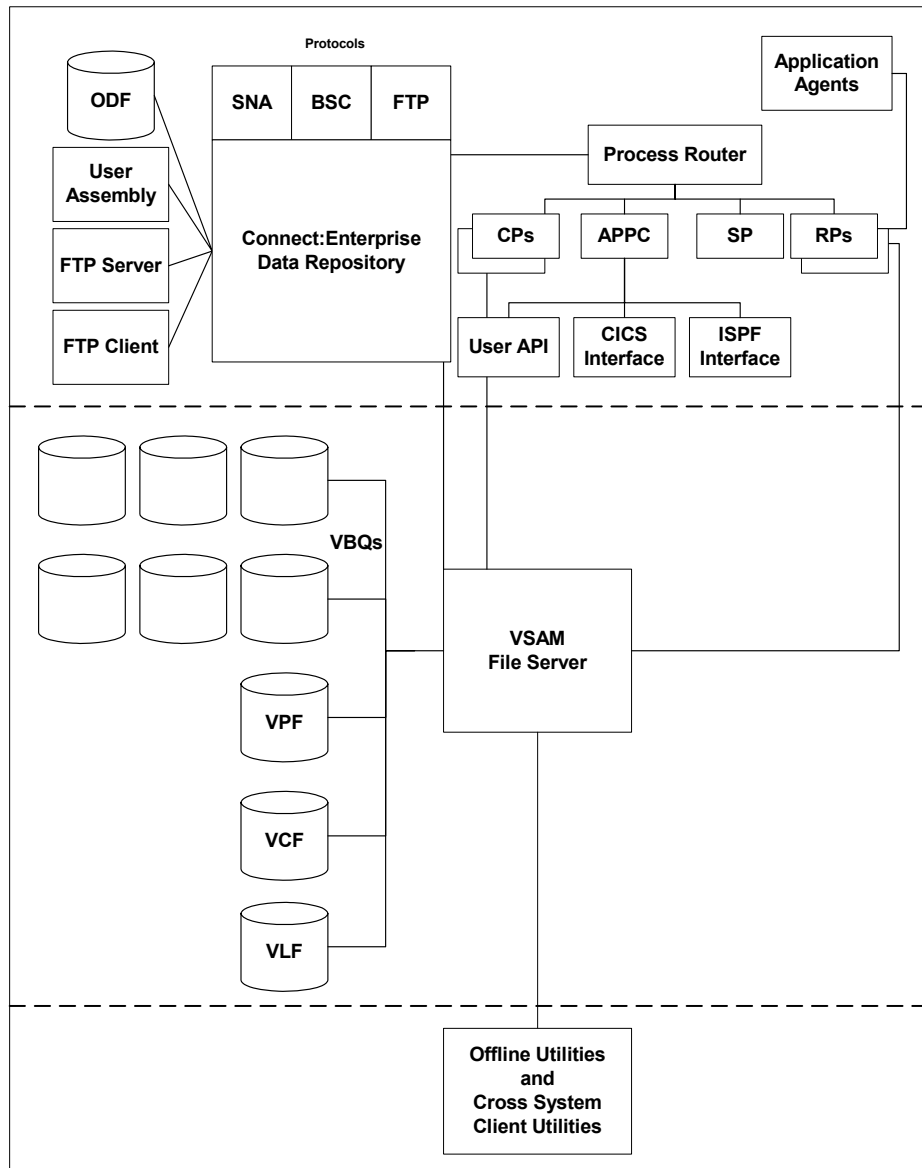
<b>Component or Topic Related to Security</b>	<b>Connect:Enterprise for z/OS Documentation</b>
Security exits	<i>Connect:Enterprise for z/OS Application Agents and User Exits Guide</i> <i>Connect:Enterprise for z/OS Remote User's Guide</i>
ODF parameters and configuring for security	<i>Connect:Enterprise for z/OS Administration Guide</i> <i>Connect:Enterprise InterConnect Option for z/OS User's Guide</i>
Logon and batch functionsecurity	<i>Connect:Enterprise for z/OS Administration Guide</i>
Authenticating user IDs and passwords	<i>Connect:Enterprise for z/OS Administration Guide</i> <i>Connect:Enterprise for z/OS Application Agents and User Exits Guide</i> <i>Connect:Enterprise InterConnect Option for z/OS User's Guide</i> <i>Connect:Enterprise for z/OS Remote User's Guide</i>
Encryption	<i>Connect:Enterprise for z/OS Administration Guide</i> <i>Connect:Enterprise for z/OS Application Agents and User Exits Guide</i> <i>Connect:Enterprise for z/OS Remote User's Guide</i>
Security for FTP connections (and SNA and BSC connections)	<i>Connect:Enterprise for z/OS Administration Guide</i> <i>Connect:Enterprise for z/OS Remote User's Guide</i>
Connect:Enterprise Security Interface	<i>Connect:Enterprise for z/OS Administration Guide</i> <i>Connect:Enterprise for z/OS Remote User's Guide</i>
Connect:Direct security	<i>Connect:Enterprise InterConnect Option for z/OS User's Guide</i>

## Connect:Enterprise Components

Connect:Enterprise has three major components:

- ◆ Data repository or 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 Connect:Enterprise FTP server.

The 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 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 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 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 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 File	Function
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.

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## Connect:Enterprise Documentation

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

## About This Guide

*Connect:Enterprise for z/OS User's Guide* is for operators who send and receive data between remote sites and Connect:Enterprise z/OS.

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

## Notational Conventions

The Connect:Enterprise documentation uses certain notational conventions. This section describes the conventions used in this guide.

Convention	Description
UPPERCASE LETTERS	Uppercase letters in the command format indicate that you type in information as shown.
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, <code>SELeCt PROCeSS</code> means that you need only type <code>SEL PROC</code> for the command to be valid.

Convention	Description
lowercase letters	Lowercase letters or words in commands or syntax boxes require substitution by the user. For example, <code>PNODE=primary-node-name</code> 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, <b>NAME=filename</b> indicates that the parameter <i>NAME</i> is required.
Underlined Letters	Underlining indicates default values for parameters and subparameters. For example, <code>FTP=Yes <u>No</u></code> specifies that the default for <i>FTP</i> is <i>NO</i> .
Vertical Bars ( )	Vertical bars indicate that you can supply one of a series of values separated by the vertical bars. For example <code>HOLD=Yes No Call</code> specifies that <i>Yes</i> or <i>No</i> or <i>Call</i> is valid.
Brackets [ ]	Brackets indicate that information is optional. For example, <code>STARTT= ([date day] [,hh:mm:ssXM])</code> 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.
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.

---

# Console Commands

You control many 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

Connect:Enterprise uses the following console commands:

Command	Description
\$\$ALLOC	Allocates a VSAM Batch Queue file (VBQ) or a VSAM Log File (VLF) to 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 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 Connect:Enterprise address space, without terminating the Connect:Enterprise job.
\$\$INVOKE	Invokes application agents.

<b>Command</b>	<b>Description</b>
\$\$LIST	Lists: <ul style="list-style-type: none"> <li>◆ All SNA sessions established with Connect:Enterprise</li> <li>◆ All BSC telecommunications lines defined to the system</li> <li>◆ All FTP sessions established with Connect:Enterprise</li> <li>◆ Status, use, current user or active traces</li> <li>◆ Any Auto Connect sessions queued for reactivation</li> <li>◆ Application agents status</li> </ul>
\$\$ODFUNLK	Releases the ODF lock, which prevents anyone from updating the ODF while it is being updated by another user.
\$\$REFRESH	Enables Connect:Enterprise to recognize files defined with PURGE, INIT=DATA while Connect:Enterprise is active. Also refreshes application agent rules.
\$\$SERVER	Shuts down or inquires on the VSAM File Server.
\$\$SHUTDOWN	Shuts down Connect:Enterprise.
\$\$SPACE	Displays the data set space allocation information of any VSAM file defined in Connect:Enterprise.
\$\$SPACEX	Displays the data set space allocation information of any VSAM file defined in 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:

<b>Type</b>	<b>Command</b>
Application agent control commands	\$\$START, \$\$STOP, \$\$INVOKE, and \$\$REFRESH
Network control commands	\$\$CHG (BSC only), \$\$CONNECT, \$\$DELACQ, \$\$LIST, \$\$START, and \$\$STOP
Problem research commands	\$\$DIALOG (FTP only), \$\$DUMP, and \$\$TRACE
System control commands	\$\$SHUTDOWN
VSAM batch control commands	\$\$DIRECTORY and \$\$STATFLG



Type	Command
VSAM file control commands	\$\$ALLOC, \$\$DALLOC, \$\$REFRESH, and \$\$SPACE
VSAM file server commands	\$\$SERVER

## Online System Console Control Interfaces

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. Connect:Enterprise is not started through the console.

To use the Connect:Enterprise WTOR interface:

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

The following outstanding WTOR message is displayed on the console:

```
CMB001I - ENTER Connect:Enterprise Vn.n.nn 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 Connect:Enterprise console commands directly to the number on the console message.

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

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

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

### Using the MODIFY Interface

To use the Connect:Enterprise MODIFY interface:

1. Specify MODIFY=YES in the \*OPTIONS section of the Connect:Enterprise ODF.
2. Run 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 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 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.
,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 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.
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 *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 Connect:Enterprise for operation. Before using the \$\$CONNECT command, see the *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	<p>(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.</p> <p>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.</p>
ACSCRIPT=pds.member.name	<p>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 Connect:Enterprise JCL.</p> <p>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.</p>

Parameter	Description
BATCHID='xx...xx' #nnnnnnn  "xx...xx"	<p>(BID=) The BATCHID specifically identifies a single batch for the ID entered. If used, the ID parameter is required. (for SNA and BSC sites)</p> <p>'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 Connect:Enterprise.</p> <p>#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.</p> <p>"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.</p> <p>For FTP sites, specifies the value of the 1–64 character &amp;BID variable that is passed to your FTP AC_SCRIPT.</p> <p><b>Note:</b> If you want this parameter to function the same as for SNA and BSC sites, code your script to implement the &amp;BID variable.</p> <p>The order of setting of the &amp;BID variable is:</p> <ul style="list-style-type: none"> <li>♦ Taken from \$\$CONNECT operator command (BATCHID= or BID= parameter).</li> <li>♦ Taken from the Connect:Enterprise remote specification record, in the ODF, at startup.</li> </ul>

Parameter	Description
BCHSEP=NO OPT1 OPT2 OPT3  OPT4	<p>Specifies which method Connect:Enterprise uses to separate batches sent to remote sites on the line when multiple batches are sent in a single connection.</p> <p>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.</p> <p>OPT1 = A common RJE method of separating batches is used. At the end of each batch, 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.</p> <p>OPT2 = Connect:Enterprise separates batches using an ETX (X'03'). Do not use this option unless the remote can properly respond to this protocol.</p> <p>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.</p> <p>OPT4 = Each batch is sent as an individual file. The batches are marked T after each one is transmitted.</p> <p><b>Note:</b> 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</p> <p>The order of priority for the BCHSEP parameter is:</p> <ol style="list-style-type: none"> <li>1 Taken from \$\$CONNECT operator command.</li> <li>2 Taken from the remote specification record in the ODF at startup.</li> <li>3 Taken from the M\$LINEX user assembly (BSC only).</li> <li>4 Taken from the *REMOTE record for the remote site (SNA only).</li> <li>5 Taken from the console \$\$CONNECT command (FTP only).</li> </ol>
BLOCK=NN *NN	<p>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.</p>
CMP=YES NO	<p>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.</p>





Parameter	Description
DATATYPE=A E I ' '	<p>(DT=) sets the value of the &amp;DATATYPE variable that is passed to your AC_SCRIPT. Valid values are:</p> <p>A = ASCII            E = EBCDIC            I = Image            Blank = Specifies that you want to use the FTP standard default for type.</p> <p>Code your AC_SCRIPT to use variable &amp;DATATYPE in order for this override to have any effect on your Auto Connect session.</p> <p>The order of the setting of the &amp;DATATYPE variable is:</p> <ol style="list-style-type: none"> <li>1 Taken from \$\$CONNECT operator command (DATATYPE= or DT= parameter).</li> <li>2 Taken from the Connect:Enterprise remote specification record in the ODF at startup time (&amp;DATATYPE=).</li> </ol> <p>If you do not specify DATATYPE in the ODF or on the console, the &amp;DATATYPE variable defaults to A, the value set in the *REMOTE record.</p>
ID=xxxxxxx	<p>(SNA and BSC) Changes the method Connect:Enterprise uses to determine which batches are transmitted to remote sites. When ID is specified, Connect:Enterprise can send batches with IDs other than those defined in the *CONNECT records. Replace xxxxxxx 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.</p>
ID=xxxxxxx	<p>(FTP) Sets the value of the &amp;ID variable that is passed to your AC_SCRIPT. When used on SNA or BSC Auto Connect sessions, this parameter changes the method 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 &amp;ID in this manner. If you plan to implement this field the same way the SNA and BSC Auto Connect sessions work, replace xxxxxxx with the 1-8 byte Mailbox ID of the batches to be sent to the remote site and implement your scripts to use variable &amp;ID to send only batches with this ID.</p>
L=xxxxxxx	<p>Specifies the LISTNAME for the host-initiated Auto Connect session. Replace xxxxxxx with the 1–8 character LISTNAME for the Auto Connect session as defined in the *CONNECT section of the ODF. This parameter is required.</p>
LINEID=xxxxxxx	<p>(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 xxxxxxx with the 1–8 character ID of the line.</p>

Parameter	Description
MEDIA=CN PR PU EX BX	<p>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.</p> <p>CN = Directs output batches to display on the remote console screen. This option causes Connect:Enterprise to use a X'15' (new line) control character as a record separator.</p> <p>PR = Directs output batches to print on the remote printer. This option causes Connect:Enterprise to use a X'15' (new line) control character as a record separator.</p> <p>PU = Directs output batches to the remote card punch. This option causes Connect:Enterprise to use a X'1E' (standard IRS) as a record separator.</p> <p>EX = Directs output batches to the remote exchange diskette and uses the transmission exchange format.</p> <p>BX = Directs output batches to the remote exchange diskette and uses the basic exchange format.</p>
MODE=SENDRECV SENDONLY RECVSEND RECVONLY	<p>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 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.</p> <p>SENDRECV (SR) = Connect:Enterprise first sends to the remote site, then receives from the remote site.</p> <p>SENDONLY (SO) = Connect:Enterprise only sends to the remote site.</p> <p>RECVSEND (RS) = Connect:Enterprise first receives from the remote site, then sends to the remote site.</p> <p>RECVONLY (RO) = Connect:Enterprise only receives from the remote site.</p>
ONEBATCH= <u>NO</u>  YES	<p>Selects only the first batch found for transmission, when used with BATCHID.</p> <p>NO = Sends all batches that match transmission criteria.</p> <p>YES = Sends only the first matching batch.</p> <p>This parameter overrides the ONEBATCH value in the *CONNECT and *REMOTE sections of the ODF.</p>
TRUNC=NO YES	<p>Specifies whether 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.</p> <p>At BSC sites, use this parameter only when the ID parameter is also used.</p> <p>At SNA sites, use TRUNC=N when transmitting variable length records; otherwise, the truncated blanks are not recovered at the receiving site.</p>

Parameter	Description
TRANSPAR=YES NO	(TRSP= ) BSC only. Use this parameter only when the ID parameter is also used. TRANSPAR=Y requests 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 = Connect:Enterprise ignores BLOCK, CMP, and TRUNC. NO = 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 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 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 <i>Connect:Enterprise for z/OS Administration Guide</i> for more information). ALLOW = Makes the deallocated VBQ/VLF available to STOUTL. DISALLOW = Makes the deallocated VBQ/VLF unavailable to STOUTL. <b>Note:</b> 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	<p>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).</p> <p>FAIL = Fails the command if the file is currently in-use and unable to immediately deallocate.</p> <p>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.</p> <p><b>Note:</b> 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=.</p>

## \$\$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=nnnnnnnnn   ALL	The queue entry number. This is displayed as part of the \$\$LIST ACQUEUE command. Specify one of the following values: nnnnnnnnn = 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 *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=*|remotel[,remote2,remote3,...remote8]
```

