ChangeMan® ZDD

Server Installation Guide

Product version: 8.2 Patch 1

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Welcome to ChangeMan® ZDD

ChangeMan® ZDD is a network file system that operates on a PC networked with a z/OS® operating system. From your PC, you can access data sets, job output, and ChangeMan ZMF components that reside on a z/OS server.

See the Readme for the latest updates and corrections for this manual. The Readme is available through the Micro Focus SupportLine website at: `https://www.microfocus.com/support-and-services/documentation/`.

Audience and scope

Use this manual if you are responsible for any of these tasks:

- Installing ChangeMan ZDD.

- Upgrading ChangeMan ZDD from a prior release.

- Managing mainframe change control or configuration management.

- Providing technical support for mainframe started tasks.

- Managing the mainframe security system at your data center.

Use this document to accomplish any of the following:

- Install a Sernet started task to act as a ChangeMan ZDD server.

- Add components to a ChangeMan ZMF server to access it from a separate ChangeMan ZDD server.

- Add components to a ChangeMan ZMF server to make it a ChangeMan ZDD server.

Navigating this book

This manual is organized as follows

- The first three chapters introduce you to ChangeMan ZDD architecture and discuss installation requirements and issues.

- The next four chapters provide detailed, step by step instructions for installing a ChangeMan ZDD server.

- The last chapter tells you how to set certain ChangeMan ZDD options with XML pages in a file on the mainframe.

- Appendixes follow with additional information that may be useful.

Change bars

Change bars in the left margin identify substantive changes to this manual in this release.

Guide to ChangeMan ZDD Documentation

The following sections provide basic information about ChangeMan ZDD documentation.

ChangeMan ZDD Documentation Suite

The ChangeMan ZDD documentation set includes the following manuals in PDF format.

Manual	Description
SER10TY User's Guide	Provides instructions for applying licenses to enable ChangeMan ZDD servers on the mainframe.
ChangeMan ZDD User's Guide	Explains how to: ■ Install and configure the client components on your PC ■ Access and perform operations on mainframe data from your desktop
ChangeMan ZDD Tools Guide	Describes the following tools that you can use to assist in your development: ■ ChangeMan Edit ■ ChangeMan Diff These tools use the Template Manager to control how your code is displayed.
ChangeMan ZDD .NET Programming Interface Guide	Describes how to use the .NET programming interface to access ChangeMan ZDD functionality from your own programs and scripts.
ChangeMan ZDD COM Programming Interface Guide	Describes how to access ChangeMan ZDD functionality, using COM Automation, from your own programs and scripts.
ChangeMan ZDD Server Installation Guide	Provides instructions for installing ChangeMan ZDD servers on the mainframe.
ChangeMan ZDD Edit Reference Card	Provides a summary of keyboard shortcuts that you can use with ZDD editing facilities.

These manuals are available through the Micro Focus SupportLine website at: https://www.microfocus.com/support-and-services/documentation/.

Related Documents

The following documents provide additional information that may be useful when installing or using ChangeMan ZDD.

Manual	Description
ChangeMan ZMF Messages Guide	Provides explanations for informational, warning, and error messages for ChangeMan ZMF and Sernet. These messages may be displayed when installing or using ChangeMan ZDD.
ChangeMan ZMF User's Guide	Describes how to use ChangeMan ZMF features and functions to manage changes to application components. Many of these functions are available through ChangeMan ZDD.
ChangeMan ZMF XML Services User's Guide	Documents the most commonly used features of the XML Services application programming interface to ChangeMan ZMF.

Using the Manuals

To view PDF files, use Adobe® Reader®, which may be downloaded for free at
get.adobe.com/reader/

TIP Be sure to download the *full version* of Reader. The more basic
version does not include the search feature.

This section highlights some of the main Reader features. For more detailed information,
see the Adobe Reader online help system.

The PDF manuals include the following features:

- **Bookmarks.** All of the manuals contain predefined bookmarks that make it easy for
  you to quickly jump to a specific topic. By default, the bookmarks appear to the left of
  each online manual.

- **Links.** Cross-reference links within a manual enable you to jump to other sections
  within the manual and to other manuals with a single mouse click. These links appear
  in blue.

- **Comments.** All PDF documentation files that are delivered with ChangeMan ZDD
  have enabled commenting with Adobe Reader. Adobe Reader version 7 and higher has
  commenting features that enables you to post comments to and modify the contents
  of PDF documents. You access these features through the Comments item on the
  menu bar of the Adobe Reader.

- **Printing.** While viewing a manual, you can print the current page, a range of pages,
  or the entire manual.

- **Advanced search.** Starting with version 6, Adobe Reader includes an advanced
  search feature that enables you to search across multiple PDF files in a specified
  directory.

Using Adobe Reader Advanced Search

To search all PDF documents in a folder, execute the following steps (requires Adobe
Reader version 6 or higher):

1 In Adobe Reader, select **Edit** | **Advanced Search** (or press **Shift+Ctrl+F**).

2 Select the **All PDF Documents in** option and use **Browse for Location** in the drop
down menu to select the folder you want to search.

3 In the text box, enter the word or phrase that you want to find.

4 Optionally, select one or more of the additional search options, such as **Whole words
only** and **Case-Sensitive**.

5 Click **Search**.

6 In the **Results**, expand a listed document to see all occurrences of the search
argument in that PDF.

Typographical Conventions

The following typographical conventions are used in the online manuals and online help. These typographical conventions are used to assist you when using the documentation; they are not meant to contradict or change any standard use of typographical conventions in the various product components or the host operating system.

Convention	Explanation
italics	Introduces new terms that you may not be familiar with and occasionally indicates emphasis.
bold	Emphasizes important information and field names.
UPPERCASE	Indicates keys or key combinations that you can use. For example, press the ENTER key.
`monospace`	Indicates syntax examples, values that you specify, or results that you receive.
`monospaced italics`	Indicates names that are placeholders for values you specify; for example, *`filename`*.
`monospace bold`	Indicates the results of an executed command.
vertical rule |	Separates menus and their associated commands. For example, select File | Copy means to select Copy from the File menu. Also, indicates mutually exclusive choices in a command syntax line.

Chapter 1
Introduction

This chapter provides a high level description of ChangeMan ZDD.

What is ChangeMan ZDD?

ChangeMan ZDD is a software infrastructure technology that makes mainframe data sets and job output appear in Windows® Explorer and other desktop applications as though they are local files or files on a Windows® network. It simulates a network file system on a Windows® platform that is networked with a z/OS® operating system.

From your PC, you can access files, execute jobs, and examine output from jobs that reside on a z/OS server. No special execution environment or programming interface is required.

ChangeMan ZDD also gives you desktop access to ChangeMan ZMF. ChangeMan ZMF instances, applications, packages, and libraries appear as folders in Windows Explorer and other PC applications. You perform many ChangeMan ZMF functions from your PC, and all of the software configuration management rules and restrictions set up in ChangeMan ZMF apply.

ChangeMan ZDD has two components:

- ChangeMan ZDD client, which is installed on your desktop workstation.
- ChangeMan ZDD server, which is installed on an enterprise server to provide access to files and services on an LPAR.

The primary component of ChangeMan ZDD server is Sernet.

What is Sernet?

Sernet (previously called Serena/Network) provides communication and other services on the enterprise server for Micro Focus Serena products. Sernet runs as a started task on an LPAR.

Some products, such as ChangeMan ZMF, run as applications under a Sernet instance. Other products, such as ChangeMan ZDD, run on other platforms and use a Sernet instance to get access to mainframe files and services.

The diagram on the next page is a logical view of the Sernet architecture.

Serena Software SERNET Architecture

Serena ChangeMan ZDD

Direct access to ChangeMan ZMF components in a change package from a workstation running Windows .

Serena ChangeMan ZMF for Eclipse

Direct access to ChangeMan ZMF components in a change package from a workstation running Eclipse .
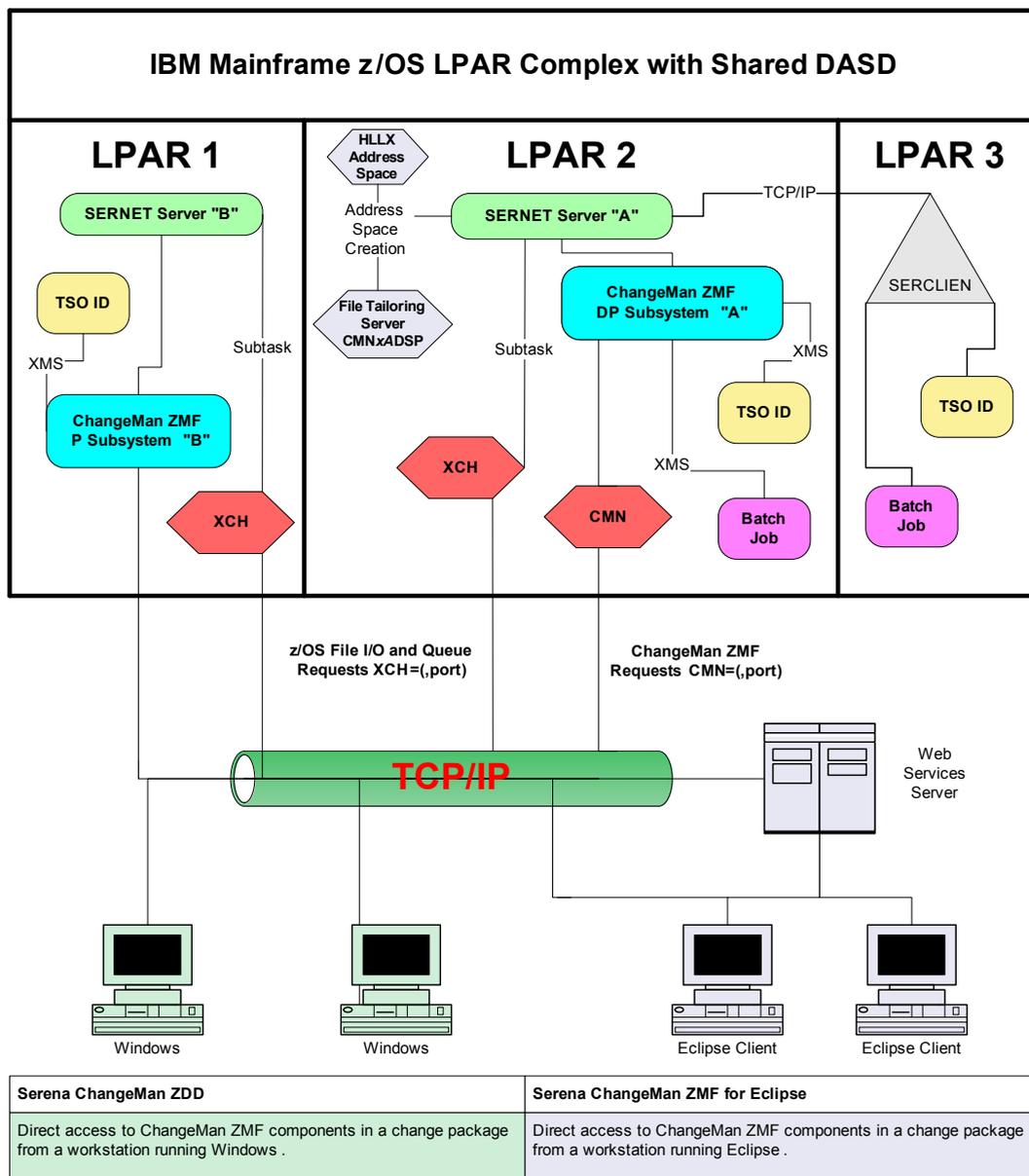
The diagram shows two Sernet instances on separate LPARs, each managing a ChangeMan ZMF instance. Users access these ChangeMan ZMF instances from the Web, from workstations in the distributed environment, and from TSO sessions in the z/OS environment. The TSO user in the last LPAR is using the Load Balancing Option of ChangeMan ZMF to work from a mainframe environment where there is no Sernet or ChangeMan ZMF instance.

ChangeMan ZDD Server

When you configure a ChangeMan ZDD client on your desktop workstation, you specify one or more ChangeMan ZDD servers.

Each ChangeMan ZDD server is a Sernet started task. Each Sernet started task that acts as a ChangeMan ZDD server must:

- Connect to the network with TCP/IP.

- Run with licenses that enable ChangeMan ZDD programs.

- Run with Sernet keyword option XCH=*port* to provide connectivity to ChangeMan ZDD clients.

In the ChangeMan ZDD client, you configure each server definition with:

- An IP address for the LPAR where the ChangeMan ZDD server resides.

- A port number for connectivity, which is the port number specified in the XCH=*port* keyword option for the Sernet started task.

Accessing ChangeMan ZMF Servers

From a ChangeMan ZDD client on a desktop workstation, you may access one or more ChangeMan ZMF servers through a ChangeMan ZDD server.

You need only one ChangeMan ZDD server on an LPAR to access all instances of ChangeMan ZMF running on that LPAR.

ChangeMan ZDD Server Design

If you already have a Sernet instance running another product, you can use that started task to act as a ChangeMan ZDD server, or you can install and configure a separate Sernet started task to act as a dedicated ChangeMan ZDD server.

We recommend that you install a separate Sernet started task to act as a dedicated ChangeMan ZDD server. A separate started task will:

- Reduce contention for Sernet resources

- Avoid operational conflicts in areas such as scheduled downtime and disaster recovery priority

Installation tasks in this manual are separated into three chapters. Execute the steps in the chapter or chapters that describes the design that you want to use for your ChangeMan ZDD server:

- Chapter 5, "Build Dedicated Sernet Started Task" on page 43 tells you how to build a Sernet started task that is dedicated as a ChangeMan ZDD server.

- Chapter 6, "Connect to ChangeMan ZMF" on page 59 tells you how to prepare an existing ChangeMan ZMF server for access through a separate ChangeMan ZDD server.

■ Chapter 7, "Add ChangeMan ZDD to ChangeMan ZMF" on page 65 tells you how to reconfigure an existing ChangeMan ZMF server to also act as a ChangeMan ZDD server.

While we do not recommend the design described in Chapter 7, it may be used if you want to use ChangeMan ZDD primarily to access a single ChangeMan ZMF instance. Using an existing Sernet instance is also the quickest way to get ChangeMan ZDD running to explore its capabilities and demonstrate its benefits.

> **NOTE** Regardless of which ZDD server design you choose, you must have a ZDD server on each LPAR where a ZMF instance runs that you will access from ZDD clients.

Dedicated ZDD Server

This diagram shows a Windows workstation using a dedicated ZDD server Sernet A to access mainframe data sets, jobs, and Unix files, and to connect to two ZMF instances, ZMF 2 and ZMF 3.
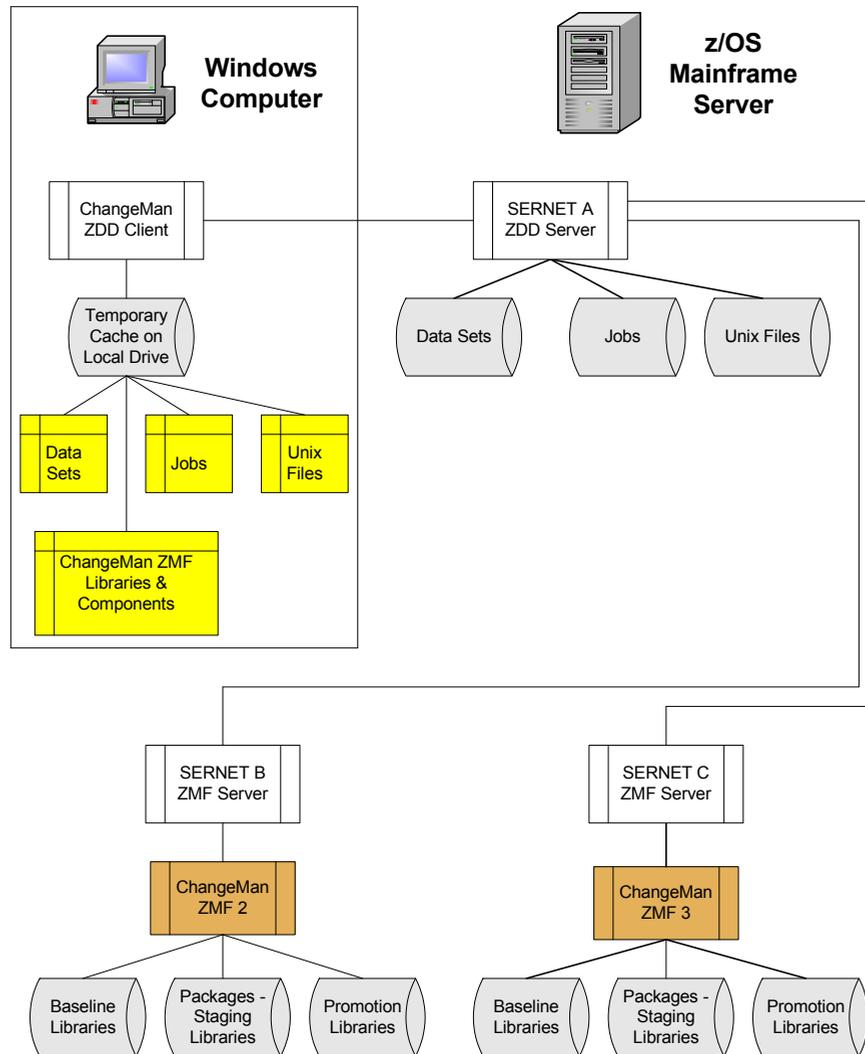
Non-dedicated ZDD Server

This diagram shows a Windows workstation using a ZMF server Sernet A as a ZDD server to access mainframe data sets, jobs, and Unix files, and to connect to three ZMF instances, ZMF 1, ZMF 2 and ZMF 3.
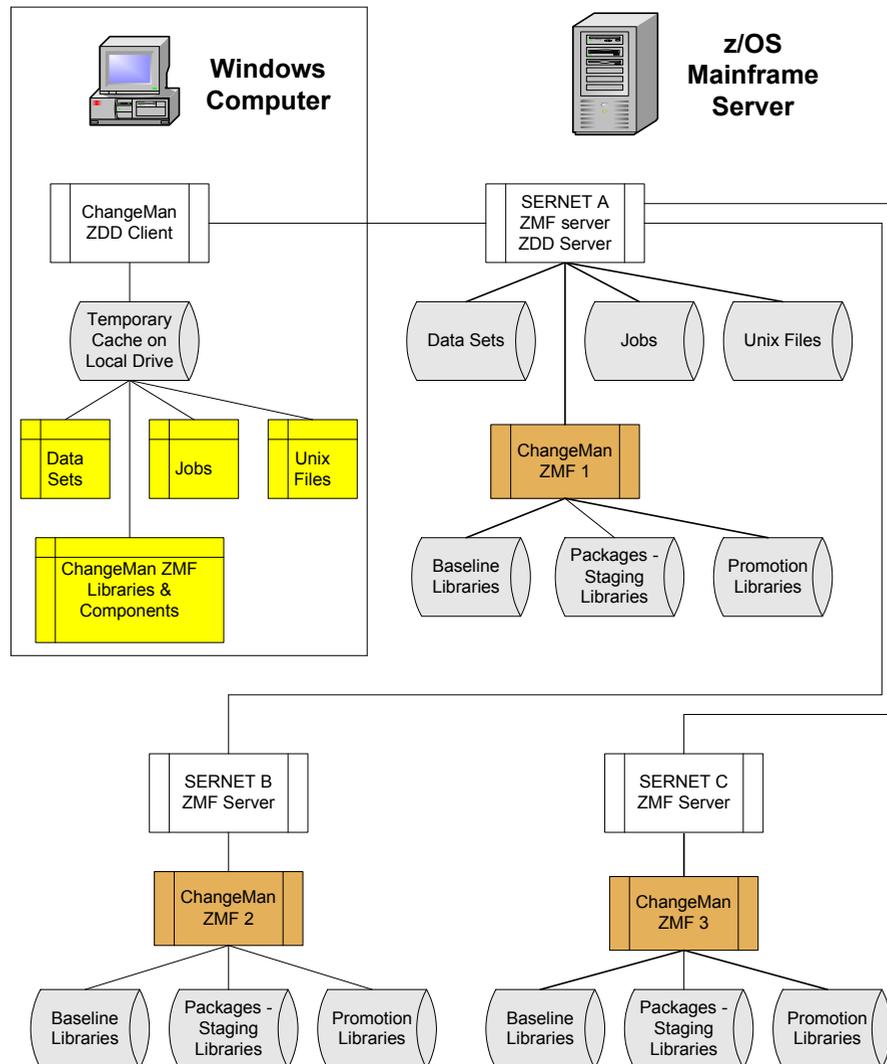
ZDD Added to One ZMF Instance

This diagram shows a Windows workstation using a ZMF server Sernet A as a ZDD server to access mainframe data sets, jobs, and Unix files, and to connect to ZMF instance ZMF 1.

This is the configuration that you use to add ZDD to an existing ZMF instance without installing a dedicated ZDD server.
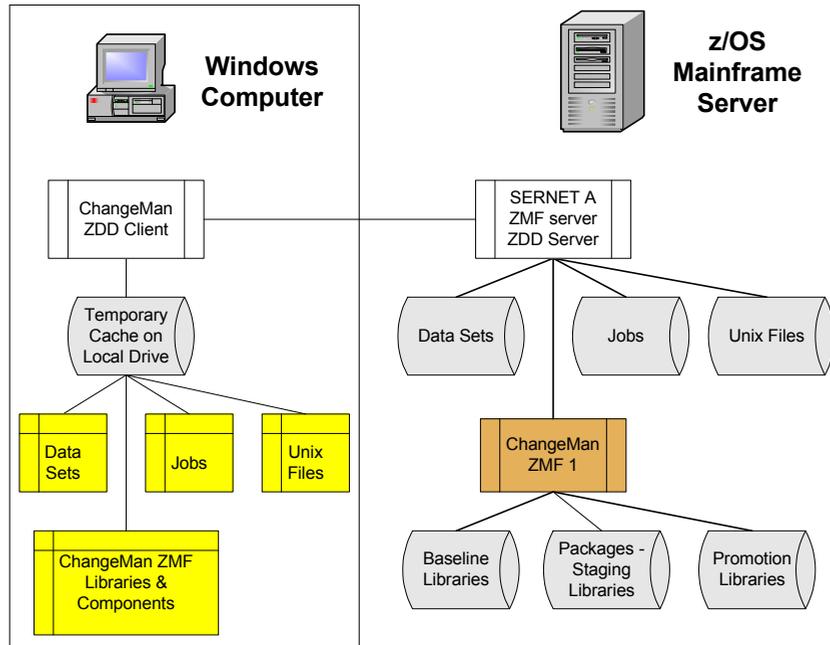
Chapter 2
Installation Requirements

This chapter describes requirements for installing a ChangeMan ZDD server in your mainframe environment.

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System Requirements

This section defines operating system and software requirements, memory requirements, and disk storage requirements.

Operating System

ChangeMan ZDD 8.1.3 runs without modification on all IBM and plug-compatible mainframes running z/OS®. See the Readme for a link to current information about OEM software compatibility testing.

Software Requirements

You need the following system software to run ChangeMan ZDD in your mainframe environment:

- One of the following external security systems:

  - IBM Security Server RACF®

  - CA ACF2™

  - CA Top Secret®

- SAF (System Authorization Facility) to interface to your security system

- At least IBM TCP/IP V3R1 for MVS. For TCP/IP V3R2, you must be at PUT level 9706 or above.

Memory Requirements

Sernet runs as a started task on each CPU that employs Sernet services. You may run multiple Sernet instances on a single processor to test Sernet or its applications, to run different products at different release levels of Sernet, or to achieve separation of control.

The recommended region size for a Sernet instance is zero megabytes (REGION=0M), which provides the absolute maximum memory above and below the line. Sernet does virtually all work in memory above the line, without spilling to DASD. To support hundreds of concurrent users, a large amount of virtual memory is used. The symptom of insufficient memory is abend S878.

NOTE If there are system exits that disallow REGION=0M, then set the Sernet region size to at least 48 megabytes (REGION=48M). Consider removing exits that limit memory acquisition, such as IEALIMIT, which limits an address space from acquiring more than megabytes above the line, or increase the maximum allowed to at least 48 megabytes

Each Sernet instance obtains 64 bytes of CSA (Common System Area subpool 245) to hold a Subsystem Communications Vector Table (SSCVT) control block. One SSCVT is required for each Sernet started task on a processor. To avoid fragmenting memory, this short piece of memory is never released (FREEMAIN). When Sernet is shut down and restarted, it reuses the same anchor block until the next IPL clears it out.

Almost all Sernet mainframe programs are written in reentrant assembly language. Most load modules have been given the RENT attribute at link-edit time as well as AMODE=31. Some load modules reside below the line using RMODE=24, but most reside above the line using RMODE=ANY. All memory that can be managed above the line is acquired there for memory constraint relief.

DASD Space Requirements

The SERCOMC libraries unloaded from the download image or distribution CD require approximately 16 cylinders of 3390 disk space.

License for ChangeMan ZDD Server

Licenses are required to activate Micro Focus Serena products on authorized CPUs. Licenses are delivered to customers as XML-format documents attached to an email. If you do not have a license for ChangeMan ZDD, contact your account representative.

ChangeMan ZDD Product Compatibility

ChangeMan ZDD uses these enabling technologies delivered in SERCOMC libraries:

- Sernet
- SER10TY License Manager
- Common Utilities
- XML Services

If you are installing Sernet as a dedicated ChangeMan ZDD server, use the files unloaded from the ChangeMan ZDD download image or distribution CD to ensure that the mainframe server software is compatible with the ChangeMan ZDD client software installed on PCs.

If you intend to use an existing Sernet started task for a ChangeMan ZDD server, or if you intend to connect ChangeMan ZDD to ChangeMan ZMF, review the ChangeMan ZDD Readme for information about software release level compatibility.

You can avoid compatibility problems between ChangeMan ZDD and other products by using JOBLIB and STEPLIB instead of adding product load libraries or SERCOMC load libraries to the LINKLIST.

CA Panvalet® and CA Librarian® Compatibility

Sernet includes program SERIFACE as an interface to CA Panvalet and CA Librarian. The source for SERIFACE is delivered in the SERCOMC ASMSRC library, but you do not need to customize SERIFACE to use CA Panvalet or CA Librarian with ChangeMan ZMF.

CA Panvalet must be at Release 12 or 14. Missing CA Panvalet PTF's can cause problems. If the PAM module has been link-edited with the RENT option, SERIFACE abends with an S0C4. PAM is not reentrant and must be link-edited with the NORENT parameter.

The CA Panvalet or CA Librarian product library must be available for calls from Sernet. If the product library is not in the LINKLIST, then add the library to the STEPLIB in the Sernet started procedure.

At startup, Sernet tries to load modules LIBR for CA Librarian and PAN#1 for CA Panvalet. If the load is successful, the interface to these products is enabled. If you have renamed program LIBR, use Sernet keyword option LIB to tell Sernet the new name. See "LIB" on page 160.

Software Conflicts

If you use any of the software products described in this section, read the information provided to determine if you must take action to prevent conflicts with Sernet.

Micro Focus Serena Products

Programs for Micro Focus Serena enabling technologies are delivered in the SERCOMC libraries with all Micro Focus Serena mainframe products. Use STEPLIB and JOBLIB with these mainframe products instead of LINKLIST concatenations to avoid problems with software release compatibility.

Abend-AID® (from Compuware Corporation)

If an abend occurs, Abend-AID generates a formatted dump. However, some Sernet problems cannot be solved without a full dump, so Micro Focus Customer Care accepts only full dumps when helping you with abends.

If your installation uses Abend-AID and you always want full dumps from Sernet, code the following DD statement in the Sernet started procedure and any JCL that executes Sernet programs.

```
//ABNLIGNR   DD DUMMY
```

PDSFAST (from Software Engineering of America)

At one time, PDSFAST would enqueue the temporary dataset created during a SERCOPY reallocate function, preventing SERCOPY from renaming the dataset and finishing the recovery. This problem has been fixed by the vendor.

PDSFAST and SERCOPY contain compression facilities that interfere with each other. Since you cannot suppress the SERCOPY compression facility when SERCOPY is executed by the Sernet started task (parameters are generated internally), you must suppress the compression facility in PDSFAST for copy tasks initiated by Sernet.

Suppress PDSFAST compression for ChangeMan ZMF by adding this DD statement to the Sernet started procedure:

```
//NPDSFAST  DD  DUMMY
```

MAINVIEW® SRM StopX37/II™ (from BMC Software)

StopX37/II intercepts DASD space abends and reallocates data sets. SERCOPY executed from the Sernet started task compresses and reallocates PDS libraries. If both StopX37/II and SERCOPY attempt to fix a space problem, the results are unpredictable.

You must suppress StopX37/II in a ChangeMan ZDD server by coding the following DD statement in the Sernet started procedure:

```
//X37IGN  DD  DUMMY
```

Load Library APF Authorization

Some SERCOMC load modules have an Authorization Code of 1 (AC=1). Load libraries containing these modules must be APF authorized. You must APF authorize all libraries in a JOBLIB or STEPLIB concatenation when one library in the concatenation is APF authorized.

IPL

When you install Sernet, IPL your system if you need to accomplish the following:

- APF authorize Sernet load libraries if you use a static APF list.

- Permanently APF authorize Sernet load libraries if you use a dynamic APF list.

- Pick up new entries in your security system, such as the following in IBM Security Server RACF:

  - Static Class Descriptor Table

  - Started Procedure Table

> **NOTE** The SER10TY License Manager gives you a choice of storing licenses for Micro Focus Serena mainframe products in CSA or in a PDS. If you choose to store licenses in CSA, reload the licenses to CSA when you IPL. See the *SER10TY 4.3 User's Guide* for information about applying licenses.

Chapter 3
Installation Considerations

This chapter describes issues you must consider and decisions you must make before installing or configuring a ChangeMan ZDD server.

> **NOTE** The information in this chapter is provided to help you plan for your installation. Do not execute any installation or configuration tasks until you get to one of these chapters:
>
> - Chapter 5, "Build Dedicated Sernet Started Task" on page 43
> - Chapter 6, "Connect to ChangeMan ZMF" on page 59
> - Chapter 7, "Add ChangeMan ZDD to ChangeMan ZMF" on page 65

System Considerations

This section describes system issues that you must consider before you start the installation process.

z/OS Subsystem

While each Sernet instance is identified by a "subsystem ID," Sernet is not a formal z/OS subsystem like JES or DB2®; do not define Sernet in the subsystem name table in SYS1.PARMLIB(IEFSSNxx). If you define it in the subsystem name table, Sernet abends with an S0C4 when it tries to update the subsystem communication vector table with the identifying address space (ASID).

Updating the System Linkage Index

Each Sernet instance uses a system linkage index (a z/OS resource). The system linkage index is not released when a Sernet started task is shut down. However, the next time the same subsystem ID is initialized, the same system linkage index is used as before.

The NSYSLX parameter in IEASYSxx defines the number of linkage indexes (in addition to those in the system function table) to be reserved as system linkages. The default number is 55. If your environment has a number of subsystems defined that use system linkage indexes (for example, DB2 and IMS V5), you might need to increase the value of NSYSLX if you define multiple Sernet instances on the same LPAR.

Non-Swappable

The Sernet address space must be available at all times for asynchronous requests coming from client desktops and from other z/OS address spaces. Each Sernet instance makes itself non-swappable by internally issuing the following:

    SYSEVENT TRANSWAP

TRANSWAP is IBM's preferred method of making an address space non-swappable for long periods of time.

Libraries and LINKLIST

We recommend that you do not add load libraries for ChangeMan ZDD server to the LINKLIST. Instead, include a STEPLIB statement in the JCL for each Sernet instance, and include a JOBLIB or STEPLIB statement in the JCL for each batch job submitted by a Micro Focus Serena product.

STEPLIB and JOBLIB are preferred because:

- If you license more than one Micro Focus Serena product and you do not keep the products at compatible release levels, common load modules in a LINKLIST library might interfere with the proper function of some of these products.

- You should segregate delivered (vendor) versions of load modules in libraries separate from customized programs such as exits. It is easier to maintain the proper concatenation of custom and vendor load libraries if they are in STEPLIB or JOBLIB statements in started procedures and batch JCL.

Security Considerations

This section provides information about how ChangeMan ZDD security works, and it describes security issues you must consider before you start the ChangeMan ZDD server installation process.

How ChangeMan ZDD Security Works

ChangeMan ZDD respects the mainframe security controls provided by RACF, CA ACF2, and CA Top Secret:

- You gain access to a ChangeMan ZDD server and other mainframe resources through your TSO userid and password.

- ChangeMan ZDD only allows you to access data sets to which you have authority.

- ChangeMan ZDD provides your user ID to ChangeMan ZMF so that your authorization to access functions, applications, and components can be verified.

Data Set Access for the Sernet Started Task

Grant the Sernet started task userid the highest general data set access authority possible. As described above, all data sets and libraries accessed by ChangeMan ZDD are protected by your security system.

If administrators and developers already have access to ChangeMan ZMF applications, functions, and data sets through the ISPF interface on the mainframe, they will have the same privileges when they use ChangeMan ZDD.

SAF and Your Security System

SAF is an acronym for System Authorization Facility, an interface defined by z/OS that enables programs to use system authorization services to protect access to resources such as data sets and z/OS commands. SAF provides a common interface for IBM Security Server RACF, CA ACF2, and CA Top Secret where you define the security rules for an LPAR.

Sernet is configured to use SAF to interface to your security system. When you define Sernet instances to your security system, you may also need to provide parameters to enable SAF.

Access to TCP/IP Functions

Access to TCP/IP Services in z/OS Communications Server requires a z/OS UNIX security context, referred to as an OMVS segment, for the user ID associated with a Sernet instance.

See the section "Requirement for an OMVS Segment" in the IBM publication *z/OS Communications Server: IP Configuration Guide*.

Additionally, RACF PassTickets are a requirement for mainframe clients (not ChangeMan ZDD or ChangeMan ZMF for Eclipse) connecting via TCP/IP. Instructions for generating RACF PassTickets are detailed in Chapter 6, "Configuring Security".

Sernet JCL

Expect to run at least two instances of Sernet:

1   One or more Sernet instances that support production versions of Micro Focus Serena mainframe applications.

2   A test Sernet instance to test upgrades and modifications before they are installed into the libraries running the production Sernet started tasks.

Before building Sernet started procedure, consider the issues described in the following subsections.

Subsystem ID

Each instance of Sernet is identified by a unique one-character subsystem ID. Valid values for a subsystem ID are:

- Blank (space)
- Numeric 0-9
- Alphabetic A-Z
- Special characters @, #, and $.

> **NOTE** Although a null (blank) subsystem ID is valid, we strongly recommend that you avoid using a null subsystem ID.

A subsystem ID is assigned through Sernet keyword option SUBSYS=*subsysID*, which is input to program SERVER.

Sernet Started Task Names

As stated previously, you will have at least two Sernet instances: a test instance and a production instance. You may also have multiple Sernet instances running on other LPARs.

Each Sernet started task must be assigned a unique identity in z/OS for console commands, automated data center management tools, and SMF. There are three ways to establish a unique z/OS identity for a Sernet started task:

- Member name - Build a separate procedure (member) for each started task. Use only the member name in the START command.

      S SERPROC1

    The Sernet started task *jobname* and *identifier* is SERPROC1.

- Identifier - Append an identifier to the procedure member name in the START command.

      S SERPROC.SERTASK2,ID=2

    The Sernet started task *jobname* is SERPROC and the *identifier* is SERTASK2.

- Jobname - Use the JOBNAME parameter in the START command.

      S SERPROC,JOBNAME=SERTASK3,ID=3

The Sernet started task *jobname* and *identifier* are both `SERTASK3`.

If you use a common procedure for several Sernet instances, then you must use an identifier or a JOBNAME parameter in the START command.

> **NOTE** When you assign a started task identity that is different from the started procedure member name, IBM recommends that you use the JOBNAME parameter because it provides an identity that is available to the most z/OS services.

Parameters for Sernet

Sernet behavior is controlled by keyword options input to program SERVER.

Passing Parameters to Sernet

Keyword options may be passed to Sernet in two ways:

■   In the EXEC statement for program SERVER, as subparameters in the PARM= parameter.

Example 1:

```
//SERVER  PROC ID=1,OPT='XCH=1234'
//SERVER  EXEC PGM=SERVER,              *Started Task
//             REGION=0M,               *Maximum Region
//             DYNAMNBR=200,            *High allocations
//             PARM='SUBSYS=&ID,&OPT'   *Execution Parms
```

Example 2:

Override the SERVER parameters in Example 1 by setting symbolic parameters in the START command.

```
S SERPROC,ID=2,XCH=2345
```

■   In a data set read by program SERVER at a DD statement referred to by the keyword option DDNAME=*ddname* coded as a PARM= subparameter.

Example:

```
//SERVER  PROC
//SERVER  EXEC PGM=SERVER,              *Started Task
//             REGION=0M,               *Maximum Region
//             DYNAMNBR=200,             *High allocations
//             PARM='DDNAME=ANYNAME'    *Execution Parms
. . .
//ANYNAME    DD DSN=SERCOMC.PARMS(SERPARM)
```

PDS member **SERPARM** contains:

```
SUBSYS=3      /* Sernet SUBSYS ID
XCH=3456      /* TCP/IP PORT #
```

Sernet Options For ChangeMan ZDD

Keyword options listed in this section are required or are commonly used with a Sernet instance that is used as a ChangeMan ZDD server.

See Appendix F on page 151 for detailed descriptions of the options listed here.

To find other Sernet keyword options that can be used with ChangeMan ZDD, look for "XCH" in the "Application(s)" row of the description tables in Appendix F on page 151.

> **NOTE** Any ChangeMan ZMF server at version 5.3.6 or above that you access with ChangeMan ZDD must **not** use keyword option XML=NO, which suppresses XML Services.

Required Options

These parameters must be specified for a Sernet instance acting as a ChangeMan ZDD server.

Option	Description
SUBSYS=*x*	SUBSYS on page 163
XCH=*port* or XCH	apl on page 152
SDNOTIFY=*nnn*	SDNOTIFY on page 163

Common Options

These options are commonly used with Sernet instances:

Option	Description
DDNAME=*ddname*	DDNAME on page 157
EX003=NO	EX003 on page 158

Other Options

These options may be specified for a Sernet instance acting as a ChangeMan ZDD server under special circumstances:

Option	Description
COMPRESS=[0|1]	COMPRESS on page 155
CONNECTCHECK=[YES|NO]	CONNECTCHECK on page 155
EXPIRE=*HhhMmm*	EXPIRE on page 157
MIGRAT=*volser*	MIGRAT on page 160
RUNFOR=*HhhMmm*	RUNFOR on page 162
TCPIP=*tcpiproc*	TCPIP on page 163

SER#PARM DD Statement

Each Sernet started task creates and maintains a reference table of application TCP/IP addresses and port numbers for Micro Focus Serena applications. This table is kept in a PDS referenced by DD name SER#PARM in the Sernet started procedure. The TCP/IP addresses are stored in a member named #SERx, where "x" is the subsystem ID of the Sernet started task.

> **CAUTION!** Do not use the SER#PARM library for any other purpose. Sernet opens this library for output, which can interfere with other uses of the file.

The following example shows the format of a #SERx member in a SER#PARM file:

```
* SMFI.SUBS APP DOT.TED.DEC.MAL PORT# TCPIPROC --Update-Time-Stamp--
  BH3A.SER1 XCH 111.11.111.111  11111          2008/08/15 @ 10:30:59
  BH3A.SER1 CMN 222.22.222.222  22222          2008/10/19 @ 13:31:42
* END OF DATA
```

SERLIC DD Statement

The SER10TY License Manager gives you a choice of storing licenses for Micro Focus Serena mainframe products in CSA or in a PDS.

If you store licenses in a PDS, that library must be named in DD statement SERLIC included in any started procedure that connects to ChangeMan ZDD.

SYSMDUMP DD Statement

The preferred means of gathering diagnostic information for a program interrupt in a Sernet started task is through a data set allocated to a SYSMDUMP DD statement. The data set should have these attributes:

```
//SYSMDUMP  DD DISP=(MOD,CATLG,CATLG),              * SYSMDUMP
//             DSN=somnode.SERCOMC.SYSMDUMP(+1),
//             UNIT=SYSDA,SPACE=(CYL,(200,100),RLSE),
//             DCB=(DSORG=PS,RECFM=FBS,LRECL=4160,BLKSIZE=4160)
```

We recommend that you define a GDG index for the SYSMDUMP dataset to prevent diagnostic information in the dataset from being overwritten when the Sernet instance is restarted after an abend.

SYSTCPD DD Statement

If there are multiple TCP/IP started tasks running on the same LPAR, you may need to code DD name SYSTCPD in the Sernet started procedure. See topic "Considerations for Multiple Instances of TCP/IP" in the IBM publication *z/OS Communications Server IP Configuration Guide*.

Component Libraries

When you allocate mainframe libraries for ChangeMan ZDD server components, consider the following:

- Preserve the components delivered with the release. If you modify a ChangeMan ZDD server component, you may need the original version if your changes do not work as expected. Segregate "vendor" and "custom" components in separate libraries.

- Use the last node of the vendor library name when you name your generic and custom libraries.

This example shows segregated vendor and custom component libraries:

Delivered Library:

```
SERCOMC.V8R1M0.LOAD
```

JCL Library:

```
//STEPLIB   DD DISP=SHR,                              * CUSTOM LOAD
//            DSN=somnode.SERCOMC.V8R1M0.CUSTOM.LOAD
//            DD DISP=SHR,                            * VENDOR LOAD
//            DSN=somnode.SERCOMC.V8R1M0.LOAD
```

Job Review

The Job Review facility of Sernet makes mainframe job output available in ChangeMan ZDD Jobs folders.

The Job Review facility uses the same subsystem interface as the TSO STATUS command. Job Review is not directly connected to SDSF or other job output viewing tools, and it does not offer the same options for viewing and manipulating output data sets.

What Job Review can make available to ChangeMan ZDD depends on how your components for JES, security, and Sernet are configured. These components determine:

1   What job output can be selected by the subsystem interface.

2   What job output a user is authorized to see.

Some of the components that can affect what users can see in ChangeMan ZDD Jobs folders include:

- JESJOBS and JESSPOOL resource classes

- TSO output/status/cancel exit IKJEFF53

- RACHECK preprocessing exit ICHRCX01 (RACF only)

- RACHECK postprocessing exit ICHRCX02 (RACF only)

If you make no changes to your existing configuration, ZDD Jobs folders may only show you this job output:

- JES2 - Jobs with job names consisting of your TSO ID plus one character.

- JES3 - No jobs.

Sernet Exit SEREX003 for JES

Sernet exit SEREX003 restricts access to JES jobs and is delivered to customers in an enabled state.

Starting with Sernet 7.1.1, exit SEREX003 allows read access to JES jobs that are not owned by the userid. However, cancel/purge/requeue functions are restricted to jobs owned by the userid.

Since access to JES jobs is normally controlled by resource classes JESJOBS and JESSPOOL, regardless of whether SEREX003 is activated, we recommend that you disable this exit. To disable the exit, do one of the following:

- Use Sernet keyword option EX003=NO.

- Customize the exit as described in comments at the top of the program source code.

Customizing the ChangeMan ZDD Client

When you access ChangeMan ZMF through its ISPF client, you can modify ZMF panels to fit your requirements. The ISPF interface can be customized further with exit programs that run in the ISPF address space and alter information that is passed to the panels.

The ChangeMan ZDD client does not offer this same flexibility. Most ZDD dialogs that access ChangeMan ZMF functions are fixed, and ZMF exit programs cannot modify what appears on ZDD dialogs.

However, ZDD 3.2 and higher can read parameters and options coded in XML on the mainframe that can alter the behavior and appearance of some ZDD client dialogs. These XML pages control:

■   Field labels, edit rules, and default values for the ZDD client Build dialog. This dialog is the equivalent of the ISPF staging panels and the User Option Panel (CMNUSR01).

■   Library types available in the ZDD client. This function is like ZMF exit program CMNEX035 that hides library types in the ISPF interface.

■   User-defined options for the Audit, Demote, Promote, and New Package dialogs.

■   Enabling or disabling of ZMF commands in the ZDD client.

■   Package fields that a user may or may not update.

The XML pages are stored in members of a mainframe PDS(E) library that is named in DD statement ZDDOPTS in the ZMF server JCL. The server must be running at ZMF 5.3.6 or higher.

If you plan to access ZMF 5.3.6 or higher through ChangeMan ZDD, analyze the following in your environment:

■   Customization of stage processing panels in the ISPF client.

■   Customization of exit program CMNEX035.

■   User-defined options for the Audit, Demote, Promote, and New Package functions.

■   Which ZMF functions a user will be allowed to access.

■   Which package fields a user may or may not update.

Chapter 4
Unload Mainframe Components

This chapter lists tasks you perform to unload ChangeMan ZDD components from the download image or distribution CD and create libraries on the mainframe.

Introduction

Mainframe PDS libraries for ChangeMan ZDD server are delivered in compressed binary format. This chapter tells you how to unload the files from the download image or distribution CD, copy the files to the mainframe, and expand the files into PDS libraries.

To execute this process, you need:

- TCP/IP FTP connectivity from your PC or workstation to the mainframe computer.

- The dotted decimal IP address or domain name of the LPAR on the mainframe.

- A mainframe userid and password.

- Security authorization to allocate files on the mainframe.

When the unload process is complete, PDS libraries for ChangeMan ZDD server reside on the mainframe, ready for the rest of the server installation procedure.

If you have problems with the automated steps in this procedure, you may execute the same functions manually by following the instructions in Appendix C, "Manual File Transfer and Expand" on page 121.

> **NOTE** In this chapter:
>
> v = Version number for ChangeMan ZDD
> r = Release number
> m = Maintenance release number

Step 1: Unload the Files

Execute this procedure to copy files from the distribution media to a work station or network drive, build an FTP command file, and create JCL for a mainframe job to execute TSO RECEIVE commands.

1 If you have a distribution CD, go to Step 5 on page 39.

2 If you download **ZDDSRVvrmSetup.exe** from the Micro Focus SupportLine website, double-click **ZDDSRVvrmSetup.exe**.

3 On the **Location to Save Files** dialog box, select the folder where you want to store InstallShield Wizard setup files. (These are not the files you will transmit to the host.)

- Click **Next** to accept the default folder, or...

- Click **Change...**, select a different folder, click **OK**, and then click **Next**.

> **NOTE** If you have previously executed these steps for this release of ChangeMan ZDD, the **Overwrite Protection** dialog box opens. You can safely click **Yes to All** to overwrite all setup files.

4 The **Extracting Files** dialog box opens, then the **Preparing to Install** dialog box opens, and then the **ChangeMan ZDD Server v.r.m - InstallShield Wizard** starts. Go to Step 10.

5 Insert the distribution CD into your optical drive.

6 If autoplay is enabled, the **ChangeMan ZMF Client Pack** menu opens. Go to Step 8.

7 If autoplay is not enabled, navigate to the CD drive, open the **Autorun** folder, then click **AUTORUN.exe**.

8 On the **ChangeMan ZMF Client Pack** menu, click option **Install ChangeMan ZDD v.r.m Server**.

9 The **Preparing to Install...** dialog box opens, and then the **ChangeMan ZDD Server v.r.m - InstallShield Wizard** starts.

10 On the on the **Welcome ...**dialog box, click **NEXT**.

> **NOTE** If you previously installed this version of ChangeMan ZDD Server from this workstation, the **Welcome** dialog box gives you three choices:
>
> ■ Modify
> ■ Repair
> ■ Remove
>
> Check **Remove** and click **Next** on this dialog box, and then click **OK** on the **Confirm Uninstall** dialog box to uninstall the existing ZDD Server artifacts. Click **Finish** on the **Uninstall Complete** dialog box, and then restart the unload procedure at Step 1 on page 38.

11 Read the text in the **End User License Agreement** scroll box. If you agree to the terms stated in the End User License Agreement, check "I accept..." and click **Next**.

12 On the **Choose Destination Location** dialog box, select the folder on your workstation into which ChangeMan ZDD installation files are copied:

- Click **Next** to accept the default folder, or...
- Click **Browse**, select a folder, click **OK**, and then click **Next**.

13 On the **Customize Ftp Template** dialog box, choose whether to automatically customize the FTP commands used to transmit ZDD server components to the host.

■ Check **Yes** to automatically customize the FTP command file, then click **Next** to continue, or...

■ Check **No** to skip FTP command file customization and click **Next** to continue at Step 16 on page 40.

> **NOTE** If you skip customization, you can manually edit the transfer commands later, or you can use a manual process to transfer ZDD server components from your workstation to the host as described in Appendix C, "Manual File Transfer and Expand" on page 121.

14 On the **Enter FTP Parameters** dialog box, type the following information (not case sensitive):

■ **IP Address or Host Name** - The dotted decimal IP address or domain name of the mainframe host

■ **User ID** - Your host logon (TSO) ID

Click **Next**.

15 On the **Specify the High Level Qualifier of the host datasets** dialog box, type the following information (not case sensitive).

- **Transmitted File HLQ** - High level qualifiers for the host data set names of the binary XMIT files transmitted from your workstation

- **PDS Libraries HLQ** - High level qualifiers for the host data set names of the PDS libraries expanded from the binary XMIT files.

> **NOTE** Follow these rules when setting high level qualifiers:
>
> - The host User ID specified in step Step 14 on page 39 must have authority to allocate files with the HLQ you specify here.
>
> - Do not enter leading or trailing periods.
>
> - Do not enter parenthesis or quotes (single or double).
>
> - Do not specify HLQ longer than 17 characters (including embedded periods).
>
> - HLQ entered in this dialog box are not case sensitive, even though they are embedded in the RECEIVE job that is run on the host.
>
> - Do not choose high level qualifiers that will create data set names that already exist on the mainframe. The transmit process and the RECEIVE job will overlay existing data sets.

Click **Next**.

16 The **Setup Status** dialog box opens as files are decompressed and copied to your workstation or network destination folder, the FTP command file is built, and JCL for the mainframe RECEIVE job is created.

17 When the unload process is completed, the **InstallShield Wizard Complete** dialog box opens. Check **I would like to view the README file** and click **Finish**.

18 If you installed from a distribution CD, close the **ChangeMan ZMF Client Pack** menu dialog box.

Step 2: Transfer Files to the Mainframe

The installation wizard generates an FTP command file to transmit binary XMIT files containing ZDD Server components to the mainframe host. In this step, you edit the FTP command file, then execute the FTP file transfer.

Your workstation must be connected to the network to transfer files to the host.

> **NOTE** If you have difficulty with this automated FTP process, or if you want to use 70 emulator software instead of FTP to transfer the files to the host, go to Appendix C, "Manual File Transfer and Expand" on page 121.

Execute this procedure to transfer ChangeMan ZDD server files from your workstation or network drive to the mainframe using FTP.

1 On the workstation where you ran the installation wizard, go to **Start | Programs | Micro Focus | ChangeMan ZDD Server v.r.m** and click **Edit FTP Input** to open the FTP command file for edit.

2   In the FTP command file, overtype **<PASSWORD>** in the third line of the file with your mainframe password.

3   Save the file to the same file name.

4   Go to **Start | Programs | Micro Focus | ChangeMan ZDD v.r.m** and click **FTP File to Host** to initiate the file transfer.

5   An **FTP In Progress** window opens, which shows:

```
FTP process has begun.
```

6   When the transfer is completed, the window shows:

```
FTP process has completed.
View FTP Log.
Press any key to continue . . .
```

7   Go to **Start | Programs | Micro Focus | ChangeMan ZDD v.r.m** and click **View FTP Log** to verify that the files were transferred to the mainframe host.

If you see the following errors in the FTP Log, make the recommended corrections to the **FTP.Input** file, then restart the process at .

Message	Corrective Action
Unknown host...	Edit the FTP.Input file and verify the IP address or domain name of your mainframe host.
530 PASS command failed	Edit the FTP.Input file and verify that you entered the correct user ID and password.

Block size specified for the host [binary] data set is invalid for the record length
Record length... invalid.
	Edit the FTP.Input file:
	
	a Delete these four command lines:
	
	`literal site cylinders`
	`literal site blocksi=3120`
	`literal site lr=80`
	`literal site recfm=fb`
	
	b Replace the deleted lines with this command (on a single line):
	
	`literal site recfm=fb lr=80 blocksi=3120 cylinders`

Not connected	The FTP connection was lost so files were not transferred. Reconnect and restart the FTP process.

8   Go to **Start | Programs | Micro Focus | ChangeMan ZDD Server v.r.m** and click **Edit FTP Input** to open the FTP command file for edit.

9   In the FTP command file, overtype your password in the third line of the file with **<PASSWORD>**.

10   Save the file to the same file name.

Step 3: Expand PDS Libraries with RECEIVE

The installation wizard generates a batch mainframe job to execute the RECEIVE command on binary XMIT files transferred to the host. The RECEIVE job is transferred to the mainframe along with the binary XMIT files.

Execute this procedure to submit the RECEIVE job on the mainframe to expand the ChangeMan ZDD Server binary XMIT files into PDS libraries.

1 Log on to the mainframe host.

2 Edit the file named *somnode*.RECEIVE.ZDD*vrm*.TXT, where *somnode* is the Transmitted File HLQ that you entered in the installation wizard.

    a Replace the four **//JOBCARD** lines at the top of the file with your JOB statements.

    b Change the **DATASET** statements if you want different output PDS library names.

3 Submit the job.

4 Examine each of the output PDS libraries to ensure that they are PDS libraries.

> **NOTE** The RECEIVE job can give a Return Code 00, and the job SYSOUT can show the message "Restore successful to dataset...", even when the RECEIVE process did not complete successfully.

5 Save the RECEIVE job JCL.

ChangeMan ZDD server PDS libraries are now resident on the mainframe, ready for the rest of the software installation procedure.

Chapter 5

Build Dedicated Sernet Started Task

This chapter tells you how to build a Sernet started task to act as a dedicated ChangeMan ZDD server.

Introduction

In the diagram on page 18, Sernet A is a dedicated ChangeMan ZDD server. ZDD clients connect to Sernet A to access data sets, jobs and Unix files, and to access ChangeMan ZMF 2 and ZMF 3 that run on the same LPAR.

This chapter tells you how to build a dedicated ZDD server like Sernet A in the diagram on page 18.

If you want to prepare an existing ChangeMan ZMF server for access through a separate ChangeMan ZDD server, see Chapter 6, "Connect to ChangeMan ZMF" on page 59.

If you want to reconfigure an existing ChangeMan ZMF server to also act as a ChangeMan ZDD server, see Chapter 7, "Add ChangeMan ZDD to ChangeMan ZMF" on page 65.

Step 1: Allocate Custom Libraries

Allocate a set of libraries for customized SERCOMC components. The following table shows an example of vendor libraries and their corresponding custom libraries.

Vendor Libraries	Custom Libraries
...SERCOMC.VvRrMm.ASMSRC	...SERCOMC.VvRrMm.CUSTOM.ASMSRC
...SERCOMC.VvRrMm.CLIST	...SERCOMC.VvRrMm.CUSTOM.CLIST
...SERCOMC.VvRrMm.CNTL	...SERCOMC.VvRrMm.CUSTOM.CNTL
...SERCOMC.VvRrMm.LOAD	...SERCOMC.VvRrMm.CUSTOM.LOAD

Recommendations for allocating CUSTOM libraries:

- Choose data set names that comply with your data center standards.

- Use the same RECFM and LRECL as the corresponding vendor library.

- You may optimize the BLKSIZE parameter.

- For simplicity, allocate SPACE=(CYL,(1,1,75)).

Step 2: APF Authorize Vendor and Custom Load Libraries

Add these libraries to the APF list:

- Vendor SERCOMC LOAD library that you unloaded from the download image or distribution CD.

- Custom LOAD library that you allocated in the previous step.

You can use the SETPROG system command to add these libraries to a dynamic APF list. If you use a static APF list, you must IPL before you can execute some of the subsequent steps in the installation process.

Step 3: Apply ChangeMan ZDD License

Apply the license you received from Micro Focus to enable ChangeMan ZDD. Refer to the *SER10TY User's Guide* for instructions on how to apply the license.

> 📝 **NOTE** ChangeMan ZDD 8.1 requires a new license key.

The load modules, JCL, and other components that run SER10TY are included in the SERCOMC libraries unloaded from the download image or the distribution CD.

Step 4: Allocate SER#PARM TCP/IP Address File

Sernet uses a PDS or PDSE file to store TCP/IP addresses and port numbers for Micro Focus Serena applications. See .

> ⚠️ **CAUTION!** Do not use the SER#PARM library for any other purpose. Sernet opens this library for output, which can interfere with other uses of the file.

If you already have a Sernet started task running in your enterprise, and the library in the SER#PARM DD statement is available through shared DASD, you should use that library in the new Sernet started procedure you are building here.

If you do not have an existing SER#PARM library available, allocate a PDS(E) with these characteristics:

```
DSN=node.SERNET.TCPIPORT         * Recommended last node
DCB=(RECFM=FB,LRECL=80,BLKSIZE=0) * Let SMS set BLKSIZE
SPACE=(CYL,(1,10,30))
```

Sernet automatically creates a #SERx member (where "x" is the Sernet subsystem ID).

Step 5: Define XMLSPACE VSAM LDS

XML Services use a VSAM Linear Dataset (LDS) to map the relationships between XML schemas and DSECTS used for fixed-format control blocks and copybooks. This data sets is referenced by the XMLSPACE DD statement in the Sernet started procedure.

Execute this procedure to define and populate the XMLSPACE VSAM LDS.

> 📝 **NOTE** This step also creates a sequential MAPDATA dataset used by the XML prototype tool XMLSERV.

1   Copy member **XMLLOAD** from the vendor SERCOMC CNTL library to your custom SERCOMC CNTL library.

2   Edit member XMLLOAD in your custom CNTL library.

    a Code your JOB statement at the top.

    b In step RECEIVE, change DSN node placeholder *somnode* in the RECEIVE command INDS parameter to point to your vendor SERCOMC CNTL library.

    c Change all other occurrences of DSN node placeholder *somnode* to create dataset names that comply with your local naming conventions. Keep the last node name of MAPDATA.

3 Submit JCL member XMLLOAD.

4 Examine the job output for problems:

    a Example of SYSTSPRT from job step RECEIVE:

```
READY
DELETE 'CMNTP.S6.V810.SERCOMC.MAPDATA'
IDC3012I ENTRY CMNTP.S6.V810.SERCOMC.MAPDATA NOT FOUND+
IDC3009I ** VSAM CATALOG RETURN CODE IS 8 - REASON CODE IS IGG0CLEG-42
IDC0551I ** ENTRY CMNTP.S6.V810.SERCOMC.MAPDATA NOT DELETED
IDC0014I LASTCC=8
READY
RECEIVE INDS('CMNTP.S0.V810T06.SERCOMC.CNTL(XMLDATA)')
INMR901I Dataset DDNAME.MAPDATA from BATCHTSO on NODENAME
INMR906A Enter restore parameters or 'DELETE' or 'END' +
INMR908A The input file attributes are: DSORG=SEQUENTIAL, RECFM=F, BLKSIZE=4096,
INMR909A You may enter DSNAME, SPACE, UNIT, VOL, OLD/NEW, or RESTORE/COPY/DELETE
INMR001I Restore successful to dataset 'CMNTP.S6.V810.SERCOMC.MAPDATA'
READY
END
```

    b Browse member XMLDATA in your SERCOMC CNTL library. Note the date and time in this line of text near the top of the data set:

```
SERNET XML Dsect Cross Reference. Created: 26 Jan 2011 02:23:40
```

    Browse the new MAPDATA file and look for the same text at the top of that file. The date and time should be the same as in the XMLDATA member.

    c Examine the job JESMSGLG to verify that job step LOAD completed with RC=00.

Step 6: Build Sernet Started Procedure

Execute these steps to build JCL for a Sernet instance:

1 In your custom CNTL library, create a member for the Sernet started procedure. Name the member according to the conventions you established in .

2 Copy the contents of model JCL member SERVER in the vendor SERCOMC CNTL library into the new Sernet started procedure member in your custom CNTL library.

3 If you will store Sernet keyword options in a PDS or PDSE library member (see), do the following:

    a Code keyword option DDNAME=*ddname* in the PARM= parameter for program SERVER.

    b Allocate a PDS or PDSE library with RECFM=FB and LRECL=80.

      c Add a *ddname* DD statement to the started procedure, and code the DSN to point to the library that you allocated and the member where you will store Sernet keyword options.

4 In the STEPLIB DD statement:

      a Delete CMNZMF libraries.

      b Change the SERCOMC.CUSTOM.LOAD library name to point to the custom LOAD library you created in "Step 1: Allocate Custom Libraries" on page 44.

      c Change the SERCOMC.LOAD library name to point to the vendor LOAD library you created in "Step 3: Expand PDS Libraries with RECEIVE" on page 42 respectively.

5 If you use a PDS to store licenses applied with the SER10TY License Manager (see "Step 3: Apply ChangeMan ZDD License" on page 45), add a SERLIC DD statement to point to your license PDS.

6 Change the SER#PARM DD statement to point the PDS(E) that you created in "Step 4: Allocate SER#PARM TCP/IP Address File" on page 45.

7 Change the XMLSPACE DD statement to point to the VSAM LDS that you created and populated in "Step 5: Define XMLSPACE VSAM LDS" on page 45.

8 Create a GDG index for SYSMDUMP datasets. (See "SYSMDUMP DD Statement" on page 33.) Change the SYSMDUMP DD statement to point to the new GDG DSN (+1).

9 Add Sernet keyword options to the PARM= parameter for program SERVER or to the keyword option PDS member. See "Sernet Options For ChangeMan ZDD" on page 32. Adjust the &ID and &OPT symbolic parameters as needed.

10 Add ddnames that are required to resolve conflicts between Sernet and other software tools in use at your site. See "Software Conflicts" on page 24.

11 Install the Sernet procedure in a system PROCLIB.

Step 7: Set Up Job Notification

The Job Notification facility of Sernet sends job completion messages to a user's workstation for jobs that they submit through ChangeMan ZDD.

> **NOTE** Job Notification does not add messages to batch jobs submitted by ChangeMan ZMF, even though you may use ChangeMan ZDD to initiate ChangeMan ZMF jobs.

To enable Job Notification in a ChangeMan ZDD server, you set up a mainframe JCL fragment that is automatically appended onto JCL submitted from ChangeMan ZDD.

Execute these steps to set up the Job Notification JCL fragment:

1 Copy member $SERNTFY from the vendor SERCOMC CNTL library into your custom CNTL library.

2 Edit member $SERNTFY in the custom library. Change the STEPLIB statement to point to the vendor SERCOMC load library you coded in the STEPLIB for the Sernet started procedure.

3 Copy the updated $SERNTFY member from your custom CNTL library into a system PROCLIB.

Step 8: Set Up Job Review

See for more information about the Job Review facility.

As delivered in Sernet 7.1.1, Sernet allows read access to JES jobs that are not owned by the userid. Cancel/purge/requeue are restricted to jobs owned by the userid.

Since access to JES jobs is normally controlled by resource classes JESJOBS and JESSPOOL, regardless of whether SEREX003 is activated, we recommend that you disable this exit. To disable the exit, do one of the following:

- Use Sernet keyword option EX003=NO.

- Customize the exit as described in source code comments at the top of the program.

Step 9: Configure Your Security System

Regardless of the security system you use, these are the tasks you must perform to set up a dedicated ZDD server.

1 Set switches in local security routine SERLCSEC.

2 Identify the Sernet instance to your security system as a started task and assign a user ID.

3 Permit data set access to files in the Sernet started procedure.

4 Set security for accessing USS file systems.

5 Define OMVS segments for access to TCP/IP functions.

6 Optionally restrict logon to the ZDD server.

Customize SERLCSEC

SERLCSEC establishes the security environment for the user's subtask in Sernet so that the subtask runs with the authority of the logged on user.

If you use RACF or CA ACF2, you can use the switch settings in program SERLCSEC that are delivered in the LOAD library unloaded from the download image or the distribution CD.

Many CA Top Secret customers can run with the SERLCSEC switch settings that we deliver. However, if you are using the CA Top Secret security system and you have too many security violations, set the bit switch for &LOGSVIO to zero.

Execute these steps to change switch &LOGSVIO for CA Top Secret:

1 Copy the source for program SERLCSEC from the vendor SERCOMC ASMSRC library to your custom ASMSRC library.

2 Edit SERLCSEC to change the &LOGSVIO switch. See the insert/delete below.

```
  ID      SOURCE LINES
    ----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
    *-----------------------------------------------------------------
    * BELOW IS WHERE THE USER CAN TAILOR THE SOURCE CODE FOR THE SHOP
    *-----------------------------------------------------------------
    &VERFYID SETB  1      (YES)       SAF user ID verification
I - &LOGSVIO SETB  0      (NO)        security violation logging
D - &LOGSVIO SETB  1      (YES)       security violation logging
    &LOGSEL  SETB  0      (NO)        .selective logging (by calling pgm)
    *-----------------------------------------------------------------
    *ACF2 batch ids are specified in a user modifiable table
    *    'F ACF2BAT WORD 1' will find the start of this table.
    *     Please modify it as necessary.
    *-----------------------------------------------------------------
    * Notes:
    *    #1 If &VERFYID is set to '1' in a Top Secret (TSS) shop,
    *        the started task must be set up as a MULTIUSER FACILITY.
    *    #2 &LOGSVIO must be set to '1' for &LOGSEL to have any affect.
    *        If selective logging is selected, the logging is determined
    *        by the calling program from products like XCH, CMN and CMW.
    *-----------------------------------------------------------------
```

3 Copy model JCL member ASSEMBLE from the vendor CNTL library to your custom CNTL library, edit the JCL, and submit it to assemble and link the SERLCSEC source in your custom ASMSRC library into your custom LOAD library.

4 If the return code from the assemble and link job is zero:

a Compare the directory entries for SERLCSEC in your custom LOAD library to the directory entries for SERLCSEC in the vendor LOAD library.

b If they are not identical, adjust the assemble and link options in the ASSEMBLE job, and submit the job again.

5 If you assemble and link SERLCSEC after you start a ChangeMan ZDD server, shut down the Sernet started task and start it again to have the exit modifications take effect.

Configure RACF

The steps listed here provide examples specific to IBM Security Server RACF for accomplishing security setup tasks. The following conventions are used in these examples:

▪ **SERPROC** is the member name of the started procedure.

▪ **SERTASK** is the jobname assigned to the started task when procedure member **SERPROC** is started. See .

▪ **SERUSER** is the RACF user ID for all Sernet instances. If you want different RACF authority for different Sernet instances, assign a unique user ID to each.

This section is not intended to be an authoritative reference for RACF command syntax. Your security administrator should be aware of the intent of each step and should adjust the sample command syntax if necessary.

1 Define the user ID that will be assigned to the Sernet started task:

```
ADDUSER SERUSER NAME('SERNET') OWNER(owner userid) +
     DFLTGRP(group name) DATA('SERNET STARTED TASK')
```

2   Add each Sernet instance to the STARTED class to associate the started task with the user ID.

> **NOTE** With RACF 2.1 and higher, you may define started procedures to the STARTED class rather than adding them to the RACF Started Procedure Table, which requires an IPL. The STARTED class must be active at your site.

Use the following command:

```
RDEF STARTED SERPROC.SERTASK STDATA(USER(SERUSER) +
    GROUP(groupname))
SETROPTS RACLIST(STARTED) REFRESH
```

In the STARTED class, you specify both the started procedure member name and the jobname assigned in the START command. (See) You can use a wild card for the jobname:

```
RDEF STARTED SERPROC.** STDATA(USER(SERUSER) GROUP(groupname))
```

or

```
RDEF STARTED SERPROC.SER* STDATA(USER(SERUSER) GROUP(groupname))
```

Configure CA Top Secret

The steps listed here provide examples specific to CA Top Secret for accomplishing security setup tasks. The following conventions are used in these examples:

- **SERPROC** is the member name of the started procedure.

- **SERACID** is the name of ACID associated with the Sernet instance.

- **SERFAC** is the name of Multiuser Facility created for the Sernet instance.

This section is not intended to be an authoritative reference for CA Top Secret command syntax. Your security administrator should be aware of the intent of each step and should adjust the sample command syntax if necessary.

1   Define the Sernet server as a Multiuser Facility, using one of the dummy facility entries in the Facilities Matrix Table. See the CA Top Secret User Guide for information on how to add a new facility.