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

```
$$DIALOG FTPOFF=*|remotel[,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 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=nnnnnnnn 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=00000005 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
xxxxxxx	The 8-byte Mailbox ID associated with the batch.
#nnnnnnn	The 7-digit batch number assigned by Connect:Enterprise.
CT=nnnnnnnn	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. <b>Note:</b> 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
ICADNURTEMB FSZ4012389e	<p>Batch status flags. The following are the possible flags:</p> <p>A = The batch was added by the offline ADD utility.</p> <p>B = The batch originated at a BSC remote site.</p> <p>C = The batch was collected from a remote site through online Connect:Enterprise.</p> <p>D = The batch is flagged for deletion due to an online \$\$DELETE request or an offline DELETE utility.</p> <p>e = The batch was encrypted when added by the offline ADD utility.</p> <p>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.</p> <p>F = The batch originated at a FTP remote site.</p> <p>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 Connect:Enterprise and you can only extract it through the offline utilities EXTRACT utility.</p> <p>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.</p> <p>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.</p> <p>R = An online \$\$REQUEST for this batch from a remote site is allowed, or a host-initiated Auto Connect session can send the batch.</p> <p>S = The batch originated at an SNA remote site.</p> <p>T = The batch was transmitted online to a remote site.</p> <p>U = 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.</p> <p>X = The batch contains transparent data.</p> <p>Z = EBCDIC data added through the APPC user API.</p> <p>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.</p> <p>1 = FTP mode is blocked.</p> <p>2 = = FTP mode is compressed.</p> <p>3FTP mode is stream.</p> <p>4 = SSL Collected.</p> <p>5 = TLS collected.</p> <p>8 = FTP structure is file.</p> <p>9 = FTP structure is record.</p>
VBQxx   [OFFLINE]	Indicates the VBQ where the batch resides, or OFFLINE if the VBQ is not currently allocated by Connect:Enterprise.

## \$\$DUMP Command

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

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

The \$\$DUMP command is a 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=xxxxxxxx | 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 Connect:Enterprise region. If 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. 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 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.

Parameter	Description
PRSCB	Takes a snapshot dump of the Process Router Control Block.
RMT=xxxxxxx	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 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=xxxxxxx	Takes a snapshot dump of the specified 8-character TCP/IP application thread identifier. 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
```

## \$\$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:

- ◆ 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

## \$\$LIST Syntax

The \$\$LIST command has the following syntax:

```
$$LIST 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
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 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.  <b>Note:</b> 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.
RULES	Lists the status of all application agents.
FTP	Lists all currently connected FTP sessions.
FTP ALL	Lists all connected or disconnected FTP sessions.

Parameter	Description
ODFLOCK	Displays the user ID/APPLID of the ISPF or CICS user currently updating the ODF.
RESOURCE S [,D]	Displays CPU and storage utilization for each task in the Connect:Enterprise address space. By default, the display shows utilization since Connect:Enterprise startup. To only show CPU and storage utilization since the last request, specify the ,D option.
STORMAP	Displays 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 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  AL    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.
CMBnnnl	The message ID.
xxxxx	The ID of the file currently pending deallocation.
AL,CC,PD	<p>The allocation status.</p> <p>AL = The file is allocated and available to both the Connect:Enterprise online system and STOUTL offline utilities.</p> <p>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.</p> <p>AL,CC = The file is allocated as the current collection file for batches (VBQ) or for the current log file (VLF).</p> <p>Blank = The file is deallocated from the online system, but available to the STOUTL offline utilities.</p> <p>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.</p>
xxxxxxxx.xxxxxxx. xxxxx	The name of the data set contained in the file including the file ID.
x.....x	<p>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.</p> <p>\$\$DALLOC issued by userid on yyyy-mm-dd- at hh:mm:ss</p> <p>IN-USE, BSC LINEID(S)=xxxxxxxx,xxxxxxxx,xxxxxxxx,xxxxxxxx</p> <p>IN-USE, SNA REMOTE(S)=xxxxxxxx,xxxxxxxx,xxxxxxxx,xxxxxxxx</p>

## \$\$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=xxxxxxx	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=xxxxxxx	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=xxxxxxx	The FTP session ID.
NAME=xxxxxxx	The name of the remote participating in this session.
CONNECTED  DISCONNECTED	Indicates if the remote is logged into 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=xxxxxxx OPEN ACTIVE[xxxxxxx] [AC] CLOSED INACTIVE
.
.
.
CMB019I - LINEID=xxxxxxx OPEN ACTIVE[xxxxxxx] [AC] CLOSED INACTIVE
```

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

Field	Description
LINEID=xxxxxxx	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.
xxxxxxx	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 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:

```
08.37.56 JOB07194 R 60,$$LIST RESOURCES
08.37.56 JOB07194 CMB594I - Connect:Enterprise RESOURCE UTILIZATION SINCE START-UP.
08.37.56 JOB07194 CMB591I - DURATION=0001:02:26.56 ADDRESS SPACE CPU
TIME=0000:00:00.00 SRB CPU TIME=0000:00:00.00
08.37.56 JOB07194 CMB591I - TOTAL DYNAMIC STORAGE ALLOCATED: MAXIMUM=0008018K,
CURRENT=0007992K
08.37.56 JOB07194 CMB289I - APPC STORAGE POOL ALLOCATED/USED PAGES 0316/0035
08.37.56 JOB07194 CMB289I - EPVT STORAGE POOL ALLOCATED/USED PAGES 0768/0025
08.37.56 JOB07194 CMB289I - PVT STORAGE POOL ALLOCATED/USED PAGES 0008/0001
08.37.56 JOB07194 CMB297I - MAXCP HIGH CURR TOT #TIMES HIGH CURR TOT ITEMS
279
279 MAXRP BUSY BUSY MAX BUSY HOLDQ HOLDQ ON HOLDQ
279 ----
279 CP=02 01 00 00000000 00000 00000 00000000
279 RP=02 00 00 00000000 00000 00000 00000000
08.37.56 JOB07194 CMB298I - FTP MAX HIGH CURR TOT #TIMES BUSY +
280
280 TASK THREADS BUSY BUSY MAX BUSY REJECT
280 ----
280 SERVER 0004 0000 0000 00000000 00000000
280 CLIENT 0010 0000 0000 00000000 00000000
08.37.56 JOB07194 CMB592I - TASK ID TASK CPU TIME DYNAMIC STORAGE CURRENT/MAXIMUM
08.37.56 JOB07194 CMB592I - STMAIN 0000:00:00.00 0004648K/0004649K
08.37.56 JOB07194 CMB592I - STAPR001 0000:00:00.00 0001376K/0001377K
08.37.56 JOB07194 CMB592I - QCP0001 0000:00:00.00 0000098K/0000099K
08.37.56 JOB07194 CMB592I - QCP0002 0000:00:00.00 0000098K/0000099K
08.37.56 JOB07194 CMB592I - QRP0001 0000:00:00.00 0000098K/0000099K
08.37.57 JOB07194 CMB592I - QRP0002 0000:00:00.00 0000098K/0000099K
08.37.57 JOB07194 *61 CMB001I - ENTER TBINK1XT REQUEST WHEN READY
```

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:

<b>Field</b>	<b>Description</b>
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 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.
CMB297I	<p>This message lists Command Processor (CP) and Rules Processor (RP) task utilization statistics.</p> <p>MAXCP MAXRP = The MAXCP=nn MAXRP=nn value specified in the ODF (Options Definition File).</p> <p>HIGH BUSY = The highest number of CP/RP tasks that were busy at any one time, since Connect:Enterprise was last started.</p> <p>CURR BUSY = The current number of busy CP/RP tasks.</p> <p>TOT #TIMES MAX BUSY = The total number of times MAXCP RP=nn was reached, since Connect:Enterprise was last started.</p> <p>HIGH HOLDQ = The highest number of entries on the CP/RP HOLD-Q at any one time, since 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.</p> <p>CURR HOLDQ = The current number of entries on the CP/RP HOLD-Q.</p> <p>TOT ITEMS ON HOLDQ = The total number of entries placed on the CP/RP HOLD-Q, since Connect:Enterprise was last started.</p>
CMB298I	<p>This message provides FTP client/server utilization statistics.</p> <p>FTP TASK = Identifies this as FTP SERVER or CLIENT task type.</p> <p>MAX THREADS = The FTP_MAX_SERVER CLIENT_THREADS=nnnn value specified in the ODF.</p> <p>HIGH BUSY = The highest number of FTP server/client tasks that were busy at any one time, since Connect:Enterprise was last started.</p> <p>CURR BUSY = The current number of busy FTP client/server threads.</p> <p>TOT #TIMES MAX BUSY = The total number of times all FTP client/server tasks were busy, since Connect:Enterprise was last started.</p> <p>BUSY REJECT = The total number of times a connection was rejected due to all client/server threads being busy. When 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 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.</p>

Field	Description
CMB592I	<p>TASK ID TASK CPU TIME DYNAMIC STORAGE-CURRENT/MAXIUM</p> <p>This message is the title line for the individual subtask resource utilization summaries.</p> <p>TASK ID = The subtask name running in the Connect:Enterprise address space.</p> <p>TASK CPU TIME = Total CPU time the task has used.</p> <p>CURRENT DYNAMIC STORAGE = Total amount of storage currently allocated to the task.</p> <p>MAXIMUM DYNAMIC STORAGE = Maximum amount of storage that was allocated to the task at any given time.</p>
CMB001I	<p>This message is the prompt that allows the operator to enter Connect:Enterprise console commands. The message is an outstanding WTOR that the operator can reply to at any time.</p>

## \$\$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=xxxxxxxxx ACTIVE[xxx,xxx RECS ID batch#]
           [x,xxx XMITs] [AC=xxxxxxxxx]
           .
           .
           .
CMB088I - NAME=xxxxxxxxx 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.

Field	Description
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 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=xxxxxxx	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: IEFIIIC 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.



Field	Description
CMB596I	<p>nnn aaaaaaaaaK bbbbbbbK cccccccK ddddddddK eeeeeeeeK ffffffffK</p> <p>This message is displayed for each storage subpool used by Connect:Enterprise. The following information is listed for each storage subpool:</p> <ul style="list-style-type: none"> <li>Storage subpool ID number (nnn)</li> <li>Allocated storage space in 4-KB blocks below the 16-MB line (aaaaaaaaK)</li> <li>Allocated storage space in 4-KB blocks above the 16-MB line (bbbbbbK)</li> <li>Total allocated storage space in 4-KB blocks (ccccccK)</li> <li>Unallocated storage space in 4-KB blocks below the 16-MB line (dddddddK)</li> <li>Unallocated storage space in 4-KB blocks above the 16-MB line (eeeeeeeK)</li> <li>Total unallocated storage space in 4-KB blocks (fffffffK)</li> </ul>
CMB597I	<p>TASK: XXXXXXXX TCB@= XXXXXXXX ALLOC: XXXXXXXX XXXXXXXX XXXXXXX</p> <p>For each task in the 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.</p>
CMB598I	<p>AAA UNAL BELOW: XXXXXXXXXX UNAL ABOVE: XXXXXXXXXX UNAL TOTAL: XXXXXXXXXX</p> <p>where AAA = PVT and CSA</p> <p>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.</p>
CMB599I	<p>XXXXXXXX.XX CPU TIME IN SECONDS.</p> <p>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.</p>

## \$\$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 Connect:Enterprise to recognize files defined through `PURGE, INIT=DATA`.