Example:

```
FACILITY(USERxx=NAME=SERFAC)
FACILITY(SERFAC=PGM=SER)
FACILITY(SERFAC=NOASUBM)
FACILITY(SERFAC=LCFCMD)
FACILITY(SERFAC=UIDACID=7)
```

2   Execute a TSS refresh to implement this parameter change, or perform a temporary change until the next refresh or IPL by executing this command:

```
TSS MODIFY FACILITY(USERxx=NAME=SERFAC)
```

3   After the above TSS command has been completed, query CA Top Secret to verify that the definition is correct.

```
TSS MODIFY FAC(SERFAC)
```

The following messages are from a successful installation:

```
TSS9550I FACILITY DISPLAY FOR SERFAC
TSS9551I INITPGM=SER ID=T TYPE=013
TSS9552I ATTRIBUTES=INUSE,ACTIVE,SHRPRF,NOASUBM,NOABEND,MULTIUSER,NOXDEF
TSS9552I ATTRIBUTES=LUMSG,STMSG,SIGN(M),INSTDATA,RNDPW,AUTHINIT
TSS9552I ATTRIBUTES=NOPROMPT,NOAUDIT,RES,WARNPW,NOTSOC,LCFCMD
TSS9552I ATTRIBUTES=MSGLC,NOTRACE,NOEODINIT,IJU,NODORMPW,NONPWR,NOIMSXTND
TSS9553I MODE=FAIL DOWN=GLOBAL LOGGING=INIT,MSG
TSS9554I UIDACID=8 LOCKTIME=000 DEFACID=*NONE* KEY=8
TSS9556I MAXUSER=03000 PRFT=003
TSS0300I MODIFY FUNCTION SUCCESSFUL
```

4   Create a CA Top Secret Started Task (STC):

```
TSS CREATE(SERACID) TYPE(USER) NAME('SERACID STC FOR SERNET')
FACILITY(STC,BATCH,SERFAC)  DEPT(NAME) PASS(NOPW,0)
```

5   Add the new STC to the Started Task Table:

```
TSS ADD(STC) ACID(SERACID) PROCNAME(SERPROC)
```

6   Add the SERFAC to the userids:

```
TSS ADD(SERACID) FACILITY(SERFAC)
```

> **NOTE** Repeat this command for each user that requires this access, or put it in a profile to which users are attached.

For more information, refer to the *CA Top Secret OS Reference Guide Volume 3*, Section: TSS Command Function.

Configure CA ACF2

The steps listed here provide examples specific to CA ACF2 for accomplishing the security setup tasks. The following conventions are used in these examples:

- **SERUSER** is the Sernet logon ID.

- **SERPROC** is the started procedure name.

This section is not intended to be an authoritative reference for CA ACF2 command syntax. Your security administrator should be aware of the intent of each step and should adjust the sample command syntax if necessary.

1   Change the ACF2 Global System Options (GSO) to associate a logon ID with started tasks. Set up a default logon ID to allow all started tasks to come up successfully. From the TSO command processing option, enter the following commands:

```
ACF2
SET CONTROL(GSO)
INSERT ACFSTCID (Set up default logon ID for started tasks)
OPTS STC (To have privilege of started task)
```

2   Set up SERUSER as unique logon ID for Sernet. From the TSO command processing option enter the following commands:

```
ACF2
SET CONTROL(GSO)
INSERT SERUSER (To insert a new logon ID)
OPTS STC (To have privilege of started task)
```

To give ChangeMan ZMF enough dataset access to perform its functions, add non-cancel authority NONCNCL or PREFIX(********).

3   Add a TSO ID:

```
ACF
SET LID
INSERT SERPROC JOB STC ACC-SRCE(STCINRDR) MUSASS
```

MUSASS means multiple-user single address space system.

> ⚠️ **CAUTION!** Verify that this ID is not assigned to a user as a TSO logon ID.

4   Add the following version-dependent definition to the environment:

For ACF2 Version 6.*x*:

```
SET C(GSO)
INSERT CLASMAP.CMN
RESOURCE(CMN)
RSRCTYPE(CMN)
INSERT SAFDEF.CMN001
ID(CMN001)
PROGRAM(SER-)
RB(SVC109)
RACROUTE(REQUEST=AUTH CLASS=CMN)
```

5   Activate the resource type SER.ACF2

```
SET RESOURCE(SER)
```

Permit Data Set Access

Permit data set access to the user ID assigned to the ZDD server started task:

- READ access to all of the data sets coded in the ZDD server started procedure, except...

- UPDATE access to the data set in the SER#PARM DD statement.

- ALTER access to the data set in the SYSMDUMP DD statement.

Set Security for USS File Systems

If you want to use ChangeMan ZDD to access HFS files in Unix System Services on the mainframe, you must make additional entries in your security system.

The instructions here describe commands for z/OS Security Server RACF. If you use CA ACF2 or CA Top Secret, consult with your security administrator to determine the actions they must take in those security systems to accomplish the same objectives.

In the commands that follow, the following conventions are used:

- **SERUSER** is the user-id assigned to the Sernet / ZMF started task.

- **SERGRP** is the RACF group assigned to the Sernet / ZMF started task.

1   Assign a non-zero UID to SERUSER by manually assigning the next available value:

```
ALTERUSER SERUSER OMVS(UID(xxx))
```

2 Permit access for SERUSER to two resources so it can manage HFS in USS:

```
PERMIT BPX.SERVER CLASS(FACILITY) ID(SERUSER) ACCESS(UPDATE)
PERMIT SUPERUSER.FILESYS CLASS(UNIXPRIV) ID(SERUSER)
ACCESS(READ)
SETROPTS RACLIST(FACILITY) REFRESH
SETROPTS RACLIST(UNIXPRIV) REFRESH
```

3 Ensure that the SERUSER default group SERGRP has a GID:

```
ALTERGROUP SERGRP OMVS(GID(YYY))
```

Define OMVS Segments For TCP/IP

Most user IDs requiring access to TCP/IP functions must have an OMVS segment.

To satisfy this requirement for the ChangeMan ZDD server and for ZDD users, do one of the following:

- Define an OMVS RACF segment for the userid of the ZDD server and for each ZDD user.

    or

- Use the default OMVS segment support provided by RACF and z/OS UNIX for users and groups.

> **NOTE** You may have already defined an OMVS segment for the ZDD server user ID in "Set Security for USS File Systems" on page 52.

See "Requirement for an OMVS segment" in the *z/OS Communications Server IP Configuration Guide*.

Restrict Logon to ZDD

As described in "How ChangeMan ZDD Security Works" on page 29, ChangeMan ZDD respects the mainframe security controls provided by your security system when a ZDD user works with files, jobs, and job output.

In addition, you can require explicit permission at the user ID and group ID level to logon to a ZDD server.

Execute these steps to restrict logon to a ZDD server:

1 Code Sernet keyword option CONNECTCHECK(YES) in one of these locations on a Sernet instance that is acting as a ZDD server:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

    The default value for this keyword option is CONNECTCHECK(NO).

2 Define a FACILITY class profile:

```
SERENA.CONNECT.sysname.XCHsubsys
```

Where:

sysname is the four-character SMF ID of the LPAR where the Sernet instance runs

subsys is the one-character subsystem ID of the Sernet started task

3   Permit READ access to the FACILITY class to user IDs and group IDs to allow logon.

Step 10: Add PassTicket Support In Sernet

RACF PassTickets are a requirement for mainframe clients connecting via TCP/IP.

NOTE RACF PassTickets are not a requirement for ChangeMan ZDD or ChangeMan ZMF for Eclipse. These PassTickets are the result of the RACF Secure Signon Function and eliminate the need for clients to provide a password or passphrase that needs to be sent over a network. Additional information on PassTickets can be found in the 'Using the Secured Signon Function' section of the IBM-supplied 'Security Server RACF Security Administrator's Guide'.

PassTickets are application-specific so a Sernet-generated PassTicket is only valid for connecting to a Sernet started task. Each PassTicket is valid for approximately ten minutes from the time it is issued and can only be used once.

RACF Administration Required

■   Activate the PTKTDATA class by entering:

```
SETROPTS CLASSACT(PTKTDATA) RACLIST(PTKTDATA)
```

■   Refresh the PTKTDATA class by entering:

```
SETROPTS RACLIST(PTKTDATA) REFRESH
```

■   Create a profile in the PTKTDATA class by entering:

```
RDEFINE PTKTDATA SERNET SSIGNON(user_must_choose) APPLDATA('NO
    REPLAY PROTECTION')
```

NOTE The value of SERNET in the above RDEFINE command is mandatory and should not be altered. You must provide the SSIGNON specification.

The SERSET Utility

Support for PassTickets in Sernet is provided via the execution of the SERSET utility. Each time the ChangeMan started task is brought up, during the initialization process, the SETSET utility gets invoked. This caters for the case where clients connect to a started task running on the same LPAR.The SERSET utility will always be automatically invoked by every Sernet started task during initialization. This caters to the case where clients connect to a started task running on the same LPAR.

However the SERSET utility can also be executed as a batch utility. We provide a new member called SERSET in the delivered SERCOMC CNTL library. If you have a situation where users are signing onto the started task from other LPARs, then you need to run the SERSET batch job once per LPAR after IPL, this will provide support for the PassTickets.

Generating a PassTicket

Sernet generates PassTickets when SERCLIEN calls SERXPTIK. The generation process requires authorization (key zero) so SERXPTIK executes as a PC routine and the sole purpose of the SERSET utility is to implement this routine.

For SERCLIEN to generate a PassTicket SERCLIEN only needs to know the PC number associated with SERXPTIK. To find this number SERCLIEN retrieves two system-level tokens, as follows:

```
SerNet.PTickTok – this contains the SerNet.PTickX value.
SerNet.PTickX – this contains the PC number.
```

NOTE The X in this token name corresponds directly to the TOKEN= value established when SERSET runs

Failures in PassTicket Generation

SERXPTIK calls the routine anchored in field RCVTPTGN of the RACF CVT. Errors will be returned to the caller of SERCLIEN with the following message:

```
SER6035E Passticket generation failed, RCVTPTGN RC=nnnn
```

RCVTPTGN and its accompanying return codes are documented under "Using the service to generate a PassTicket" in the *RACF Macros and Interfaces* manual.

TOKEN =Operand of SERSET

The SERSET member of the SERCOMC CNTL library contains an EXEC card that reads:

```
PTICKET EXEC PGM=SERSET,REGION=2M,PARM='TOKEN= '
```

The default value for TOKEN is A so this effectively reads:

```
PTICKET EXEC PGM=SERSET,REGION=2M,PARM='TOKEN=A'
```

When the JCL executes one of two message sequences will normally ensue:

```
SER1704I CSVDYLPA loaded SERXPTIK @ xxxxxxxx
SER1708I SerNet.PtickA token created
SER1708I SerNet.PtickTok token created
SER1709I Passticket support enabled
```

This sequence will appear when SERSET first executes after an IPL. It shows the loading of SERXPTIK and the creation of the two system-level tokens.

```
SER1701I Passticket support previously enabled under 'A' suffix
```

This message will appear when SERSET executes every other time after an IPL. It signifies that SerNet.PTickTok points at SerNet.PTickA and that the latter contains the PC number associated with SERXPTIK.

Refreshing SERXPTIK

SERXPTIK is loaded into common storage by SERSET. By design, it's a very small piece of code that should rarely change but, even so, on occasion it may need to be refreshed without an IPL.

To do this, rerun SERSET ensuring it will pick up the new version of SERXPTIK from STEPLIB and specifying a different TOKEN= value. For example, specifying TOKEN=B will result in the following message sequence:

```
SER1704I CSVDYLPA loaded SERXPTIK @ xxxxxxxx
SER1708I SerNet.PtickB token created
SER1708I SerNet.PtickTok  token created
SER1709I Passticket support enabled
```

Once this has executed SerNet.PTickTok will point at SerNet.PTickB and this will cause SERCLIEN to invoke the new version of SERXPTIK [via a different PC number].

The TOKEN= parameter will accept any value from A-Z and 0-9 but any use beyond A and, rarely, B would be highly unusual.

Step 11: Start the Sernet Instance

Use a START command to start a Sernet instance. Variations of the START command include:

```
S SERPROC1
S SERPROC.SERTASK2,ID=2
S SERPROC,JOBNAME=SERTASK3,ID=3
```

See "Sernet Started Task Names" on page 30 for a discussion of the START command and Sernet started task names.

Messages

Sernet messages and SER10TY License Manager messages are displayed in the SERPRINT sysout dataset for the Sernet started task. Sernet messages are explained in "SERNET Messages" on page 167.

```
SER0800I SerNet - Initialization in progress: CSA=0000E000
SER0801I Execution parameters specified:
SER0801I DDNAME=PARMLIB
SER0801I < DDNAME: PARMLIB
SER0801I   SUBSYS=$
SER0801I   XCH=61
SER0801I   SDNOTIFY=010
SER0801I >
LIC0034I ChangeMan ZDD licensed to SERENA - Blue Hill CPU
SER0660I Unix services are available
SER0821I XCH (ChangeMan ZDD) licensed
SER1000I XCH      TCP/IP environment active at 10.35.11.100..61
SER1001I XCH      TCP/IP local host name: C001
```

```
SER08I  Address Space Manager active
SER0833I XML Data Space Manager active
SER0810I SerNet server "$" initialized and ready for communications
SER0824I Attempting to load PAN#1 to determine if feature present; Please ignore any associated
        CSV003I message.
SER0826I PAN#1 not found
SER0824I Attempting to load LIBR to determine if feature present; Please ignore any associated
        CSV003I message.
SER0826I LIBR not found
```

Already Started

Each Sernet instance started on an LPAR must be assigned a unique subsystem ID. If you attempt to start a Sernet instance with a subsystem ID that is the same as a Sernet instance that is already running, an error message is displayed.

```
SER0822E SerNet already active for subsystem ID "$" - Terminating
```

Step 12: Stop the Sernet Instance

There are several ways to bring down a Sernet started task. The recommended method is to do an orderly termination with a SHUTDOWN modify command. You can specify a grace period with the SHUTDOWN command to allow users to save their work and logoff.

The following table lists some variations of the SHUTDOWN command.

Shutdown Command	Result
F SERs,SHUTDOWN	Orderly shutdown, 5 minute grace period
F SERs,SH	Command abbreviation, same result as `SHUTDOWN`
F SERsHALT	Alternate command; same result as `SHUTDOWN`
F SERs,SH,M10	Orderly shutdown, 10 minute grace period
F SERs,SH,30	Orderly shutdown, 30 minute grace period
F SERs,SH,0	Immediate orderly shutdown, 15 second maximum wait

- `SERs` is the started procedure name, the started task identifier, or the JOBNAME specified on the START command. See "Sernet Started Task Names" on page 30.

- The keyword `SHUTDOWN` may be abbreviated `SH`.

- The keyword `HALT` is equivalent to SHUTDOWN and is provided because IBM® NetView® often uses `HALT` as the directive to bring down long running systems.

- The default grace period is 5 minutes.

- Minutes of grace period may be preceded with `M` to conform with other hour and minute designations.

- Grace periods longer than 30 minutes are set back to 30 minutes.

■ The response is printed at `//SERPRINT, as follows`:

```
SER0944I SerNet orderly SHUTDOWN initiated; No grace period; Immediate termination
SER0990I Statistics; Real time:          H09M11S02
SER0991I Statistics; Applications:              3
SER0992I Statistics; Users attached:           0
SER0993I Statistics; Called count:             0
SER0994I Statistics; Concurrent max:           0
SER0995I Statistics; Abended:                  0
SER0996I Statistics; Detached inactive:        0
SER0999I SerNet server "$" termination complete, RC=0
```

Other methods may be used to stop the Sernet started task if the SHUTDOWN command is not successful.

Command	Result
P SERs	Purge all users in session immediately and stop
F SERsABEND	Abend the started task with an S0C3 after closing VSAM files.
CANCEL SERs,DUMP	Cancel the job. Cancel is **not recommended** because there may be open dialogs along the network and open data sets. Severe damage could result depending on what is occurring at the time the CANCEL is issued.

Chapter 6
Connect to ChangeMan ZMF

This chapter tells you how to prepare an existing ChangeMan ZMF server for access through a separate ChangeMan ZDD server.

Skip this chapter if you do not license ChangeMan ZMF, or if you will not use ChangeMan ZDD to access ChangeMan ZMF.

Introduction

In the diagram on page 18, ChangeMan ZDD clients connect to ChangeMan ZMF 2 and ZMF 3 through dedicated ZDD server Sernet A.

This chapter tells you how to prepare ZMF instances like ZMF 2 and ZMF 3 in the diagram on page 18 for access through ZDD.

If you want to build a Sernet started task that is dedicated as a ChangeMan ZDD server, see Chapter 5, "Build Dedicated Sernet Started Task" on page 43.

If you want to configure an existing ChangeMan ZMF server to act as a ChangeMan ZDD server, see Chapter 7, "Add ChangeMan ZDD to ChangeMan ZMF" on page 65.

Step 1: Verify ChangeMan ZMF Compatibility

As you connect to ChangeMan ZMF, see the release level on the pop-up panel that is displayed before the Primary Option Menu appears.

```
   Menu  List  Mode  Functions  Utilities  Help
 -------------------------------------------------------------------------
                            ISPF Command Shell
 Enter TSO or Workstation commands below:
       +----------------------------------------------------------------+
 ===> s |                                                                |
        |                          ChangeMan(R)                          |
        |                         Version = 7.1.1                        |
        |                                                                |
 Place  |                   Initialization in progress                   |
        |                                                                |
 => ser |          Copyright (C) 1985-2010 Serena Software, Inc.         |
 => ser |             Licensed material.  All rights reserved.           |
 => SER | ChangeMan is a registered trademark of SERENA (R) Software Inc.|
 => ser |                                                                |
 => RAC |                                                                |
 => isr +----------------------------------------------------------------+
 => isrddn
 =>
 =>
 =>
```

See the "Compatibility" section of the ChangeMan ZDD Readme to verify that your ZMF release level is compatible with the ZDD client you want to use to access it.

Upgrade ChangeMan ZMF or ChangeMan ZDD if necessary.

Step 2: Apply ChangeMan ZDD License

Ensure that the license that enables ChangeMan ZDD on the ZDD server is available to this ZMF server, either through CSA or through a license PDS or PDSE at a SERLIC DD statement.

If you need to apply the license with SER10TY License Manager, apply the ZDD license using the SER10TY JCL that you used to apply other licenses to this ZMF server. If you

cannot find that JCL, SER10TY components are included in the SERCOMC libraries running your ZMF server.

Step 3: Enable ZDD Application

Add Sernet application keyword option XCH to the started task to enable ChangeMan ZDD on this Sernet instance.

Code the option in one of these locations:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

A port number is optional because ZDD clients will not access this Sernet instance directly. The following format is acceptable.

```
XCH
```

Step 4: Provide Port Number for ZMF

To access a ChangeMan ZMF instance from a ChangeMan ZDD server, the CMN application keyword option must include a port number.

1   Locate the CMN application parameter in the Sernet started task. This parameter will be coded in either:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

2   Ensure that the CMN keyword option includes a non-zero port number. Example:

```
CMN=60
```

> **NOTE** Do not use the same port number for the CMN=*port* keyword option and the XCH=*port* keyword option.

Step 5: Allocate ZDDOPTS XML Parameters

You can use XML pages in a library at ddname ZDDOPTS in the ChangeMan ZMF started procedure to alter the behavior of the ChangeMan ZDD client when it accesses functions in ChangeMan ZMF 5.3.6 and higher.

See Chapter 8, "ZDDOPTS: ChangeMan ZDD XML Options" on page 73 for a description of the XML parameter members and for instructions for coding the XML to meet your requirements.

Execute these steps to add a ZDDOPTS library to an existing ChangeMan ZMF server:

1   Allocate a PDS(E) for the ZDDOPTS XML page members with these characteristics:

```
DSN=node.SERCOMC.ZDDOPTS              * Recommended last node
DCB=(RECFM=VB,LRECL=255,BLKSIZE=0)  * Let SMS set BLKSIZE
SPACE=(CYL,(1,10,30))
```

2   Add a ZDDOPTS DD statement to the ChangeMan ZMF started procedure and code it with the data set name of the allocated ZDDOPTS library.

3   Copy these members to the ZDDOPTS library from the SERCOMC SAMPXML library unloaded from the download image or the distribution CD:

```
AUDIT
BUILD
COMMAND
DEMOTE
LIBTYPE
PKGCREAT
PKGPROP
PROMOTE
```

4   Use a PDS search like the ISPF Search-For Utility to find this XML comment syntax in any ZDDOPTS library member:

```
<!--
```

If no XML comments are found, see "Translating Comments in ZDDOPTS Members" on page 76 for a procedure to fix XML comments in ZDDOPTS library members.

Step 6: Configure Your Security System

You may need to change some security settings in your ChangeMan ZMF instance to access it from a ChangeMan ZDD client.

Set Security Interface to SAF

A ChangeMan ZMF instance must use SAF for its security interface if you want to access it from a ChangeMan ZDD client. See "SAF and Your Security System" on page 29.

Execute these steps to ensure that the ChangeMan ZMF server you want to access from a ZDD server is using the SAF security interface:

1   Logon to ChangeMan ZMF with Global Administrator authority.

2   Go to the **Global Parameters - Part 1 of 6** panel (=A.G.1) and examine the setting of the **Security System** field.

3   If the **Security System** field is set to **RACF**, **ACF2**, or **TSS**, change it to **SAF**, and then save your change by pressing **ENTER** until you are returned to the menu where you started.

4   If you have *not* customized local security routine SERLCSEC, no further action is required. Go to "Define OMVS Segments For TCP/IP" on page 64.

5   Edit local security routine SERLCSEC in your custom ASMSRC library, and search the source code for **&SAF**.

6   If **&SAF** is not found, Sernet is running Version 7.1.1 or later, and no further action is required. Go to "Define OMVS Segments For TCP/IP" on page 64.

7   Compare the switch settings in your customized SERCSEC source to the settings shown in this code fragment.

```
*-------------------------------------------------------------------
* BELOW IS WHERE THE USER CAN TAILOR THE SOURCE CODE FOR THE SHOP
*-------------------------------------------------------------------
&SAF     SETB  1      (YES)        security package - SAF
&ACF2    SETB  0      (NO)         security package - ACF2
&RACF    SETB  0      (NO)         security package - RACF
&RACFVRM SETB  1      (1.9)        .RACF 1.9 or better (0=1.8)
&TSS     SETB  0      (NO)         security package - Top Secret
&TSSVRM  SETB  0      (4.1)        .version 4.2 or better (0=4.1)
&VERFYID SETB  1      (YES)        SAF user ID verification
```

8   If your switch settings match the settings in the code fragment above, no changes are required. Go to "Define OMVS Segments For TCP/IP" on page 64.

9   Change the switch settings in your customized SERLCSEC source to match the code fragment above.

10 Assemble and link the customized SERLCSEC program source into your custom LOAD library.

11 Stop and start your ChangeMan ZMF instance.

Define OMVS Segments For TCP/IP

Most user IDs requiring access to TCP/IP functions must have an OMVS segment. To satisfy this requirement for the ChangeMan ZMF server, do one of the following:

- Define an OMVS RACF segment for the userid assigned to the ZMF server.

  or

- Use the default OMVS segment support provided by RACF and z/OS UNIX for users and groups.

See "Requirement for an OMVS segment" in the *z/OS Communications Server IP Configuration Guide*.

Add ChangeMan ZDD to ChangeMan ZMF

This chapter tells you how to reconfigure an existing ChangeMan ZMF server to also act as a ChangeMan ZDD server.

Skip this chapter if you do not license ChangeMan ZMF, or if you will not use ChangeMan ZDD to access ChangeMan ZMF.

Introduction

In the diagram on page 19, ZDD clients connect to Sernet A to access ZMF 1 that runs as an application under Sernet A. ZDD clients also connect to Sernet A to access ZMF 2 and ZMF 3 running under Sernet B and Sernet C respectively.

This chapter tells you how to prepare Sernet A for its dual role as a ZMF server and a ZDD server as shown on page 19.

If you want to build a Sernet started task that is dedicated as a ChangeMan ZDD server, see Chapter 5, "Build Dedicated Sernet Started Task" on page 43.

If you want to prepare an existing ChangeMan ZMF server for access through a separate ChangeMan ZDD server, see Chapter 6, "Connect to ChangeMan ZMF" on page 59.

We recommend that you set up a dedicated Sernet instance as a ChangeMan ZDD server to access all ChangeMan ZMF instances on an LPAR. (See "ChangeMan ZDD Server Design" on page 16).

However, adding ChangeMan ZDD to an existing ChangeMan ZMF server may be quicker than creating a new Sernet started task. This approach might allow you to demonstrate the capabilities and benefits of ChangeMan ZDD with little effort.

> ⚠️ **CAUTION!** If you do not currently define SAF as your security system interface in ChangeMan ZMF Global Administration, the procedure in this chapter requires you to change the switch settings in security module SERLCSEC. Mistakes in this change could make ChangeMan ZMF unavailable.

Step 1: Verify ChangeMan ZMF Compatibility

As you connect to ChangeMan ZMF, see the release level on the pop-up panel that is displayed before the Primary Option Menu appears.

```
   Menu  List  Mode  Functions  Utilities  Help
 --------------------------------------------------------------------------
                            ISPF Command Shell
 Enter TSO or Workstation commands below:
        +--------------------------------------------------------------+
 ===> s |                                                              |
        |                          ChangeMan(R)                        |
        |                        Version = 7.1.1                       |
        |                                                              |
 Place  |                  Initialization in progress                  |
        |                                                              |
 => ser |         Copyright (C) 1985-2010 Serena Software, Inc.        |
 => ser |            Licensed material.  All rights reserved.          |
 => SER | ChangeMan is a registered trademark of SERENA (R) Software Inc. |
 => ser |                                                              |
 => RAC |                                                              |
 => isr +--------------------------------------------------------------+
 => isrddn
 =>
 =>
 =>
```

See the "Compatibility" section of the ChangeMan ZDD Readme to verify that your ZMF release level is compatible with the ZDD client you want to use to access it.

Upgrade ChangeMan ZMF or ChangeMan ZDD if necessary.

Step 2: Apply ChangeMan ZDD License

Apply the license you received from Micro Focus to enable ChangeMan ZDD. Refer to the *SER10TY User's Guide* for instructions on how to apply the license.

Use the SER10TY JCL and SERCOMC load libraries that were used to apply other licenses to this Sernet instance.

If you cannot find that JCL, the load modules, JCL, and other components that run SER10TY are included in the SERCOMC libraries unloaded from the ZDD download image or the distribution CD.

Step 3: Enable ZDD Application With Port Number

Add Sernet application keyword option XCH to the started task to enable ChangeMan ZDD on this Sernet instance and to provide a port number for access by ZDD clients.

Code the option in one of these locations:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

The following format with a port number is required:

    XCH=nnnn

Step 4: Provide Port Number for ZMF

To access a ChangeMan ZMF instance from a ChangeMan ZDD server, the CMN application keyword option must include a port number.

1   Locate the CMN application parameter in the Sernet started task. This parameter will be coded in either:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

2   Ensure that the CMN keyword option includes a non-zero port number. Example:

    CMN=60

NOTE Do not use the same port number for the CMN=*port* keyword option and the XCH=*port* keyword option.

Step 5: Allocate ZDDOPTS XML Parameters

You can use XML pages in a library at ddname ZDDOPTS in the ChangeMan ZMF started procedure to alter the behavior of the ChangeMan ZDD client when it accesses functions in ChangeMan ZMF 5.3.6 and higher.

See for a description of the XML parameter members and for instructions for coding the XML to meet your requirements.

Execute these steps to add a ZDDOPTS library to an existing ChangeMan ZMF server:

1 Allocate a PDS(E) for the ZDDOPTS XML page members with these characteristics:

```
DSN=node.SERCOMC.ZDDOPTS             * Recommended last node
DCB=(RECFM=VB,LRECL=255,BLKSIZE=0)   * Let SMS set BLKSIZE
SPACE=(CYL,(1,10,30))
```

2 Add a ZDDOPTS DD statement to the ChangeMan ZMF started procedure and code it with the data set name of the allocated ZDDOPTS library.

3 Copy these members to the ZDDOPTS library from the SERCOMC SAMPXML library unloaded from the download image or the distribution CD:

```
AUDIT
BUILD
COMMAND
DEMOTE
LIBTYPE
PKGCREAT
PKGPROP
PROMOTE
```

4 Use a PDS search like the ISPF Search-For Utility to find this XML comment syntax in any ZDDOPTS library member:

```
<!--
```

If no XML comments are found, see for a procedure to fix XML comments in ZDDOPTS library members.

Step 6: Set Up Job Notification

The Job Notification facility of Sernet sends job completion messages to a user's PC for jobs that they submit through ChangeMan ZDD.

NOTE Job Notification does not add messages to batch jobs submitted by ChangeMan ZMF, even though you may use ChangeMan ZDD to initiate ChangeMan ZMF jobs.

To enable Job Notification in a ChangeMan ZDD server, you set up a mainframe JCL fragment that is automatically appended onto JCL submitted from ChangeMan ZDD.

1 Copy member $SERNTFY from the vendor SERCOMC CNTL library into your custom CNTL library.

2 Edit member $SERNTFY in the custom library. Change the STEPLIB statement to point to the vendor load library you coded in the STEPLIB for the Sernet started procedure.

3 Copy the updated $SERNTFY member from your custom CNTL library into a system PROCLIB.

Step 7: Set Up Job Review

See "Job Review" on page 34 for more information about the Job Review facility.

As delivered in Sernet 7.1.1, Sernet allows read access to JES jobs that are not owned by the userid. Cancel/purge/requeue are restricted to jobs owned by the userid.

Since access to JES jobs is normally controlled by resource classes JESJOBS and JESSPOOL, regardless of whether SEREX003 is activated, we recommend that you disable this exit. To disable the exit, do one of the following:

- Use Sernet keyword option EX003=NO.

- Customize the exit as described in source code comments at the top of the program.

Step 8: Configure Your Security System

You may need to change some security settings in your ChangeMan ZMF instance to access it from a ChangeMan ZDD client.

Set Security Interface to SAF

A ChangeMan ZMF instance must use SAF for its security interface if you want to access it from a ChangeMan ZDD client. See "SAF and Your Security System" on page 29.

Execute these steps to ensure that the ChangeMan ZMF server you want to access from a ZDD client is using the SAF security interface:

1 Logon to ChangeMan ZMF with Global Administrator authority.

2 Go to the **Global Parameters - Part 1 of 6** panel (=A.G.1) and examine the setting of the **Security System** field.

3 If the **Security System** field is set to **RACF**, **ACF2**, or **TSS**, change it to **SAF**, and then save your change by pressing **ENTER** until you are returned to the menu where you started.

4 If you have *not* customized local security routine SERLCSEC, no further action is required. Go to "Set Security for USS File Systems" on page 70.

5 Edit local security routine SERLCSEC in your custom ASMSRC library, and search the source code for **&SAF**.

6 If **&SAF** is not found, Sernet is running Version 7.1.1 or later, and no further action is required. Go to "Set Security for USS File Systems" on page 70.

7   Compare the switch settings in your customized SERCSEC source to the settings shown in this code fragment.

```
* BELOW IS WHERE THE USER CAN TAILOR THE SOURCE CODE FOR THE SHOP
*-------------------------------------------------------------------
&SAF     SETB  1     (YES)     security package - SAF
&ACF2    SETB  0     (NO)      security package - ACF2
&RACF    SETB  0     (NO)      security package - RACF
&RACFVRM SETB  1     (1.9)     .RACF 1.9 or better (0=1.8)
&TSS     SETB  0     (NO)      security package - Top Secret
&TSSVRM  SETB  0     (4.1)     .version 4.2 or better (0=4.1)
&VERFYID SETB  1     (YES)     SAF user ID verification
```

8   If your switch settings match the settings in the code fragment above, no changes are required. Go to "Set Security for USS File Systems" on page 70.

9   Change the switch settings in your customized SERLCSEC source to match the code fragment above.

10   Assemble and link the customized SERLCSEC program source into your custom LOAD library.

11   Stop and start your ChangeMan ZMF instance.

Set Security for USS File Systems

If you want to use ChangeMan ZDD to access HFS files in Unix System Services on the mainframe, you must make additional entries in your security system.

The instructions here describe commands for z/OS Security Server RACF. If you use CA ACF2 or CA Top Secret, consult with your security administrator to determine the actions they must take in those security systems to accomplish the same objectives.

In the commands that follow, the following conventions are used:

- **SERUSER** is the user-id assigned to the Sernet / ZMF started task.

- **SERGRP** is the RACF group assigned to the Sernet / ZMF started task.

1   Assign a non-zero UID to SERUSER by manually assigning the next available value:

```
ALTERUSER SERUSER OMVS(UID(xxx))
```

2   Permit access for SERUSER to two resources so it can manage HFS in USS:

```
PERMIT BPX.SERVER CLASS(FACILITY) ID(SERUSER) ACCESS(UPDATE)
PERMIT SUPERUSER.FILESYS CLASS(UNIXPRIV) ID(SERUSER)
ACCESS(READ)
SETROPTS RACLIST(FACILITY) REFRESH
SETROPTS RACLIST(UNIXPRIV) REFRESH
```

3   Ensure that the SERUSER default group SERGRP has a GID:

```
ALTERGROUP SERGRP OMVS(GID(YYY))
```

Define OMVS Segments For TCP/IP

Most user IDs requiring access to TCP/IP functions must have an OMVS segment. To satisfy this requirement for the ChangeMan ZMF server, do one of the following:

- Define an OMVS RACF segment for the userid assigned to the ZMF server.

or

- Use the default OMVS segment support provided by RACF and z/OS UNIX for users and groups.

See "Requirement for an OMVS segment" in the *z/OS Communications Server IP Configuration Guide*.

Restrict Logon to ZDD

As described in "How ChangeMan ZDD Security Works" on page 29, ChangeMan ZDD respects the mainframe security controls provided by your security system when a ZDD user works with files, jobs, and job output.

In addition, you can require explicit permission at the user ID and group ID level to logon to a ZDD server.

Execute these steps to restrict logon to a ZDD server:

1   Code Sernet keyword option CONNECTCHECK(YES) in one of these locations on a Sernet instance that is acting as a ZDD server:

- The PARM= parameter for program SERVER in the Sernet started procedure.

- The data set coded at the ddname that is specified in the DDNAME=*ddname* keyword option in the PARM= parameter.

The default value for this keyword option is CONNECTCHECK(NO).

2   Define a FACILITY class profile:

SERENA.CONNECT.*sysname*.XCH*subsys*

Where:

sysname is the four-character SMF ID of the LPAR where the Sernet instance runs

subsys is the one-character subsystem ID of the Sernet started task

3   Permit READ access to the FACILITY class to user IDs and group IDs to allow logon.

ZDDOPTS: ChangeMan ZDD XML Options

This chapter tells you how to customize the behavior of the ChangeMan ZDD client when accessing a ChangeMan ZMF server.

Introduction

This chapter describes the ChangeMan ZDD settings that can be specified for the mainframe server started tasks. These settings apply to ChangeMan ZMF functions accessed through ZDD.

See "Customizing the ChangeMan ZDD Client" on page 35.

These settings are specified in XML format and stored as members of a PDS library. This library must be allocated to the ChangeMan ZMF server started task using ddname ZDDOPTS:

```
//ZDDOPTS DD DSN=somnode.ZDDOPTS,DISP=SHR
```

The ZDDOPTS library is allocated to the started task to which the settings apply.

> **NOTE** Skip this chapter if any of these apply:
> - You do not license ChangeMan ZMF
> - You will not use ChangeMan ZDD to access ZMF
> - Your version of ZMF is not 5.3.6 or higher

The first time you initiate a ZDD function that uses these options, the following actions are performed:

1 XML pages are read from the appropriate ZDDOPTS member on the mainframe.

2 XML is parsed to get the option values.

3 Option values are stored in the Windows registry on your PC.

Option information is deleted from the registry when you log off from Windows or restart Windows.