The `$$REFRESH` command also updates application agent rules while 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 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, Connect:Enterprise does not recognize the newly initialized files until it is cycled
RULES=CON  EOB LOG  SCH WKT  ALL	<p>Updates application agent rules while online Connect:Enterprise is running. The following are the RULES options:</p> <p>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</p> <p>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.</p> <p>Refresh rules processing can take several minutes, depending on the size of the rule set. During the refresh, 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.</p> <p>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.</p> <p>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.</p>

## \$\$REFRESH Examples

Type the following from a console to allow 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 Connect:Enterprise.

### \$\$\$SERVER Syntax

The \$\$\$SERVER command uses the following syntax:

```
F procname,$$SERVER STOP[,I]|FILES[,LISTDD=xxxxxxxxxxxxxx]|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]	<p>Shuts down the VSAM file server.</p> <p>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 Connect:Enterprise if you use the STOP parameter without the I option.</p> <p>Use the STOP parameter with the I option to force an immediate shutdown if VSAM batch files are open. All utilities and online Connect:Enterprise will stop and must be recycled.</p>
FILES [,LISTDD] =xxxxxxx	<p>Lists all files currently opened by the VSAM file server.</p> <p>LISTDD displays the users of the specified file currently identified as opened by the VSAM server. xxxxxxx is the DDname assigned by the operating system during allocation. You may specify a wildcard, generic, or specific value for the DDname.</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>◆ FILES,LISTDD=*</li> <li>◆ FILES,LISTDD=SY0006*</li> <li>◆ FILES,LISTDD=SYS00061</li> </ul> <p><b>Note:</b> You can obtain the DDname from the BTB1441I or BTB007I message. See <i>\$\$\$SERVER FILES Examples</i> on page 53 for sample output.</p>
LIST STORMAP	<p>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.</p>

## \$\$\$SERVER STOP Example

Type the following to shutdown the VSAM file server after all utilities and online 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXS3A 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=RDXSVA 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 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 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 48).

---

## \$\$\$SHUTDOWN Command

The \$\$\$SHUTDOWN command terminates the 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, 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, 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 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
```

Connect:Enterprise forces an immediate shutdown of the system. Any sessions or lines with current transactions are immediately stopped, and the 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 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=nnnnnnnnnn EXTENTS=nnn
```

or

```
CMB235I - File ID %USED=nnn HI-AVAIL-RBA=nnnnnnnnnn HI-USED-RBA=nnnnnnnnnn 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	High allocated relative byte address.
or	
HI-AVAIL-RBA	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 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	High allocated relative byte address.
or	
HI-AVAIL-RBA	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
ID Used High-Allocated-RBA Multi-Volume High-Used-RBA Ext
-----
CMB423I -
VPF 002 000000068843520 00000001658880 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 00000000720896 001
VBQ07 005 000000014417920 00000000720896 001
VBQ08 005 000000014417920 00000000720896 001
VBQ09 001 000000014417920 000000043253760 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 available RBA of the data component as calculated by 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: <ul style="list-style-type: none"> <li>When the file meets the Connect:Enterprise Multi-Volume criteria. See the "Pct Used" field description for more information.</li> <li>When a VSAM error occurs. In this case, the VSAM error is displayed along with the Reason Code in hexadecimal ('REAS=xxxxxxx').</li> <li>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 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.</li> </ul>
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=xxxxxxx, 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=xxxxxxx, 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
xxxxxxx	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 Connect:Enterprise was started
APPC	Opens the APPC APPLID for ISPF or CICS communications, if the Connect:Enterprise APPC is implemented.
FTP	Starts all FTP session threads. You must also specify FTP=YES in the ODF *OPTIONS record to enable 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, \$\$\$F. You must specify ID or BATCHID, or both.

## Parameter Descriptions

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

Parameter	Description
ID=xxxxxxx	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. <b>Note:</b> 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=xxxxxxx
[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,FTPRTM=xxxxxxx FTP,FTPRTM=xxxxxxx,I FTP,FTPRTM=xxxxxxx,F
[FTP]	\$\$\$STOP FTP,FTPTRD=xxxxxxx FTP,FTPTRD=xxxxxxx,I FTP,FTPTRD=xxxxxxx,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 xxxxxx 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. <b>Note:</b> 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 <i>Connect:Enterprise for z/OS Installation Guide</i> for more information about these macros.

Parameter	Description
APPC APPC,I	<p>Stops an APPC interface. The following options are valid:</p> <p>APPC = Stops the APPC interface as soon as there are no active conversations.</p> <p>APPC,I = Stops the APPC interface immediately.</p>
FTP FTP,I FTP,F	<p>Stops FTP processing between Connect:Enterprise and remote FTP clients. The following options are valid:</p> <p>FTP = Stops all FTP sessions. All FTP sessions in progress are allowed to complete normally.</p> <p>FTP,I = Stops all FTP sessions immediately. All FTP sessions in progress are stopped immediately.</p> <p>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.</p>
FTP,FTPRTM=xxxxxxx  FTP,FTPRTM=xxxxxxx,I  FTP,FTPRTM=xxxxxxx,F	<p>FTP,FTPRTM=xxxxxxx = Stops all FTP sessions with the specified remote name.</p> <p>FTP,FTPRTM=xxxxxxx,I = Stops all FTP sessions for that specified remote name immediately.</p> <p>FTP,FTPRTM=xxxxxxx,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.</p>
FTP,FTPTRD=xxxxxxx  FTP,FTPTRD=xxxxxxx,I  FTP,FTPTRD=xxxxxxx,F	<p>FTP,FTPTRD=xxxxxxx = Stops the specified FTP thread. The "xxxxxxx" value is the thread identifier, which is displayed by the \$\$LIST FTP command.</p> <p>FTP,FTPTRD=xxxxxxx,I = Stops the specified FTP thread immediately. The "xxxxxxx" value is the thread identifier, which is displayed by the \$\$LIST FTP command.</p> <p>FTP,FTPTRD=xxxxxxx,F = Immediately stops the specified FTP thread. The "xxxxxxx" value is the thread identifier. The "F" option forces the thread to immediately stop. Use this option when the FTPTRD=xxxxxxx option fails to end the thread.</p>
RULES=CON CON,I EOB  EOB,I LOG LOG,I SCH SCH,I  WKT WKT,I	<p>Stops an application agent rules. The following options are valid:</p> <p>CON = Stops Console Application agent rules</p> <p>CON,I = Stops Console Application agent rules immediately</p> <p>EOB = Stops End-of-Batch application agent rules</p> <p>EOB,I = Stops End-of-Batch application agent rules immediately</p> <p>LOG = Stops Logging application agent rules</p> <p>LOG,I = Stops Logging application agent rules immediately</p> <p>SCH = Stops Scheduler application agent rules</p> <p>SCH,I = Stops Scheduler application agent rules immediately</p> <p>WKT = Stops Wake Up Terminate application agent rules</p> <p>WKT,I = Stops Wake Up Terminate application agent rules immediately</p>



## \$\$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. The chapter on diagnostics in the *Connect:Enterprise for z/OS Administration Guide* has more information about the trace facility.

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



---

# Offline Utilities

The host site uses the 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 Connect:Enterprise log records.

The 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 Connect:Enterprise installation. The 4-character name must be the same name as the online 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)
//SYSTEM    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
//*
```

## Enhancing the Performance of STOUTL

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 BATCNUM 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 *Connect:Enterprise for z/OS Installation Guide*. To verify the accuracy of the index, see the chapter on file maintenance in the *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 75. 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.

## 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 Table* on page 72.
- ◆ 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 Connect:Enterprise is active, the PURGE function can initialize files that were not initialized before Connect:Enterprise went online.
- ◆ Elapsed time calculations are included with each log report detail line.

## Offline Utilities Files

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

File Name	Function
INFILE	<p>Defines the sequential input file used only by the offline ADD utility.</p> <p>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.</p> <p>For BSC sites, INFILE can be any fixed length or variable length sequential file with a maximum record length of 4,096 characters.</p> <p>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.</p> <p>Override this DD name with the INFILE= parameter.</p>
INTRDR	<p>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.</p>
LOGFILE	<p>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.</p> <p><b>Note:</b> Log records written to this file are not used by Connect:Enterprise or the offline utilities.</p> <p><b>Note:</b> 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:</p> <pre> 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) </pre> <p>If LB\$64SET is ON: The log record was created while running in the BID64 environment (C:E 1.4.00 or later). Obtain the Batch ID from LB\$BCHID64.</p> <p>If LB\$64SET is OFF: The log record was created while running in the BID24 environment (C:E 1.3.00 or prior). Obtain the Batch ID from LB\$BCHID.</p>
MISMATCH	<p>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.</p>
ORPHAN	<p>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.</p>
OUTFILE	<p>Defines the sequential output file used only by the offline utilities EXTRACT utility.</p> <p>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.</p> <p>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.</p> <p>Override this DD name with the OUTFILE= parameter.</p>

File Name	Function
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.
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.
SYSTEM	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. <b>Note:</b> 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-sensitivity 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.

Rule	Description
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 Connect:Enterprise is Online

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

## User Message Table

The Connect:Enterprise user message table contains return code values and text for messages issued by the offline utilities. 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.
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.

The user message table source is in the STUTAUMT member of the source library. The beginning of STUTAUMT lists instructions to change the table to your specification. The changes take effect after you successfully assemble and link the member. JCL to assemble and link is in the ASMUMT member of the example library.

When the offline utilities are executed, the user message table is 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 *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 *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 *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 116.

---

## 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 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 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.
U	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.

Flag	Description
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 *Connect:Enterprise for z/OS Release Notes and 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 *Connect:Enterprise for z/OS* 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 *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
VCF          ALLOCATED
VBQ01
VBQ02
VBQ03
VBQ04
VBQ05        ALLOCATED  CURR COLL  RDXD110.SJV110A.VBQ05
VBQ06        ALLOCATED
VBQ07        (STOUTL=D)
VBQ08
VBQ09        -----
VBQ10        -----
VBQ11        -----
VBQ12        -----
VBQ13        -----
VBQ14        -----
VBQ15        -----
VBQ16        -----
VBQ17        -----
VBQ18        -----
VBQ19        -----
VBQ20        -----
VLF1        (STOUTL=D)
VLF2        ALLOCATED  CURR COLL  RDXD110.SJV110A.VLF2
VLF3
VLF4        (STOUTL=D)
VLF5
VLF6
VLF7
VLF8        -----
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 Connect:Enterprise file, for example, VPF, VBQ11, or VLF7.
Allocation Status	The allocation status of the file: <ul style="list-style-type: none"> <li>ALLOCATED      The file was allocated by STOUTL during this execution.</li> <li>Blank            The file was not accessed by STOUTL during this execution.</li> <li>(STOUTL=D)      The file was deallocated and unavailable to both the online system and STOUTL (\$\$DALLOC was issued with STOUTL=DISALLOW parameter).</li> </ul>
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 Queue Report (ACQUEUE)
- ◆ Auto Connect Summary Report (ACSUMMARY)
- ◆ Offline Utility Log (OFFLOG)
- ◆ Remote Connect Detail Report (RCDETAIL)
- ◆ Remote Connect Summary Report (RCSUMMARY)
- ◆ Auto Connect Detail FTP Report (ACDFTP)

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
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.

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 Connect:Enterprise or if Connect:Enterprise is no longer running and the VBQ was not allocated when Connect:Enterprise came down, a warning message is issued.
- ◆ If the VBQ parameter is not specified and the VBQROTAT value in the online 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 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 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 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'
```

Connect:Enterprise can encrypt data before transmitting it from one Connect:Enterprise to another. 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 *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
VPPF='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=xxxxxxx 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.

## 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, 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=*
//SYSTEM   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 74.

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 *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=xxxxxxxxx
  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=PID
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=
```

### 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=*
//SYSTEM 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 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 74.

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 Connect:Enterprise cannot access it. If the CRONLY option is not specified (see page 187 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 132.

---

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 *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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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
//STOURL  EXEC   PGM=STOURL, 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=*
//SYSTEM  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 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 74.

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
Console (CN)	X'1E' X'15' End of nonspanned RU

---

**Note:** 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 *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, 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. 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 */'
```

A security exit is available for the EXTRACT utility that limits user access to certain batch names. See the *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=xxxxxxxxx
  FILE_ACCESS=VPF|VCF1P
  FORMAT=1|1X|2
  FROMDATE=yyddd|nnn|yyyyddd
  FROMTIME=hhmmD
  GPLUS=YES
  ID=xxxxxxxxx
  IGNORE_VBQ_DISALLOW
  LOG=YES|NO
  MAXBATCH=nnnnnnn
  MEDIA=PR|PU|CN|EX|BX
  ONEBATCH=YES
  OUTFILE=xxxxxxxxx
  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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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=*
//SYSTEM 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 Connect:Enterprise.
User Batch Identification	The 1–64 character user-assigned batch identifier.
XmitBlk Count	The number of blocks in the transmitted batch.
XmitRec Count	The number of records in the transmitted batch.

Field	Description
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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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=*
//SYSTEM    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 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.
Total VSAM Blocks	The total number of VSAM blocks in the batch.

Field	Description
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	<p>The value of each batch status flag. The flags are described on page 74.</p> <p><b>Note:</b> The Recordized Batch indicator shows whether or not 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 Connect:Enterprise processes batches while supporting \$\$ADD processing, see the chapter in the <i>Connect:Enterprise for z/OS Administration Guide</i> on how to configure ODF records for FTP connections.</p>
<b>Origination and Protocol Information:</b>	
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 Connect:Enterprise.
Mailbox Remote	The remote site name.
\$\$ADD Information	<p>Specifies if \$\$ADD was found in the data that was used to create this batch. Valid value are:</p> <ul style="list-style-type: none"> <li>◆ \$\$ADD Found</li> <li>◆ \$\$ADD without parameters</li> <li>◆ No \$\$ADD Found</li> </ul> <p>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.</p>
<b>BSC Information:</b>	
Line ID	The ID of the line used for file transmission.
<b>SNA Information:</b>	

Field	Description
Media	<p>The output media used by the remote.</p> <p>The valid codes are:</p> <p>CN = Directs output batches to be displayed on the remote console screen. This option causes Connect:Enterprise to use a X'15' (new line) control character as a record separator.</p> <p>PR = Prints output batches on the remote printer. This option causes Connect:Enterprise to use a X'15' (new line) control character as a record separator.</p> <p>PU = Directs output batches to the remote card punch. This option causes Connect:Enterprise to use a X'1E' (standard IRS) as a record separator. Connect:Enterprise Gateway remote sites should select this option.</p> <p>EX = Directs output batches to the remote exchange diskette and uses Transmission Exchange format.</p> <p>BX = Directs output batches to the remote exchange diskette and uses Basic Exchange format.</p>
ERCL	The ERCL for basic exchange batches.
<b>FTP Information:</b>	
Data Structure	<p>Indicates the batch's data structure. Connect:Enterprise supports the following structures:</p> <p>File = The data has no internal structure and is a continuous sequence of bytes.</p> <p>Record = The data is sent as a set of sequential records.</p>
Transmission	<p>Indicates how the data was transferred. Connect:Enterprise supports the following modes:</p> <p>STREAM = Data is transferred as a stream of bytes.</p> <p>BLOCK = Data is transferred as a series of blocks.</p> <p>COMPRESSED = Data is transferred as a series of blocks in a compressed format.</p>
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.
<b>Batch Detail Information:</b>	
<b>Batch Statistics:</b>	
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.
First Transmission Remote	The remote name that the first transmission was sent to.

Field	Description
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, 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 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 74.



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 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 *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 reenabled.

---

## MOVE Input Control Records

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

```

MOVE
  BATCHID='xxxx...xxx'|"yyyy...yyy"|nnnnnnn
  BATCHNUM=nnnnnnn[-nnnnnnn][,nnnnnnn,nnnnnnn,...nnnnnnn-nnnnnnn]
  CASE_SENSITIVE=YES|NO
  FILE_ACCESS=VPF|VCF1P
  FORMAT=1|1X|2
  FROMBLK=nnnnnnnnn
  FROMDATE=yyyddd|yyddd|nnn
  FROMTIME=hhmmD
  ID=xxxxxxxxx
  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=yyyddd|yyddd|nnn
  TOTIME=hhmmD
  VBQ=nn[-nn]
  VBQOUT=nn
  VBQBLOCK
  VBQUNBLOCK
  VPF='xxxxxxx.xxxxxx'
  WILD_CARD=BID
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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
//STOURL    EXEC     PGM=STOURL, 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=*
//SYSTEM    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:

Mailbox Flags	Batch	Block	Record	Byte	User Batch	Time	Date	Input	Output	Batch	Status
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 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 74.

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

Two types of purges are available:

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

---

**Note:** The \$\$REFRESH console command notifies Connect:Enterprise of the newly defined files using INIT=DATA. See the *\$\$REFRESH Command* on page 50 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 Connect:Enterprise is online.

---

The PURGE utility provides the full data set names of all VSAM files used by 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 *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=xxxxxxxxxx
  MAXBNO=nnnnnnnn
  VBQ01='xxxxx.xxxxx'
  VBQ02='xxxxx.xxxxx'
  .
  .
  .
  VBQ20='xxxxx.xxxxx'
  VBQALLOC=nn
  VCF='xxxxx.xxxxx'
  VCF1P='xxxxx...xxxxx'
  VCF1X='xxxxx...xxxxx'
  VLFn='xxxxx.xxxxx'
  VLFALLOC=nn
  VPF='xxxxx.xxxxx'
```

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 *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=*
//SYSTEM  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 12:19:33      Connect:Enterprise 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
CMU013I - 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 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 Queue Report (ACQUEUE)
- ◆ Auto Connect Summary Report (ACSUMMARY)
- ◆ Offline Utility Log (OFFLOG)
- ◆ Remote Connect Detail Report (RCDETAIL)
- ◆ Remote Connect Summary Report (RCSUMMARY)
- ◆ Auto Connect Detail FTP Report (ACDFTP)

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
  LINEID=xxxxxxxx
  LISTNAME=xxxxxxxx
  LOGNAME=('xxxx.xxxx'|, 'xxxx.xxxx', 'xxxx.xxxx')
  LUNAME=xxxxxxxx
  REMOTE=xxxxxxxx
  TODATE=yyddd|nnn|yyyyddd
  TOTIME=hhmmD
  WILD_CARD=BID
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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)
//SYSTEM 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.vlfl')
    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 17:32:35   Connect:Enterprise Offline Utilities
Control Records For This Run:
  report
  type=acdetail
  logname=('entprs.vlfl')
  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
Listname AC# Name      Remote Start      Complete Elapsed Status Mailbox Batch Blk/Rec   User Batch
          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 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 Connect:Enterprise started processing the Auto Connect batch.
Complete Date-Time	The date and time that Connect:Enterprise completed processing the Auto Connect batch.
Elapsed Time	The length of the session in hours, minutes, and seconds.

Field	Description
Status Code	<p>The 2-column field that describes the status of the batch processed.</p> <p>In the first column, one of the following codes is displayed:</p> <p>T = Transmitted  C = Collected  S = Session Start  K = Connect  D = Disconnect  E = Session End  U = User Log  L = Logon</p> <p>In the second column, either <b>S</b>, which stands for successful processing, or <b>F</b>, which stands for failed processing, is displayed. If <b>F</b> 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.</p>
Mailbox ID	The 1–8 character Mailbox ID.
Batch Number	The unique 7-digit batch number assigned to the batch by Connect:Enterprise.
BLK/Rec Count -or-	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.
Byte Count	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.

## ACDFTP 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|"yy...yy"
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
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
WILD_CARD_MULTI_CHAR=
WILD_CARD_SINGLE_CHAR=

```

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)
//SYSTEM 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=acdfpt
logname=('ENTPRS.v1f1')
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	TIME	FTP AUTO	CONNECT	DETAIL	REPORT	Release	Page	
06/16/05 (05167)	13:58:38					1.4.00	1	
Listname	AC #	Remote Name	Start Date-Time	Complete Date-Time	Elapsed Time	Status Codes	Mailbox 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	TIME	FTP AUTO	CONNECT	DETAIL	REPORT	Release	Page	
06/16/05 (05167)	13:58:38					1.4.00	25	
Listname	AC #	Remote Name	Start Date-Time	Complete Date-Time	Elapsed Time	Status Codes	Mailbox 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 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 Connect:Enterprise started processing the Auto Connect batch.
Complete Date-Time	The date and time that Connect:Enterprise completed processing the Auto Connect batch.
Elapsed Time	The amount of time Connect:Enterprise takes to complete processing the Auto Connect batch.

Field	Description
Status Code	<p>Specifies the status of the FTP Auto Connect session.</p> <p>One of the following codes is displayed:</p> <p>SS = Session Start            CC = Client Connect            CD = Client Disconnect            LG = Logon            UL = User Log            SE = Session End            F = Failure</p> <p>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.</p> <p><b>Note:</b> If UL is displayed, the text string that was entered using the USERLOG command (see the <i>FTP Auto Connect</i> chapter of the <i>Connect:Enterprise for z/OS Administration Guide</i>) is displayed beneath. For example, in the sample report above, LOG: PRM453S - Begin Collection of Payroll Data, is one of the userlog text strings.</p>
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)
//SYSTEM 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 17:49:35      Connect:Enterprise 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 RMT Line Queue CICS CICS
Listname Event Date-Time Date-Time Time 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|yyyddd
  FROMTIME=hhmmD
  LISTNAME=xxxxxxxx
  LOGNAME=( 'xxxx .xxxx' [, 'xxxx .xxxx', 'xxxx .xxxx' ] )
  TODATE=yyddd|nnn|yyyddd
  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)
//SYSTEM 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 17:32:35      Connect:Enterprise 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 Connect:Enterprise online when the Auto Connect session begins processing.



<b>Field</b>	<b>Description</b>
Start Date-Time	The date and time the Auto Connect session started.
Complete Date-Time	The date and time the Auto Connect session ended.
Elapsed Time	The length of the session in hours, minutes, and seconds.
Successful Transmits	The total number of successful batch transmissions from 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 Connect:Enterprise.
Failed Transmits	The total number of failed batch transmissions from 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 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=nnnnnn[-nnnnnn]
  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
  LOGNAME=('xxxx.xxxx'|, 'xxxx.xxxx', 'xxxx.xxxx')
  TODATE=yyddd|nnn|yyyyddd
  TOTIME=hhmmD
  WILD_CARD=BID
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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)
//SYSTEM  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.vlfl')
          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 18:29:13      Connect:Enterprise Offline Utilities      Page 1
Control Records For This Run:
report
type=offlog
logname=('entprs.vlfl')
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
Jobname  Userid    Start      Completed   Utility  Mailbox  Batch  Rcd/Blk  User Batch
          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.
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 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
  DATATYPE=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
  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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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)
//SYSTEM 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 13:22:09	Connect:Enterprise Offline Utilities	Page 1										
Control Records For This Run:													
Report													
type=rcdetail													
logname=('entprs.vlfl')													
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	Time	Status	Func	Mailbox	Batch	User	Batch	Block	Record
(BSC)		Date-Time	Date-Time				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.

Field	Description
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. <b>Note:</b> 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 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
  LINEID=xxxxxxxx
  LOGNAME=( 'xxxxx .xxxxx' [ , 'xxxxx .xxxxx' , 'xxxxx .xxxxx' ] )
  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
//STOURL  EXEC  PGM=STOURL, PARM='SRV1', REGION=4000K
//STEPLIB DD    DISP=SHR, DSN=ENTPRS.LOAD
//INTRDR  DD    SYSOUT=(A, INTRDR)
//SYSTEM  DD    SYSOUT=*
//BTSNAP  DD    SYSOUT=*
//PRINT   DD    SYSOUT=*
//SYSPRINT DD   SYSOUT=*
//REPORTS DD    SYSOUT=*
//REPORTS2 DD   SYSOUT=*
//SYSIN   DD    DATA, DLM=ZZ
          report
          type=rsummary
          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 14:35:30      Connect:Enterprise Offline Utilities      Page 1
Control Records For This Run:
  report
  type=rcsummary
  logname=('entprs.vlfl')
  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.
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.

---

## 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 *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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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)
//SYSTEM  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       5     Monthly Sales Report  15:50 03294 06  A  R  EM
Atlanta2 8594     5       5       5     Monthly Sales Report  15:50 03294 08  A  R  M
Atlanta2 8595     5       5       5     Monthly Sales Report  16:22 03294 08  A  R  M
Atlanta2 8596     5       5       5     Monthly Sales Report  16:30 03294 08  A  R  M
Atlanta2 8597     5       5       5     Monthly Sales Report  16:35 03294 08  A  R  M
Atlanta2 8592     5       5       5     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 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 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.

Field	Description
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 74.

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

VBQC     403  COMPANYYB ( C          F 038          ) 04 02323 101946          2 YOUR GET BATCH ID          No
VBQ      403  COMPANYYB (          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  COMPANYYB ( C          F 038          ) 04 02323 102122          2 LIST          No
VBQ      405  COMPANYYB (          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 Connect:Enterprise.
Mailbox ID	The 1-8 character Mailbox ID.
Batch Status	A code describing the batch status. The codes are described on page 74.
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.

<b>Field</b>	<b>Description</b>
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

S  File  Batch  Mailbox  Batch Status  VBQ#  Create  Create  Records  User Batch  Transmittable
   Number  ID          (          )
-----

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

S  File  Batch  Mailbox  Batch Status  VBQ#  Create  Create  Records  User Batch  Transmittable
   Number  ID                                     Date    Time
=====
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	TIME	VERIFY TYPE	Page							
10/17/03 (03290)	14:00:29	REPAIR	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										
S	File	Batch Number	Mailbox ID	Batch Status	VBQ#	Create Date	Create Time	Records	User Batch 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	VFF	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	VFF	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
S File Number ID          Batch Status          VBQ#   Create Date   Create Time   Records   User Batch 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 Connect:Enterprise.
Mailbox ID	The 1–8 character Mailbox ID.
Batch Status	A code describing the batch status. The codes are described on page 74.
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.

---

<b>Field</b>	<b>Description</b>
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.

---





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# 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 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 Connect:Enterprise VSAM File Server. CSCU control and output is similar to the offline utilities.

---

**Note:** Online 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.

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 does not permit you to alter messages and return codes.
- ◆ 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 146. 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.

<b>ADD Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
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

<b>ADD Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
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.

<b>EXTRACT Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
BATCHID	X	X
BATCHNUM	X	X
CASE_SENSITIVE	X	X
DECR	X	
FORMAT	X	X
FROMDATE	X	X
FROMTIME	X	X
GPLUS	X	X

<b>EXTRACT Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
ID	X	X
IGNORE_VBQ_DISALLOW	X	
LOG	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
ZERO_LENGTH_RECORD	X	X

The following table identifies the STOUTL LIST utility parameters that are valid with the CSCU program.

<b>LIST Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
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.

<b>STATFLG Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
BATCHID	X	X
BATCHNUM	X	X
CASE_SENSITIVE	X	X
ID	X	X

<b>STATFLG Utility</b>		
<b>Parameter</b>	<b>STOUTL</b>	<b>CSCU</b>
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 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 Connect:Enterprise.

The following is a sample local VTAM ACB definition:

MBXLP000	APPL	ACBNAME=MBXLP000,	CROSS SYSTEM CLIENT 1	72
		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:

LU 6.2	MODEENT	LOGMODE=TESTLU62, FMPROF=X'13', TSPROF=X'07',	72
		SECPROT=X'B0', COMPROT=X'D0B1', RUSIZES=X'8989',	X
		PRIPROT=X'B0', PSERVIC=X'06020000000000000000300'	X
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'06020000000000000000300'	
		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.
SYSPTDD	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.

Parameter	Description
LOGFILDD	<p>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.</p> <p><b>Note:</b> 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 <i>Offline Utilities Files</i> on page 69.</p>
REPORTS	<p>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.</p> <p>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):</p> <ul style="list-style-type: none"> <li>◆ FORMAT=1 uses LRECL=132 (one detail line; displays the first 24 characters of the Batch ID)</li> <li>◆ FORMAT=1X uses LRECL=172 (one detail line extended; displays the full 64 character Batch ID)</li> <li>◆ 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.</li> </ul> <p>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 <i>STOUTL Reports</i> on page 75.</p> <p>For more information on the FORMAT= parameter, see Appendix A, <i>Offline Utility Parameters</i>. For more information on report formats, see <i>Customizing the Layout of Reports</i> on page 75.</p>
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 <i>VTAM Setup</i> on page 150). This parameter is required. There is no default.
MBAPPL	The Connect:Enterprise VTAM ACB name. This is the value in the 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 Connect:Enterprise user ID. This parameter is required if you use the Security Interface. There is no default.
MBOXPWD	The 8-character 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 75. 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 *Connect:Enterprise 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 155 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 STCSCUSR 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: 05/12/2003 TIME: 15:02:52          CONNECT:ENTERPRISE - CROSS SYSTEM CLIENT UTILITY
PAGE 1                                     PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
  SYSINDD=SYSIN
  PRINTDD=PRINT
  INPUTDD=INPUT
  OUTPUTDD=OUTPUT
  SYSPRDD=SYSPRINT
  LOGFILDD=LOGFILE
  SNAPODD=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*
  SYSPRDD=SYSPRINT        00190004 *NO CHANGE*
  LOGFILDD=LOGFILE        00200004 *OVERRIDES USER EXIT
  SNAPODD=SNAPOUT        00210004 *NO CHANGE*
  LOCAPPL=MBXLP           00220007 *OVERRIDES DEFAULT
  MBAPPL=MBXDRDR          00230006 *OVERRIDES DEFAULT
  LOGMODNM=TESTLU62       00240004 *OVERRIDES DEFAULT
  MBOXUID=RRAIN1          00250004 *OVERRIDES DEFAULT
  MBOXPWD=???????        00260004 *OVERRIDES DEFAULT, ACTUAL
TEXT OVERLAYED
  *TPBFSZ=-. . .          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	<p>Commands and parameters are read through 80-byte SYSIN records.</p> <p>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.</p>
Comments	<p>An asterisk (*) in column one of the 80-byte record denotes that the record holds comments only.</p> <p>Any data specified after the command, or parameter and parameter value on the 80-byte record is considered a comment.</p>

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.

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 Connect:Enterprise or if Connect:Enterprise is no longer running and the VBQ was not allocated when 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=xxxxxxxxx
  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=xxxxxxx 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=xxxxxxx
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, 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.
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 <i>VTAM Setup</i> on page 150).

---

Parameter	Description
MBAPPL	The Connect:Enterprise VTAM ACB name. This is the value in the 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: 6/15/2004 TIME: 16:33:04 CONNECT:ENTERPRISE - CROSS SYSTEM CLIENT UTILITY PAGE 1
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
MENAME=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
MENAME=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: 6/15/2004 TIME: 16:33:04.5 CONNECT:ENTERPRISE CROSS LPAR UTILITY 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 --ELAPSED 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.
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 Connect:Enterprise.
INFILE RECORDS	The number of records sent from Connect:Enterprise to CSCU.
REQUESTS SENT	The number of requests sent to Connect:Enterprise.
BYTES RCVD	The number of bytes received from Connect:Enterprise.
OUTFILE RECORDS	The number of records sent to Connect:Enterprise.
RESPONSES RCVD	The number of responses received from 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:** 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.

---

## 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, 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. 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 | "yy...yy"
  BATCHNUM=nnnnnn [-nnnnnn]
  CASE_SENSITIVE=YES | NO
  FORMAT=1 | 1X | 2
  FROMDATE=yyddd | nnn | yyyyddd
  FROMTIME=hhmmD
  GPLUS=YES
  ID=xxxxxxxx
  LOG=YES | NO
  MAXBATCH=nnnnnnn
  ONEBATCH=YES
  PADCHAR=Xnn
  PCC=KEEP | REMOVE | CONVERT
  RDW=BUILD | NOBUILD
  RECSEP=Xnn [ , nn , . . . nn ] | Tnnnnn | Cnnnnn
  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
  WILD_CARD_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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=TSSTLU62B          LOGMODE TABLE NAME
XX
//SYSIN    DD    DATA,DLM=ZZ
        extract
        id=*
ZZ
//