> **IMPORTANT!** If you update a ZDDOPTS member, you must do a refresh options from the ZDD client for the new settings to take effect:
> **1** In Windows Explorer, right-click either a ChangeMan ZDD server node or a ChangeMan ZMF instance.
> **2** On the ZDD Network shortcut menu, click Refresh Options.
> It is not necessary to restart the started task.

If you want to use the same options for all servers, allocate the same ZDDOPTS library to all servers. If you want unique behavior for a server, code a different library name at ddname ZDDOPTS.

ZDDOPTS Members

The following members can be included in the ZDDOPTS library.

Member Name	Purpose
AUDIT	User-defined options for audit package
BUILD	Default settings for build, recompile, and relink dialogs

Member Name	Purpose
CHECKIN	User-defined options for check in
CHECKOUT	User-defined options for check out
COMMAND	Enables or disables menu commands
DEMOTE	User-defined options for demote package
FREEZE	User-defined options for freeze package
LIBTYPE	Shows or hides ChangeMan library types
PKGCREAT	User-defined options for package creation
PKGPROP	Allow or disallow package property fields to be changed
PROMOTE	User-defined options for promote package

XML Syntax

Members in the ZDDOPTS library contain well-formed XML pages, but this XML does not follow all of the same syntax rules that apply to XML Services.

The top level XML element for each ZDDOPTS XML page is the <options> element:

```
<options name="XXXXXXXX" strict=...>
...
</options>
```

...where XXXXXXXX is the name of the ZDDOPTS member.

Element names (example: <options>) and attribute names (example: name=) in ZDDOPTS members are case sensitive and should always be specified using lower case. Attribute values in double quotes are not case sensitive and can be specified in upper, lower, or mixed case.

The optional **strict="Y"** or **strict="N"** attribute above specifies whether unrecognized keywords or element names are ignored. The default is **strict="N"**, which ignores unrecognized keywords. This default facilitates migrating to new versions of ChangeMan ZDD that support new keywords or element names. By ignoring unrecognized keywords, older ZDD clients can still be used without displaying an error message when a ZDDOPTS member is read.

There may be times, however, when you want to specify **strict="Y"**. With **strict="N"**, misspelled keywords or element names will simply be ignored. If you have a ZDDOPTS member that doesn't appear to be working correctly, specify **strict="Y"** so that any misspelled names will be reported as errors.

The **strict** attribute can be specified in the **<options>** element of any ZDDOPTS member.

Multiple Attribute Values

Some attributes allow multiple values to be specified. When specifying multiple values, separate the values with spaces, for example:

```
<profile application="TST* DEMO X*">
```

Most attributes on <profile> elements accept multiple values.

> **NOTE** All ChangeMan ZDD users must be at version 3.2 or higher before specifying multiple attribute values in any ZDDOPTS member. Earlier versions of ZDD do not support multiple values and this will be considered a syntax error.

Wildcard Patterns

Some attribute values allow wildcard patterns to be specified. You can use the following wildcard characters in the pattern string:

Character	Function
*	Matches zero or more characters
?	Matches a single character

For example:

- The pattern "A*" would match any string that starts with the letter A.

- The pattern "*Z" would match any string that ends in the letter Z.

- The pattern "A*Z" would match any string that starts with A and ends with Z.

- The pattern "A??D" would match a string that starts with A, followed by exactly two characters, and followed by D.

- The pattern "*" matches any string.

The following table gives examples of how wildcard patterns work.

Pattern	Description	Match	No Match
A*	Match any string that starts with the letter A.	A AB ABCDEFGH	B BA
*Z	Match any string that ends in the letter Z.	Z WXYZ	ZA AZA
A*DE	Match a string that starts with A and ends with the letters DE.	ABCDE AXXXXXDE	ABCDEF
A??DE	Match a string that starts with A, followed by exactly two characters, followed by DE.	ABCDE AXYDE	ABCDEF AXYZDE
*	Match any string.	Z ABCDEFGH	

Translating Comments in ZDDOPTS Members

> **IMPORTANT!** This section describes modifications you may need to make if you are using certain code pages on your mainframe.

ZDDOPTS members use the following XML syntax for comments:

```
<!-- xxx -->
```

If you use certain code pages on your mainframe, and if you follow the standard procedure in Chapter 4, "Unload Mainframe Components" on page 37 to populate the SERCOMC SAMPXML library on the mainframe, the ! in XML comments may be changed to a different character. This change renders the XML invalid.

This table shows how ! is translated for each code page:

Code Page	Language	Translation
00424	Hebrew	!
00875	Greek	]
01140	English-US, Portuguese	!
01141	German	Ü
01142	Danish, Norwegian	_
01143	Finish, Swedish	_
01144	Italian	é
01145	Spanish	]
01146	English-UK	!
01147	French	§
01148	Malay	]
01149	Icelandic	Æ
01153	Polish, Hungarian	]
01154	Russian	]
01155	Turkish	Ð
01156	Latvian, Lithuanian	!
01157	Estonian	_
01158	Ukrainian	]
01164	Vietnamese	]

When ! is changed to a different character, users see the following error message (or something similar) the first time they execute a ZMF function that uses a ZDDOPTS member with a comment:

```
ChangeMan [ChangeMan ZMF instance] on server [ChangeMan ZDD server]
    has invalid XML data specified for ZDDOPTS in [library(member)].
Missing equals sign between attribute and attribute value.
```

There are two solutions to this problem:

■ On the mainframe, manually edit the members that you copy from the SERCOMC SAMPXML library to the ZDDOPTS library to fix the ! in comments. The hexadecimal code for ! is 5A.

■ Manually upload the sample ZDDOPTS files *as text files* to the mainframe from the workstation where you installed the ChangeMan ZDD client. The translation of ASCII text to hexadecimal will preserve the ! in comments. The default location for ZDDOPTS members on your workstation is:

C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts

Profile Names

Many of the ZDDOPTS members have <profile> elements with an optional profile name (name="" attribute).

The profile names are not case sensitive. Below is an example:

```
<profile name="Einstein">
```

The "name" attribute can be used by an HLLX exit to select a specific profile. There can be multiple profiles with the same name, in which case the first matching profile will be selected. A given profile can also have multiple names. If it has multiple names, it will match any of the names. The profile name is not case sensitive.

Named profiles can only be selected using an HLLX exit. If you are not using HLLX exits, do not specify a profile name.

For example, say we have the following profiles:

```
<profile name="Tarzan Jane" application="DEMO TEST">
<profile name="Tarzan Jane" application="*">
<profile name="KingKong Godzilla" application ="DEMO">
<profile name="KingKong Godzilla" application ="TEST">
<profile name="KingKong Godzilla" application ="*">
```

If an HLLX exit sets the "optsProfile" to "Godzilla", then the third profile will be selected if the application is "DEMO", the fourth profile would be selected if the DEMO is "TEST", and the last profile would be selected if the application is anything else.

If the profile contains no "name" attribute, then it will match any name. Client Pack always selects the first matching profile. Therefore, unnamed profiles should always be placed after the named profiles.

The profile name can be set from one of the user options HLLX preprocessing exit points or from any exit prior to user options being displayed.

AUDIT, DEMOTE, FREEZE, PROMOTE Options

The AUDIT, DEMOTE, FREEZE, and PROMOTE members of the ZDDOPTS library specify user-defined options for the Audit, Demote, Freeze, and Promote Package wizards. Each of these members contains one or more profiles. Each profile is a complete set of options for the corresponding wizard.

Profiles are specified by profile name an application. You may specify one or more applications associated with each profile. Applications may be specified using wildcard patterns. The first matching profile is the one used. For information on using HLLX exits to select profiles by name, see .

The structure of an AUDIT, DEMOTE, FREEZE, or PROMOTE member is as follows:

```
<options name= ...> (AUDIT, DEMOTE, FREEZE, or PROMOTE)

  <profile ...>
    <field name= .../>
    <field name= .../>
```

```
          </profile>

          <profile ...>
            <field name= .../>
            <field name= .../>
          </profile>

      </options>
```

Elements

This table shows the elements for the AUDIT, DEMOTE, FREEZE, and PROMOTE members.

Element	Description	Attributes
options	Top-level document element	name strict
profile	Complete set of user variables for the audit, demote, or promote package wizards.	application
field	Properties for a particular field.	name length default readonly label help required uppercase validation list

Attributes for <options> Element

These are the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"AUDIT" "DEMOTE" "FREEZE" "PROMOTE"	No	8	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

This table shows the attributes for the <profile> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name	Profile name	Wildcard pattern	Yes	0 - 8	"*"
application	Application mnemonic	Wildcard pattern	Yes	0 - 4	"*"

The "name" attribute can be used by an HLLX exit to select a specific profile. For more information on profile names, see "Profile Names" on page 78.

Attributes for <field> Element

This table shows attributes for the <field> element. Attributes can be coded in any order.

Attribute	Description / Values	Multiple Values	Length	Default
name	Field name. Values are described in "Name Values for <field> Element" on page 82.	No	1 - 16	Value required
length	Maximum number of characters. Valid values: 1 - 72	No	2	Field length
default	Default value for field.	No		Field is left blank
readonly	Determines whether the field can be changed by users. "Y" Field cannot be changed. "N" Field can be changed.	No	1	"N"
label	Defines the field label. Can be any text, any case. The number of characters that are actually displayed depends on the size of the display field.	No	0 – 256	Value required
help	Help text. Displayed in a tool tip when the mouse hovers over the field.	No	0 - 4096	
required	Determines whether a field is required or can be left blank. "Y" This field is required and cannot be left blank. "N" This field can be left blank.	No	1	"N"
uppercase	Determines whether the case of the field will remain as entered or will be changed to upper case. "Y" Field will be changed to upper case. "N" Field will remain as entered.	No	1	"N"

Attribute	Description / Values	Multiple Values	Length	Default
validation	Validation performed on data entered in the field. **NOTE** This is an attribute for the UserOption fields only. Ignored if **list** is also specified. "YN" — Y or N "ALPHA" — A-Z or national (#, $, @) "ALPHANUM" — A-Z, national (#, $, @), 0-9 "NUMERIC" — 0-9 "SYMBOL" — Same as ALPHANUM, except first character must be alphabetic or national. "DSNAME — Valid data set name "NONE" — No validation performed	No	0 – 8	"NONE"
list	List of possible values for field, separated by semicolons (";"). User can select one of the values from a dropdown list. The **validation** attribute is ignored if **list** is specified.	Yes. Use ";".		

Name Values for <field> Element

This table describes values for the name attribute of the <field> element.

Name Value	Description	User Defined	Values	Length
UserVariable01 - UserVariable05	User options	Yes	Any text, subject to validation	0-8
UserVariable06 - UserVariable10	User options	Yes	Any text, subject to validation	0-72

Example

Sample AUDIT, DEMOTE, FREEZE,and PROMOTE members are delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample members, formatted by your default XML browser, by double clicking on the files:

```
C:\Program Files\Micro Focus\ChangeMan
    ZDD\Samples\ZddOpts\member.xml
```

where *member* is AUDIT, DEMOTE, FREEZE, or PROMOTE.

BUILD Options

The BUILD member of the ZDDOPTS library specifies default settings for the Build, Recompile, and Relink dialog boxes. The BUILD member includes one or more profiles. Each profile is a complete set of rules for the Build dialog.

Profiles are specified by profile name, build function, application, language, build procedure, and library type. Any or all of these can be specified using wildcard patterns. The first matching profile is the one used. For information on using HLLX exits to select profiles by name, see "Profile Names" on page 78.

The structure of a BUILD member is as follows:

```
<options name="BUILD">

  <multiple init= .../>

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

</options>
```

Elements

This table shows the elements for the BUILD member.

Element	Description	Attributes
options	Top-level document element.	name strict
multiple	Specifies how the Build dialog box fields are to be initialized when multiple components are being built at the same time.	init
profile	Complete set of fields for Build dialog box.	application libtype language procname
field	Properties for a particular field in the dialog box.	name default readonly length label help required uppercase validation list

Attributes for <options> Element

This table shows the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"BUILD"	No	5	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <multiple> Element

Attributes for the <multiple> element are shown below.

Attribute	Description	Values	Multiple Values	Length	Default
init	Field initialization for multiple components	"None" "First" "All"	No	0 - 5	"All"

The <multiple> element specifies how the Build dialog box fields are to be initialized when multiple components are being built at the same time. The following table describes the values that can be specified for the **init** attribute:

Values	Description
None	None of the dialog box fields will be filled in.
First	Dialog box fields will be filled in with values from the first component for which history or a designated build procedure can be found.
All	History for all of the components will be examined. Those fields that contain the same value for all components will be filled in. Fields for which values differ from component to component will be left blank.

Attributes for <profile> Element

This table shows the attributes for the <profile> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name	Profile name	Wildcard pattern	Yes	0 - 8	"*"
function	Build function	"Build" "Recomp" "Relink" "Query"	Yes	0 - 6	
application	Application mnemonic	Wildcard pattern	Yes	0 - 4	"*"
libtype	Library type	Wildcard pattern	Yes	0 – 3	"*"
language	Language	Wildcard pattern	Yes	0 – 8	"*"
procname	Build procedure	Wildcard pattern	Yes	0 – 8	"*"

The "name" attribute can be used by an HLLX exit to select a specific profile. For more information on profile names, see "Profile Names" on page 78.

The "function" attribute can be used to select different profiles based upon the type of build operation (Build, Recompile, Relink). You can specify more than one function for a profile, if it is to be used for more than one type of build operation. If no function attribute is specified, then the profile can be selected for any type of build operation. Multiple values should be separated by spaces.

Attributes for <field> Element

Attributes for the <field> element are shown in the following table. Attributes can be coded in any order.

> **NOTE** Some of the attributes apply only to user-defined fields that display on the User Options page of the Build wizard. They are: "label", "length", "required", "uppercase", and "validation".

Attribute	Description / Values	Multiple Values	Length	Default
name	Field name. Values are described in "Name Values for <field> Element" on page 87.	No	1 - 16	Value required
default	Defines what value is automatically inserted in the Build dialog field when the field is initially blank.	No	Depends on the field	Field is left blank
readonly	Determines whether the field on the Build dialog can be changed by users. "Y" Field cannot be changed. "N" Field can be changed.	No	1	"N"
label	Defines the field label on the Build dialog. Can be any text, any case. The number of characters that are actually displayed depends on the width of the displayed characters. **NOTE** This is an attribute for the UserOption fields only.	No	0 – 256	Value required
help	Help text. Displayed in a tool tip when the mouse hovers over the field.	No	0 - 4096	
length	The maximum number of characters allowed for entry in a UserOption field. Cannot exceed the field size defined for that particular UserOption. See "Name Values for <field> Element" on page 87 for specific lengths. **NOTE** This is an attribute for the UserOption fields only.	No	2	Max. length defined for a User Option field.

Attribute	Description / Values	Multiple Values	Length	Default
required	Determines whether a field is required, whether a field can be left blank. **NOTE** This is an attribute for the UserOption fields only. "Y" This field is required and cannot be left blank. "N" This field can be left blank. Delivered ZMF skeletons process blank User Options as if they were set to "N".	No	1	"N"
uppercase	Determines whether text will be folded to upper case. **NOTE** This is an attribute for the UserOption fields only. "Y" Text will be folded to uppercase. "N" Text will remain as entered (no conversion to uppercase).	No	1	"N"
validation	Validation performed on data entered in this field. **NOTE** This is an attribute for the UserOption fields only. Ignored if **list** is also specified. "YN" Y or N "ALPHA" A-Z or national (#, $, @) "ALPHANUM" A-Z, national (#, $, @), 0-9 "DSNAME Valid data set name "NUMERIC" 0-9 "SYMBOL" Same as ALPHANUM, except first character must be alphabetic or national. "NONE" No validation performed	No	0 – 8	"NONE"
list	List of possible values for field, separated by semicolons (";"). User can select one of the values from a dropdown list. The **validation** attribute is ignored if **list** is specified.	Yes. Use ";".		

Name Values for <field> Element

This table describes the values that may be specified for the **name** attribute of the <field> element.

Name Value	Description	User Defined	Values	Length
Language	Language name	No	Alphanumeric	0-8
BuildProc	Build procedure name	No	Alphanumeric	0-8
Db2PreCompile	DB2 precompile option	No	"Y" or "N"	1
Db2Subsystem	DB2 subsystem name	No	Alphanumeric	0-4
CompileOptions	Compile parameters	No	Any text	0-34

Name Value	Description	User Defined	Values	Length
LinkOptions	Link parameters	No	Any text	0-34
UserOption01 – UserOption20	User options	Yes	Any text, subject to validation	0-1
UserOption101 – UserOption105	User options	Yes	Any text, subject to validation	0-1
UserOption201 – UserOption203	User options	Yes	Any text, subject to validation	0-2
UserOption301 – UserOption303	User options	Yes	Any text, subject to validation	0-3
UserOption401 – UserOption403	User options	Yes	Any text, subject to validation	0-4
UserOption801 – UserOption805	User options	Yes	Any text, subject to validation	0-8
UserOption1001 – UserOption1002	User options	Yes	Any text, subject to validation	0-10
UserOption1601 – UserOption1602	User options	Yes	Any text, subject to validation	0-16
UserOption3401 – UserOption3402	User options	Yes	Any text, subject to validation	0-34
UserOption4401 – UserOption4402	User options	Yes	Any text, subject to validation	0-44
UserOption6401 – UserOption6405	User options	Yes	Any text, subject to validation	0-64
UserOption7201 – UserOption7205	User options	Yes	Any text, subject to validation	0-72
UserVariable01 - UserVariable05	User variable	Yes	Any text, subject to validation	0-8
UserVariable06 - UserVariable10	User variable	Yes	Any text, subject to validation	0-72

Example

A sample BUILD member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample BUILD member, formatted by your default XML browser, by double clicking on the file:

```
C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts\Build.xml
```

CHECKIN Options

The CHECKIN member of the ZDDOPTS library specifies default settings for the Check-In wizard. The CHECKIN member includes one or more profiles. Each profile is a complete set of defaults for the Check-In wizard.

Profiles are specified by profile name, application, and library type. Any or all of these can be specified using wildcard patterns. The first matching profile will be the one used. For information on using HLLX exits to select profiles by name, see "Profile Names" on page 78.

The structure of a CHECKIN member is as follows:

```
<options name="CHECKIN">

 <profile …>
    <field name= …/>
    <field name= …/>
  </profile>

  <profile …>
    <field name= …/>
    <field name= …/>
  </profile>

</options>
```

Elements

The following table shows the elements for the CHECKIN member.

Element	Description	Attributes
options	Top-level document element.	name strict
profile	Complete set of command definitions.	user
field	Properties for a particular field in the dialog box.	name default readonly length label help required uppercase validation list

Attributes for <options> Element

The following table shows the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"COMMAND"	No	7	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

This table shows the attributes for the <profile> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name	Profile name	Wildcard pattern	Yes	0 - 8	"*"
application	Application mnemonic	Wildcard pattern	Yes	0 - 4	"*"
libtype	Library type	Wildcard pattern	Yes	0 – 3	"*"

The "name" attribute can be used by an HLLX exit to select a specific profile. For more information on profile names, see "Profile Names" on page 78.

Attributes for <field> Element

Attributes for the <field> element are shown in the following table. Attributes can be coded in any order.

Attribute	Description / Values	Multiple Values	Length	Default
name	Field name. Values are described in "Name Values for <field> Element" on page 87.	No	1 - 16	Value required
default	Defines what value is automatically inserted in the Build dialog field when the field is initially blank.	No	Depends on the field	Field is left blank
readonly	Determines whether the field on the Build dialog can be changed by users. "Y" Field cannot be changed. "N" Field can be changed.	No	1	"N"
label	Defines the field label on the Build dialog. Can be any text, any case. The number of characters that are actually displayed depends on the width of the displayed characters. **NOTE** This is an attribute for the UserOption fields only.	No	0 – 256	Value required
help	Help text. Displayed in a tool tip when the mouse hovers over the field.	No	0 - 4096	
length	The maximum number of characters allowed for entry in a UserOption field. Cannot exceed the field size defined for that particular UserOption. See "Name Values for <field> Element" on page 92 for specific lengths. **NOTE** This is an attribute for the UserOption fields only.	No	2	Max. length defined for a User Option field.
required	Determines whether a field is required, whether a field can be left blank. **NOTE** This is an attribute for the UserOption fields only. "Y" This field is required and cannot be left blank. "N" This field can be left blank. Delivered ZMF skeletons process blank User Options as if they were set to "N".	No	1	"N"
uppercase	Determines whether text will be folded to upper case. **NOTE** This is an attribute for the UserOption fields only. "Y" Text will be folded to uppercase. "N" Text will remain as entered (no conversion to uppercase).	No	1	"N"

Attribute	Description / Values		Multiple Values	Length	Default
validation	Validation performed on data entered in this field. **NOTE** This is an attribute for the UserOption fields only. Ignored if **list** is also specified.		No	0 – 8	"NONE"
	"YN"	Y or N			
	"ALPHA"	A-Z or national (#, $, @)			
	"ALPHANUM"	A-Z, national (#, $, @), 0-9			
	"DSNAME	Valid data set name			
	"NUMERIC"	0-9			
	"SYMBOL"	Same as ALPHANUM, except first character must be alphabetic or national.			
	"NONE"	No validation performed			
list	List of possible values for field, separated by semicolons (";"). User can select one of the values from a dropdown list. The **validation** attribute is ignored if **list** is specified.		Yes. Use ";".		

Name Values for <field> Element

This table describes the values that may be specified for the **name** attribute of the <field> element.

Name Value	Description	User Defined	Values	Length
UserOption01 – UserOption20	User options	Yes	Any text, subject to validation	0-1
UserOption101 – UserOption105	User options	Yes	Any text, subject to validation	0-1
UserOption201 – UserOption203	User options	Yes	Any text, subject to validation	0-2
UserOption301 – UserOption303	User options	Yes	Any text, subject to validation	0-3
UserOption401 – UserOption403	User options	Yes	Any text, subject to validation	0-4
UserOption801 – UserOption805	User options	Yes	Any text, subject to validation	0-8
UserOption1001 – UserOption1002	User options	Yes	Any text, subject to validation	0-10
UserOption1601 – UserOption1602	User options	Yes	Any text, subject to validation	0-16
UserOption3401 – UserOption3402	User options	Yes	Any text, subject to validation	0-34
UserOption4401 – UserOption4402	User options	Yes	Any text, subject to validation	0-44

Name Value	Description	User Defined	Values	Length
UserOption6401 – UserOption6405	User options	Yes	Any text, subject to validation	0-64
UserOption7201 – UserOption7205	User options	Yes	Any text, subject to validation	0-72
UserVariable01 - UserVariable05	User variable	Yes	Any text, subject to validation	0-8
UserVariable06 - UserVariable10	User variable	Yes	Any text, subject to validation	0-72

Example

A sample CHECKIN member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample CHECKIN member, formatted by your default XML browser, by double clicking on the file:

```
C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts\CHECKIN.xml
```

CHECKOUT Options

The CHECKOUT member of the ZDDOPTS library specify user-defined options for the Check Out wizard. Each of these members contains one or more profiles. Each profile is a complete set of options for the corresponding wizard.

Profiles are specified by profile name an application. You may specify one or more applications associated with each profile. Applications may be specified using wildcard patterns. The first matching profile is the one used. For information on using HLLX exits to select profiles by name, see .

The CHECKOUT user-defined options are used for batch check out operations only. The Check Out wizard does not display any user options page when performing online check out operations. Batch check out is normally used only for like type "other" and for previous baseline versions.

The structure of a CHECKOUT member is as follows:

```
<options name="CHECKOUT">

  <components .../>

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

  <profile ...>
```

```
          <field name= .../>
          <field name= .../>
      </profile>

  </options>
```

Elements

This table shows the elements for the AUDIT, CHECKOUT, DEMOTE, FREEZE, and PROMOTE members.

Element	Description	Attributes
options	Top-level document element	name strict
profile	Complete set of user variables for the audit, demote, or promote package wizards.	application
field	Properties for a particular field.	name length default readonly label help required uppercase validation list

Attributes for <options> Element

These are the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"CHECKOUT"	No	8	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <components> Element

These are the attributes for the <components> element.

Attribute	Description	Values	Multiple Values	Length	Default
warn	Number of components before warning displayed	Number	No	0-8	No limit
max	Maximum number of components that user can check out	Number	No	0-8	No limit

Attributes for <profile> Element

This table shows the attributes for the <profile> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name	Profile name	Wildcard pattern	Yes	0 - 8	"*"
application	Application mnemonic	Wildcard pattern	Yes	0 - 4	"*"

The "name" attribute can be used by an HLLX exit to select a specific profile. For more information on profile names, see "Profile Names" on page 78.

Attributes for <field> Element

This table shows attributes for the <field> element. Attributes can be coded in any order.

Attribute	Description / Values	Multiple Values	Length	Default
name	Field name. Values are described in "Name Values for <field> Element" on page 82.	No	1 - 16	Value required
length	Maximum number of characters. Valid values: 1 - 72	No	2	Field length
default	Default value for field.	No		Field is left blank
readonly	Determines whether the field can be changed by users. "Y" Field cannot be changed. "N" Field can be changed.	No	1	"N"
label	Defines the field label. Can be any text, any case. The number of characters that are actually displayed depends on the size of the display field.	No	0 – 256	Value required
help	Help text. Displayed in a tool tip when the mouse hovers over the field.	No	0 - 4096	
required	Determines whether a field is required or can be left blank. "Y" This field is required and cannot be left blank. "N" This field can be left blank.	No	1	"N"
uppercase	Determines whether the case of the field will remain as entered or will be changed to upper case. "Y" Field will be changed to upper case. "N" Field will remain as entered.	No	1	"N"

Attribute	Description / Values	Multiple Values	Length	Default
validation	Validation performed on data entered in the field. **NOTE** This is an attribute for the UserOption fields only. Ignored if **list** is also specified.	No	0 – 8	"NONE"
	"YN" Y or N			
	"ALPHA" A-Z or national (#, $, @)			
	"ALPHANUM" A-Z, national (#, $, @), 0-9			
	"NUMERIC" 0-9			
	"SYMBOL" Same as ALPHANUM, except first character must be alphabetic or national.			
	"DSNAME Valid data set name			
	"NONE" No validation performed			
list	List of possible values for field, separated by semicolons (";"). User can select one of the values from a dropdown list. The **validation** attribute is ignored if **list** is specified.	Yes. Use ";".		

Name Values for <field> Element

This table describes values for the name attribute of the <field> element.

Name Value	Description	User Defined	Values	Length
UserVariable01 - UserVariable05	User options	Yes	Any text, subject to validation	0-8
UserVariable06 - UserVariable10	User options	Yes	Any text, subject to validation	0-72

Example

Sample AUDIT, CHECKOUT, DEMOTE, FREEZE,and PROMOTE members are delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample members, formatted by your default XML browser, by double clicking on the files:

```
C:\Program Files\Micro Focus\ChangeMan
    ZDD\Samples\ZddOpts\CHECKOUT.xml
```

.

COMMAND Options

The COMMAND member of the ZDDOPTS library allows certain menu commands to be disabled in the ChangeMan ZDD user interface. The COMMAND member includes one or more profiles. Each profile is a complete set of command settings.

Profiles can be specified by either user ID or security group name. Using group name requires that the server be at the SerNet 7.1.3+ level.

If both user= and group= filters are specified in the profile, the profile will be selected if either filter matches. Both the user ID and group name filters may contain wildcard patterns. The first matching profile will be the one used.

The structure of a COMMAND member is as follows:

```
<options name="COMMAND">

  <profile ...>
    <command name= .../>
    <command name= .../>
  </profile>

  <profile ...>
    <command name= .../>
    <command name= .../>
  </profile>

</options>
```

Elements

The following table shows the elements for the COMMAND member.

Element	Description	Attributes
options	Top-level document element.	name strict
profile	Complete set of command definitions.	user
command	Enable or disable menu commands.	name enable

Attributes for <options> Element

The following table shows the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"COMMAND"	No	7	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

The following table shows the attributes for the <profile> element.

Attribute	Description	Values	Multiple Values	Length	Default
user	z/OS user ID(s)	Wildcard pattern	Yes	0 – 7	"*"
group	z/OS security group(s) *(requires SerNet 7.1.3+)*	Wildcard pattern	Yes	0 – 7	None

Attributes for <command> Element

The following table shows the attributes for the <command> element. Commands are always enabled by default.

The command name may contain wild characters. If a command name matches multiple <command> elements with wild character patterns, the first matching <command>

element is used for that command.

Attribute	Description	Values	Multiple Values	Length	Default
name	Command name	"*" "ApproveCheckIn" "ApproveCheckOff" "ApprovePackage" "ApproveRelease" "AttachDetachPackage" "AuditPackage" "AuditReleaseArea" "BackOutPackage" "BackOutRelease" "BillOfMaterials" "BlockArea" "BlockRelease" "BuildComponent" "CancelJob" "ChangePackageDate" "ChangePackageStatus" "ChangeSchedule" "CheckInComponent" "CheckInToNextArea" "CheckInToPackage" "CheckInToRelease" "CheckOutComponent" "CheckOutToPackage" "ClosePackage" "ComponentHistory" "CreatePackage" "DeleteComponent" "DeleteOutput" "DeletePackage" "Demote" "FreezePackage" "HoldSchedule" "ImpactAnalysis" "InstallationSchedule" "LimboPackages" "LockComponent" "NotifyCheckIn" "NotifyCheckOff" "OpenPackage" "Promote" "PromotionHistory" "PromotionSchedule" "RebuildJcl" "RecompileComponent" "RefreezeComponent" "RefreezePackage" "ReleaseSchedule" "ReleaseVersions" "RelinkComponent" "RenameComponent"	No	1 – 16	Value required

COMMAND Options

Attribute	Description	Values	Multiple Values	Length	Default
name (continued)	Command type	"RequeueOutput" "ResetApprovals" "ResetAuditLock" "RetrieveComponent" "RevertPackage" "RevertRelease" "ScratchComponent" "ScratchRename" "SearchFiles" "SearchRelease" "SiteActivity" "StagingVersions" "SubmitJcl" "SubmitXml" "TestArea" "TestPackage" "TestRelease" "UnblockArea" "UnblockRelease" "UndeletePackage" "UnfreezeComponent" "UnfreezePackage" "UnlockComponent" "ValidateVersions"	No	1 – 16	Value required
enable	Indicates whether command is enabled or disabled.	"Y" or "N"	No	1	"Y"

The following types of commands are not supported in the COMMAND member by the ChangeMan ZDD client, and will be ignored, if specified:

- Download and Upload commands

- New, Copy, and Move commands

- Recall, Migrate, and Compress commands

- View, Edit, Compare, and Merge

Due to the nature of ChangeMan ZDD as a Windows file system, most of the operations above can be performed in Windows functions without explicit use of the ZDD menus. As such, disabling these options using the ZDDOPTS COMMAND member would be ineffective. The Windows functions cannot be disabled as this would cause technical problems.

Example

A sample COMMAND member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample COMMAND member, formatted by your default XML browser, by double clicking on the file:

```
C:\Program Files\Micro Focus\ChangeMan
      ZDD\Samples\ZddOpts\Command.xml
```

LIBTYPE Options

You can suppress the display of application library types in ChangeMan ZDD with XML entries in the LIBTYPE member of the ZDDOPTS library. Use the LIBTYPE member to emulate customization in ZMF exit program CMNEX035 you have made to suppress the display of "hidden" library types.

> **NOTE** ZMF exit program CMNEX035 contains multiple tables to suppress the display of library types in particular functions such as checkout, stage, browse compressed listing, and browse baseline. The LIBTYPE member of ZDDOPTS suppresses all displays of specified library types in baseline and package folders in the specified applications, effectively disabling all ZMF functions for those library types in the specified applications.

The LIBTYPE member includes one or more profiles. Each profile is a complete set of library type settings for an application. Application can be specified using wildcard patterns. The first matching profile is the one used.

The structure of a LIBTYPE member is as follows:

```
<options name="LIBTYPE">

  <profile ...>
    <libtype name= .../>
    <libtype name= .../>
  </profile>

  <profile ...>
    <libtype name= .../>
    <libtype name= .../>
  </profile>

</options>
```

Elements

This table show the elements for the LIBTYPE member.

Element	Description	Attributes
options	Top-level document element.	name strict
profile	Complete set of library type definitions.	Application
libtype	Show or hide properties for a particular library type. Library type can be specified using a wildcard pattern.	name show

Attributes for <options> Element

These are the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"LIBTYPE"	No	7	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

These are the attributes for the <profile> element.

Attribute	Description	Values	Multiple Values	Length	Default
application	Application name	Wildcard pattern	Yes	1 - 4	"*"

Attributes for <libtype> Element

This table shows the attributes for the <field> element. The default is to show all a library types.

Attribute	Description / Values	Multiple Values	Length	Default
name	3 character library type or wildcard pattern.	No	1-3	None
listing	Listing library type filters. One or more wildcard patterns, separated by spaces.	Yes	1-3	"LST"
show	Indicates whether library type is shown or hidden. "Y"　　　Show library type "N"　　　Hide library type	No	1	"Y"

Example

A sample LIBTYPE member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample LIBTYPE member, formatted by your default XML browser, by double clicking on the file:

```
C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts\LibType.xml
```

PKGCREAT Options

The PKGCREAT member of the ZDDOPTS library specifies user-defined options for the New Package wizard. The PKGCREAT member includes one or more profiles. Each profile is a complete set of rules for the New Package wizard.

Profiles are specified by profile name and application. You may specify one or more applications associated with each profile. Applications may be specified using wildcard patterns. The first matching profile is the one used. For information on using HLLX exits to select profiles by name, see .

The structure of a PKGCREAT member is as follows:

```
<options name="PKGCREAT">

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

</options>
```

Elements

This table shows the elements for the PKGCREAT member.

Element	Description	Attributes
options	Top-level document element.	name strict
profile	Complete set of user variables for the New Package wizard.	application

Element	Description	Attributes
field	Properties for a particular field in the New Package dialog boxes.	name length default readonly label help required uppercase validation list

Attributes for <options> Element

These are the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"PKGCREAT"	No	8	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

This table shows the attributes for the <profile> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name	Profile name	Wildcard pattern	Yes	0 - 8	"*"
application	Application mnemonic	Wildcard pattern	Yes	0 - 4	"*"

The "name" attribute can be used by an HLLX exit to select a specific profile. For more information on profile names, see .

Attributes for <field> Element

This table shows attributes for the <field> element. Attributes can be coded in any order.