```

See *ADD Utility Sample JCL* on page 157 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: mm/dd/yyyy    TIME: hh:mm:ss          CONNECT:ENTERPRISE CROSS SYSTEM CLIENT UTILITY          PAGE 1
                                         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" *****
* sysIndd=csctf001      COMMENT          00210000 *** COMMENT ***
* PRINTDD=PRINT          00220000 *** COMMENT ***
* OUTPUTDD=OUTPUT      00230000 *** COMMENT ***
* INPUTDD=INPUT        00250000 *NO CHANGE*
* SYSPRTDD=SYS00001    00260000 *** COMMENT ***
* LOGFILDD=LOGFILE     00270000 *NO CHANGE*
* SNAPOUDD=SNAPOUT     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 ***
* TPBUF SZ=          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: 06/30/2000    TIME: 14:23:27.5          CONNECT:ENTERPRISE CROSS LPAR UTILITY          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 : MBIC0000
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.

<b>Field</b>	<b>Description</b>
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 Connect:Enterprise.
INFILE RECORDS	The number of records received from Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Connect:Enterprise.
BYTES RCVD	The number of bytes received from Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from 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_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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=*
//SYSTEM   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 157 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: 6/15/2004 TIME: 23:40:58 CONNECT:ENTERPRISE - CROSS SYSTEM CLIENT UTILITY PAGE 1
PARAMETER OVERRIDE PROCESSING LOG

STCSC00 - DEFAULT PARM VALUES:
SYSINDD=SYSIN
PRINTDD=PRINT
INPUTDD=INPUT
OUTPUTDD=OUTPUT
SYSPRRDD=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*
SYSPRRDD=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: 6/15/2004 TIME: 23:40:58.3 CONNECT:ENTERPRISE CROSS LPAR UTILITY PAGE: 0001

CMA100 -- CONTROL RECORDS FOR THIS RUN:

===== >>> LIST <<<=====
===== >>> ID=* <<<=====
LOCAL ACBNAME : MBXLP000
C:M ACB NAME : SBLDUB75
----- Page Break -----
DATE: 6/15/2004 TIME: 23:40:58.3 CONNECT:ENTERPRISE CROSS LPAR UTILITY PAGE: 0002
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=Structure 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: 6/15/2004 TIME: 23:40:58.3 CONNECT:ENTERPRISE CROSS LPAR UTILITY 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 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 74.
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 Connect:Enterprise.
INFILE RECORDS	The number of records received from Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Connect:Enterprise.
BYTES RCVD	The number of bytes received from Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from 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
  MAXBATC=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_MULTI_CHAR=
  WILD_CARD_SINGLE_CHAR=

```

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=*
//SYSTEM   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: 6/16/2004 TIME: 00:23:39 CONNECT:ENTERPRISE - CROSS SYSTEM CLIENT UTILITY PAGE 1
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: 6/16/2004 TIME: 00:23:39.5 CONNECT:ENTERPRISE CROSS LPAR UTILITY 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=Structure 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: 06/16/2004 TIME: 00:23:39.5 CONNECT:ENTERPRISE CROSS LPAR UTILITY PAGE: 0002

REQ MAIL BOX ----- MAIL BOX ----- -BATCH- BYTES INFILE REQUESTS BYTES OUTFILE RESPONSES --ELAPSED 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 0 0 0.00 0.00

CMA154 -- PROCESSING COMPLETE, HIGHEST CONDITION CODE = 00
    
```

The report lists the following information:

<b>Field</b>	<b>Description</b>
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 74.
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 Connect:Enterprise.
INFILE RECORDS	The number of records received from Connect:Enterprise.
REQUESTS SENT	The number of requests sent to Connect:Enterprise.
BYTES RCVD	The number of bytes received from Connect:Enterprise.
OUTFILE RECORDS	The number of records written to the OUTPUT file.
RESPONSES RCVD	The number of responses received from 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.



---

# 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

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 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 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 Connect:Enterprise data batches that are sent to a remote site. 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, 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, 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), 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 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, 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, 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), 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, 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, 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), 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. Connect:Enterprise in the receive mode after a \$TURNLINE\$=RMDC responds to an EOT with an EOT. If the remote then sends a ENQ, Connect:Enterprise continues to receive. If the remote sends another EOT or does not respond (resulting in one or two timeouts), 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

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 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, Connect:Enterprise sends a block ending in ETX to the remote site, indicating end-of-file to the remote site. 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; 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)

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 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 Connect:Enterprise issues a TTD. This is due to the nature of BTAM TTD processing and is normal.

---

# 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.

---

<b>Parameter</b>	<b>Definition</b>
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	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: ADD</p> <p>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).</p> <p>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:</p> <p>xxx...xxx (blank delimiter) = Displayable characters, excluding embedded blanks. The first blank detected is presumed to be the end of string delimiter.</p> <p>'xxx...xxx' (single quote delimiter) = Displayable characters, including embedded blanks. You can enclose the string in single quotes to allow embedded blanks.</p> <p>"xxx...xxx" (double quote delimiter) = Displayable characters, including embedded blanks. You can enclose the string in double quotes to allow embedded blanks.</p> <p>0Xhhh...hhh (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.</p> <p><b>Note:</b> 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).</p>

Parameter	Definition
AUTOSEND= <i>n</i>   <i>n</i> ,E	<p>Short form: AS=            Abbreviated form: AU=            Offline Utilities: ADD, except the CSCU ADD utility</p> <p>Specifies that the next <i>n</i> (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 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.</p> <p>Modify commands for Autosend are not currently supported on JES 3 systems.</p> <p>Use the following symbolic parameters in any AUTOSEND record. No abbreviations are permitted. Each parameter must be in uppercase text.</p> <ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ &amp;TIM is replaced by the hour and minute (HHMM) of the current time.</li> <li>◆ &amp;DATE is replaced by the current Julian date (YYDDD).</li> <li>◆ &amp;DATE07 is replaced by the current 4-digit year Julian date (YYYYDDD).</li> <li>◆ &amp;IDFIELD is replaced by the 8-byte Mailbox ID.</li> <li>◆ &amp;BATCH# is replaced by the 8-digit batch number. It includes the leading zeros.</li> <li>◆ &amp;BID24 is replaced by the 24-byte BID. Be aware the symbolic substitution starts with &amp; and overlays the next 24 bytes.</li> <li>◆ &amp;BID64 is replaced by the 64-byte BID. Be aware the symbolic substitution starts with &amp; and overlays the next 64 bytes.</li> </ul> <p><b>Note:</b> 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).</p>

Parameter	Definition
BATCHID='xxx...xxx'   nnnnnnn #nnnnnnn  "yyy...yyy"	<p>Short form: BID= Abbreviated form: BATCHI= Offline utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG</p> <p>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.</p> <p><b>Note:</b> For maximum efficiency running STOUTL programs run, use the BATCHID or BATCHNUM parameter whenever possible.</p> <p>'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.</p> <p>nnnnnnn = Specifies the number to process. Replace nnnnnnn with the 1–7 digit batch number assigned by Connect:Enterprise (leading zeros are not required).</p> <p><b>Note:</b> Generic user BIDs or batch numbers are not permitted for the ADD utility.</p> <p>"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.</p> <p><b>Note:</b> 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). When full wildcard support is used, the BATCHID= value is treated as a pattern, in which wildcard characters can be used to mask out one or more portions of the Batch ID. To activate wildcard checking, the WILD_CARD=BID parameter must be specified. See the following parameters for a complete description on how to activate wildcard checking:</p> <ul style="list-style-type: none"> <li>◆ CASE_SENSITIVE</li> <li>◆ WILD_CARD=</li> <li>◆ WILD_CARD_MULTI_CHAR=</li> <li>◆ WILD_CARD_SINGLE_CHAR=</li> </ul>

Parameter	Definition
BATCHIDM='xxx...xxx' "yyy...yyy"	<p>Short form: BIDM=            Abbreviated form: N/A            Offline utilities: LIST</p> <p>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 matching on any of the specified BIDs thus improving VCF I/O processing. These IDs may 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.</p> <p><b>Note:</b> Specific batch numbers are not allowed, for example, BATCHIDM=#28694.</p> <p>'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.</p> <p>"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.</p> <p>Example:            LIST            VPF='YOUR.VPF.DSN'            BATCHIDM='batchid 01 specific'            BATCHIDM='batchid 02 specific'            .            .            BATCHIDM='batchid 63 generic'            BATCHIDM='batchid 64 generic'</p> <p><b>Note:</b> For more information on using wildcards when selecting BIDs, see <i>Connect:Enterprise for z/OS Release Notes</i>.</p>