Attribute	Description / Values	Multiple Values	Length	Default
name	Field name. Values are described in "Name Values for <field> Element" on page 107.	No	1 - 16	Value required
length	Maximum number of characters. Valid values: 1 - 72	No	2	Field length

Attribute	Description / Values	Multiple Values	Length	Default
default	Default value for field.	No		Field is left blank
readonly	Determines whether the field can be changed by users. "Y"　　　Field cannot be changed. "N"　　　Field can be changed.	No	1	"N"
label	Defines the field label. Can be any text, any case. The number of characters that are actually displayed depends on the size of the display field.	No	0 – 256	Value required
help	Help text. Displayed in a tool tip when the mouse hovers over the field.	No	0 - 4096	
required	Determines whether a field is required or can be left blank. "Y"　　　This field is required and cannot be left blank. "N"　　　This field can be left blank.	No	1	"N"
uppercase	Determines whether the case of the field will remain as entered or will be changed to upper case. "Y"　　　Field will be changed to upper case. "N"　　　Field will remain as entered.	No	1	"N"
validation	Validation performed on data entered in the field. Ignored if **list** also specified. "YN"　　　　　Y or N "ALPHA"　　　A-Z or national (#, $, @) "ALPHANUM"　　A-Z, national (#, $, @), 0-9 "DSNAME　　　Valid data set name "NUMERIC"　　0-9 "SYMBOL"　　　Same as ALPHANUM, except first character must be alphabetic or national. "NONE"　　　No validation performed	No	0 – 8	"NONE"
list	List of possible values for field, separated by semicolons (";"). User can select one of the values from a dropdown list. The **validation** attribute is ignored if **list** is specified.	Yes. Use ";".		

Name Values for <field> Element

This table describes values for the name attribute of the <field> element.

Name Value	Description	User Defined	Values	Length
UserVarLen101 - UserVarLen199	User options	Yes	Any text, subject to validation	0-1
UserVarLen201 - UserVarLen211	User options	Yes	Any text, subject to validation	0-2
UserVarLen301 - UserVarLen310	User options	Yes	Any text, subject to validation	0-3
UserVarLen401 - UserVarLen410	User options	Yes	Any text, subject to validation	0-4
UserVarLen801 - UserVarLen810	User options	Yes	Any text, subject to validation	0-8
UserVarLen1601 - UserVarLen1605	User options	Yes	Any text, subject to validation	0-16
UserVarLen4401 - UserVarLen4405	User options	Yes	Any text, subject to validation	0-44
UserVarLen7201 - UserVarLen7205	User options	Yes	Any text, subject to validation	0-72

Example

A sample PKGCREAT member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample PKGCREAT member, formatted by your default XML browser, by double clicking on the file:

```
C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts\PkgCreat.xml
```

PKGPROP Options

The PKGPROP member of the ZDDOPTS library is used to disallow users from changing selected fields of the package properties. The PKGPROP member includes one or more profiles. Each profile is a complete set of property field settings.

Profiles can be specified by either user ID or security group name. Using group name requires that the server be at the SerNet 7.1.3+ level.

If both user= and group= filters are specified in the profile, the profile will be selected if either filter matches. Both the user ID and group name filters may contain wildcard patterns. The first matching profile will be the one used.

The structure of a PKGPROP member is as follows:

```
<options name="PKGPROP">

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

  <profile ...>
    <field name= .../>
    <field name= .../>
  </profile>

</options>
```

Elements

This table shows the elements for the PKGPROP member.

Element	Description	Attributes
options	Top-level document element.	name strict
profile	Complete set of field definitions.	user
field	Allow or disallow field to be changed.	name readonly

Attributes for <options> Element

This table shows the attributes for the <options> element.

Attribute	Description	Values	Multiple Values	Length	Default
name	ZDDOPTS member name	"PKGPROP"	No	7	Value required
strict	Report error or ignore unrecognized keywords	"Y" or "N"	No	1	"N"

Attributes for <profile> Element

This table shows the attributes for the <profile> element.

Attribute	Description	Values	Multiple Values	Length	Default
user	Mainframe user ID	Wildcard pattern	Yes	0 - 7	"*"
group	z/OS security group(s) *(requires SerNet 7.1.3+)*	Wildcard pattern	Yes	0 – 7	None

Attributes for <field> Element

This table shows the attributes for the <field> element. Attributes can be coded in any order.

Attribute	Description	Values	Multiple Values	Length	Default
name (continued)	Field name	"PackageTitle" "PackageLevel" "RequestorName" "RequestorPhone" "WorkRequestId" "Department" "UnplannedReason" "TemporaryDays" "Release" "PackageDescription"	No	1 – 21	Value required
name (continued)	Field name	"ProblemAction" "Scheduler" "InstallInstructions" "PredessorJobs" "SuccessorJobs" "AffectedApplications" "InstallSite" "InstallDateTime" "ContactName" "ContactPhone" "ParticipatingPackages" "UserOptions" "*"	No	1 – 21	Value required
readonly	Determines whether the field can be changed by users.	"Y" Field cannot be changed. "N" Field can be changed.	No	1	"N"

Example

A sample PKGPROP member is delivered in the Samples\ZddOpts subdirectory of the ChangeMan ZDD client installation directory.

You can view the sample PKGPROP member, formatted by your default XML browser, by double clicking on the file:

`C:\Program Files\Micro Focus\ChangeMan ZDD\Samples\ZddOpts\PkgProp.xml`

Appendix A
Technical Notes

This chapter contains technical information that may be helpful when installing and administering ChangeMan ZDD.

TCP/IP Trouble Shooting

This section provides advice to the installer responsible for making Sernet connect to the TCP/IP address space.

Verifying the TCP/IP Port

A common concern is whether Sernet is listening on the proper port. Enter the following command on the ISPF Command Shell command line, or at the TSO READY prompt, to display a list of sockets and their corresponding states:

    NETSTAT ALLCONN

The NETSTAT command can produce a high volume of output in a large network. The REPORT option can be added to the command to write the output to a data set. The syntax for adding the REPORT option is:

    NETSTAT ALLCONN REPORT

The naming convention for the output data set is:

    userid.NETSTAT.ALLCONN

The output of this command displays all ports currently in use. If for some reason Sernet cannot establish a TCP/IP connection and produces an appropriate error message at startup, then shut down the server address space and verify that no other address space currently uses this port. If the port is in use, you can either choose another port in the Sernet parmlib, or terminate, causing the other consumer to release the port. A single port can only be used by a single consumer at a time.

Detecting Errors in the TCP/IP API

Error messages from the TCP/IP API are written to the SERPRINT sysout data set for the Sernet started task. You can toggle the Sernet keyword option TRACE to see a complete listing of all TCP/IP calls. (Contact Customer Care about using TRACE.)

Each call to the API is detailed in messages with the following format:

```
SER0000I user-ID TCP/IP function RC=rc,ERRNO=errno
```

To find the specific reason for the error, locate the error number (errno) in Appendix D.1 of the IBM publication *TCP/IP for MVS: API Reference*. Function (function) and return code (rc) offer further advice.

> **NOTE** errno is a decimal and not a hexadecimal number.

Verifying Network Connectivity

Use the PING command to verify network connectivity to a specific IP address.

```
PING YOURLPAR
PING 111.111.111.111
```

> **NOTE** PING only verifies that network connectivity exists. It cannot determine if a specific port number is available for connection.

This method is not fool-proof, as some networks intentionally suppress the response to a PING command to lower the risk of intrusion. However, a positive response indicates basic connectivity.

Alternatively, you may use the TRACERTE TSO command. This command outputs the addresses of all capable devices along the route to a given destination. For example:

```
tracerte 10.31.224.91
```

might produce the following:

```
CS V1R8: Traceroute to 10.31.224.91 (10.31.224.91)...
1 10.35.2.20 (10.35.2.20) 2 ms 1 ms 1 ms
2 10.0.0.1 (10.0.0.1) 99 ms 98 ms 98 ms
3 OR-CVPN3030.company.com (10.31.2.40) 100 ms 99 ms 100 ms
4 rm04175.company.com (10.31.224.91) 185 ms 179 ms 179 ms
```

where each line indicates a "hop". This, too, is not necessarily a foolproof method and only a positive response verifies basic connectivity.

Examining Startup Messages

When Sernet is started, it issues a number of messages indicating the ports it uses and its IP address (the local IP address of the server). Whenever a connection to Sernet is made, these ports and IP addresses must be specified. The messages are:

```
SER1000I XCH TCP/IP environment active at 10.35.11.101..6021
SER1001I XCH TCP/IP local host name: D001
```

```
SER1000I CMN TCP/IP environment active at 10.35.11.101..6011
SER1001I CMN TCP/IP local host name: D001
```

Note that message SER1001I can only display a domain name if a domain name exists for the current address. When multiple domain name entries exist in a referenced domain name server (which is perfectly legal), only one of them will be printed.

Sernet will generally display at least two ports, one corresponding to the server address space itself, and the other catering to ChangeMan ZMF.

If you are using a different symbolic name than the one shown to connect to Sernet, you can verify that the domain name pointer references the proper address by using the NSLOOKUP TSO command:

For example:

```
NSLOOKUP D001
```

should produce:

```
EZB3170I Server: rcd-dc.company.com
EZB3172I Address: 10.30.11.10
```

which matches the output that Sernet has generated.

Attaching and Detaching TCP/IP Connections

If TCP/IP comes down while ChangeMan ZMF is up, the users cannot sign back on. This section describes how to recover from a TCP/IP outage using the following operator commands:

```
TCPIP,STOP,[mins]
TCPIP,START,[name]
TCPIP,RESTART,[mins],[name]
```

These commands provide the means for:

■ Gracefully shutting down all TCP/IP connected users while not interrupting cross-memory connected users.

■ Forcefully shutting down all TCP/IP connected users without impacting cross-memory connected users. This function is able to execute even in case of a complete TCP/IP failure.

■ Terminating the TCP/IP API (TERMAPI).

■ Re-initializing the API (and subsequent re-logon of TCP/IP users), optionally providing the name of an alternate TCP/IP (stack).

TCPIP,STOP,[mins]

This command displays the current users that are connected by ports.

If no interval ([mins]) is specified, 0 minutes are assumed.

As soon as the command has been entered, no further TCP/IP connections are accepted.

A warning will be issued to all TCP/IP connected users every minute up to [mins] minutes, after which the TCP/IP users are terminated. This is done using standard termination post to SERUSER (involving cleanup).

After all TCP/IP users are terminated, the controlling task (SERMAIN) calls SERCOMM to close the socket and process a TERMAPI.

Also, at the top level, SERVER will process a TERMAPI via call to SERCOMM. This will always occur immediately.

The following display shows a sample sysout from the TCP/IP,STOP command:

```
NC0000000 C001    2008188 11:28:50.97 DYOUNG   00000280  F SERT3TMP,TCPIP,STOP
N FFDF000 C001    2008188 11:28:51.28 S0466400 00000080  SER0916I TCPIP Stop Requested
N FFDF000 C001    2008188 11:28:51.28 S0466400 00000080  SER0920I Current Users:0 Maximum Users:767
N FFDF000 C001    2008188 11:28:51.28 S0466400 00000080  SER2010I XCH  ###<User_ID><T_Elapsed><T_LastAct><Partner
     Identifier>
S                                                         Users=0
N FFDF000 C001    2008188 11:28:51.28 S0466400 00000080  SER2012I XCH  No active users found
N FFDF000 C001    2008188 11:28:51.30 S0466400 00000080  SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner
     Identifier>
S                                                         Users=0
N FFDF000 C001    2008188 11:28:51.30 S0466400 00000080  SER2012I CMN  No active users found


ISFPCU41 UT DISPLAY SERT3TMP S0466400  DSID     2 LINE 50     COLUMNS 02- 161
 COMMAND INPUT ===>                                  SCROLL ===> PAGE
11.28.51 S0466400  SER0916I TCPIP Stop Requested
11.28.51 S0466400  SER0920I Current Users:0 Maximum Users:767
11.28.51 S0466400  SER2010I XCH  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0
11.28.51 S0466400  SER2012I XCH  No active users found
11.28.51 S0466400  SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0
```

TCPIP,START,[name]

This command starts TCP/IP communications (INITAPI) provided that the TCP/IP API has not already been initialized.

If the second parameter ([name]) has been specified, INITIAPI (SERCOMM) explicitly specifies this STC stack name when creating the TCP/IP environment.

When [name] has not been specified the code will connect to the default STC stack TCPIP or leave the selection up to the TCP/IP code which parses the SYSTCPD DD statement.

The following display shows a sample sysout from the TCP/IP,START command:

```
N FFDF000 C001    2008188 11:30:52.71 S0466400 00000080  SER0915I TCPIP Start Requested
N FFDF000 C001    2008188 11:30:52.78 S0466400 00000080  SER1000I CMNSTART TCP/IP environment active at 10.35.11.100..6031
N FFDF000 C001    2008188 11:30:52.78 S0466400 00000080  SER1001I CMNSTART TCP/IP local host name: C001

11.30.52 S0466400  SER0915I TCPIP Start Requested
11.30.52 S0466400  SER1000I CMNSTART TCP/IP environment active at 10.35.11.100..6031
11.30.52 S0466400  SER1001I CMNSTART TCP/IP local host name: C001
```

TCPIP,RESTART,[mins],[name]

The RESTART command will display the active TCP/IP users and stop accepting TCP/IP connection requests. It is a combination of the STOP and START command and will behave exactly as if the STOP and START commands had been issued one after the other.

> **NOTE** The individual usage of STOP and START commands allows the customer to recycle his TCP/IP STC. Before doing so, the existing TCP/IP users can be gracefully disconnected by using the TCPIP STOP command.

The (optional) parameter [mins] defines how long to allow for a voluntary logoff of the TCP/IP connected users. A warning will be issued to all TCP/IP connected users every

minute up to [mins] minutes, after which the TCP/IP users are terminated. This is done using standard termination post to SERUSER (involving cleanup).

After all TCP/IP users are terminated, the controlling task (SERMAIN) calls SERCOMM to close the socket and process a TERMAPI. Also, at the top level, SERVER will process a TERMAPI via call to SERCOMM. This will always occur immediately.

Immediately after the TERMAPI has completed, an INITAPI is again issued, making the address space available again for TCP/IP clients.

An optional TCP/IP STC name [name] may be specified, overriding the TCP/IP default.

The second RESTART format, that is, with [name] specified, is most useful when the customer wishes to switch TCP/IP stacks by specifying the optional name parameter.

The following display shows a sample sysout from the TCP/IP,RESTART command:

```
NC0000000 C001     2008188 11:42:22.36 DYOUNG    00000280  F SERT3TMP,TCPIP,RESTART
N FFDF000 C001     2008188 11:42:22.55 S0468486 00000080  SER0917I TCPIP Restart Requested
N FFDF000 C001     2008188 11:42:22.55 S0468486 00000080  SER0920I Current Users:0 Maximum Users:767
N FFDF000 C001     2008188 11:42:22.55 S0468486 00000080  SER2010I XCH  ###<User_ID><T_Elapsed><T_LastAct><Partner
      Identifier>
S                                                          Users=0
N FFDF000 C001     2008188 11:42:22.55 S0468486 00000080  SER2012I XCH  No active users found
N FFDF000 C001     2008188 11:42:22.57 S0468486 00000080  SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner
      Identifier>
S                                                          Users=0
N FFDF000 C001     2008188 11:42:22.57 S0468486 00000080  SER2012I CMN  No active users found
N FFDF000 C001     2008188 11:42:22.65 S0468486 00000080  SER1000I XCH     TCP/IP environment active at 10.35.11.100..60
N FFDF000 C001     2008188 11:42:22.65 S0468486 00000080  SER1001I XCH     TCP/IP local host name: C001

ISFPCU41 UT DISPLAY SERT3TMP S0468486  DSID     2 LINE 38     COLUMNS 02- 161
 COMMAND INPUT ===>                                      SCROLL ===> PAGE
11.42.22 S0468486  SER0917I TCPIP Restart Requested
11.42.22 S0468486  SER0920I Current Users:0 Maximum Users:767
11.42.22 S0468486  SER2010I XCH  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0
11.42.22 S0468486  SER2012I XCH  No active users found
11.42.22 S0468486  SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0
11.42.22 S0468486  SER2012I CMN  No active users found
11.42.22 S0468486  SER1000I XCH     TCP/IP environment active at 10.35.11.100..60
11.42.22 S0468486  SER1001I XCH     TCP/IP local host name: C001
```

Appendix B

Model JCL

The following sample JCL models are derived from JCL members delivered in the SERCOMC CNTL library on the download image or distribution CD. The models have been modified to conform to instructions in previous chapters in this book.

Model Assemble Job

Model assemble JCL is found in member ASSEMBLE in the SERCOMC CNTL library. Use this JCL to assemble and link edit modified program source such as security module SERLCSEC or Job Review exit program SEREX004.

The model JCL has been changed here to show (in bold):

- Assemble SYSIN input from CUSTOM ASMSRC library.

- Link edit SYSLIB with CUSTOM LOAD library concatenated over the LOAD library unloaded from the download image or distribution CD.

- Link edit SYSLMOD output to the CUSTOM LOAD library.

```
//KCAMPBEX JOB (),'S$.V711T01 ASSEMBLE',
//         CLASS=A,MSGCLASS=Y,NOTIFY=KCAMPBE
//*
//*******************************************************************
//* This is a sample Assembly of 'SERxxxxx'. You may prefer to use
//* one of your standard procedures such as 'ASMFCL' or 'ASMHCL'
//* instead.  Just be sure that it assembles clean and link-edits
//* without any UNRESOLVED EXTERNAL REFERENCES.
//*                ----------------------------
//*******************************************************************
//ASMLINK PROC SOMNODE=SOMNODE,         <==== HIGHEST LEVEL NODEDE
//             MBR=SERXXXXX,            <==== MODULE NAME
//             AC=0                     <==== Authorization code
//ASM     EXEC PGM=ASMA90,REGION=2M,
//             PARM='LIST,XREF(SHORT),RENT,OBJECT'
//SYSLIB    DD DISP=SHR,DSN=SYS1.MACLIB
//          DD DISP=SHR,DSN=&SOMNODE..SERCOMC.ASMCPY
//          DD DISP=SHR,DSN=&SOMNODE..SERCOMC.ASMSRC
//          DD DISP=SHR,DSN=SYS1.MODGEN
//SYSPRINT  DD SYSOUT=*
//SYSPUNCH  DD DUMMY
//SYSUT1    DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SYSLIN    DD DISP=(,PASS),DSN=&&OBJECT,
//             UNIT=SYSDA,SPACE=(TRK,(2,1)),
//             DCB=(RECFM=F,BLKSIZE=80)
//SYSIN     DD DISP=SHR,DSN=&SOMNODE..SERCOMC.CUSTOM.ASMSRC(&MBR)
//*
//LKED    EXEC PGM=IEWL,COND=(4,LT),REGION=1M,
//             PARM='LIST,XREF,RENT,REFR,NCAL,MAP,AC=&AC'
//SYSPRINT  DD SYSOUT=*
//SYSLIB    DD DISP=SHR,DSN=&SOMNODE..SERCOMC.CUSTOM.LOAD
//          DD DISP=SHR,DSN=&SOMNODE..SERCOMC.LOAD
//SYSUT1    DD UNIT=SYSDA,SPACE=(CYL,1)
```

```
//SYSLMOD   DD DISP=SHR,DSN=&SOMNODE..SERCOMC.CUSTOM.LOAD(&MBR)
//SYSLIN    DD DISP=(OLD,DELETE),DSN=&&OBJECT
//        PEND
//ASMLINK EXEC ASMLINK,
//             SOMNODE='CMNTP.S$.V711T01',
//             AC=0,
//             MBR=SERLCSEC
//* EOJ
```

Sernet Procedure

This JCL is a customized version of member SERVER from the SERCOMC CNTL library.

- STEPLIB with a custom LOAD library concatenated over a library containing components unloaded from the download image or distribution CD. The custom LOAD library might contain modified components such as security module SERLCSEC or exit program SEREX003.

- PARM DDNAME= added to point to ddname PARMLIB where a PDS member contains additional Sernet keyword parameters.

- SERLIC DD statement pointing to licenses stored in a PDS.

```
//SERVER  PROC
//APFAUTH  EXEC PGM=IEFBR14
// SETPROG APF,ADD,DSNAME=CMNTP.S$.V711T01.SERCOMC.CUSTOM.LOAD,SMS
// SETPROG APF,ADD,DSNAME=CMNTP.S$.V711T01.SERCOMC.LOAD,SMS
//SERVER  EXEC PGM=SERVER,                       *Started Task
//             REGION=0M,                        *Maximum Region
//             DYNAMNBR=200,                     *High allocations
//             PARM='DDNAME=PARMLIB'             *Execution Parms
//*************************************************************************
//* This procedure assumes the following:
//*  1) There will be more than one subsystem.
//*      Leaving no value for ID gets the default subsystem 'SER '.
//*      A testing subsystem could be ID=T which generates 'SERT'
//*      and may call for a different set of libraries.
//*  2) If you have Abend-AID, be certain to kill it with
//*      //ABNLIGNR because it gets in the way of problem solving.
//*  3) //PANSYSIN & //PANPRINT are only for PANvalet.  Take them
//*      out if you do not plan on using PANvalet at your shop.
//*  4) //OSJOB is strictly for LIBrarian.  Take it out if you do not
//*      plan on using LIBrarian at your shop.
//*  5) //SYSIN & //SYSPRINT may be needed for IEBCOPY (but IEBCOPY
//*      via SERCOPY prefers to use //CPYPRINT).
//*  6) Other applications (e.g. CMN) may need some DDNAMEs added.
//*  7) IMS needs Steplib concatenation to RESLIB and as //DFSRESLB
//*  8) DB2 could use DSNTRACE for testing but take it out later.
//*  9) TCP/IP will need C/370 runtime libraries if dynamic addressing
//*      used.  Also //SYSTCPD will be needed.
//* 10) //SER#PARM is an existing PDS(E) where each member reflects a
//*      subsystem; e.g. #SERA, #SER7.  TCP/IP & port numbers stored.
//* 11) //XMLSPACE is needed when XML support is requested.
//*      The XML dataspace needs to be loaded before XML can be used.
//*      See the Installation Guide concerning XML load.
//* ****** NOTE ******
//* Diagnostic capture is to SYSMDUMP.
//* The DD statement must point to a dataset, not SYSOUT.
//* The DCB attributes are FBS, LRECL/BLKSIZE = 4160.
//* An allocation of 200/100 cyls is a good starting point.
//* DISP=MOD as an initial disposition allows multiple dumps to
//* be recorded during the life of the same stc.
```

```
//* Use of a gdg allows the stc to be recycled immediately without
//* losing this diagnostic data.
//************************************************************************
//STEPLIB   DD DISP=SHR,                              * Custom Load
//             DSN=CMNTP.S$.V711T01.SERCOMC.CUSTOM.LOAD
//          DD DISP=SHR,                              * Vendor Load
//             DSN=CMNTP.S$.V711T01.SERCOMC.LOAD
//* IMS related allocations follow:
//*        DD DISP=SHR,DSN=node.IMSESA.APF.RESLIB    * IMS-DL/1 RESLIB
//PARMLIB   DD DISP=SHR,
//             DSN=CMNTP.S$.V711.SERCOMC.PARMLIB(S$V711)
//SERLIC    DD DISP=SHR,                              * SER10TY LICENSE
//             DSN=CMNTP.S0.V710.LICENSE.ZDD
//SER#PARM  DD DISP=SHR,                              * TCP/IP port map
//             DSN=CMNTP.S$.V711.SERCOMC.TCPIPORT
//XMLSPACE  DD DISP=SHR,                              * XML dataspace
//             DSN=CMNTP.S$.V711.SERCOMC.XMLSPACE
//*DFSRESLB DD DISP=SHR,DSN=node.IMSESA.APF.RESLIB    * IMS-DL/1 RESLIB
//* DB2 allocation for DSNTRACE is temporary
//*DSNTRACE DD SYSOUT=*
//*SYSTCPD  DD DISP=SHR,DSN=node.TCPIP.PARMLIB     * TCP/IP parameters
//SERPRINT  DD SYSOUT=*                             * SERVER Messages
//SYSMDUMP  DD DISP=(MOD,CATLG,CATLG),              * SYSMDUMP
//             DSN=CMNTP.S$.V711.SERCOMC.SYSMDUMP(+1),
//             UNIT=SYSDA,SPACE=(CYL,(2,10),RLSE),
//             DCB=(DSORG=PS,RECFM=FBS,LRECL=4160,BLKSIZE=4160)
//ABNLIGNR  DD DUMMY                                 * Kill Abend-AID
//PANSYSIN  DD DISP=(,DELETE),DSN=&&PANSYS,          * PANvalet SYSIN
//             UNIT=SYSDA,SPACE=(CYL,(10,5)),
//             DCB=(DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=6000)
//PANPRINT  DD SYSOUT=*                              * PANvalet SYSPRINT
//OSJOB     DD DUMMY,                                * LIBrarian output
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=400)
//SYSPRINT  DD SYSOUT=*          * PRINT for IEBCOPY, LIB
//CPYPRINT  DD DUMMY             * PRINT for SERCOPY/IEBCOPY
//SYSIN     DD DISP=(,DELETE),   * SYSIN for IEBCOPY, LIB
//             DSN=&&SYSIN,UNIT=SYSDA,SPACE=(CYL,(10,5)),
//             DCB=(DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=6000)
//* EOJ
```

Appendix C

Manual File Transfer and Expand

This appendix tells you how to manually transmit XMIT format files from a networked PC to a mainframe host and how to expand those files into PDS libraries.

Use the procedures in this appendix if you have problems with the automated procedures described in Chapter 4, "Unload Mainframe Components" on page 37.

Transfer Files To Host Mainframe

After WIndows Installer has copied and decompressed the XMIT format mainframe software files to your PC or a network drive, you must copy the files to the mainframe.

The transfer process must not convert the file into character format; the transfer must be binary. The receiving mainframe files must have these characteristics:

File Organization	Sequential
Record Format	Fixed block
Record Length (LRECL)	80
Block Size	3120

Choose the transfer procedure that you prefer:

- To use FTP, see "File Transfer Using FTP" on page 121.

- To use 70 emulator software, see "File Transfer Using 70 Emulator" on page 123.

File Transfer Using FTP

This section describes how to use FTP to upload ChangeMan ZDD files from a PC to a mainframe host computer. These instructions assume that you have:

- TCP/IP FTP connectivity from your PC to the mainframe computer.

- The dotted decimal IP address of the mainframe.

- A mainframe userid and password.

- Security authorization to allocate files on the mainframe.

Execute these steps on your PC.

1   Open a Command Prompt window:

> Start>Programs>Accessories>Command Prompt

2   At the Command prompt, type this command to start FTP and connect to the host mainframe. Specify the dotted decimal IP address of the target mainframe computer:

```
ftp nnn.nnn.nnn.nnn
```

Press [Enter].

3 When you are prompted for your userid, type your mainframe userid and press [Enter].

4 When you are prompted for your password, type your mainframe password and press [Enter].

5 At the FTP prompt, type this command to set the transfer type to binary:

```
binary
```

Press [Enter]

6 At the FTP prompt, type each of these commands and press [Enter] in the order shown:

```
literal site blocksi=3120
literal site lr=80
literal site rec=fb
literal site cyl
```

These commands set the DCB and the SPACE units for the receiving files that are automatically allocated on the mainframe.

7 At the FTP prompt, type this command to transfer a file from the PC to the mainframe host. (The sample command here is too long to display on this page without artificial breaks. Long command lines like this one will wrap in the Command Prompt window.)

```
put "C:\Program Files\Micro Focus\
    ChangeMan ZDD Server\SERCOMC.V5R3M2.ASMSRC"
    'user111.binary.sercomc.v5r3m2.assemble'
```

The first file name is the PC file to be transmitted. You must enclose the PC file name in double quotes if there are spaces in a directory name or in the file name. The PUT command is not case sensitive.

The second file name is the receiving file on the mainframe computer. Enclose the mainframe file in single quotes to suppress the addition of the "working directory" (userid) as a high level qualifier.

NOTE The mainframe file you specify in the PUT command is not a PDS library. Specify an intermediate file name rather than a data set name you intend to use for a ChangeMan ZDD PDS library on the mainframe.

Press [Enter].

8 Type a PUT command at the FTP prompt and press [Enter] for each file to be transferred to the host.

9 After you have transferred all files from the PC to the host mainframe computer, type the following command at the FTP prompt to disconnect from the mainframe computer and end the FTP session.

```
quit
```

Press [Enter].

10 Close the Command Prompt window.

11   Logon to the mainframe and verify that the new mainframe files have the proper
record format, logical record length, and block size.

File Transfer Using 70 Emulator

Extra!® from Attachmate Corporation and Personal Communications from IBM are
popular 70 emulator programs. These and other 70 emulator programs commonly use
IND$FILE to transfer files between a PC and a mainframe host computer.

Execute these steps if you use 70 emulator software on your PC to transfer ChangeMan
ZDD files to the host mainframe computer.

1   In the File Transfer facility of your PC host emulator software, change the TSO binary
transfer type to use these settings, or define a new TSO Binary transfer type:

Setting	Value
VM / TSO / CICS	TSO
Transfer Type	Binary
ASCII	NO
CRLF	NO
APPEND	NO
Record Format	Fixed (block)
Record Length	80
Block Size	3120
Allocation Units	Cylinders
Primary Allocation	1
Secondary Allocation	1

2   With the preceding settings, the file transfer software should allocate a sequential
target file on the host for each file transfer. However, if you wish to preallocate one or
more host target files, use these file allocation parameters:

```
SPACE=(CYL,(1,1)),
DCB=(DSORG=PS,RECEM=FB,LRECL=80,BLKSIZE=3120)
```

3   Run the file transfer function to transfer each file on the PC to a target sequential disk
data set on the host.

> **NOTE** The mainframe file you specify in the transfer facility is not a PDS library.
> Specify an intermediate file name rather than the data set name you intend to use
> for the ChangeMan ZDD PDS library on the mainframe.

4   Logon to the mainframe and verify that the new mainframe files have the proper
record format, logical record length, and block size.

Expand Host Target Files

Execute these steps to expand the sequential XMIT files transferred from your PC into PDS libraries.

1   Choose Option 6 (Command) from the ISPF/PDF Primary Option Menu.

2   On the ISPF Command Shell panel, type the TSO RECEIVE command:

```
RECEIVE INDATASET('host.target.dataset.name')
```

Specify one of the sequential XMIT files that you uploaded from the PC.

3   The RECEIVE command prompts you with these messages:

```
INMR901I Dataset USER11.CMN512.GOLDCODE.CNTL.FIX from...
INMR906A Enter restore parameters or 'DELETE' or 'END' +
```

Respond by typing a DATASET parameter to specify the data set name you chose for ChangeMan ZDD vendor libraries. See "Component Libraries" on page 33.

```
DATASET('node.SERCOMC.VnRnMn.LOAD') NEW|OLD
```

> **NOTE** We recommend that you define the last node in your PDS library names the same as the last node of the original files on the download image or distribution CD.

4   The RECEIVE command displays IEBCOPY sysout messages.

If you need more information about using the RECEIVE receive command, type the following on the Command line:

```
TSO HELP RECEIVE
```

Appendix D
Applying Maintenance Releases

This appendix discusses the procedures for applying a maintenance release to an existing dedicated ZDD server.

IMPORTANT! Never apply a ChangeMan ZDD maintenance release to a Sernet server that runs a ChangeMan ZMF instance.

Introduction

For any ChangeMan ZDD maintenance release, there are some customary actions that you execute to apply changes to your existing dedicated ZDD servers.

This Appendix describes those tasks. See the Readme for tasks that apply to the specific maintenance release that you wish to install.

Updating Vendor Libraries

ChangeMan ZDD server libraries for a maintenance release are delivered as a full product libraries. There are no "fix" level libraries that contain only the components changed for the maintenance release.

Execute these steps to update your SERCOMC vendor libraries with components changed in the ZDD maintenance release:

1 Before you update your vendor libraries, make a copy of your current vendor libraries to use in a later task.

2 Replace your current vendor libraries with the maintenance release libraries.

Updating Custom Libraries

The *ChangeMan ZDD Server Installation Guide* tells you to allocate these custom libraries.

…SERCOMC.VvRrMm.CUSTOM.ASMSRC

…SERCOMC.VvRrMm.CUSTOM.CLIST

…SERCOMC.VvRrMm.CUSTOM.CNTL

…SERCOMC.VvRrMm.CUSTOM.LOAD

After you update your vendor libraries, follow this procedure to update your custom libraries:

1 Allocate a new set of custom libraries.

2 Copy any custom components that are all original code into your new custom libraries.

3 If you can use the ChangeMan ZMF M+R Option:

    a On the Versions panel, define your base and derivative libraries as follows:

        Base: Vendor library for old version

        Drv1: Custom library for old version

        Drv2: Vendor library for new version

    b On the Consolidation Workplace panel, reconcile your old customization with the new maintenance release components.

    c When you have reconciled all of your customization, export reconciled components to your new custom library.

4 If you do not use the ChangeMan ZMF M+R Option:

    a Determine what components are changed in the maintenance release by comparing vendor libraries before and after updates for the maintenance release.

    b Find components in your custom libraries that are changed in the maintenance release.

    c Determine whether your modifications will be valid in the maintenance release.

    d Copy the new vendor version to a new custom library and reapply your modifications.

5 Assemble custom source members into your custom load library.

> **IMPORTANT!** Some changes in a maintenance release will make your modifications obsolete or require you to change your modifications.

Reloading XMLSPACE VSAM LDS

If the Readme recommends that you reload the XMLSPACE LDS, run the job in member XMLLOAD in your custom CNTL library to delete, define, and reload the XMLSPACE VSAM LDS and the MAPDATA sequential file with the new data in member XMLDATA.

> **NOTE** Load the new data at the same time that you start using the new load modules delivered with the release. If you back out the upgrade, restore the previous contents of the XMLSPACE VSAM LDS and the MAPDATA sequential file.

Appendix E
Modify Commands

This appendix describes modify commands that may be issued to a Sernet started task.

Introduction

These modify commands may be issued from the operator console or through SDSF by authorized users. Responses to these commands are displayed in the SERPRINT sysout data set of the Sernet instance.

Standard Modify Commands

An application administrator or a console operator may use these modify commands to manage a Sernet started task and the applications that run under it.