Parameter	Definition
BATCHIDV='xxx...xxx'	<p>Short form: BIDV= Offline utilities: ADD</p> <p>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.</p> <p>'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.</p> <p><b>Note:</b> If any resolved symbolic variable causes the length of the Batch ID to exceed 64 bytes, the ADD function will fail.</p> <p>Use any of the following symbolic parameters in the BATCHIDV value. No abbreviations are permitted. Each symbolic variable must be specified in uppercase text.</p> <p><b>Variable/Description</b></p> <p>&amp;DATE—Current date in 5-digit yyddd format  &amp;DATE07—Current date in 7-digit yyyyddd format  &amp;DAYUC—UPPER CASE DAY (MONDAY, TUESDAY..)  &amp;DAY—Mixed Case Day (Monday, Tuesday..)  &amp;IDFIELD—8-byte Mailbox ID (ID=xxxxxxx value)  &amp;MONTHUC—UPPER CASE MONTH(JANUARY, FEBRUARY.)  &amp;MONTH—Mixed Case Month(January, February.)  &amp;OSNAME—4 to 6 byte operating system name (for example, z/OS)  &amp;OSVER—Operating system version in 6-digit vvrmm format  &amp;STCNAME—8-byte jobname/taskname  &amp;YYYYDDD—Current date in 7-digit yyyyddd format  &amp;YYDDD—Current date in 5-digit yyddd format  &amp;YYYYMMDD—Current date in 8-digit yyyymmdd format  &amp;MMDDYYYY—Current date in 8-digit mmdyyy format  &amp;DDMMYYYY—Current date in 8-digit ddmmyyy format  &amp;YYYY—Current year in 4-digit yyyy format  &amp;YY—Current year in 2-digit yy format  &amp;MM—Current month in 2-digit mm format  &amp;DD—Current day in 2-digit dd format  &amp;HHMMSSTH—Current time in 8-digit hhmmsth format  &amp;HHMMSS—Current time in 6-digit hhmmss format  &amp;HHMM—Current time in 4-digit hhmm format  &amp;HOUR—Current time in 2-digit (hours) hh format  &amp;MIN—Current time in 2-digit (minutes) mm format  &amp;SEC—Current time in 2-digit (seconds) ss format  &amp;TH—Current time in 2-digit (tenths/hundredths) th format</p>



Parameter	Definition
BATCHNUM=nnnnnnn [-nnnnnnn][,nnnnnnn, nnnnnnn,..... nnnnnnn-nnnnnnn]	<p>Short form: N/A</p> <p>Abbreviated form: BN=</p> <p>Offline utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p><b>Note:</b> You cannot specify multiple items for the REPORT and VERIFY utilities. For those utilities only, use the format, nnnnnnn   nnnnnnn-nnnnnnn.</p> <p>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.</p> <p><b>Note:</b> For maximum efficiency running STOUTL programs run, use the BATCHID or BATCHNUM parameter whenever possible.</p> <p>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.</p>
BATCHTYPE= <u>ALL</u>   TRANSMITTED  COLLECTED  START CONNECT  DISCONNECT END LOG	<p>Short form: BTYPE=</p> <p>Abbreviated form: BATCHT= A   T   C   S   K   D   E   L</p> <p>Offline utilities: ACDetail, ACDFTP</p> <p>Selects the batch types, data transmissions, or data collections for processing.</p> <p>ALL = Processes either collected or transmitted batches. The default is ALL.</p> <p>TRANSMITTED = Processes only transmitted batches.</p> <p>COLLECTED = Processes only collected batches.</p> <p>START = Processes FTP session start log records.</p> <p>CONNECT = Processes FTP client connect log records.</p> <p>DISCONNECT = Processes FTP client disconnect log records.</p> <p>END = Processes FTP session end records.</p> <p>LOG = Processes FTP User log records.</p>

Parameter	Definition
CASE_SENSITIVE= <u>YES</u>  NO	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL ACDFTP OFFLOG RCDETAIL, STATFLG</p> <p>Specifies whether characters are to be treated as case-sensitive when performing a wild card comparison. The default value is yes.</p> <p>YES = Treats the tested string and mask pattern as case-sensitive, that is, leaves the input value as is when performing the wildcard comparison.</p> <p>NO = Uppercases both the tested character string and the mask pattern, prior to performing the wild card comparison.</p> <p><b>Note:</b> You must specify the WILD_CARD=BID parameter when using this parameter.</p>
COMPLETION= <u>ALL</u>   SUCCESS FAILURE	<p>Short form: N/A</p> <p>Abbreviated form: CO=A   S   F</p> <p>Offline Utilities: ACDetail, ACDFTP, RCDetail</p> <p>The specific completion status of batches selected for processing.</p> <p>ALL = Processes all batches, regardless of completion status. The default is ALL.</p> <p>SUCCESS = Processes only successfully transmitted batches.</p> <p>FAILURE = Processes only batches that failed transmission.</p>
COUNT= <u>RECORD</u>  BYTE	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: REPORT (ACDETAIL, OFFLOG, RCDetail)</p> <p>Specifies whether block/record count or byte count is to be printed on the report.</p> <p>RECORD = The record/block count appears in the report.</p> <p>BYTE = The byte count appears in the report.</p>

Parameter	Definition
CRONLY	<p>Short form: N/A</p> <p>Abbreviated form: CR</p> <p>Offline Utilities: ERASE, VERIFY</p> <p>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.</p> <p><b>Note:</b> 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.</p> <p><b>Note:</b> If you use the ALLERRORS parameter with the VERIFY utility, this parameter is not necessary.</p>
DATETYPE= <u>START</u> COMPLETION	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: REPORT (ACDETAIL, ACDFTP, ACSUMMARY, RCDETAIL, RCSUMMARY)</p> <p>Specifies whether the start date/time or the completion date/time is to be used for selection.</p> <p>START = Selects all items based on start date/time.</p> <p>COMPLETION = Selects all items based on completion date/time.</p>
DECR=xxxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: DEC=</p> <p>Offline Utilities: EXTRACT</p> <p><b>Note:</b> This parameter cannot be used with the CSCU EXTRACT utility.</p> <p>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 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.</p> <p><b>Note:</b> Connect:Enterprise must reside at both the sending and receiving sites when using encryption.</p>

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 <b>Note:</b> 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  <u>DISALLOW</u>	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=xxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: E=</p> <p>Offline Utilities: ADD</p> <p><b>Note:</b> This parameter cannot be used with the CSCU ADD utility.</p> <p>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 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.</p> <p><b>Note:</b> Connect:Enterprise must reside at both the sending and receiving sites when using encryption.</p> <p>When encrypting data, the following limitations exist:</p> <ul style="list-style-type: none"> <li>◆ If multiple batches are processing, all the batches are encrypted.</li> <li>◆ 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.</li> <li>◆ Do not truncate data during transmission or extraction. This causes decryption or MAC validation errors.</li> <li>◆ The encryption key is not sent with the batch data.</li> <li>◆ The encryption key is not in the utility report.</li> </ul>
FAILCODE=nnn	<p>Short form: N/A</p> <p>Abbreviated form: FA=</p> <p>Offline Utilities: RCDETAIL</p> <p>Specifies a 3-digit fail code to list only those remote connect records that failed with the specified fail code.</p> <p>See the <i>Connect:Enterprise for z/OS Messages and Codes Guide</i> for a description of fail codes.</p> <p>If you specify this parameter, you must specify COMPLETION=FAILURE.</p>

Parameter	Definition
FILE_ACCESS=VPF VCF1P	<p>Short form: N/A</p> <p>Abbreviated form: FILE_ACC=</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG</p> <p>Specifies the file access path STOUTL should use to process the batch control files.</p> <p>VPF = Access batches via the VPF (VSAM Pointer File). Batches are processed and reported in ID order.</p> <p>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 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-transmittable batches for each ID.</p>
FORMAT=1 1X 2	<p>Short form: none</p> <p>Abbreviated form: none</p> <p>Offline utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL OFFLOG RCDETAIL, STATFLG, VERIFY</p> <p>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 <i>Customizing the Layout of Reports</i> on page 75.</p> <p>1 = Prints the normal (original) report's single detail line items, which display only 24 characters of the User Batch ID.</p> <p>1X = Prints single line extended detail items to accommodate the full 64 character User Batch ID.</p> <p>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.</p>
FROMBLK=nnnnnnnnn	<p>Short form: N/A</p> <p>Abbreviated form: FROMB=</p> <p>Offline Utilities: MOVE</p> <p>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.</p>

Parameter	Definition
FROMDATE=yyyddd  nnnyddd	<p>Short form: FD= Abbreviated form: FROMD= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p>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-<i>nnn</i> (for example, FROMDATE=3 is resolved to the date three days ago). The default is 1980001.</p> <p><b>Note:</b> 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.</p> <p><b>Note:</b> 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).</p>
FROMTIME=hhmmD	<p>Short form: FT= Abbreviated form: FROMT= Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p>Specifies the starting military time range for all data selected for processing. The default is 0001.</p> <ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ 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.</li> </ul>

Parameter	Definition
FTYPE= <u>ALL</u> ,CONNECT, DISCONNECT,ADD,NOAD, REQUEST,DELETE, DIRECTORY,SIGNON	<p>Short form: N/A Abbreviated form: FT=AL,C, D,AD,N,R, DE,DI,S Offline Utilities: RCDetail</p> <p>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.</p> <p>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.</p>
GPLUS=YES	<p>Short form: N/A Abbreviated form: G=Y Offline Utilities: EXTRACT</p> <p>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.</p>
ID=xxxxxxx	<p>Short form: N/A Abbreviated form: ID= Offline Utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p>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.</p> <p><b>Note:</b> The ADD utility does not permit Generic Mailbox IDs.</p>
IGNORE_TRANSPARENT	<p>Short form: N/A Abbreviated for: IGNORE_TRANSP Offline Utilities: ADD</p> <p>Specifies that the added batch should not be marked transparent even if the data has transparent characters.</p>



Parameter	Definition
IGNORE_VBQ_DISALLOW	<p>Short form: N/A</p> <p>Abbreviated form: IGNORE_VBQ_D</p> <p>Offline Utilities: ADD, ERASE, EXTRACT, MOVE</p> <p>Specifies that the current STOUTL function is allowed to access a VBQ that was previously deallocated using \$\$DALLOC VBQnn,STOUTL=DISALLOW.</p>
INFILE=xxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: INF=</p> <p>Offline Utilities: ADD</p> <p><b>Note:</b> This parameter cannot be used with the CSCU ADD utility.</p> <p>Specifies the DD name that allocates the batch input data file. The default is INFILE.</p>
INIT=ALL DATA	<p>Short form: N/A</p> <p>Abbreviated form: INI=AL D</p> <p>Offline Utilities: PURGE</p> <p>Specifies the type of utility processing to perform.</p> <p>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 Connect:Enterprise system.</p> <p>DATA = Adds new data collection files (VBQs and VLFs) to a 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.</p>
IPADDR=n.n.n.n  domain_name	<p>Short form: N/A</p> <p>Abbreviated form: IPADDR=</p> <p>Offline Utilities: REPORT</p> <p>Specifies the 12-digit numeric IP address of the remote user to be used as a selection criteria.</p>
JOBNAME	<p>Short form: N/A</p> <p>Abbreviated form: JO=</p> <p>Offline Utilities: VERIFY</p> <p>Specifies the job that erased the batch control information for CRONLY erased batches.</p>

Parameter	Definition
KEEPADD	<p>Short form: N/A</p> <p>Abbreviated form: K</p> <p>Offline Utilities: ADD</p> <p>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.</p> <p><b>Note:</b> 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.</p>
LINEID=xxxxxxx	<p>Short form: LID=</p> <p>Abbreviated form: LIN=</p> <p>Offline Utilities: ACDETAIL, RCDETAIL</p> <p>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=.</p>
LISTNAME=xxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: LIS=</p> <p>Offline Utilities: REPORT</p> <p>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</p>
LOG=YES NO	<p>Short form: N/A</p> <p>Abbreviated form: LOG=</p> <p>Offline Utilities: ADD, EXTRACT</p> <p>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.</p>
LOGNAME=('xxx.xxx' [, 'xxx.xxx', 'xxx.xxx'])	<p>Short form: N/A</p> <p>Abbreviated form: LOGN=</p> <p>Offline Utilities: REPORT</p> <p>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.</p>
LUNAME=xxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: LOGN=</p> <p>Offline Utilities: ACDETAIL</p> <p>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=.</p>

Parameter	Definition
MAXBATCH=nnnnnnn	<p>Short form: N/A            Abbreviated form: MAXBATCH=            Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG</p> <p>Specifies the maximum number of batches when processing data. Only the first nnnnnnn batches, which meet the selection criteria, will be processed.</p> <p><b>Note:</b> MAXBATCH=1 is the same as ONEBATCH=YES for the EXTRACT utility. Either ONEBATCH=YES or MAXBATCH=nnnnnnn may be specified, but not both.</p>
MAXBNO=nnnnnnn	<p>Short form: N/A            Abbreviated form: MA=            Offline Utilities: PURGE</p> <p>Specifies the maximum number of batches that 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.</p> <p><b>Note:</b> A VCF control record is written for each batch number possible in the Connect:Enterprise system.</p>
MBXNAME=xxxxxxx	<p>Short form: N/A            Abbreviated form: MB=            Offline Utilities: PURGE</p> <p>Specifies the unique 1–8 character name for the Connect:Enterprise system. It is used for batch and function security checks (if the security interface is active) within online 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.</p>
MEDIA=PR PU CN EX BX	<p>Short form: N/A            Abbreviated form: ME=            Offline Utilities: EXTRACT</p> <p>For SNA auto connect sessions, specifies the media to which outbound batches are sent.</p> <p>PR = Printer            PU = Card punch            CN = Console screen            EX = Exchange disk using the transmission exchange format            BX = Exchange disk using the basic exchange format</p>
MISMATCH	<p>Short form: N/A            Abbreviated form: MI            Offline Utilities: VERIFY</p> <p>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.</p>

Parameter	Definition
MULTXMIT=YES NO	<p>Short form: MX=            Abbreviated form: MU=Y N            Offline Utilities: ADD</p> <p>YES = You can send the batch to multiple sites. The batch is not marked <b>T</b> 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 <b>T</b> 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.</p> <p>NO = The batch can only be sent once. This is the default.</p> <p><b>Note:</b> The value of this parameter is automatically set to NO if TRANSMITONCE=YES is specified.</p>
NOERASE	<p>Short form: N/A            Abbreviated form: NOE            Offline Utilities: MOVE</p> <p>Specifies that source batch data is not erased after it is copied to the destination VBQ.</p>
OFFFLAGS= REQUESTABLE, DELETED,TRANSMITTED, EXTRACTED, MULTXMIT	<p>Short form: N/A            Abbreviated form: OF=R,D,T,E,M            Offline Utilities: STATFLG</p> <p>Specifies which batch status flags are turned off for a selected batch by the utility. Specify any or all, separated by commas.</p> <p>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.</p> <p><b>Note:</b> 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.</p>
ONEBATCH=YES	<p>Short form: N/A            Abbreviated form: ONE=Y            Offline Utilities: EXTRACT</p> <p>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.</p> <p><b>Note:</b> MAXBATCH=1 is the same as ONEBATCH=YES for the EXTRACT utility. Either ONEBATCH=YES or MAXBATCH=nnnnnnn may be specified, but not both.</p>

Parameter	Definition
ONFLAGS=REQUESTABLE , DELETED,TRANSMITTED, EXTRACTED, MULTXMIT	<p>Short form: N/A Abbreviated form: ON=R,D,T, E,M Offline Utilities: STATFLG</p> <p>Specifies which batch status flags are turned on for a selected batch by the utility. Specify any or all, separated by commas.</p> <p>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.</p> <p><b>Note:</b> 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.</p>
OPTION=ALLFORCONN	<p>Short form: N/A Abbreviated form: OP=A Offline Utilities: REPORT</p> <p>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.</p>
ORPHAN	<p>Short form: N/A Abbreviated form: OR Offline Utilities: VERIFY</p> <p>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.</p>
OUTFILE=xxxxxxx	<p>Short form: N/A Abbreviated form: OU= Offline Utilities: EXTRACT</p> <p>Specifies the DD name that allocates the batch output data. The default is OUTFILE.</p>

Parameter	Definition																												
PADCHAR=Xnn	<p>Short form: N/A            Abbreviated form: PA=            Offline Utilities: ADD, EXTRACT</p> <p><b>Note:</b> This parameter cannot be used with the CSCU ADD utility.</p> <p>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).</p> <p><b>Note:</b> For the ADD utility, this parameter is valid only if VBQRECSIZE is specified.</p>																												
PCC= <u>KEEP</u>  REMOVE  CONVERT	<p>Short form: N/A            Abbreviated form: PC=K R C            Offline Utilities: EXTRACT</p> <p>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.</p> <p>KEEP = Maintains all PCC ESC sequences in the file. The default is KEEP.</p> <p>REMOVE = Removes all PCC ESC sequences. Examines all processed data and removes the following 2-byte codes.</p> <table border="1"> <tbody> <tr><td>ESC /</td><td>(X'2761')</td></tr> <tr><td>ESC F</td><td>(X'27C6')</td></tr> <tr><td>ESC S</td><td>(X'27E2')</td></tr> <tr><td>ESC G</td><td>(X'27C7')</td></tr> <tr><td>ESC T</td><td>(X'27E3')</td></tr> <tr><td>ESC A</td><td>(X'27C8')</td></tr> <tr><td>ESC I</td><td>(X'27C9')</td></tr> <tr><td>ESC B</td><td>(X'27C2')</td></tr> <tr><td>ESC J</td><td>(X'27D1')</td></tr> <tr><td>ESC C</td><td>(X'27C3')</td></tr> <tr><td>ESC K</td><td>(X'27D2')</td></tr> <tr><td colspan="2">REMOVE =</td></tr> <tr><td>ESC D</td><td>(X'27C4')</td></tr> <tr><td>ESC L</td><td>(X'27D3')</td></tr> </tbody> </table>	ESC /	(X'2761')	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')
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ESC K	(X'27D2')																												
REMOVE =																													
ESC D	(X'27C4')																												
ESC L	(X'27D3')																												

Parameter	Definition		
	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
	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

Parameter	Definition
QREASON=ALL LINE ACTIVE SESSION THREAD	<p>Short form: N/A</p> <p>Abbreviated form: QR=AL L AC S T</p> <p>Offline Utilities: REPORT</p> <p>Specifies the reason to select queued sessions for processing.</p> <p>ALL = Processes all queued Auto Connect sessions. The default is ALL.</p> <p>LINE = Processes Auto Connect sessions queued for BSC lines.</p> <p>ACTIVE = Processes Auto Connect sessions queued because they were already initiated and running.</p> <p>SESSION = Processes Auto Connect sessions queued because no SNA session is established.</p> <p>THREAD = Processes Auto Connect sessions queued because no FTP threads were available.</p>
QSTATUS=ALL QUEUE START DELETE	<p>Short form: N/A</p> <p>Abbreviated form: QS=A Q S D</p> <p>Offline Utilities: REPORT</p> <p>Specifies which queuing events that have taken place for a queued Auto Connect session.</p> <p>ALL = Processes all Auto Connect sessions placed in the queue. The default is ALL.</p> <p>QUEUE = Processes all Auto Connect sessions queued but not started.</p> <p>START = Processes all Auto Connect sessions that were successfully restarted and removed from the queue.</p> <p>DELETE = Processes all Auto Connect sessions manually deleted from the queue.</p>
RDW=KEEP REMOVE	<p>Short form: N/A</p> <p>Abbreviated form: RD=K R</p> <p>Offline Utilities: ADD</p> <p>Specifies how record descriptor words (RDW) of variable length input data are processed.</p> <p>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.</p> <p>REMOVE = Removes RDWs by default for ADD.</p>



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Parameter	Definition
RDW=BUILD NOBUILD	<p>Short form: N/A</p> <p>Abbreviated form: RD=B N</p> <p>Offline Utilities: EXTRACT</p> <p>Specifies how to process record descriptor words (RDW) of variable length output data.</p> <p>BUILD = Adds RDWs by default for EXTRACT.</p> <p>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.</p>

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Parameter	Definition
RECSEP=Xnn[,nn,...nn]   Tnnnnn   Cnnnnn   Cnnnn,Xnn[,nn...nn]	<p>Short form: N/A</p> <p>Abbreviated form: RECSEP=</p> <p>Offline Utilities: EXTRACT</p> <p>The record separators searched for as the record delimiter when processing data to the output file.</p> <p>Xnn[,nn,...nn] = When you specify this form, the code X, plus up to 24 2-digit and 4-digit HEX values, represents the desired record separators.</p> <p>For SNA, this parameter overrides standard 3770 deblocking. Only this HEX character separates records.</p> <p>For example, if RECSEP=X0A0D,1E specifies that either the &lt;carriage return&gt;&lt;line feed&gt; characters (x'0A0D') or the standard SNA Punch/Print/Exchange character (x'1E') is used by EXTRACT to delimit logical records.</p> <p>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.</p> <p><b>Note:</b> 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 <i>Batch Extraction</i> on page 95.</p> <p>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.</p> <p>For BSC batches, record separators x'1E', x'1F' and x'1F02' are stripped.</p> <p>For SNA batches, record separators are stripped based on the incoming media type:</p> <ul style="list-style-type: none"> <li>◆ Punch and Print - x'0C', x'0D', x'15', x'1E', and x'1F'.</li> <li>◆ Console - x'15'.</li> <li>◆ Exchange - x'1E'.</li> </ul> <p>Cnnnnn,Xnn = When you specify this form, the numeric value and the hexadecimal value together determine the record separator. The rules for Cnnnnn and Xnn apply except that no communication control characters are removed by default.</p>

Parameter	Definition
RECSEPIN=YES NO	<p>Short form: N/A</p> <p>Abbreviated form: RECSEPI=Y N</p> <p>Offline Utilities: EXTRACT</p> <p>The value specified in RECSEP=Xnn is retained in the record when the record is written to the OUTFILE. The default is NO.</p>
REMOTE=xxxxxxx	<p>Short form: N/A</p> <p>Abbreviated form: RE=</p> <p>Offline Utilities: REPORT</p> <p>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=.)</p>
REMOVECOL=nnnnn	<p>Short form: N/A</p> <p>Abbreviated form: REMOVEC=</p> <p>Offline Utilities: ADD, EXTRACT, except the CSCU ADD or EXTRACT utility</p> <p>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.</p> <p>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.</p> <p><b>Note:</b> If REMOVECOL is set, REMOVEVAL is required.</p>
REMOVEVAL='xx..xx' 0xhh..hh	<p>Short form: N/A</p> <p>Abbreviated form: REMOVEV=</p> <p>Offline Utilities: ADD, EXTRACT, except the CSCU ADD or EXTRACT utility</p> <p>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).</p> <p>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).</p> <p><b>Note:</b> If REMOVEVAL is set, REMOVECOL is required.</p>

Parameter	Definition
RETRY	<p>Short form: N/A</p> <p>Abbreviated form: RET</p> <p>Offline Utilities: MOVE</p> <p>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.</p>
RTYPE=ALL SNA BSC FTP	<p>Short form: N/A</p> <p>Abbreviated form: RT=A S B F</p> <p>Offline Utilities: RCDETAIL, RCSUMMARY, ACQUEUE</p> <p>Specifies the remote type used for selecting data for processing.</p> <p>ALL = Processes all remote types. The default is ALL.</p> <p>SNA = Processes only SNA remote types.</p> <p>BSC = Processes only BSC remote types.</p> <p>FTP = Processes only FTP remote types.</p>
SPLITCOUNT=nnnn	<p>Short form: SC=</p> <p>Abbreviated form: SP=</p> <p>Offline Utilities: ADD</p> <p>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. Connect:Enterprise then closes out the batch and begins a batch with the same identifiers.</p>
SSL=YES  <u>NO</u>	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: RCDETAIL, RCSUMMARY</p> <p>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.</p> <p>YES = Select only sessions using a secure SSL or TLS connection.</p> <p>NO = Select only sessions using a non secure connection.</p>

Parameter	Definition
STATOR=ADDED,BSC, COLLECTED,DELETED, EBCDIC,EXTRACTED, FILE_STRUCTURE,FTP, INCOMPLETE,MULTXMIT, NONTRANSMITTABLE, REQUESTABLE,SNA,SSL, TRANSPARENT, TRANSMITTED, UNEXTRACTABLE	<p>Short form: N/A</p> <p>Abbreviated form: STATO= A, B, C, D, EB, EX, FILE, FTP, I, M, NON, R, S, SSL, TRANSP, TRANSM, U</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG</p> <p>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.</p> <p>You must use this parameter or STATUS in EXTRACT to override the rules that prevent processing of deleted or incomplete batches.</p> <p>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.</p> <p>ADDED = The batch was added offline.</p> <p>BSC = The batch was collected from a BSC transmission.</p> <p>COLLECTED = The batch was collected online.</p> <p>DELETED = The batch was deleted.</p> <p>EBCDIC = The batch was collected from the APPC API.</p> <p>EXTRACTED = The batch was extracted.</p> <p>FILE_STRUCTURE = The batch is nonrecord oriented (one contiguous byte string).</p> <p>FTP = The batch was collected from an FTP transmission.</p> <p>INCOMPLETE = The batch was incomplete (not successfully collected).</p> <p>MULTXMIT = The batch is available for multiple transmissions.</p> <p>NONTRANSMITTABLE = The batch cannot be transmitted.</p> <p>REQUESTABLE = The batch is available for online requests by remote sites or for transmission by host-initiated auto connect sessions.</p> <p>SNA = The batch was collected from an SNA transmission.</p> <p>SSL = The batch was collected over a secure connection using SSL or TLS.</p> <p>TRANSMITTED = The batch was transmitted.</p> <p>TRANSPARENT = The batch contains transparent data.</p> <p>UNEXTRACTABLE = The batch cannot be extracted.</p>

Parameter	Definition
STATUS=ADDED,BSC, COLLECTED,DELETED, EBCDIC,EXTRACTED, FILE_STRUCTURE,FTP, INCOMPLETE,MULTXMIT, NONTRANSMITTABLE, REQUESTABLE,SNA,SSL, TRANSPARENT, TRANSMITTED, UNEXTRACTABLE	<p>Short form: N/A</p> <p>Abbreviated form: STATU=A, B, C, D, EB, EX, FILE, FTP, I, M, NON, R, S, SSL, TRANSP, TRANSM, U</p> <p>Offline Utilities: DELETE,ERASE,EXTRACT,LIST,MOVE, STATFLG</p> <p>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.</p> <p>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.</p> <p>ADDED = The batch was added offline.</p> <p>BSC = The batch was collected from a BSC transmission.</p> <p>COLLECTED = The batch was collected online.</p> <p>DELETED = The batch was deleted.</p> <p>EBCDIC = The batch was collected from the APPC API.</p> <p>EXTRACTED = The batch was extracted.</p> <p>FILE_STRUCTURE = The batch is nonrecord oriented (one contiguous byte string).</p> <p>FTP = The batch was collected from an FTP transmission.</p> <p>INCOMPLETE = The batch was incomplete (not successfully collected).</p> <p>MULTXMIT = The batch is available for multiple transmissions.</p> <p>NONTRANSMITTABLE = The batch cannot be transmitted.</p> <p>REQUESTABLE = The batch is available for online requests by remote sites or for transmission by host-initiated auto connect sessions.</p> <p>SNA = The batch was collected from an SNA transmission.</p> <p>SSL = The batch was collected over a secure connection using SSL or TLS.</p> <p>TRANSMITTED = The batch was transmitted.</p> <p>TRANSPARENT = The batch contains transparent data.</p> <p>UNEXTRACTABLE = The batch cannot be extracted.</p>
STRUCTURE= <u>RECORD</u>   FILE	<p>Short form: N/A</p> <p>Abbreviated form: STRUCT</p> <p>Offline Utilities: ADD</p> <p>Specifies that batches are added to the VBQ using one of the following structures:</p> <p>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.</p> <p>FILE = All input data records are written to the VBQ as one continuous byte stream (no logical record delineation).</p>

Parameter	Definition
TOBLK=nnnnnnnnn	<p>Short form: N/A</p> <p>Abbreviated form: TOB=</p> <p>Offline Utilities: MOVE</p> <p>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.</p>
TODATE=yyyyddd yyddd nnn	<p>Short form: TD=</p> <p>Abbreviated form: TOD=</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p>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-<i>nnn</i>. The default is the current date.</p> <p><b>Note:</b> 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.</p> <p><b>Note:</b> 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).</p>
TOTIME=hhmmD	<p>Short form: TT=</p> <p>Abbreviated form: TOT=</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT, STATFLG, VERIFY</p> <p>Specifies the ending military time range for all data selected for processing.</p> <p>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.</p> <p>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.</p>
TRANSMITONCE=YES	<p>Short form: TO=</p> <p>Abbreviated form: TRANSM=</p> <p>Offline Utilities: ADD</p> <p>Flags processed batches so that they are only transmitted once. They are also flagged unextractable. If TRANSMITONCE=YES is specified, MULTXMIT=NO is enforced.</p>