ABEND

Purpose	Abend the started task with an 0C3.
Application(s)	All applications running under a Sernet started task.
Format	/F jobname,ABEND Where: jobname Started task jobname
Comments	Use of this modify command is not recommended without instructions from Micro Focus Customer Care.
Examples	`/F SERT5,ABEND`
Response	`ASER0850I Operator command: ABEND` `SER0952W Intentional abend <S0C3> requested`

ASID

Purpose	Modify the maximum number of concurrent address spaces and time-out minutes.
Application(s)	All applications running under a Sernet started task

Format	/F jobname,ASID[=(n,m)]
	
	Where: jobname Started task jobname
	           n Maximum number of concurrent address spaces
	           m Time-out in wall clock minutes

Comments	ASID values are set by: ■ Default at startup (16 address spaces and 20 minutes time-out expiration) ■ Sernet keyword option ASID at startup ■ ASID modify command The maximum number of address spaces is checked when an application needs to start an address space for an asynchronous operation. An example of an asynchronous process that uses a separate address space is ChangeMan ZMF ISPF file tailoring for install JCL. Sernet periodically checks the list of address spaces that it has started, and if an address space runs longer than the time-out limit, it is terminated. Such an address space may be in a loop or have some other problem, and it can prevent another address space from starting when the maximum number of address spaces is reached. The ASID time out limit is similar to the TIME parameter for an ordinary job except it is wall clock time, not CPU time. The elapsed run time for an address space is calculated as the difference between the store clock (STCK) value taken when the address space was created and the store clock value taken when the check is made. The maximum number of address spaces is 256, and the maximum number of time-out minutes is 255, but whatever you input is displayed in SERPRINT. If you enter a number of minutes greater than 255, a time-out limit of 255 is used, which is 4 hours 15 minutes.
Examples	`/F SERT5,ASID=(64,30)`

Response	`SER0850I Operator command: ASID=(64,30)`
	`SER0901I Number of Address Spaces:64 Expiration Timeout:30 Minutes`
	`SER0904I 0 active address spaces are running at this time.`

ASIDS

Purpose	Display the maximum number of concurrent address spaces and time-out minutes. Display the number of address spaces that are running as well as the address space requests that are waiting to run and the classes assigned.
Application(s)	All applications running under a Sernet started task
Format	/F jobname,ASIDS Where: jobname Started task jobname
Comments	See modify command ASID for an explanation of the maximum number of concurrent address spaces and expiration time-out minutes. The maximum number of address spaces is 256, and the maximum number of time-out minutes is 255, but whatever was input is displayed in SERPRINT.
Examples	`/F SERT5,ASIDS`

Response	`SER0850I Operator command: ASIDS`
	`SER0901I Number of Address Spaces:16 Expiration Timeout:20 Minutes`
	`SER0904I 0 active address spaces are running at this time.`

ASIDS4R

Purpose	Dynamically adjusts the ASIDS4RECALL setting. See Appendix F, "Sernet Keyword Options" on page 151.
Application(s)	All applications running under a Sernet started task

Format	/F *jobname*,ASIDS4R,*n*
	Where: *jobname* Started task jobname *n* Is a numerical value from 2 to 16.
Examples	/F *jobname*,ASIDS4R,8

ASINITi

Purpose	For an initiator, modify the maximum number of concurrent address spaces that can be created and the job classes assigned to the initiator.
Application(s)	All applications running under a Sernet started task
Format	/F jobname, ASINITi=(n,c)

	Where: jobname Started task jobname
	       i Initiator number
	       n Maximum number of concurrent address spaces
	       c Job classes

Comments	The address space limit is checked when an application needs to start an address space for an asynchronous operation. An example of an asynchronous process that uses a separate address space is ChangeMan ZMF ISPF file tailoring for install JCL. The maximum number of address spaces is 256, but whatever you input is displayed in SERPRINT.
Examples	/F SERT5,ASINIT2=(50,ABC)
Response	SER0850I Operator command: ASINIT3=(10,ABC) SER0901I Number of Address Spaces:22 Expiration Timeout:25 Minutes SER0902I Initiator:1 Classes:ABCD Maximum:4 Active:0 SER0902I Initiator:2 Classes:ABCD Maximum:4 Active:0 SER0902I Initiator:3 Classes:ABC Maximum:10 Active:0 SER0902I Initiator:4 Classes:ABCD Maximum:4 Active:0

ASINITS

Purpose	For each initiator, display the assigned job classes, the maximum number of concurrent address spaces that can be created, and the number of active address spaces.
Application(s)	All applications running under a Sernet started task
Format	/F SERs,ASINITS
	Where: jobname Started task jobname
Comments	This command also display the address space requests that are waiting to run and the classes assigned.
Examples	/F SERT5,ASINITS
Response	SER0850I Operator command: ASINITS SER0901I Number of Address Spaces:32 Expiration Timeout:25 Minutes SER0902I Initiator:1 Classes:ABCD Maximum:4 Active:0 SER0902I Initiator:2 Classes:ABCD Maximum:4 Active:0 SER0902I Initiator:3 Classes:ABCD Maximum:4 Active:0 SER0902I Initiator:4 Classes:ABCD Maximum:4 Active:0

ATTACH

Purpose	Attach a subtask to an application running under the Sernet started task.
Application(s)	ChangeMan ZMF

Format	/F jobname,aaa,ATTACH,tttttttt
	
	Where: jobname STC jobname
	        aaa Application CMN ChangeMan ZMF
	        tttttttt subtask HLLX High Level Language Exits
	                                             SSV Staging Versions
	                                             IADS Impact Analysis
	                                             NFT Event Notification

Comments	See the DETACH modify command. For SSV, the three staging version VSAM masters are attached to the started task. For IADS, the impact analysis data space is created and populated from the VSAM LDS at DD statement CMNIMPCT, and DD statement CMNIALOG is allocated and opened.
Examples	`/F SERT5,CMN,ATTACH,SSV` Attach the Staging Versions subtask `/F SERT5,CMN,ATTACH,IADS` Attach the Impact Analysis subtask
| Responses | ```
SER0850I Operator command: CMN,ATTACH,SSV
CMN5300I CMNSTART Attach:
U=CMNSTART,F1=ATTACH,F2=SSV,@TCA=17139000,@TCB=8C3CF0
CMN5315I CMNSTART SSV  Task Attached
CMN5385I CMNSSV   Attempting SSV initialization CMNSSV   (MVS-6.1.1) 20090506
10.14
CMN5388I CMNSSV   SSV initialization complete

SER0850I Operator command: CMN,ATTACH,IADS
CMN5300I CMNSTART Attach:
U=CMNSTART,F1=ATTACH,F2=IADS,@TCA=17115000,@TCB=8C329
CMN5315I CMNSTART IADS Task Attached
CMN5391I CMNIAM00 Attempting to open the I/A Dataspace.
CMN5392I CMNIAM00 I/A Dataspace OPEN, LDS: CMNTP.SERT5.CMNZMF.V6R1M1.IADSP
``` |

CPR

Purpose	Refresh or Restart Client Pack Registrar.
Application(s)	ChangeMan ZMF

Format	/F jobname,CPR,command
	
	Where: jobname STC jobname
	        command REFRESH or
	                      RESTART

Comments	Used
Examples	`/F SERT5,CPR,REFRESH` Preserves the Shared Memory Object and sets it up as in the beginning `/F SERT5,CPR,RESTART` Discards the Shared Memory Object and replaces it with a new one
| Responses | ```
SER0850I 00009000 Operator command: CPR,REFRESH
SER0614I 00009000 Client Pack Registrar Refresh Requested

SER0850I 00009000 Operator command: CPR,RESTART
SER0615I 00009000 Client Pack Registrar Restart Requested
``` |

DETACH

Purpose	Detach a subtask from an application running under the Sernet started task.
Application(s)	ChangeMan ZMF
Format	/F jobname,aaa,DETACH,tttttttt
	Where: jobname STC jobname
	aaa Application CMN ChangeMan ZMF
	tttttttt subtask HLLX High Level Language Exits
	SSV Staging Versions
	IADS Impact Analysis
	NTF Event Notification
Comments	See the ATTACH modify command.
	For SSV, the three staging version VSAM masters are closed and deallocated from the started task.
	For IADS, the impact analysis LDS is synchronized with the data space, the data space is closed, LDS is closed and deallocated from the started task, and DD statement CMNIALOG is closed and deallocated.
	CAUTION! When impact analysis is detached, these functions are affected:
	■ Package audit fails with RC=20
	■ Baseline ripple and reverse baseline ripple jobs yield RC=04 in step DSPTM, and impact analysis updates are written to the CMNDELAY file. Transactions in the CMNDELAY file are not processed until the Sernet/ZMF started task is restarted.
	■ Query Impact and Query BOM return no results.
Examples	`/F SERT5,CMN,DETACH,SSV` Detach the Staging Versions subtask
	`/F SERT5,CMN,DETACH,IADS` Detach the Impact Analysis subtask
| **Responses** | ```
SER0850I Operator command: CMN,DETACH,SSV
CMN5389I CMNSSV   Terminating SSV
CMN5387I CMNSSV   SSV terminated
CMN5305I CMNSTART Detach:
U=CMNSTART,F1=DETACH,F2=SSV,@TCA=17107000,@TCB=8C3CF0
CMN5316I CMNSTART SSV  Task Detached

SER0850I Operator command: CMN,DETACH,IADS
CMN5394I CMNIAM00 Closing the I/A Dataspace.
CMN5395I CMNIAM00 The I/A Dataspace is now offline.
CMN5305I CMNSTART Detach:
U=CMNSTART,F1=DETACH,F2=IADS,@TCA=170F5000,@TCB=8C42A08
CMN5316I CMNSTART IADS Task Detached
``` |

EXTEND

Purpose	Extend the time when the Sernet started task automatically shuts down as specified in the EXPIRE or RUNFOR runtime parameters.
Application(s)	All applications running under a Sernet started task
Format	/F jobname,EXTEND,HhhMmm
	Where: jobname Started task jobname
	hh Hours to extend the started task expire time
	mm Minutes to extend the started task expire time
Comments	The new system clock time for shutdown is displayed.

Examples	`/F SERT5,EXTEND,H00M15`
Response	`SER0850I Operator command: EXTEND,H00M15` `SER0870I Expiration time extended to 07:53`

HALT

Purpose	Stop the Sernet started task with an orderly termination process that closes VSAM files and disconnects from system resources. This command is the same as SHUTDOWN and is provided to comply with NetView terminology.
Application(s)	Sernet and applications running under the Sernet started task
Format	/F jobname,HALT,[n|Mn] Where: jobname Started task jobname n Grace period in minutes before attached users are forcibly detached and termination of ChangeMan ZMF and Sernet is initiated. If a grace period is not specified, the grace period defaults to 5 minutes. If a grace period of 0 is specified, the shutdown is immediate. The grace period minutes subparameter may be preceded by M.
Comments	No users are allowed to logon after a HALT command is issued. During the grace period, Sernet checks every 60 seconds for attached users. If all users have logged off, termination is initiated. If attached users are found, this message is sent to each TSO ID: SER2000I CMN Network shutting down; Please exit! CN(INTERNAL) After termination is initiated, the process may take several minutes to complete.

| Examples | ```
/F SERT5,HALT,1
/F SERT5,HALT
/F SERT5,HALT,0
/F SERT5,HALT,1M
``` |
|---|---|
| Response | ```
SER0850I Operator command: HALT,0
SER0944I SerNet orderly SHUTDOWN initiated; No grace period; Immediate terminat
CMN5389I CMNSSV   Terminating SSV
CMN5394I CMNIAM00 Closing the I/A Dataspace.
CMN5395I CMNIAM00 The I/A Dataspace is now offline.
CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNPMAST
CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNCMPNT
CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNLOG
CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNRECV
CMN5810I CMNSTART Change Man VSAM Files closed
CMN5820I CMNSTART          Change Man VSAM File Statistics
CMN5820I CMNSTART                CMNPMAST CMNCMPNT CMNLOG   CMNRECV   CMNDELAY C
CMN5820I CMNSTART Read Update   00000005 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Read Only     00000003 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Read Next     00000447 00000000 00000000 00000000 00000001 0
CMN5820I CMNSTART Write (Sync)  00000000 00000000 00000002 00000004 00000000 0
CMN5820I CMNSTART Write (ASync) 00000000 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Update        00000004 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Delete        00000000 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Start         00000000 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Start Generic 00000149 00000000 00000000 00000000 00000001 0
CMN5820I CMNSTART End Request   00000002 00000001 00000000 00000000 00000000 0
CMN5820I CMNSTART Dup Records   00000000 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Record locks  00000005 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART Max locks used 00000001 00000000 00000000 00000000 00000000 0
CMN5820I CMNSTART CI locks found 00000000 00000000 00000000 00000000 00000000 0
CMN5387I CMNSSV   SSV terminated
CMN5305I CMNSTART Detach:
U=CMNSTART,F1=DETACH,F2=IADS,@TCA=170F5000,@TCB=8C42A
SER0989I Waiting for application to terminate: CMN
CMN5305I CMNSTART Detach:
U=CMNSTART,F1=DETACH,F2=INFO,@TCA=170FF000,@TCB=8C1E8
CMN5305I CMNSTART Detach:
U=CMNSTART,F1=DETACH,F2=SSV,@TCA=17108000,@TCB=8BF088
CMN5313I CMNSTART Termination Complete
SER0990I Statistics; Real time:         H02M30S53
SER0991I Statistics; Applications:              4
SER0992I Statistics; Users attached:           0
SER0993I Statistics; Called count:             0
SER0994I Statistics; Concurrent max:           0
SER0995I Statistics; Abended:                  0
SER0996I Statistics; Detached inactive:        0
SER0999I SerNet server "5" termination complete, RC=0
``` |

HOLD

Purpose	Stop the ChangeMan ZMF internal scheduler from submitting installation jobs for packages that specify CMN for the Installation Job Scheduler.
Application(s)	ChangeMan ZMF
Format	/F jobname,CMN,HOLD Where: jobname Started task jobname
Comments	Install jobs are not held for packages that use MANUAL or OTHER for the Installation Job Scheduler. Issue the HOLD modify command in the P environment started task to hold packages that have been distributed from a D or DP environment.
Examples	`/F SERT5,CMN,HOLD`
| Response | ```
SER0850I Operator command: CMN,HOLD
CMN5317I CMNSTART All scheduled jobs held
``` |

LOCKS

Purpose	Display information about serialization locks in force.
Application(s)	ChangeMan ZDD
Format	/F jobname,XCH,LOCK Where: jobname Started task jobname
Comments	Data displayed: <User_ID> Logon ID for a given user <T_Elapsed> Number of hours, minutes, and seconds that have elapsed since the lock was placed. If the hours exceed 24, days are displayed and seconds are dropped. <Type> Type of lock applied. If the literal 'ENQ' is displayed, an ENQ is outstanding under Qname SPFEDIT for the displayed data set name and likely member name in parenthesis. <Locked_DsName (Member)...> Data set name and member name on which a temporary serialization lock was placed. Total= Total number of locks that have been placed since the Sernet instance was started
Examples	`/F SERT5,XCH,LOCK` `/F SERT5,XCH,LOCKS`

Response	`SER0850I Operator command: XCH,LOCK`
	`SER2013I XCH  <User_ID><T_Elapsed><Type><Locked_DsName(Member)...> Total=0`
	`SER2016I XCH  No active locks found`

RELEASE

Purpose	Release installation jobs that are being held by the HOLD modify command.
Application(s)	ChangeMan ZMF
Format	/F jobname,CMN,RELEASE Where: jobname Started task jobname
Comments	See the HOLD modify command.
Examples	`/F SERT5,CMN,RELEASE`
Response	`SER0850I Operator command: CMN,RELEASE` `CMN5320I CMNSTART All scheduled jobs released`

RELEASE,DELAY

Purpose	Process contents of delay file.
Application(s)	ChangeMan ZMF
Format	/F jobname,CMN,RELEASE,DELAY Where: jobname Started task jobname

Comments	This command immediately processes the contents of the delay file. It runs asynchronously with other work in the started task. It does not prevent users from logging on and doing work, as happens at task startup. It should not be run when the Impact analysis files are detached. It can be run as many times as required when the task is up. A duplicate request ie one issued before a previous one is finished is ignored.
Examples	`/F SERT7820,CMN,RELEASE,DELAY`
| Response | ```
SER0850I Operator command: CMN,RELEASE,DELAY
CMN7300I CMNSTART Attach:
U=CMNSTART,F1=ATTACH,F2=SERVDLAY,@TCA=18CD6000,@TCB=8A3058
CMN7476I CMNSTART Delay file processing started
CMN7460I CMNDELAY - START of processing
CMN7468I CMNDELAY - Waiting for resource => qname:rname
CMN7468I CMNDELAY - CHGMAN:CMNTP.S7.CMNDELAY
CMN7469I CMNDELAY - Resource obtained successfully.
CMN7800I SERT    Opened VSAM file CMNTP.S7.CMNDELAY
CMN7800I SERT    Closed VSAM file CMNTP.S7.CMNDELAY
CMN7461I CMNDELAY - END of processing                  00000
Note that the 4th character of the CMN messages is the instance ID, here it is
'7'.
``` |

SHUTDOWN

Purpose	Stop the Sernet started task with an orderly termination process that closes VSAM files and disconnects from system resources. This command is the same as HALT, which is provided to comply with NetView terminology.
Application(s)	Sernet and applications running under the Sernet started task

Format	/F jobname,SHUTDOWN,[n|Mn]
	
	Where: jobname Started task jobname
	            n Grace period in minutes before attached users are forcibly detached and termination of ChangeMan ZMF and Sernet is initiated.
	                  If a grace period is not specified, the grace period defaults to 5 minutes.
	                  If a grace period of 0 is specified, the shutdown is immediate.
	                  The grace period minutes subparameter may be preceded by M.
	
	SHUTDOWN can be coded as SH, SHUT, or HALT.

Comments	No users are allowed to logon after a SHUTDOWN command is issued. During the grace period, Sernet checks every 60 seconds for attached users. If all users have logged off, termination is initiated. If attached users are found, this message is sent to each TSO ID: SER2000I CMN Network shutting down; Please exit! CN(INTERNAL) After termination is initiated, the process may take several minutes to complete.

Examples	`/F SERT5,SHUTDOWN,1`
	`/F SERT5,SH`
	`/F SERT5,SH,0`
	`/F SERT5,SHUTDOWN,1M`

Response	`SER0850I Operator command: SH,0`
	`SER0944I SerNet orderly SHUTDOWN initiated; No grace period; Immediate terminat`
	`CMN5389I CMNSSV   Terminating SSV`
	`CMN5394I CMNIAM00 Closing the I/A Dataspace.`
	`CMN5395I CMNIAM00 The I/A Dataspace is now offline.`
	`CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNPMAST`
	`CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNCMPNT`
	`CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNLOG`
	`CMN5800I CMNSTART Closed VSAM file CMNTP.SERT5.CMNZMF.V6R1M1.CMNRECV`
	`CMN5810I CMNSTART Change Man VSAM Files closed`
	`CMN5820I CMNSTART            Change Man VSAM File Statistics`
	`CMN5820I CMNSTART               CMNPMAST CMNCMPNT CMNLOG   CMNRECV   CMNDELAY C`
	`CMN5820I CMNSTART Read Update   00000005 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Read Only     00000003 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Read Next     00000447 00000000 00000000 00000000 00000001 0`
	`CMN5820I CMNSTART Write (Sync)  00000000 00000000 00000002 00000004 00000000 0`
	`CMN5820I CMNSTART Write (ASync) 00000000 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Update        00000004 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Delete        00000000 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Start         00000000 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Start Generic 00000149 00000000 00000000 00000000 00000001 0`
	`CMN5820I CMNSTART End Request   00000002 00000001 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Dup Records   00000000 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Record locks  00000005 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART Max locks used 00000001 00000000 00000000 00000000 00000000 0`
	`CMN5820I CMNSTART CI locks found 00000000 00000000 00000000 00000000 00000000 0`
	`CMN5387I CMNSSV   SSV terminated`
	`CMN5305I CMNSTART Detach:`
	`U=CMNSTART,F1=DETACH,F2=IADS,@TCA=170F5000,@TCB=8C42A`
	`SER0989I Waiting for application to terminate: CMN`
	`CMN5305I CMNSTART Detach:`
	`U=CMNSTART,F1=DETACH,F2=INFO,@TCA=170FF000,@TCB=8C1E8`
	`CMN5305I CMNSTART Detach:`
	`U=CMNSTART,F1=DETACH,F2=SSV,@TCA=17108000,@TCB=8BF088`
	`CMN5313I CMNSTART Termination Complete`
	`SER0990I Statistics; Real time:        H02M30S53`
	`SER0991I Statistics; Applications:             4`
	`SER0992I Statistics; Users attached:           0`
	`SER0993I Statistics; Called count:             0`
	`SER0994I Statistics; Concurrent max:           0`
	`SER0995I Statistics; Abended:                  0`
	`SER0996I Statistics; Detached inactive:        0`
	`SER0999I SerNet server "5" termination complete, RC=0`

SNAPENV

Purpose	Display information on started task region memory usage.
Application(s)	ChangeMan ZMF
Format	`/F jobname,SNAPENV` Where: jobname Started task jobname
Comments	
Examples	`/F SERT5,SNAPENV`
Response	`SER0850I Operator command: SNAPENV` `SER0868I EPvt used=43,036K avail=1,701,860K  Pvt used= 676K avail=8,516K`

STATS

Purpose	Display VSAM file access statistics for the ChangeMan ZMF package master, component master, log, recovery, and delay files.
Application(s)	ChangeMan ZMF

Format	/F jobname,CMN,STATS
	Where: jobname Started task jobname
Comments	If you license the ChangeMan ZMF INFO Option, statistics for the INFO VSAM interface file are also displayed.
Examples	`/F SERT5,CMN,STATS`
| **Response** | ```
SER0850I Operator command: CMN,STATS
CMN5820I CMNSTART          Change Man VSAM File Statistics
CMN5820I CMNSTART              CMNPMAST CMNCMPNT CMNLOG   CMNRECV   CMNDELAY
CMN5820I CMNSTART Read Update   00000005 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Read Only     00000003 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Read Next     00000438 00000000 00000000 00000000 00000001
CMN5820I CMNSTART Write (Sync)  00000000 00000000 00000001 00000004 00000000
CMN5820I CMNSTART Write (ASync) 00000000 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Update        00000004 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Delete        00000000 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Start         00000000 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Start Generic 00000146 00000000 00000000 00000000 00000001
CMN5820I CMNSTART End Request   00000002 00000001 00000000 00000000 00000000
CMN5820I CMNSTART Dup Records   00000000 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Record locks  00000005 00000000 00000000 00000000 00000000
CMN5820I CMNSTART Max locks used 00000001 00000000 00000000 00000000 00000000
CMN5820I CMNSTART CI locks found 00000000 00000000 00000000 00000000 00000000
``` |

TCPIP

Purpose	Manage TCP/IP for applications running under Sernet:
	■ Gracefully detach inactive users connected to a Sernet started task through TCP/IP, and stop TCP/IP without disrupting users connected through cross memory services.
	■ Start TCP/IP for use by Sernet.
	■ Gracefully disconnect inactive users using TCP/IP, stop and start TCP/IP without disrupting users connected through cross memory services.
Application(s)	Sernet
Format	/F jobname,TCPIP,action,[mmm],[tcpipname]
	Where: jobname started task jobname
	action START
	STOP
	RESTART
	mmm Minutes of inactivity after a STOP command before a TCP/IP user is automatically detached. If *mmm* not specified, default is 0.
	tcpipname TCPIP procedure name for START and RESTART

Comments	After the TCPIP command is entered, subsequent actions such as detaching inactive users, stopping TCPIP, and restarting TCPIP are executed on the minute at hh:mm:00:00.
	STOP: When the STOP command is entered, no further TCP/IP connections are accepted, currently attached users are listed in SERPRINT, and the following MVSEND message is issued to users connected through TCP/IP: SER2060T TCP/IP connections being terminated due to operator request CN(INTERNAL)
	This message is reissued each minute until the TCPIP user disconnects or is automatically detached. A TCPIP user is automatically detached when they have been inactive for the specified *mmm* interval. After all TCPIP users disconnect or are automatically detached, the controlling task (SERMAIN) calls SERCOMM to close the socket and process a TERMAPI.
	START: This command starts TCP/IP communications (INITAPI) provided that the TCP/IP API has not already been initialized. If *tcpipname* is not specified in the TCPIP command, INITIAPI (SERCOMM) connects to the default STC stack TCPIP, or it leaves the selection up to the TCP/IP code that parses the SYSTCPD DD statement. If *tcpipname* is specified, INITIAPI (SERCOMM) specifies this STC stack name when creating the TCP/IP environment.
	RESTART: The RESTART command is a combination of the STOP and START commands. TCPIP is restarted one minute after the last inactive TCPIP user is detached.
	Note: Use discrete STOP and START commands when you want to recycle the TCP/IP STC. Use the RESTART command with a *tcpipname* parameter when you want to switch TCP/IP stacks.

Examples	/F SERT5,TCPIP,STOP /F SERT5,TCPIP,START /F SERT5,TCPIP,RESTART /F SERx,TCPIP,STOP,IMMED
Response	SER0850I Operator command: TCPIP,STOP SER0916I TCPIP Stop Requested SER1020I SYSTEM TCP/IP SETSOCKOPT: RC=FFFF ErrNo=1027 TCA=00010000 Task=SER TCB=008DAE88 TIE=15B62F50 Sock=0000 SER1020I SYSTEM TCP/IP CLOSE: RC=FFFF ErrNo=1027 TCA=00010000 Task=SER TCB=008DAE88 TIE=15B62F50 Sock=0000 SER0920I Current Users:0 Maximum Users:32767 SER2010I XCH ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0 SER2012I XCH No active users found SER2010I CMN ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0 SER2012I CMN No active users found SER1020I XCH TCP/IP CLOSE: RC=FFFF ErrNo=1027 TCA=15B6E000 Task=XCH00001 TCB=008CC888 TIE=15B7C150 Sock=0000 SER0850I Operator command: TCPIP,START SER0915I TCPIP Start Requested SER1018I SYSTEM The following TCP/IP procedures are active: TCPIP SER1020I SYSTEM TCP/IP INITAPI: RC=FFFF ErrNo=10197 TCA=00010000 Task=SER TCB=008DAE88 TIE=15B62F50 Sock=0000 SER1020I CMNSTART TCP/IP BIND: RC=FFFF ErrNo=48 TCA=15B98000 Task=CMN TCB=008CC0D8 TIE=15BC6090 Sock=0000 SER1014E CMNSTART *Error* Specified port number already in use: 6051 SER1000I XCH TCP/IP environment active at 10.35.11.100..6052 SER1001I XCH TCP/IP local host name: C001 SER0826I LIBR not found SER0850I Operator command: TCPIP,RESTART SER0917I TCPIP Restart Requested SER0920I Current Users:0 Maximum Users:32767 SER2010I XCH ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0 SER2012I XCH No active users found SER2010I CMN ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0 SER2012I CMN No active users found SER1000I XCH TCP/IP environment active at 10.35.11.100..6052 SER1001I XCH TCP/IP local host name: C001 SER0850I Operator command: TCPIP,STOP,IMED SER0916I TCPIP Stop Requested SER1020I SYSTEM TCP/IP SETSOCKOPT: RC=FFFF ErrNo=1027 TCA=00010000 Task=SER TCB=008DAE88 TIE=15B62F50 Sock=0000 SER1020I SYSTEM TCP/IP CLOSE: RC=FFFF ErrNo=1027 TCA=00010000 Task=SER TCB=008DAE88 TIE=15B62F50 Sock=0000 SER0920I Current Users:2 Maximum Users:32767 SER2010I XCH ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0 SER2012I XCH No active users found SER2010I CMN ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=2 SER2011I CMN 001 USER240 H00M01S05 H00M01S04 10.35.11.100 SER2011I CMN 002 USER239 H00M00S36 H00M00S33 10.30.224.18

USERS

Purpose	Display users connected to the Sernet started task. If the application is specified, only users connected to that application are displayed. If SUMMARY is specified, only a count of users connected to each application is displayed.
Application(s)	All applications running under a Sernet started task
Format	/F jobname[,aaa],USERS /F jobname,USERS[,SUMMARY] Where: jobname Started task jobname aaa Application running under Sernet

Comments	Data displayed:	
	###	Three-digit relative number for the user.
	User_ID	Logon ID for the user.
	T_Elapsed	Number of hours, minutes, and seconds that have elapsed since the initial logon. If hours exceed 24, days are displayed and seconds are dropped.
	T_LastAct	Number of hours, minutes, and seconds that have elapsed since the last contact with the Sernet instance. If hours exceed 24, days are displayed and seconds are dropped.
	Partner Identifier	Fully qualified partner logical unit name or TCP/IP address of the workstation. Nothing is displayed if the connection is through cross memory services.
	Current/Max=0/0	No longer maintained by Sernet.

Examples	`/F SERT4712,USERS`
	`/F SERT4712,CMN,USERS`
	`/F SERT4712,USERS,SUMMARY`	

Response	`SER0850I Operator command: USERS`
	`SER0920I Current Users:0 Maximum Users:32767`
	`SER2010I XCH  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0`
	`SER2012I XCH  No active users found`
	`SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0`
	`SER2012I CMN  No active users found`
	
	`SER0850I Operator command: CMN,USERS`
	`SER2010I CMN  ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=0`
	`SER2012I CMN  No active users found`
	
	`SER0850I Operator command: USERS,SUMMARY`
	`SER0920I Current Users:0 Maximum Users:32767`
	`SER2009I XCH  Users: 0`
	`SER2009I CMN  Users: 0`	

WARN

Purpose	Controls XML Services syntax warnings facility.
Application(s)	XML Services
Format	/F jobname,WARN,[YES|NO]
	Where: jobname Started task jobname

Comments	When SERXMLI is unable to recognize an XML tag, it can write a warning message to SERPRINT. There are three ways to enable or disable these warning messages:
	■ Sernet modify command:
	   /F jobname,WARN,[YES|NO]
	■ Sernet keyword option input to the started task at startup:
	   WARN=[YES|NO]
	   See "WARN" on page 165.
	■ XML tag in the <header> of the request message:
	   <warn>Y</warn>
	   See the *XML Services User's Guide.*

Examples	/F SERT4712,WARN,YES	Enable XML Services syntax warning
	/F SERT4712,WARN,NO	Enable XML Services syntax warning
	/F SERT4712,WARN	Display status of XML Services syntax warning
Response	SER0850I Operator command: WARN,YES SER0960I XML syntax warning has been turned on SER0850I Operator command: WARN,NO SER0959I XML syntax warning has been turned off SER0850I Operator command: WARN SER0961I XML syntax warning is: Off	

Restricted Modify Commands

These modify commands will add significant processing overhead and are to be used only as directed by Micro Focus Customer Care. They are included here to provide format specifications and examples.

NETTRACE

Purpose	Display the contents of communications buffers to trace data that flows across the network. Dump the contents of each buffer into the SERPRINT sysout data set.
Application(s)	All applications running under a Sernet started task
Format	/F jobname,NETTRACE {ON|OFF|DISPLAY},[LUNAME|TCP|USER], TRACESIZE=size Where: jobname — Started task jobname ON — Enable NETTRACE as specified OFF — Disable NETTRACE as specified DISPLAY — Display all NETTRACE specifications currently enabled LUNAME=data — Trace this LU. Abbreviation: L=. Trailing * wildcard permitted. TCP=data — Trace this TCP/IP address. Abbreviation: T= for trace. Trailing * wildcard permitted in each address segment. USER=data — Trace this user ID. Abbreviation: U=. Trailing * wild card permitted. TRACESIZE=data — Specifies maximum amount of data to display for each call to the network tracing routines. Default is 1024 bytes, minimum is 128 bytes.
Comments	The TRACE modify command is not a toggle switch. You must turn OFF any NETTRACE that you turn ON. You cannot use a wildcard to turn OFF multiple TRACE,ON commands. NETTRACE can generate high volumes of output if all users are traced or there is a high level of activity for individual users that are traced.

Examples	`/F SERT5,NETTRACE,ON,USER=USER239`
	`/F SERT5,NETTRACE,ON,TCP=111.11.111.111`
	`/F SERT5,NETTRACE,DISPLAY`
	`/F SERT5,NETTRACE,OFF,U=USER239`
	`/F SERT5,NETTRACE,OFF,T=111.11.111.111`

Response	`SER0850I Operator command: NETTRACE,ON,USER=USER239` `SER0864I NETTRACE enabled: USER=USER239,SIZE=00256`

REFRESH

Purpose	Delete and reload specified load module.
Application(s)	Sernet
Format	/F jobname,REFRESH,modname Where: jobname — Started task jobname modname — Module to be refreshed

Comments	This modify command refreshes load modules that are loaded by the started task, and uses SER1405I messages to display details of the old and new.
Examples	`/F SERT5,REFRESH,CMNVPKGE`

Response	`SER0850I Operator command: REFRESH,CMNVPKGE`
	`SER1405I Name=CMNVPKGE CMNVPKGE (MVS-F.L.O) 20171005 12.25`
	`SER1402I Name=CMNVPKGE old/new EPA=16779000/16779000 RC=0`
	`SER1403I Name=CMNVPKGE old/new token=F7F6B992-00007FFF/9CD40CE8-00007FFF`
	`SER1405I Name=CMNVPKGE CMNVPKGE (MVS-8.2.0) 20171025 05.12`

TRACE

Purpose	Modify the TRACE options in effect.
Application(s)	Sernet, ChangeMan ZMF

Format	/F jobname,TRACE[,DISPLAY]
	    [,ON,CMN|SER,CLASS=(n,n,n...)]
	    [,OFF,CMN|SER,CLASS=(n,n,n,...)]
	    [,ON,USER=uuuuuuu[*]
	    [,OFF,USER=uuuuuuu[*]
	    [,OFF,ID=n]
	ON is a synonym for YES
	OFF is a synonym for NO		

	Where:	jobname	Started task jobname
		DISPLAY	Display all TRACE facilities currently enabled
		ON or YES	Enable TRACE as specified
		OFF or NO	Disable TRACE as specified
		SER	Sernet
		CMN	ChangeMan ZMF
		n	Trace class, numeric 1-32
			1 - All CMN traces not listed below
			2 - CMNATACH user conversation incoming request and outgoing response. I.E. "TRACE IN …" and "TRACE OUT …". CMNENTFY event notification. CMNSCHED CMN scheduler.
			3 - VSAM CMAST data interim results. This shows long and short CMAST data in a common format
			4 - CMNVRLIO VSAM i/o response (major/minor/key/rc/fdbk)
		USER=uuuuuuu	Limit Sernet trace to this user ID (trailing wildcard permitted)
		ID=m	Numeric identifier for trace USER that is used to turn trace user limit off
Comments	If no user ID is specified, all user IDs are traced. The TRACE,ON,USER= command may be issued more than once to add user IDs to the list of eligible messages. TRACE options are logically ORed, meaning that if a message matches one of the specifications, the message is displayed. ChangeMan ZMF messages are never affected by a user ID limit and are always shown for all user IDs. All trace classes can also be enabled/disabled with the following format: /F stcname,TRACE,YES,CMN /F stcname,TRACE,YES,SER **Once the problem requiring the trace has been recreated, immediately disable all the traces by replacing any 'YES' with 'NO' and/or 'ON' with 'OFF' in each of the above modify commands.**		

Trace Examples

In the following examples of the TRACE modify command:

- Each command that is entered on the operator console or in SDSF is followed by the response that is displayed in the SERPRINT data set.

- Trace specifications in these examples are cumulative. Trace DISPLAY commands show the cumulative trace options in effect.

■   No TRACE keyword option was included in the Sernet startup parameters.

1   Display the current trace settings.

```
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0966I Classes active for component SER: None
SER0966I Classes active for component CMN: None
```

2   Turn on trace Class 1 and 2 for Sernet and ChangeMan ZMF:

```
/F SERT5,TRACE,ON,SER,CLASS=(1,2)
SER0850I Operator command: TRACE,ON,SER,CLASS=(1,2)
SER0964I Trace classes set
/F SERT5,TRACE,ON,CMN,CLASS=(1,2)
SER0850I Operator command: TRACE,ON,CMN,CLASS=(1,2)
SER0964I Trace classes set
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0966I Classes active for component SER: 01 02
SER0966I Classes active for component CMN: 01 02
```

3   Limit trace to user ID USER239 and USER240:

```
/F SERT5,TRACE,ON,USER=USER239
SER0850I Operator command: TRACE,ON,USER=USER239
SER0924I Trace started for user: USER239, ID: 1
/F SERT5,TRACE,ON,USER=USER240
SER0850I Operator command: TRACE,ON,USER=USER240
SER0924I Trace started for user: USER240, ID: 2
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0922I      information follows:
SER0923I Trace ID: 2 User ID: USER240
SER0923I Trace ID: 1 User ID: USER239
SER0966I Classes active for component SER: 01 02
SER0966I Classes active for component CMN: 01 02
```

> ⚠   **CAUTION!** Trace classes 1 and 2 ON for both Sernet and ChangeMan ZMF produces the most verbose output. Over 350 lines of trace data is displayed in the SERPRINT data set when one user executes the following steps:
>
> **1**   Logon to ChangeMan ZMF
>
> **2**   Package list for the ACTP application
>
> **3**   Log off ChangeMan ZMF

4   Turn off Class 2 trace for ChangeMan ZMF:

```
/F SERT5,TRACE,OFF,CMN,CLASS=(2)
SER0850I Operator command: TRACE,OFF,CMN,CLASS=(2)
SER0964I Trace classes set
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0922I      information follows:
SER0923I Trace ID: 2 User ID: USER240
SER0923I Trace ID: 1 User ID: USER239
SER0966I Classes active for component SER: 01 02
SER0966I Classes active for component CMN: 01
```

5   Turn off Class 1 trace for ChangeMan ZMF:

```
/F SERT5,TRACE,OFF,CMN,CLASS=(1)
SER0850I Operator command: TRACE,OFF,CMN,CLASS=(1)
SER0964I Trace classes set
```

```
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0922I      information follows:
SER0923I Trace ID: 2 User ID: USER240
SER0923I Trace ID: 1 User ID: USER239
SER0966I Classes active for component SER: 01 02
SER0966I Classes active for component CMN: None
```

6   Turn turn off the USER239 trace limit and the USER240 trace limits:

```
/F SERT5,TRACE,OFF,ID=1
SER0850I Operator command: TRACE,OFF,ID=1
SER0883I TRACE ID 1 turned off
/F SERT5,TRACE,OFF,USER=USER240
SER0850I Operator command: TRACE,OFF,USER=USER240
SER0883I TRACE ID 2 turned off
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0966I Classes active for component SER: 01 02
SER0966I Classes active for component CMN: None
```

7   Turn off Class 1 and 2 trace for Sernet:

```
/F SERT5,TRACE,OFF,SER,CLASS=(1,2)
SER0850I Operator command: TRACE,OFF,SER,CLASS=(1,2)
SER0964I Trace classes set
/F SERT5,TRACE,DISPLAY
SER0850I Operator command: TRACE,DISPLAY
SER0966I Classes active for component SER: None
SER0966I Classes active for component CMN: None
```

Appendix F

Sernet Keyword Options

This appendix describes keyword options that may be used with a Sernet started task.

General rules for Sernet keyword options:

- Sernet keyword options may be input in any order.

- The syntax for Sernet keyword options is flexible. Any of the following formats is acceptable:

  ```
  keyword(value)
  keyword(value1,value2),...)
  keyword=value
  keyword=(value1,value2,...)
  ```

- To preserve lower-case characters in a keyword value, enclose the value in single or double quotes. Examples:

  ```
  NTFYURL='tt_server.serena.com:8080/zmfws/...'
  NTFYURL="tt_server.serena.com:8080/zmfws/..."
  ```

When keyword options are coded in a file for input to a Sernet started task, these additional rules apply:

- One or more keyword options may be coded in a single record.

- Multiple keyword options are separated by spaces, commas, semicolons, or any combination of these.

- A slash (/) or asterisk (*) marks the start of a comment, and the rest of the record is ignored.

apl

Purpose	Starts a Sernet application and/or specifies a TCP/IP port number.
Application(s)	All
Format	apl[=port]

Valid Values	apl CMN ChangeMan ZMF
	        CPX Comparex
	        STR StarTool
	        SYN ChangeMan SSM
	        XCH ChangeMan ZDD
	        XCHMSG ChangeMan ZDD/Messenger
	
	port Number between 1024 and 65535.
	      These apl values require a port number:
	      CPX
	      STR
	      XCH
	      XCHMSG
	      If port number is not specified, cross memory services are used instead of TCP/IP.
	      Do not use the same port number for multiple applications.

Default Value	There is no default value for apl. If port number is not specified, cross memory services are used.
When Required	Always
Comments	Formats from previous versions of Sernet are compatible, but APPC application name is ignored. apl=([APPCaplname],port)
Examples	CMN=6000 Starts ChangeMan ZMF with port 6000 CMN Starts ChangeMan ZMF using cross-memory services only SYN Starts ChangeMan SSM XCH=5000 Starts ChangeMan ZDD with port 5000

ASID

Purpose	Specifies an override to the default maximum number of concurrent address spaces and time-out minutes.
Application(s)	ChangeMan ZMF
Format	ASID=(n,m) where: n Maximum number of concurrent address spaces m Time-out in wall clock minutes
Valid Values	n Numeric, maximum 256 concurrent address spaces m Numeric, maximum 255 wall clock minutes
Default Value	Omitting this parameter is the same as ASID=(16,20)

Comments	The maximum number of address spaces is checked when an application needs to start an address space for an asynchronous operation. An example of an asynchronous process that uses a separate address space is ChangeMan ZMF ISPF file tailoring for install JCL.
	Sernet periodically checks the list of address spaces that it has started, and if an address space runs longer than the time-out limit, it is terminated. Such an address space may be in a loop or have some other problem, and it can prevent another address space from starting when the maximum number of address spaces is reached.
	The ASID time out limit is similar to the TIME parameter for an ordinary job except it is wall clock time, not CPU time. The elapsed run time for an address space is calculated as the difference between the store clock (STCK) value taken when the address space was created and the store clock value taken when the check is made.
	The maximum number of address spaces is 256, and the maximum number of time-out minutes is 255, but whatever you input is displayed in SERPRINT. If you enter a number of minutes greater than 255, a time-out limit of 255 is used, which is 4 hours 15 minutes.

ASIDS4RECALL

Purpose	Specifies the maximum number of address spaces that SerNet will create for the purpose of data set recalls.
Application(s)	ChangeMan ZMF
Format	ASIDS4RECALL=*n* where:
	n Number of address spaces. The valid range of values is 2-16. The default is 4.
Comments	You can use the ASIDS4R operator command to dynamically adjust the ASIDS4RECALL setting. See Appendix E, "Modify Commands" on page 129. The value that you specify for ASIDS4RECALL is independent of the ASID setting.

ASINITi

Purpose	For an initiator, specifies an override to the default maximum number of concurrent address spaces and the job classes assigned to an initiator.
Application(s)	ChangeMan ZMF
Format	`ASINITi=(n,c)` where:
	i Initiator number
	n Maximum number of concurrent address spaces that can be created
	c Job classes assigned to the initiator
Valid Values	n Numeric, maximum 256 concurrent address spaces
Default Value	
Comments	The address space limit is checked when an application needs to start an address space for an asynchronous operation. An example of an asynchronous process that uses a separate address space is ChangeMan ZMF ISPF file tailoring for install JCL.
	The maximum number of address spaces is 256, but whatever you input is displayed in SERPRINT.

AUTOMESSENGER

Purpose	Tells Sernet whether to automatically append a Messenger JCL fragment onto submitted batch jobs and comment out any NOTIFY= parameter found in JOB statements.
Application(s)	ChangeMan ZDD/Messenger
Format	AUTOMESSENGER=[NO|YES|NOTIFY]
Valid Values	NO Do not append the Messenger JCL YES Append the Messenger JCL unless it is already present NOTIFY Append the Messenger JCL if a NOTIFY=userID parameter is found within the first four JOB statement images and the Messenger JCL is not already present. If these conditions are met, also comment out the NOTIFY=userID.
Default Value	Omitting this parameter is the same as AUTOMESSENGER=NO
When Required	

Comments	The Messenger JCL fragment is delivered in SERCOMC.CNTL($SERNTFY) on the Sernet distribution tape, and it is copied to a public PROCLIB. Treatment of JOB statement parameter NOTIFY=userID specified in the keyword parameter AUTOMESSENTER may be overridden by code in exit program SEREX002. The Messenger JCL fragment contains these statements:
	
	`//      EXEC $SERNTFY`
	`//*`
	`//*`
	`//*`

CCSID

Purpose	Specifies the Coded Character Set Identifier (CCSID) of text data that is stored in the ChangeMan ZMF server for clients that send and receive UNICODE request and response messages.
Application(s)	ChangeMan ZMF
Format	CCSID(37) CCSID=37
Valid Values	Any valid CCSID. The default is CCSID(37) which is US EBCDIC and should suffice for most customers. Japanese customers who use DBCS CCSID 00939 should specify CCSID=00939.
Default Value	CCSID(37)
When Required	When the ChangeMan ZMF server has been localized for a CCSID other than US EBCDIC

Comments	In ChangeMan ZMF, Double Byte Character Set (DBCS) data can be in three places:
	■ Package title
	■ Programmer name
	■ Inside a component
	When clients such as TeamTrack send XML requests to the MVS server, they send UNICODE XML. The server on MVS converts the incoming XML to its local CCSID as specified in the CCSID startup parameter. When sending XML responses to the clients that sent UNICODE, the server converts the XML from its local CCSID to UNICODE. This process preserves any DBCS characters that may be contained in the XML.
Examples	CCSID=37
	CCSID(37)
	CCSID=000939
	CCSID(000939)

COMPRESS

Purpose	Determines whether compression is forced or dynamic when data is transmitted through TCP/IP.
Application(s)	All applications running under the Sernet started task
Format	COMPRESS=[0|1]
	COMPRESS=[NO|YES]
Valid Values	0,NO Dynamic compression. Large messages are compressed, but small messages (under 20K) are not compressed.
	1,YES Compression is forced. Every response from z/OS is compressed at the highest level regardless of size.
Default Value	Omitting this parameter is the same as `COMPRESS=0`
When Required	
Comments	The overhead for compressing short messages is high, so `COMPRESS=0` is most efficient. Use `COMPRESS=1` to encrypt all messages.

CONNECTCHECK

Purpose	Activates a Sernet security check to allow logon to ChangeMan ZDD or ChangeMan ZMF only if the user ID or group has READ access to a FACILITY class profile.
Application(s)	ChangeMan ZDD, ChangeMan ZMF
Format	CONNECTCHECK=[NO|YES]
Valid Values	NO Do not perform a security check to see who is allowed to logon to ZDD or ZMF.
	YES Perform a security check to see who is allowed to logon to ZDD or ZMF.
Default Value	Omitting this parameter is the same as CONNECTCHECK=NO

When Required	Never
Comments	If the security check is enabled with CONNECTCHECK=YES, the user ID must have READ access to these FACILITY class profiles to logon to ZMF or ZDD respectively: SERNET.CONNECT.*sysname*.XCH*subsys* SERNET.CONNECT.*sysname*.CMN*subsys* Where: *sysname* is the four-character SMF ID of the LPAR where the Sernet instance runs. *subsys* is the one-character subsystem ID of the Sernet started task.

CONAUTH

Purpose	Turns on a security check that restricts access to a ChangeMan ZDD server or a ChangeMan ZMF instance.
Application(s)	ZDD and CMN
Format	CONAUTH=[Y|N]
Valid Values	Y Perform check for READ access to resource N Do not perform check for READ access to resource.
Default Value	Omitting this parameter is the same as CONAUTH=N
When Required	Not required

Comments	The RACF resources that are checked are named for the application and for the subsystem ID of the Sernet started task:
	
	Class: FACILITY
	
	Resource: SERNET.CONNECT.aaas
	                  Where:
	                  aaa is the application
	                  s is the Sernet subsystem ID.
	                  Examples:
	                  SERNET.CONNECT.XCHA
	                  SERNET.CONNECT.CMNB

DB2

Sernet keyword option DB2=subs is obsolete, and code that allows this keyword option will be removed in a future Sernet release. This keyword option has no relationship to the ChangeMan ZMF Db2 Option, and it is not used by ChangeMan ZDD.

⚠ **CAUTION!** If you use Sernet keyword option DB2=subs, legacy code for a discontinued product establishes a Db2 thread that cannot be detached except by shutting down the Sernet server.

DDNAME

Purpose	Directs Sernet to get additional keyword parameter data from a data set coded in the started task JCL, and specifies the DD name where that data set is found.
Application(s)	All applications running under the Sernet started task
Format	DDNAME=ddname
Valid Values	ddname A sequential data set or a PDS member containing Sernet keyword parameters
Default Value	If this parameter is omitted, Sernet reads keyword parameters only through the PARM statement.
When Required	When there are more than 100 bytes of keyword parameter data (an IBM limit)
Comments	The data set can be fixed or variable, blocked or unblocked, but the record length cannot exceed 255 bytes.
Examples	DDNAME=PARMLIB PARM input from //PARMLIB DD data set

ESTAE

Purpose	Denotes whether a dump should be taken for non-system tasks.
Application(s)	All applications running under the Sernet started task
Format	ESTAE=NO
Valid Values	YES Produces a dump for all abends. NO Suppresses dumps for non-system tasks.
Default Value	Omitting this parameter is the same as ESTAE=YES
Comments	None**.**

EXPIRE

Purpose	Sets a future system clock time when the Sernet started task automatically shuts down.
Application(s)	All applications running under the Sernet started task
Format	EXPIRE=HhhMmm hh hours are preceded by "H" and mm minutes are preceded by "M" Hours are specified before minutes
Valid Values	hh 0 to 23; values larger than 23 are reset to 23 mm 0 to 59; values larger than 59 are reset to 59
Default Value	Omitting this parameter allows Sernet to run until it is shut down externally
When Required	Not required
Comments	The shutdown time may be changed to a later time with the EXTEND modify command.
Examples	EXPIRE=H23M59 Shutdown at 1 minute before midnight EXPIRE=H12 Shutdown at noon (12:00 high) EXPIRE=H20M15 Shutdown at 8:15 PM

EX003

Purpose	Disables SERJES calls to SEREX003 and reverts to whatever security mechanisms are supplied by the installed security system. As delivered, SEREX003 is enabled.
Application(s)	ChangeMan ZDD
Format	EX003=NO
Valid Values	NO Disable SEREX003
Default Value	Omitting this parameter leaves exit program SEREX003 enabled
Comments	SEREX003 is a SERJES exit that performs security checking when RACF® JESJOBS or JESSPOOL resource classes may not be active.

EX005

Purpose	Disables calls to exit program SEREX005, which provides library member level security.
Application(s)	ChangeMan ZMF
Format	EX005=NO
Valid Values	NO Disable SEREX005
Default Value	Omitting this parameter leaves exit program SEREX005 enabled
Comments	SEREX005 provide library member level security. This exit is called after the library access rules in your security system are applied. As delivered, SEREX005 is enabled.

IAM

Purpose	Determine if direct access data sets are IAM® instead of VSAM.
Application(s)	All applications running under the Sernet started task
Format	IAM=YES
Valid Values	YES Open direct access (BDAM) data sets determined to be IAM as IAM
Default Value	Omitting this parameter causes direct access (BDAM) data sets to be listed as "OTHER" and opened as VSAM
When Required	
Comments	Innovation Access Method (IAM) is a product of Innovation Data Processing. IAM is a substitute access method for VSAM that reduces DASD and CPU utilization and enhances performance for direct access files.

IEX

Purpose	Specifies the exit program that enforces standards for CA Librarian® `-DESC` and `-PGMR` cards when a module is added.
Application(s)	ChangeMan ZDD
Format	IEX=exitname

Valid Values	exitname Name of exit program
Default Value	Omitting this parameter is the same as having no exit program
When Required	CA Librarian environment where usage of -DESC and -PGMR cards is enforced through an exit program
Comments	
Examples	IEX=ADDCHK Input exit name is ADDCHK IEX=SHOPLIBR Input exit name is SHOPLIBR

IMS

Purpose	Names the IMS™ subsystem that is attached for an intermittent dialog. May also specify Normal Buffer Allocation (NBA) and Overflow Buffer Allocation (OBA) for a Fast Path region.
Application(s)	Serena Connect
Format	IMS=subs IMS=(subs,NBA=nn,OBA=oo) Order of NBA and OBA is not significant.
Valid Values	subs IMS subsystem nn Fast Path Normal Buffer Allocation. Any numeric value expressed in 1 to 8 characters. oo Fast Path Overflow Buffer Allocation. Any numeric value expressed in 1 to 8 characters.
Default Value	Omitting this parameter means no IMS subsystem is accessed. Omitting NBA and OBA or entering NBA=0, OBA=0 leaves in effect the values specified in the IMS sysgen.
When Required	Specify the IMS subsystem if the Sernet IMS Option has been licensed. (The Sernet IMS Option is not the same as the ChangeMan ZMF IMS Option.) Specify NBA and OBA if the values specified in the IMS sysgen are insufficient.
Comments	In practice, IMS subsystems may be accessed other than the one specified in the IMS keyword option. IMS databases can be downloaded through existing PSBs (Program Specification Blocks). The NBA and OBA subparameters are almost never used. They operate independently.
Examples	IMS=IMS2 IMS subsystem is IMS2 IMS=(IMS2,NBA=9,OBA=5) Optional number of database buffers for normal and overflow

LANGUAGE

Purpose	Specifies the language code for Sernet message template module (SERMXxxx).
Application(s)	Sernet
Format	LANGUAGE(ENU)
Valid Values	ENU
Default Value	ENU

LCLCCSID

Purpose	Deprecated. Use the **CCSID** keyword option instead.

LIB

Purpose	Specifies the CA Librarian update module name.
Application(s)	ChangeMan ZMF, ChangeMan ZDD
Format	LIB=librname
Valid Values	libname Valid load module name or alias
Default Value	Omitting this parameter leaves the CA Librarian update module name as LIBR
When Required	In a CA Librarian environment where the CA Librarian update module has been renamed to something other than LIBR
Comments	If ZMF cannot find the CA Librarian update module, the result is user message "File Type LIB not supported" and return code 16.
Examples	LIB=LIBRARY CA Librarian update module name is LIBRARY LIB=SHOPLIBR CA Librarian update module name is SHOPLIBR

MIGRAT

Purpose	Specifies a pseudo volume serial for disk data sets that are migrated to a secondary storage format or medium.
Application(s)	All applications running under the Sernet started task
Format	MIGRAT=volser
Valid Values	volser One- to eight-character pseudo volume serial specified by the disk storage management system
Default Value	Omitting this parameter leaves the pseudo volume serial set to MIGRAT
When Required	When a disk storage management product uses a volume serial other than MIGRAT for migrated data sets
Comments	IBM product DFSMShsm™ uses MIGRAT as the volume serial for migrated data sets.
Examples	MIGRAT=ARCIVE Pseudo volume serial for DMS/OS MIGRAT=FDRABR Pseudo volume serial for FDR® ABR®

NETTRACE

Purpose	Set initial network trace options at Sernet startup.
Application(s)	All
Format	NETRACE[YES|NO]
Valid Values	Y Initializes network trace with values of USER=* and SIZE=512. N Does not initialize the network trace.
Default Value	Omitting this parameter is the same as NETTRACE=NO

When Required	For debugging purposes only
Comments	Be aware that setting NETTRACE=Y will create a lot of output. If you wish to turn off the network trace, issue /F stcname,NT,N,U=*

NOSCHED

Purpose	Suppresses the ChangeMan ZMF internal scheduler.
Application(s)	ChangeMan ZMF
Format	NOSCHED
Valid Values	NOSCHED The ChangeMan ZMF internal scheduler is suppressed
Default Value	Omitting this parameter leaves the ChangeMan ZMF scheduler in force
When Required	Never
Examples	NOSCHED

NOTIFYPROC

Purpose	Specifies the name of the Job Notification cataloged procedure to be inserted as the last step in batch jobs that are submitted from ZDD. The Job Notification facility sends a job completion message from the host back to the work station that submitted the job.
Application(s)	ChangeMan ZDD
Format	NOTIFYPROC=PROCNAME
Default Value	Omitting this parameter is the same as coding NOTIFYPROC=$SERNTFY

NTFYINT

Purpose	Specifies the time interval in seconds between cycles of the of the ChangeMan ZMF event notification facility.
Application(s)	Application Lifecycle Framework (ALF)
Format	NTFYINT=n n Seconds in 1-10 decimal digits
Valid Values	1 to 4294967295
Default Value	Omitting this parameter is the same as coding NTFYINT=60
When Required	Never
Comments	With each cycle, the event notification facility scans the ZMF Log File for applicable ZMF events, includes and excludes events according to filters defined in the file at DDname ALFFLTR in the ZMF started procedure (if present), and emits event notifications to the Web Services URL specified in Sernet keyword option NTFYURL. The Log File scan starts with the record after the last record read in the prior event notification cycle. The time between cycles of the event notification facility is defined in Sernet keyword option NTFYINT. For details of how to set up ALFFLTR, see the ALFFLTR member supplied in the SAMPLES dataset.

NTFYURL

Purpose	The URL where Web Services are installed to receive messages from the ChangeMan ZMF event notification facility.
Application(s)	Application Lifecycle Framework (ALF)
Format	NTFYURL='hostname:port/almzmfalf/services/ZMFALFEventRouter' hostname Server name where ALM Web Services are installed port Port number for ALM Web Services **Note:** Use single or double quotes to prevent forcing the URL to upper case.
Default Value	Omitting this parameter disables the ZMF event notification facility.
When Required	This keyword parameter is required to run the event notification facility.
Comments	With each cycle, the event notification facility scans the ZMF Log File for applicable ZMF events, includes and excludes events according to filters defined in the file at DDname ALFFLTR in the ZMF started procedure (if present), and emits event notifications to the Web Services URL specified in Sernet keyword option NTFYURL. The Log File scan starts with the record after the last record read in the prior event notification cycle. The time between cycles of the event notification facility is defined in Sernet keyword option NTFYINT. For details of how to set up ALFFLTR, see the ALFFLTR member supplied in the SAMPLES dataset.
Examples	NTFYURL='alm_host:8080/almzmfalf/services/ZMFALFEventRouter' NTFYURL="alm_host:8080/almzmfalf/services/ZMFALFEventRouter"

RUNFOR

Purpose	Sets a time interval after startup when the Sernet started task is automatically shut down.
Application(s)	All applications running under the Sernet started task
Format	RUNFOR=HhhMmm hh hours are preceded by "H" and mm minutes are preceded by "M". Hours are specified before minutes.
Valid Values	hh 0 to 23; values larger than 23 are reset to 23. mm 0 to 59; values larger than 59 are reset to 59.
Default Value	Omitting this parameter allows Sernet to run until it is shut down externally
When Required	Never
Comments	Messages issued: SER0811I Automatic termination (expiration) set for 10:55 SER0940I Warning; EXPIRE/RUNFOR time nearing: 10:55 SER0941I EXPIRE/RUNFOR time reached; Shutting down The shutdown time may be changed to a later time with the EXTEND modify command.
Examples	RUNFOR=H23M59 Shut down Sernet after 23 hours and 59 minutes RUNFOR=M999 Shut down Sernet after 59 minutes RUNFOR=H1 Shut down Sernet after one hour

SDNOTIFY

Purpose	Deprecated. Use the **TIMEOUT** keyword option instead.

STAX

Purpose	Controls the behavior of the **ATTN** and **PA1** keys in applications running under Sernet.
Application(s)	All applications.
Format	STAX=NO
Valid Values	NO Make Sernet compatible with ISPF session managers that use the ATTN and PA1 keys to switch sessions. Users are not disconnected from ISPF applications running under Sernet when they press the **ATTN** or **PA1** keys.
Default Value	Omitting this parameter is the same as STAX=YES, which disconnects users from applications running under Sernet when they press the PA1 or ATTN keys.
When Required	Never
Examples	STAX=NO Do not disconnect users from ISPF applications running under Sernet when they press **ATTN** or **PA1**.

SUBSYS

Purpose	Specifies the subsystem ID for the Sernet started task.
Application(s)	All applications running under the Sernet started task.
Format	SUBSYS=x
Valid Values	One character: 0-9, A-Z, @, #, $, and blank (null) **Note:** It is strongly recommended that you do not use a blank (null) subsystem ID.
Default Value	Omitting this parameter sets the subsystem ID to blank (null)
When Required	**It is strongly recommended that you do not use a blank (null) subsystem ID.**
Examples	SUBSYS=A Subsystem identifier is A SUBSYS=5 Subsystem identifier is 5

TCPIP

Purpose	Identifies the TCP/IP server that handles communication for the Sernet started task.
Application(s)	ChangeMan ZMF, ChangeMan ZDD
Format	TCPIP=tcpiproc TCPIP.smfi=tcpiproc
Valid Values	tcpiproc Procedure name. smfi SMFID of another z/OS system.

Default Value	For TCP/IP 3.1, no entry is the same as TCPIP=TCPIPROC.
	For TCP/IP 3.2 and higher, Sernet 5.2 and higher ignores this keyword. Program SERCOMM dynamically deduces the name of the TCP/IP started task.
When Required	TCP/IP 3.1.
Comments	The IBM default name for TCPIP address spaces is TCPIP.
Examples	TCPIP=TCP TCP/IP procedure name is TCP.
	TCPIP.SMFA=JOBTCPIP TCP/IP procedure name is JOBTCPIP on system whose SMFID is SMFA.

TIMEOUT

Purpose	Specifies a period of inactivity after which a user is automatically detached by a "watchdog" facility. TIMEOUT can also be specified as SDNOTIFY.
Application(s)	All applications running under the Sernet started task
Format	TIMEOUT=nnn
	TIMEOUT=(nnn,nnn)
Valid Values	nnn Number of inactive minutes before user is detached. Minutes may be preceded by "M". Value is from 1 to 32767.
	If only one value nnn is specified, it applies to all users and clients. If two values are specified (nnn,nnn), the first value applies to TSO users and the second value applies to other clients such as ZDD or TeamTrack.
Default Value	Omitting the keyword lets users run no matter how long their session is inactive
When Required	Use of this parameter to enable an automatic detach is recommended.
Comments	A ChangeMan ZMF edit-in-stage session using ISPF edit turns off the timer for TIMEOUT.
	The inactivity limit set with z/OS parameter JWT(0100) in SYS1.PARMLIB(SMFPRM00) takes precedence over TIMEOUT and will end your TSO session with ABEND=S522 even if you are in a ZMF edit-in-stage session. However, if your ZMF administrator sets application parameter EDIT STAGING RECOVERY MODE ON to YES, you can recover the temporary file containing your edited text.
Examples	TIMEOUT=50 Detach users who are inactive for 50 minutes
	TIMEOUT=M090 Detach users who are inactive for 90 minutes

TRACE

Purpose	Sets initial trace options at Sernet startup.
Application(s)	Sernet, ChangeMan ZMF
Format	TRACE(SER|CMN,n,n,n...)

Valid Values	SER	Sernet
	CMN	ChangeMan ZMF
	n	Trace class, an integer 1-32:
		1 All CMN traces not listed below
		2 CMNATACH user conversation incoming request and outgoing response. I.E. "TRACE IN …" and "TRACE OUT …". CMNENTFY event notification. CMNSCHED CMN scheduler
		3 VSAM CMAST data interim results. This shows long and short CMAST data in a common format
		4 CMNVRLIO VSAM i/o response (major/minor/key/rc/fdbk)
Default Value	Omitting the keyword leaves no tracing enabled	
Examples	TRACE(CMN,1,2) TRACE on for ChangeMan ZMF, classes 1 and 2	
	TRACE(SER,1,2) TRACE on for Sernet, classes 1 and 2	

WARN

Purpose	Controls XML Services syntax warnings facility.
Application(s)	XML Services
Format	WARN[(YES)]
	WARN=[YES|NO]
	WARN
Default Values	Omitting the keyword leaves XML Services syntax warning disabled at Sernet startup.
When Required	Never
Comments	When SERXMLI is unable to recognize an XML tag, it can write a warning message to SERPRINT. There are three ways to enable or disable these warning messages:
	■ Sernet keyword option input to the started task at startup: WARN=[YES|NO]
	■ Sernet modify command: /F jobname,WARN,[YES|NO] See "WARN" on page 143.
	■ XML tag in the <header> of the request message: <warn>Y</warn> See the *XML Services User's Guide.*
Examples	WARN Enable XML Services syntax warning
	WARN(YES) Enable XML Services syntax warning
	WARN=YES Enable XML Services syntax warning

XML

Purpose	Disables XML Services.
Application(s)	ChangeMan ZMF
Format	XML=NO
Valid Values	NO Disables XML Services.
Default Value	Omitting this option leaves XML Services enabled.
When Required	Never

Chapter 2

SERNET Messages

This chapter describes messages issued by a SERNET started task.

Locating SERNET Messages

SERNET messages are displayed in the SERPRINT sysout dataset of the started task. Some of messages are also displayed in the JES messages sysout dataset.

SERNET Message Format

SERNET messages are displayed in the following format:

```
yyyymmdd hh:mm:ss SERnnnnt [message text]
```

The following table explains the SERnnnnt message number:

SER	SERNET mnemonic.
nnnn	A number that uniquely identifies the message. Automated operations software can use this number to trigger action or to suppress messages that clutter the operator console.
t	Type of message. Indicates whether action is required.
	E Error message - Requires action to resolve the error condition.
	I Informational message - No action required.
	T TRACE message - Displayed only when TRACE is activated on instructions from Micro Focus Customer Care to diagnose a problem.
	W Warning message.

IMPORTANT! Merge and Reconcile (M&R) messages begin with SER followed by 3 digits. Sernet messages begin with SER followed by 4 digits SER*nnnn*.

SERNET Message Descriptions

SERNET message numbers, message text, explanation, and recommended action are listed in ascending message number order.

SER0001 SERSTACK

SERSTACK - Program stack manager. SERSTACK creates a program stack environment for use by the ENTER and LEAVE macros.

SER0001T   `High program stack for {`*`program`*`} extended to {`*`integer`*`}K`

Explanation: The indicated program had to enlarge its stack of working storage above the 16M virtual storage line.

Solution: Solution: Contact Micro Focus Customer Care if this happens frequently. The module that obtains the working storage may need to be changed to get more storage initially.

SER0002T   `Low program stack for {`*`program`*`} extended to {`*`integer`*`}K`

SER0003T   `High program stack for {`*`program`*`} allocated {`*`integer`*`}K,used {`*`integer`*`}K, segments {`*`integer`*`}`

Explanation: The indicated program issues this message when it terminates to provide statistics about the amount of virtual storage it used above the 16M line.

Solution: If the address space has getmain abends or a lot of page faults then report this message to Micro Focus Customer Care. The amount of storage used might help product developers to identify the program that is using too much virtual storage above 16M.

SER0004T   `Low program stack for {`*`program`*`} allocated {`*`integer`*`}K,used {`*`integer`*`}K, segments {`*`integer`*`}`

Explanation: The indicated program issues this message when it terminates to provide statistics about the amount of virtual storage it used below the 16M line.

Solution: If the address space has getmain abends or a lot of page faults then report this message to Micro Focus Customer Care. The amount of storage used might help product developers to identify the program that is using too much virtual storage below 16M.

Solution:

SER0020I   `'{`*`reason`*`}' recall request will be issued locally for '{`*`dsname`*`}'`

Explanation: The dataset recall for dataset '*dsname*' will be issued due to '*reason*'.

Solution: This message will usually appear when a dataset is migrated to disk in which case the message can be ignored. It can also appear, though, in error circumstances in which case the problem should be reported to Micro Focus Customer Care.

SER0200 SERSUBMT

SERSUBMT - Submit jobs constructed elsewhere.

SER0200E   `Invalid data set organization`

Explanation: The offending dataset does not have a dataset organization of Physical Sequential (DSORG=PS).

Solution: Determine why the dataset was defined improperly, and re-define.

SER0201E   `Invalid record format`

Explanation: The offending dataset does not have a record format of Fixed, Fixed Blocked, Variable, or Variable Blocked (DCB=RECFM=F,FB,V,VB).

Solution: determine why the dataset was defined improperly and re-define.

SER0202E   `Unable to allocate internal reader: SVC 99 REASON CODE {`*`error code`* `+ `*`info code`*`}, {`*`svc 99 return code`*`}.`

Explanation: Dynamic allocation failed for an internal reader.

Solution: Look up the SVC 99 REASON CODE and RETURN CODE in z/OS MVS Programming: Authorized Assembler Services Guide - SA23-1371-xx, Chapter 26, section Interpreting DYNALLOC Return Codes and proceed accordingly.

SER0203E   `Unable to open internal reader`

Explanation: The OPEN for an internal reader failed.

Solution: Scan the started task SYSOUT around the time indicated in the message for any OPEN ERRORS (IEC141), look up the error in z/OS MVS System Messages, Vol 7 (IEB-IEE) SA38-0674-xx, and proceed accordingly.

SER0204E   `Unable to allocate JCL file to submit: {`*`svc 99 reason code (error code + info code)`*`}, {`*`svc 99 return code`*`}.`

Explanation: Dynamic allocation failed for a JCL dataset, used for submitting jobs.

Solution: Look up the SVC 99 REASON CODE and RETURN CODE in z/OS MVS Programming: Authorized Assembler Services Guide - SA23-1371-xx, Chapter 26, section Interpreting DYNALLOC Return Codes and proceed accordingly.

SER0205E   `Unable to open JCL file to submit`

Explanation: OPEN failed for a JCL dataset used for submitting jobs.

Solution: Scan the started task SYSOUT and SYSLOG around the time indicated in the message for any OPEN ERRORS (IEC141), look up the error in z/OS MVS System Messages, Vol 7 (IEB-IEE) SA38-0674-xx, and proceed accordingly.

SER0206E   `No JOB card found`

Explanation: Probably a finger check.

Solution: Inspect your jobcard, what changed? Are you using SEREX002, the SERNET JOB card modification exit? This exit is invoked by SERSUBMT every time a job is to be submitted. Did this code change? Try disabling this exit and see if that helps to isolate the problem.

SER0207E   `Unable to write to internal reader`

Explanation: Hard to believe this message is possible if you've successfully gotten past the dynamic allocation and the open.