Parameter	Definition
TRANSPARENT=YES  <u>NO</u>   BOTH	<p>Short form: N/A</p> <p>Abbreviated form: TRANSP=Y N B</p> <p>Offline Utilities: EXTRACT</p> <p>Specifies whether transparent batches are processed.</p> <p>YES = Processes only transparent batches, without the need for batch numbers.</p> <p>NO = Processes only nontransparent batches, unless the batch number is specified. The default is NO.</p> <p>BOTH = Processes both transparent and nontransparent batches into the same output file. All batch record lengths must be the same.</p> <p><b>Note:</b> 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 <i>Batch Extraction</i> on page 95</p>
TYPE=ACDETAIL  ACQUEUE  ACSUMMARY OFFLOG  RCDETAIL RCSUMMARY  ACDFTP	<p>Short form: N/A</p> <p>Abbreviated form: TY=ACD  ACQ ACS OFF RCD RCS ACDFTP</p> <p>Offline Utilities: REPORT</p> <p>Specifies the report type to execute. This parameter is the first noncomment card following the REPORT control card.</p> <p>ACDETAIL = Executes the Auto Connect Detail Report.</p> <p>ACDFTP = Executes the Auto Connect FTP Detail Report</p> <p>ACQUEUE = Executes the Auto Connect Queue Report.</p> <p>ACSUMMARY = Executes the Auto Connect Summary Report.</p> <p>OFFLOG = Executes the Offline Log Report.</p> <p>RCDETAIL = Executes the Remote Connect Detail Report.</p> <p>RCSUMMARY = Executes the Remote Connect Summary Report.</p>



Parameter	Definition
USERRCD=1 to 9,E	<p>Short form: UR=  Abbreviated form: US=  Offline Utilities: ADD,EXTRACT</p> <p>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.</p> <p>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 <b>E</b> (EVERY) is specified, the user record is written in front of every batch that is processed.</p> <p>You can use the following symbolic parameters in the USERRCD record. No abbreviations are permitted. Each parameter must be uppercase text.</p> <ul style="list-style-type: none"> <li>◆ &amp;TIM is replaced by the hour and minute (HHMM) of the current time.</li> <li>◆ &amp;DATE is replaced by the current Julian date (YYDDD).</li> <li>◆ &amp;DATE07 is replaced by the current 4-digit year Julian date (YYYYDDD).</li> <li>◆ &amp;IDFIELD is replaced by the 8-byte Mailbox ID.</li> <li>◆ &amp;BATCH# is replaced by the 7-digit batch number. It includes the leading zeros.</li> <li>◆ &amp;BID24 is replaced by the 24-byte BID. Be aware that the symbolic substitution starts with the &amp; and overlays the next 24 bytes.</li> <li>◆ &amp;BID64 is replaced by the 64-byte BID. Be aware the symbolic substitution starts with &amp; and overlays the next 64 bytes.</li> </ul> <p>Symbolic parameters are updated before the user record is written. The data provided in the USERRCD record is case sensitive.</p> <p>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.</p>

Parameter	Definition
UTYPE= <u>ALL</u> ,ADD,DELETE,ERASE,EXTRACT,MOVE,STATFLG	<p>Short form: N/A</p> <p>Abbreviated form: UT=AL,AD,D,ER,EX,M,S</p> <p>Offline Utilities: REPORT</p> <p>Specifies the utility log data for processing. You can specify one or more utility names, separated by commas.</p> <p>ALL = Processes log data from all utilities. If specified, no other operands are needed. The default is ALL.</p> <p>ADD = Processes only log data from the ADD utility.</p> <p>DELETE = Processes only log data from the DELETE utility.</p> <p>ERASE = Processes only log data from the ERASE utility.</p> <p>EXTRACT = Processes only log data from the EXTRACT utility.</p> <p>MOVE = Processes only log data from the MOVE utility.</p> <p>STATFLG = Processes only log data from the STATFLG utility.</p>
VBQ=nn[-nn]	<p>Short form: N/A</p> <p>Abbreviated form: VBQ=</p> <p>Offline Utilities: ADD, DELETE, ERASE, EXTRACT, LIST, MOVE, STATFLG, VERIFY</p> <p>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.</p>
VBQ01='xxxx.xxxx'	<p>Short form: N/A</p> <p>Abbreviated form: VBQ01=</p> <p>Offline Utilities: PURGE</p> <p>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.</p>
VBQ02='xxxx.xxxx' . . . VBQ20='xxxx.xxxx'	<p>Short form: N/A</p> <p>Abbreviated form: VBQ02=...VBQ20=</p> <p>Offline Utilities: PURGE</p> <p>Specifies the full data set name of the VBQ02-VBQ20 VBQ files. Use VBQ02-VBQ20 with INIT=DATA to define additional files to Connect:Enterprise at a later time. After you specify this parameter in PURGE, you cannot specify it again.</p>

Parameter	Definition
VBQALLOC=nn	<p>Short form: N/A</p> <p>Abbreviated form: VBQA</p> <p>Offline Utilities: PURGE</p> <p>Specifies the number of VSAM Batch Queue Files (VBQ) that online Connect:Enterprise allocates when it is brought up for the first time. 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.</p>
VBQBLOCK	<p>Short form: N/A</p> <p>Abbreviated form: VBQB=</p> <p>Offline Utilities: MOVE</p> <p>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.</p>
VBQOUT=nn	<p>Short form: N/A</p> <p>Abbreviated form: VBQO=</p> <p>Offline Utilities: MOVE</p> <p>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.</p>
VBQRECSIZE=1 to 32,742	<p>Short form: N/A</p> <p>Abbreviated form: VBQR=</p> <p>Offline Utilities: ADD</p> <p><b>Note:</b> This parameter cannot be used with the CSCU ADD utility.</p> <p>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.</p>
VBQUNBLOCK	<p>Short form: N/A</p> <p>Abbreviated form: VBQU=</p> <p>Offline Utilities: MOVE</p> <p>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.</p>
VCF='xxxx.xxxx'	<p>Short form: N/A</p> <p>Abbreviated form: VC=</p> <p>Offline Utilities: PURGE</p> <p>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.</p>

Parameter	Definition
VCF1P='xxxx....xxxx'	<p>Short form:N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: PURGE</p> <p>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.</p> <p><b>Note:</b> Both VCF1P and VCF1X must be specified when identifying the alternate index to Connect:Enterprise.</p>
VCF1X='xxxx....xxxx'	<p>Short form:N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: PURGE</p> <p>Specifies the VCF alternate index cluster name. Use the same value in the IDCAMS DEFINE PATH PATHENTRY (YOUR.ENTPRS.VCF1X.DSNAME)) statement.</p> <p><b>Note:</b> Both VCF1P and VCF1X must be specified when identifying the alternate index to Connect:Enterprise.</p>
VLFn='xxxx.xxxx'	<p>Short form: N/A</p> <p>Abbreviated form: VLF=</p> <p>Offline Utilities: PURGE</p> <p>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 Connect:Enterprise at a later time. If you specify this parameter in the PURGE utility, you cannot specify it again.</p>
VLFALLOC=n	<p>Short form: N/A</p> <p>Abbreviated form: VLFA=</p> <p>Offline Utilities: PURGE</p> <p>Specifies how many VLFs to allocate when the online Connect:Enterprise system is initially brought up. 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.</p>
VPF='xxxx.xxxx'	<p>Short form: N/A</p> <p>Abbreviated form: VP=</p> <p>Offline Utilities: ADD, DELETE, ERASE, EXTRACT, MOVE, LIST, PURGE, STATFLG, VERIFY</p> <p><b>Note:</b> This parameter cannot be used with any CSCU EXTRACT utility.</p> <p>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.</p> <p>For the PURGE utility, you can only use this parameter when INIT=ALL is specified.</p>

Parameter	Definition
WILD_CARD=BID	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL ACDFTP OFFLOG RCDETAIL, STATFLG</p> <p>Turns on wildcard checking using the specified BATCHID or BATCHIDV value as the criterion for selecting batches.</p> <p>BID = Performs wildcard checking on the User Batch ID</p> <p>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 186.</p> <p><b>Note:</b> For more information on using wildcards when selecting BIDs, see <i>Connect:Enterprise for z/OS Release Notes</i>.</p>
WILD_CARD_MULTI_CHAR =*   x[xxxxxxx]	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL ACDFTP OFFLOG RCDETAIL, STATFLG</p> <p>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.</p> <p>A contiguously repeating multi-wildcard character has no additional effect, for example, 'A*' is identical to 'A**', 'A***', and so on.</p> <p>The default value is '*'.</p> <p><b>Note:</b> You must specify the WILD_CARD=BID parameter when using this parameter.</p>
WILD_CARD_SINGLE_ CHAR=%   x[xxxxxxx]	<p>Short form: N/A</p> <p>Abbreviated form: N/A</p> <p>Offline Utilities: DELETE, ERASE, EXTRACT, LIST, MOVE, REPORT TYPE=ACDETAIL ACDFTP OFFLOG RCDETAIL, STATFLG</p> <p>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.</p> <p>The default value is '%'.</p> <p><b>Note:</b> You must specify the WILD_CARD=BID parameter when using this parameter.</p>

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Parameter	Definition
ZERO_LENGTH_RECORD= <u>KEEP</u>  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.

---

## 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 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 Connect:Enterprise interface that allows the customization of 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. Connect:Enterprise supports the following application agents: Console, End Of Batch, Logging, Scheduler, and Wake Up Terminate.

### Auto Connect

A Connect:Enterprise feature that allows host-initiated data communications to one or more remote sites. The host and remote sites may be connected using SNA, FTP, bisync manual dial, auto dial, or nonswitched lines. The Auto Connect session may be fully automated by time of day, or controlled with the \$\$CONNECT console command. Full reporting of Auto Connect activity is available.

### 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 set of related data collected by or added to Connect:Enterprise and maintained on the VSAM Batch Files at the host.

### **Batch Number**

A unique 7-digit number assigned internally by 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 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 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 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. 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 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 Connect:Enterprise.

### **BTAM (Basic Telecommunications Access Method)**

A standard IBM access method used by 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 Connect:Enterprise system. Both the host site and the remote site must be capable of implementing the option. 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 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 (Connect:Enterprise).

**Cross System Client Utility (CSCU)**

A 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 Connect:Enterprise VSAM File Server. CSCU control and output is similar to the offline utilities.

**D****Data Collection**

The process in which 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 Connect:Enterprise at the host computer.

**Data Repository**

The component that 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 Connect:Enterprise FTP server.

## Data Transmission

The process in which Connect:Enterprise transmits data from the VSAM Batch Files to remote sites. Data transmission means data is output from Connect:Enterprise at the host computer to the remote site.

## Directory

A formatted listing of control information for batches on the 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 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 Connect:Enterprise CICS or ISPF interface to initiate execution of the 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. 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 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 Connect:Enterprise to function as an FTP server. This enables remote FTP client sites to access, retrieve, and send data to the 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

The main processing computer where Connect:Enterprise is running and where you send your data batches. Also referred to as the host site or host computer.

## I

### IRS (Inter-Record Separator)

A special character used to separate multiple records in a block of data being transmitted over a telecommunications line. 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. 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 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 Connect:Enterprise ODF.

### Log Facility

A 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 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 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 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 Connect:Enterprise/SNA method of providing security during a remote site's attempt to LOGON to Connect:Enterprise. The LUNAME (assigned to the remote site as part of the VTAM definition process) is provided to and validated by 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 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.

## **Mailbox Name**

The 8-character symbolic name used to identify individual Connect:Enterprise systems to the user interface.

## **Mailbox Password**

A security password used to control access to Connect:Enterprise systems.

**Mailbox User ID**

An 8-character field used to identify each user to Connect:Enterprise. In order for a user to access a 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 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 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. 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 Connect:Enterprise control records and keyword parameters that specify options in effect for the current execution of online 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 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 Connect:Enterprise (ADD), the RDW may be removed or retained. For batch data sent from Connect:Enterprise (REQUEST) the RDW may be created or not created.

**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 Connect:Enterprise.

**Remote Site**

Any terminal, computer, or software that can connect with Connect:Enterprise in the host computer.

**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 Connect:Enterprise at the host site and another logical unit, such as a 3770 device. When a LOGON is completed between 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 Connect:Enterprise provided 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. 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 *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 Connect:Enterprise, the capability to create a snapshot dump of internal 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. Connect:Enterprise supports both BSC transparency and SNA transparency.

## **Truncation**

See *Blank Truncation*.

## **\$TURNLINE\$**

An optional feature in 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 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 Connect:Enterprise BSC connections. A User Assembly is not required by SNA connections.

### User Batch ID

A 1–24 character free-form batch identifier used to describe the contents of a batch of data on the Connect:Enterprise VSAM Batch Files.

### User Exits

A user-written program called by online 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 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 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 Connect:Enterprise.

## V

### VBQ (VSAM Batch Queue)

The Connect:Enterprise data set used for storing batches of data collected from remote sites during online 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 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 Connect:Enterprise data set that contains control information for batches stored on the VSAM Batch Queue.

### **VLf (VSAM Log File)**

The Connect:Enterprise data set that contains logged information on the progress of a Connect:Enterprise execution.

### **VPF (VSAM Pointer File)**

The Connect:Enterprise data set that contains control information for every file defined in the 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 Connect:Enterprise for the VSAM Batch Files.

### **VSAM Batch Files**

A term used for the group of up to 24 files used by the 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 Connect:Enterprise to receive and send data to a variety of SNA devices or application programs.

### **VTAM Application Program**

A program, such as 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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