Solution: Scan the started task SYSOUT and SYSLOG for any related messages (device failure, someone popped the wrong cable, power failure, outstanding reserve by another system maybe a backup job). Contact Micro Focus Customer Care.

SER0208E   `Member {`*`member`*`} not found`

Explanation: PDS MEMBER doesn't exist in specified DATASET, probably a finger check.

Solution: Verify the MEMBER and DATASET exist

`SER0209E`	`Member name missing`

Explanation: A PDS MEMBER name must be specified that identifies the JOB under submission.

Solution: Determine the missing MEMBER name and include it where appropriate.

`SER0210E`	`Job rejected by installation exit`

Explanation: SEREX002, the SERNET JOB card modification exit, is invoked by SERSUBMT every time a job is to be submitted. This exit rejected the job submission.

Solution: This could be working as designed, check the exit. For example, if your logic is based on USERID (X02$USER) assure you are testing/inspecting/looking at all 8 bytes of the field.

`SER0220I`	`Job {`*`jobname`*`} {`*`jobid`*`} submitted`

Explanation: Normal JOB Submit, JOBNAME and JOBID of submitted JOB.

`SER0221I`	`Job {`*`jobname`*`} {`*`jobid`*`} submitted <Notify step added>`

Explanation: STEP added in SEREX002, JOB Submitted, JOBNAME and JOBID of submitted JOB.

`SER0222I`	`Job {`*`jobname`*`} {`*`jobid`*`} submitted <Modified to notify>`

Explanation: JCL modified in SEREX002, JOB Submitted, JOBNAME and JOBID of submitted JOB.

`SER0230E`	`{`*`jobname`*`} {`*`Parameters for serex002`*`} Submit: Job rejected by installation exit`

Explanation: WTO version of SER0210E, with storage addresses for the JOBCARD and SEREX002 parameters.

Solution: Use these addresses when shooting a dump, or when using IPCS.

`SER0231I`	`{`*`jobname`*`} {`*`parameters for serex002`*`} Submit: Job JOBNAME JOBID submitted`

Explanation: WTO version of SER0220I, with storage addresses for the JOBCARD and SEREX002 parameters

Solution: Use these addresses when shooting a dump, or when using IPCS.

SER0300 SERHFS

SERHFS - general purpose interface routine for performing operations on zFS files. The messages issued by this module correspond to messages in SYS1.MACLIB(BPXYERNO), OpenMvs Component Return/Reason Codes. The corresponding BPXYERNO Return Code (Errno) is listed for each SERHFS message.

- 00 - get error message
- 01 - list files and directories
- 02 - create directory
- 03 - remove directory
- 04 - create symbolic link
- 05 - rename file or directory

- 06 - delete file or symbolic link

- 07 - query file time stamp

- 08 - generate hash token

- 09 - open file

- 10 - close file

- 11 - read file

- 12 - write file

- 13 - seek to file position

- 14 - change file size

- 15 - set dub defaults for subtasks

SER0300I   `Error in the domain.`

Explanation: BPXYERNO EDOM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0301I   `Result is too large.`

Explanation: BPXYERNO ERANGE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0302I   `Permission is denied.`

Explanation: BPXYERNO EACCES

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0303I   `The resource is temporarily unavailable.`

Explanation: BPXYERNO EAGAIN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0304I   `The file descriptor is incorrect.`

Explanation: BPXYERNO EBADF

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0305I   The resource is busy.

Explanation: BPXYERNO EBUSY

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0306I   No child process exists.

Explanation: BPXYERNO ECHILD

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0307I   A resource deadlock is avoided.

Explanation: BPXYERNO EDEADLK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0308I   The file exists.

Explanation: BPXYERNO EEXIST

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0309I   The address is incorrect.

Explanation: BPXYERNO EFAULT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0310I   The file is too large.

Explanation: BPXYERNO EFBIG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0311I   A function call is interrupted.

Explanation: BPXYERNO EINTR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0312I   The parameter is incorrect.

Explanation: BPXYERNO EINVAL

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0313I   An I/O error occurred.

Explanation: BPXYERNO EIO

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0314I   The file specified is a directory.

Explanation: BPXYERNO EISDIR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0315I   Too many files are open for this process.

Explanation: BPXYERNO ENFILE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0316I   Too many links occurred.

Explanation: BPXYERNO EMLINK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0317I   The filename is too long.

Explanation: BPXYERNO ENAMETOOLONG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0318I   Too many files are open in the system.

Explanation: BPXYERNO ENFILE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0319I   No such device exists.

Explanation: BPXYERNO ENODEV

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0320I   No such file, directory, or IPC member exists.

Explanation: BPXYERNO ENOENT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0321I   The exec call contained a format error.

Explanation: BPXYERNO ENOEXEC

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0322I   No locks are available.

Explanation: BPXYERNO ENOLCK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0323I   Not enough space is available.

Explanation: BPXYERNO ENOMEM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0324I   No space is left on the device.

Explanation: BPXYERNO ENOSPC

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0325I   The function is not implemented.

Explanation: BPXYERNO ENOSYS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0326I   Not a directory.

Explanation: BPXYERNO ENOTDIR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0327I   The directory is not empty.

Explanation: BPXYERNO ENOTEMPTY

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0328I   The I/O control operator is inappropriate.

Explanation: BPXYERNO ENOTTY

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0329I   No such device or address exists.

Explanation: BPXYERNO ENXIO

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0330I   The operation is not permitted.

Explanation: BPXYERNO EPERM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0331I   The pipe is broken.

Explanation: BPXYERNO EPIPE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0332I   The specified file system is read only.

Explanation: BPXYERNO EROFS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0333I   The seek is incorrect.

Explanation: BPXYERNO ESPIPE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0334I   No such process or thread exists.

Explanation: BPXYERNO ESRCH

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0335I   A link to a file on another file system was attempted.

Explanation: BPXYERNO EXDEV

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0336I   The parameter list is too long, or the message too large for the buffer.

Explanation: BPXYERNO E2BIG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0337I   A loop is encountered in symbolic links.

Explanation: BPXYERNO ELOOP

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0338I   The byte sequence is illegal.

Explanation: BPXYERNO EILSEQ

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0339I   A value is too large to be stored in the data type.

Explanation: BPXYERNO EOVERFLOW

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0340I   OpenMVS kernel is not active.

Explanation: BPXYERNO EMVSNOTUP

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0341I   Dynamic allocation error.

Explanation: BPXYERNO EMVSDYNALC

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0342I   Catalog Volume Access Facility error.

Explanation: BPXYERNO EMVSCVAF

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0343I   Catalog obtain error.

Explanation: BPXYERNO EMVSCATLG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0344I   Process initialization error.

Explanation: BPXYERNO EMVSINITIAL

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0345I   A MVS environmental or internal error has occurred.

Explanation: BPXYERNO EMVSERR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0346I   Bad parameters were passed to the service.

Explanation: BPXYERNO EMVSPARM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0347I   zFS encountered a permanent file error.

Explanation: BPXYERNO EMVSPFSFILE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0348I   zFSzFS encountered a system error.

Explanation: BPXYERNO EMVSPFSPERM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0349I   SAF/RACF extract error.

Explanation: BPXYERNO EMVSSAFEXTRERR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0350I   SAF/RACF error.

Explanation: BPXYERNO EMVSSAF2ERR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0351I   Access to the OpenMVS version of the C RTL is denied.

Explanation: BPXYERNO EMVSNORTL

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0352I   The password for the specified resource has expired.

Explanation: BPXYERNO EMVSEXPIRE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0353I   The new password specified is not valid.

Explanation: BPXYERNO EMVSPASSWORD

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0354I   A WLM service ended in error.

Explanation: BPXYERNO EMVSWLMERROR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0355I   Socket number assigned by client interface code is out of range.

Explanation: BPXYERNO EIBMSOCKOUTOFRANGE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0356I   Socket number assigned by client interface code is already in use.

Explanation: BPXYERNO EIBMSOCKINUSE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0357I   Offload box error.

Explanation: BPXYERNO EOFFLOADboxERROR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0358I   Offload box restarted.

Explanation: BPXYERNO EOFFLOADboxRESTART

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0359I   Offload box down.

Explanation: BPXYERNO EOFFLOADboxDOWN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0360I   Already a conflicting call outstanding on socket.

Explanation: BPXYERNO EIBMCONFLICT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0361I   Request cancelled via SockCallCancel request.

Explanation: BPXYERNO EIBMCANCELLED

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0362I   SetIbmOpt specified a name of a PFS that either was not configured or was not a Sockets PFS.

Explanation: BPXYERNO EIBMBADTCPNAME

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0363I   Block device required.

Explanation: BPXYERNO ENOTBLK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0364I   Text file busy.

Explanation: BPXYERNO ETXTBSY

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0365I   The descriptor is marked nonblocking, and the required function cannot complete immediately.

Explanation: BPXYERNO EWOULDBLOCK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0366I   Operation now in progress.

Explanation: BPXYERNO EINPROGRESS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0367I   Operation already in progress.

Explanation: BPXYERNO EALREADY

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0368I   `Socket operation on a non-socket.`

Explanation: BPXYERNO ENOTSOCK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0369I   `Destination address required.`

Explanation: BPXYERNO EDESTADDRREQ

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0370I   `The message is too large to be sent all at once, as required.`

Explanation: BPXYERNO EMSGSIZE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0371I   `The socket type is incorrect.`

Explanation: BPXYERNO EPROTOTYPE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0372I   `Protocol or socket option not available.`

Explanation: BPXYERNO ENOPROTOOPT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0373I   `Protocol not supported.`

Explanation: BPXYERNO EPROTONOSUPPORT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0374I   `Socket type not supported.`

Explanation: BPXYERNO ESOCKTNOSUPPORT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0375I   The referenced socket is not a type that supports the requested
                function.

Explanation: BPXYERNO EOPNOTSUPP

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0376I   Protocol family not supported.

Explanation: BPXYERNO EPFNOSUPPORT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0377I   The address family is not supported.

Explanation: BPXYERNO EAFNOSUPPORT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0378I   The address is already in use.

Explanation: BPXYERNO EADDRINUSE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0379I   Cannot assign requested address.

Explanation: BPXYERNO EADDRNOTAVAIL

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0380I   Network is down.

Explanation: BPXYERNO ENETDOWN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0381I   Network is unreachable.

Explanation: BPXYERNO ENETUNREACH

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages
Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler
Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages
and Codes - SA23-2284-xx and proceed accordingly.

SER0382I   Network dropped connection on reset.

Explanation: BPXYERNO ENETRESET

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0383I   Software caused connection abort.

Explanation: BPXYERNO ECONNABORTED

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0384I   Connection reset by peer.

Explanation: BPXYERNO ECONNRESET

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0385I   Insufficient buffer space available.

Explanation: BPXYERNO ENOFBOS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0386I   The socket is already connected.

Explanation: BPXYERNO EISCONN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0387I   The socket is not connected.

Explanation: BPXYERNO ENOTCONN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0388I   Cannot send after socket shutdown.

Explanation: BPXYERNO ESHUTDOWN

Solution: Look up value for BPXYERNO in z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0389I   Too many references: cannot splice.

Explanation: BPXYERNO ETOOMANYREFS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0390I   Connection timed out.

Explanation: BPXYERNO ETIMEDOUT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0391I   The attempt to connect was rejected.

Explanation: BPXYERNO ECONNREFUSED

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0392I   Host is down.

Explanation: BPXYERNO EHOSTDOWN

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0393I   No route to host.

Explanation: BPXYERNO EHOSTUNREACH

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0394I   Too many processes.

Explanation: BPXYERNO EPROCLIM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0395I   Too many users.

Explanation: BPXYERNO EUSERS

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0396I   `Disc quota exceeded.`

Explanation: BPXYERNO EDQUOT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0397I   `Stale NFS file handle.`

Explanation: BPXYERNO ESTALE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0398I   `Too many levels of remote in path.`

Explanation: BPXYERNO EREMOTE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0399I   `Device is not a stream.`

Explanation: BPXYERNO ENOSTR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0400I   `Timer expired.`

Explanation: BPXYERNO ETIME

Solution: Look up value for BPXYERNO in z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0401I   `Out of streams resources.`

Explanation: BPXYERNO ENOSR

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0402I   `No message of the desired type.`

Explanation: BPXYERNO ENOMSG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0403I   Trying to read unreadable message.

Explanation: BPXYERNO EBADMSG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0404I   Identifier removed.

Explanation: BPXYERNO EIDRM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0405I   Machine is not on the network.

Explanation: BPXYERNO ENONET

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0406I   Object is remote.

Explanation: BPXYERNO ERREMOTE

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0407I   The link has been severed.

Explanation: BPXYERNO ENOLINK

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0408I   Advertise error.

Explanation: BPXYERNO EADV

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0409I   srmount error.

Explanation: BPXYERNO ESRMNT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0410I   `Communication error on send.`

Explanation: BPXYERNO ECOMM

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0411I   `Protocol error.`

Explanation: BPXYERNO EPROTO

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0412I   `Protocol error.`

Explanation: BPXYERNO EMULTIHOP

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0413I   `Cross mount point.`

Explanation: BPXYERNO EDOTDOT

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0414I   `Remote address change.`

Explanation: BPXYERNO EREMCHG

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0415I   `The asynchronous I/O request has been canceled.`

Explanation: BPXYERNO ECANCELLED

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0416I   `Socket send/receive gotten out of order.`

Explanation: BPXYERNO ETcpOutOfState

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0417I   Unattached streams error.

Explanation: BPXYERNO ETcpUnattach

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0418I   Streams push object error.

Explanation: BPXYERNO ETcpBadObj

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0419I   Streams closed error.

Explanation: BPXYERNO ETcpClosed

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0420I   Streams link error.

Explanation: BPXYERNO ETcpLinked

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0421I   Tcp error.

Explanation: BPXYERNO ETcpErr

Solution: Look up value for BPXYERNO in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx and proceed accordingly.

SER0500 SERVFILE

SERVFILE - Service for FILE objects

- ACCESS   - Check callers access
- COPY   - Copy a file
- CREATE   - Create a new file
- DELETE   - Delete a file
- DOWNLOAD - Copy a file down to a client
- EXPORT   - Export file to an MVS dataset
- IMPORT   - Import file from an MVS dataset
- LIST   - Provide a list of files

- ◾ MKDIR   - Make a new file directory
- ◾ RENAME   - Rename file
- ◾ RMDIR   - Remove a file directory
- ◾ UPLOAD   - Copy a client file up to a HOST file

SER0500I   `Service completed.`

Explanation: Requested service completed successfully.

SER0501I   `End of data.`

Explanation: Normal end of file reached.

SER0502E   `The pathname is not valid. It must start with a slash (/).`

Explanation: The pathname does not begin with a /.

Solution: Check the pathname and correct.

SER0503E   `zFS Error: {`*`serhfs error code`*`}`

Explanation: An error was received by SERHFS.

Solution: Refer to SERHFS messages above.

SER0504E   `The MVS dataset failed to allocate.`

Explanation: Unable to locate the MVS dataset.

Solution: Check the spelling of the DDNAME and the associated DSNAME.

SER0505E   `The MVS dataset failed to open successfully.`

Explanation: Located the dataset but couldn't open it.

Solution: Assure the DSNAME is a valid dataset.

SER0506E   `Input/output error on the MVS dataset.`

Explanation: An I/O error occurred on the dataset entered.

Solution: Check logs for further messages about the dataset.

SER0507W   `zFS file exists but access is denied.`

Explanation: You do not have access to the requested zFS file.

Solution: Contact your security administrator.

SER0508E   `Permissions must be exactly 3 bytes in the range 0-7.`

Explanation: Permissions length must not exceed 3 bytes and contain a numeric value between 0-7.

Solution: Correct input and resubmit.

SER0509I   `File uploaded: Time {`*`hh`*`:`*`mm`*`}.`

Explanation: Information, file was uploaded at HH:MM.

SER0510I   `Confirm file upload request.`

Explanation: Information only.

SER0511W   `File upload request cancelled.`

Explanation: Warning, the request to upload specified file has been `cancelled`.

SER0512I	List service complete. The list is empty.
	Explanation: Information only.

SER0513E	Copy service from path cannot be a directory.
	Solution: Confirm and correct path.

SER0514E	Download bypassed due to finger print match.
	Explanation: Displays when an attempt is made to download a file that already exists identified through finger print match.
	Solution: Verify correct file is being downloaded.

SER0515E	Invalid data format.
	Explanation: The date format entered is incorrect YYYYMMDD.
	Solution: Correct format and reenter date.

SER0517I	The compress flag is invalid. Valid values are Y, C, E, N, H, L, D or y.
	Solution: Enter one of the acceptable values.

SER0518E	The date supplied contains a non-numeric character.
	Explanation: Invalid date format; date must be numeric.
	Solution: Enter date with numeric characters.

SER0519E	Cannot specify file with recurse
	Explanation: Bad combination resulting in recursion.
	Solution: Remove recursion.

SER0520E	Path start with a slash (/).
	Explanation: The pathname does not begin with a /.
	Solution: Check the pathname, correct and resubmit.

SER0521E	Error creating local session.
	Explanation: Internal error.
	Solution: Retry; If problem persists call Micro Focus Customer Care.

SER0522E	Error reading specified file/path.
	Explanation: Unable to read the file/path entered.
	Solution: Verify correct file/path and resubmit.

SER0523I	File ENQ obtained.
	Explanation: Information only.

SER0524E	Requested File ENQ not available.
	Explanation: Enqueue failed.

SER0525E	Error setting up thread-level security for {*userid*}; RC={*return code*}, RS={*reason code*}
	Explanation: Unable to create security environment for your userid. Additional messages will be displayed based on the circumstances of the error.

SER0526E   Error during ACEE creation for {*member*}; SAF RC={*return code*}, RACF
                  RC={*return code*}.

                  Explanation: Unable to create security environment. Additional
                  messages will be displayed based on the circumstances of the error.

SER0600 SERVER

This is the main driver module for the SerNet started task. SERVER attaches a subtask for
each application licensed under this facility.

SER0600E   Task abended: {*abend-code*} - Contact SerNet Administrator

                  Explanation: The Sernet STC has failed.

                  Solution: Collect the STC output from JES/SDSF, note the location of any dumps.

SER0601I   Obsolete trace parameter specified - defaulted to YES

                  Explanation: An old (obsolete) format of the TRACE parameter was specified.

                  Solution: See the ChangeMan ZMF Installation Guide for TRACE keyword formats and
                  modify command options.

SER0602E   Incomplete dataset allocation information provided by SEREX006;
                  abend will be issued.

                  Explanation: Exit SEREX006 didn't populate enough fields in the X06DSECT to allow
                  either SMS or non-SMS dataset allocations.

                  Solution: Review the SEREX006 coding to ensure it populates enough fields. There are
                  comments in the supplied code to help with this.

SER0603E   TCP/IP logons will not be allowed due to an error in passticket
                  initialization.

                  Explanation: This message is displayed during startup of the SerNet started task and
                  denotes an error invoking code that implements passticket support, SERSET. TCP/IP
                  logons will be inhibited by this error; however the started task will continue with logon
                  support being provided by Cross Memory Services (XMS). Additional messages will be
                  issued as WTO's and can be found in the JESMSGLG dataset.

                  Solution: If the problem persists, contact Micro Focus Customer Care.

SER0604I   The prefix for the dynamic allocation of log datasets is {*prefix*}.

                  Explanation: Information, displays the prefix defined in global administration for your
                  user-specific log datasets.

SER0610I   Server started with reusable ASID

                  Explanation: The SERNET started task was started with z/OS START command
                  parameter REUSASID=YES to make the ASID reusable.

                  Solution: This message is information only.

SER0611I   Storage protection is being used.

                  Explanation: The SerNet started task initialized with the PROTECT=YES parameter
                  coded in SERSYSIN. This parameter provides protection for vital internal control blocks.

SER0612I   Storage protection is not being used.

                  Explanation: The SerNet started task initialized with the PROTECT=NO parameter coded
                  in SERSYSIN.

SER0614I   `Client Pack Registrar Refresh Requested`

Explanation: This advises that a CPR REFRESH operator command has been issued, and the Shared Memory Object will be preserved and set up as in the beginning.

Solution: Information only.

SER0615I   `Client Pack Registrar Restart Requested`

Explanation: This advises that a CPR RESTART operator command has been issued, and the Shared Memory Object will be discarded and replaced with a new one.

Solution: Information only.

SER0650E   `Invalid trace command syntax`

Explanation: The TRACE command has been used improperly.

Solution: See the ChangeMan ZMF Installation Guide for Trace keyword formats and modify command options.

SER0660I   `Unix services are available`

Explanation: At startup, SERVER has verified that UNIX System Services are available on this system and that appropriate security elements are defined in your security system.

Solution: No action required.

SER0661W   `Warning; Unix services are not available on this system`

Explanation: At startup, SERVER cannot find elements of UNIX System Services at startup.

Solution: If you want to use any z/OS UNIX service, TCP/IP, or other functions that require the kernel services, have your systems programmer activate z/OS UNIX in full function mode.

SER0662W   `Warning; Invalid UID. Unix services disabled`

Explanation: There is a problem with the security setup for this SERNET instance.

Solution: See the instructions in the ChangeMan ZMF Installation Guide for setting up SERNET security for UNIX System Services.

SER0663W   `Security profiles for Unix services not correctly configured. Unix services disabled`

Explanation: At startup, SERVER executed RACROUTE REQUEST=AUTH and determined that appropriate security permissions are not granted to the userid for this started task to allow it to access UNIX System Services functions.

Solution: Ensure that started task user ID is either running as UID 0 or has both of the following:

- Update access to BPX.SERVER in the FACILITY class.

- Read access to SUPERUSER.FILESYS in the UNIXPRIV class.

SER0664W   `Warning; Add a TIMEOUT value for improved storage utilization and performance.`

Explanation: This message is a warning that a zero TIMEOUT value has been adopted for this instance of the SerNet started task. This is due to either not providing a TIMEOUT specification in SERSYSIN or specifying TIMEOUT=0. The implication of TIMEOUT=0 is that the started task will continue to manage idle user tasks and this is a cost in terms of both processing and storage.

SER0670E   ARM registration failed, RC={*return code*}, RS={*reason code*}; SERNET server or STCnn won't be restarted in the event of failure.

Explanation: Displays when ARM registration requested via ARM=YES specification in SERSYSIN has failed. Refer to SYS1.MACLIB(IXCYARM) and the IBM manual MVS Programming: Sysplex Services Reference for additional information on displayed return and reason codes.

Solution: Contact Micro Focus Customer Care.

SER0671W   ARM requested but disabled in Sysplex; STC won't be restarted in the event of failure.

Explanation: Displays when ARM registration requested via ARM=YES specification in SERSYSIN and the facility is not active.

Solution: Activate ARM support in XCF and restart the SerNet started task.

SER0672I   Server SERNET successfully registered with ARM and will be restarted in the event of failure.

Explanation: Information, the started task has successfully registered with ARM and will be restarted if the task fails.

SER0673E   ARM de-registration failed, RC={*return code*}, RS={*reason code*}.

Explanation: ARM de-registration failed withe the return and reason code displayed. The values for these codes are explained in SYS1.MACLIB(IXCYARM) and the IBM manual MVS Programming: SYSPLEX Services Reference.

Solution: Contact Micro Focus Customer Care.

SER0674I   STC successfully de-registered from ARM.

Explanation: Information.

SER0675W   RACF LISTUSER command failed, SRC={*system rc*}, RC={*return code*}, RS={*reason code*}.

Explanation: The command that failed is meant to verify the presence of an OMVS segment for the userid under which the SerNet started task is running. Since the command failed, that verification can not be done so the started task will still initialize but be aware that if the OMVS segment is missing from the userid, then runtime errors might occur.

Solution: Contact Micro Focus Customer Care.

SER0676E   No OMVS segment defined for user {*user id*}.

Explanation: The OMVS segment is missing from the userid, then runtime errors might occur.

Solution: Add an OMVS segment to the userid.

SER0700I   CPU ID: {*cpu-id*}, Company: {*company*}

Explanation: Sernet Capacity (MSU) report information.

SER0701I   Product: {*product-id*} Name: {*product-name*}

Explanation: Sernet Capacity (MSU) report information.

SER0702I   Capacity MSU: {*range*} Hours: {hours}

Explanation: Sernet Capacity (MSU) report information.

SER0703I	Report Time : {*date/time*} Hours: {*hours*} Key: {*key*}

Explanation: Sernet Capacity (MSU) report information.

SER0704I	Machine type: {*mach. type*}, Model: {*model*}, LPAR: {*lpar*} / {*int*}.

Explanation: Information; Displays the machine, model number and LPAR of the started task you are currently accessing. For example:
SER0704I Machine type: 2096, Model: S02, LPAR: D001 / 3

SER0705I	LPAR Capacity MSU: {*number*}-{*number*}, Hours: {*num of hours*}.

Explanation: Information; Displays LPAR capacity between specific hours.

SER0800I	SerNet - Initialization in progress: CSA={*size of csa in hex*}

Explanation: Information, size of Common Storage Area below 16MB.

SER0801I	Execution parameters specified:

Explanation: Information, list of SERNET KEYWORD parameters for this execution of the Sernet started task.

SER0802E	Error: Parameters could not be loaded from DDNAME: {*ddname*}

Explanation: Severe error, the STC fails at initialization. Something is amiss with the DDNAME specified for SERNET KEYWORD startup parameters.

Solution: Check the spelling of the DDNAME parameter, the DDNAME in the JCL for the Sernet started task, the DSN (dataset name) for the corresponding DDNAME. Check the spelling of the MEMBER name if this is a partitioned dataset.

SER0803E	Error: Unrecognized parameter keyword: {*unrecognized keyword*}

Explanation: Severe error, the STC fails at initialization due to the UNRECOGNIZED KEYWORD.

Solution: Check the spelling of the UNRECOGNIZED KEYWORD. Consult the Sernet Installation guide for KEYWORD formats.

SER0804W	Obsolete parameter ignored: {*obsolete parameter*}

Explanation: An old parameter was used.

Solution: If this keyword needs updating, consult the ChangeMan ZMF Installation and Migration guides. If this parameter is no longer relevant, remove it.

SER0805E	Error: Unrecognized parameter value: {*unrecognized value*}

Explanation: Severe error, the STC fails at initialization due to the UNRECOGNIZED VALUE.

Solution: Check the spelling of the UNRECOGNIZED VALUE. Consult the ChangeMan ZMF Installation guide for KEYWORD formats.

SER0806E	Error: Invalid parameter value length: {*invalid parm*}

Explanation: Severe error, the STC fails at initialization due to the length of the INVALID PARM.

Solution: Examine the INVALID PARM, consult the ChangeMan ZMF Installation Guide, correct, and re-submit.

SER0807E   `Error: Invalid parameter value syntax: {`*`invalid value`*`}`

Explanation: Severe error, the STC fails at initialization due to the syntax of the INVALID VALUE.

Solution: Examine the INVALID VALUE, consult the ChangeMan ZMF Installation Guide, correct, and re-submit.

SER0808E   `Error: Parameter value not numeric: {`*`invalid value`*`}`

Explanation: Severe error, the STC fails at initialization due to the syntax of the INVALID VALUE.

Solution: Examine the INVALID VALUE, consult the ChangeMan ZMF Installation Guide, correct, and re-submit.

SER0809E   `Error: DDNAME only allowed within JCL parm: {`*`invalid value`*`}`

Explanation: Severe error, the STC fails at initialization due to the syntax of the INVALID VALUE. The DDNAME keyword may only be specified as a PARAMETER on the EXEC card for the Sernet started task.

Solution: Remove the DDNAME keyword from the parameter dataset specified by the DDNAME PARAMETER on the EXEC card for the Sernet started task.

SER0810I   `SerNet server "{`*`ssid`*`}" initialized and ready for communications`

Explanation: Information, the Sernet started task identified by SSID successfully initialized.

SER0811I   `Automatic termination (`*`expiration`*`) set for {`*`hh`*`:`*`mm`*`}`

Explanation: Information. Local time for automatic termination. This is controlled by the EXPIRE keyword, which specifies local time for automatic termination.

SER0812E   `Error: Parameter value not within valid range: {`*`invalid value`*`}`

Explanation: Severe error, the STC fails at initialization due to the syntax of the INVALID VALUE.

Solution: Examine the INVALID VALUE, consult the ChangeMan ZMF Installation Guide, correct, and re-submit.

SER0820E   `No applications started under SERNET, or no valid licenses for the applications found; Shutting down`

Explanation: No application keyword options (apl=port) were input to program SERVER in the SERNET started procedure.

Solution: Code at least one apl=port SERNET keyword option in the PARM parameter for program SERVER, or code it in the library member referred to by the DD name specified in the DDNAME=ddname keyword option. See the ChangeMan ZMF Installation Guide for the format of SERNET keyword options and for methods to input keyword options to a SERNET started task.

Note: If at least one apl=port keyword option is input to SERNET, but there are no valid licenses for that application, then the application is shut down and a LICnnnnE message is displayed to describe the license error. The started task is not shut down, even if no applications are left running.

SER0821I   `{`*`product`*`} licensed`

Explanation: Informational. The PRODUCT has a valid license.

SER0822E   SerNet already active for subsystem ID "{*ssid*}" - Terminating

Explanation: Severe error, the Sernet started task fails at initialization. There is already an active Sernet started task for SSID.

Solution: Probable user error, determine why an attempt was made to start a Sernet started task for the already and currently active SSID.

SER0823E   Name/token service failed: RC={*name token return code*}

Explanation: Severe error, the Sernet started task fails at initialization. An IEANTCR call to create a name/token pair failed.

Solution: Look up the NAME TOKEN RETURN CODE in z/OS V1R8.0 MVS Authorized Assembler Services Reference EDT-IXG (SA22-7610-13). Contact Micro Focus Customer Care.

SER0824I   Attempting to load {*feature*} to determine if feature present;
                  Please ignore any associated CSV003I message.

Explanation: Information, checking for FEATURE presence.

SER0825I   {*module*} found

Explanation: Information, program named module was found.

SER0826I   {*module*} not found

Explanation: Information, program named module was found.

SER0830I   DB2 subtask attached: {*ssid*}

Explanation: Information, a task for the DB2 subsystem with ID ssid has been attached to the Sernet started task.

SER0831I   IMS subtask attached: {*ssid*}

Explanation: Information, a task for the IMS subsystem with ID ssid has been attached to the Sernet started task.

SER0832I   Address Space Manager active

Explanation: Information, the Address Space Manager is active.

SER0833I   XML Data Space Manager active

Explanation: Information, the XML Data Space Manager is active.

SER0834I   MailMan Interface active

Explanation: Information, the MailMan Interface is active.

SER0835I   TCB Manager active.

Explanation: Information only.

SER0836E   ATTACH failed: RC={*return code*}

Explanation: Severe error, the Sernet started task fails at initialization.

Solution: Look up the ATTACH RETURN CODE in z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN (SA22-7609-08) and proceed accordingly.

SER0837I   Waiting for application to initialize: {*application*}

Explanation: Information, waiting for the APPLICATION to initialize.

SER0838I	Application initialization complete: {*application*}

Explanation: Information, application initialized.

SER0839I	Posted application to start: {*application*}

Explanation: Information, application posted.

SER0840I	Midnight crossover; Applications notified; It is now {*weekday*}

Explanation: Information, the day of the week is now weekday.

SER0850I	Operator command: {*command*}

Explanation: Operator command *command* was issued for the started task.

Solution: Information only, no action required.

SER0851W	Unrecognized operator command ignored: {*command*}

Explanation: Warning, the command is unrecognized.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the error, re-issue the command.

SER0852E	Application unrecognized; Please reenter

Explanation: The application specified on a Sernet started task modify (F) command is invalid.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the error, re-issue the command.

SER0853E	Application unavailable; Please try later

Explanation: The application specified on a Sernet started task modify (F) command is unavailable.

Solution: This may be working as designed. If this command needs to be issued, determine why the application is unavailable at this time.

SER0854E	Required command parameter missing

Explanation: Sernet started task modify (F) missing parameter error.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the missing parameter, re-issue the command.

SER0855E	Invalid command syntax; Please reenter

Explanation: Sernet started task modify (F) command syntax error.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the correct syntax, re-issue the command.

SER0856W	Unexpected operator START command ignored

Explanation: Warning, an unexpected start command was encountered.

Solution: Determine the origin of the start command.

SER0857W	Unexpected MOUNT command ignored

Explanation: Warning, an unexpected mount command was encountered.

Solution: Determine the origin of the mount command.

SER0858W	Command of unknown type "{*verb*}" (in cibverb) ignored

Explanation: Sernet started task modify (F) command syntax error, unrecognized verb.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the correct verb, re-issue the command.

Explanation:

SER0859W	Null operator command ignored

Explanation: Sernet started task modify (F) command syntax error, null operator command ignored.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the correct syntax, re-issue the command.

SER0860W	The specified trace ID is incorrect / not numeric

Explanation: The ID on a trace modify command must be numeric.

Solution: Issue a modify trace command with no operands to display the current trace IDs. Select the correct ID and re-issue the command.

SER0861W	Do not specify an ID when turning on trace

Explanation: Trace modify command syntax error.

Solution: Examine the command, consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands to determine the correct syntax, re-issue the command.

SER0862W	The specified trace entry cannot be located

Explanation: The ID on a trace modify command cannot be located.

Solution: Issue a MODIFY TRACE command with no operands to display the current trace IDs. Select the correct ID and re-issue the command.

SER0863W	A trace with these criteria is already active

Explanation: Modify trace command collision, this flavor of trace already exists.

Solution: Use the existing TRACE criteria, or turn off the trace with this criteria and re-issue the command.

SER0864I	NETTRACE enabled

Explanation: Information, the Sernet NETTRACE facility has been enabled.

SER0865I	NETTRACE modified:

Explanation: Information, the Sernet NETTRACE facility has been modified.

SER0866I	NETTRACE disabled:

Explanation: Information, the Sernet NETTRACE facility has been disabled.

SER0867E	NETTRACE not active

Explanation: A NETTRACE MODIFY command was issued, but the NETTRACE facility is not enabled.

Solution: Enable the NETTRACE facility. consult the ChangeMan ZMF Installation Guide, Appendix B Modify Commands.

SER0868I   `EPvt used={`*`integer`*`}K avail={`*`integer`*`}K  Pvt used={`*`integer`*`}K avail={`*`integer`*`}K`

Explanation: Information, memory utilization for PRIVATE and EXTENDED PRIVATE areas.

SER0870I   `Expiration time extended to {`*`hh:mm`*`}`

Explanation: Information, a MODIFY EXTEND COMMAND was issued, the new time for Sernet started task is HH:MM.

SER0871E   `No expiration set; Extension not possible`

Explanation: A MODIFY EXTEND COMMAND was issued, there is no RUNFOR or EXPIRE KEYWORDS in the startup parms for this Sernet started task.

Solution: Specify RUNFOR or EXPIRE in the startup parms for this Sernet started task.

SER0872I   `Address Space Manager attached`

Explanation: Information, the task for the Address Space Manager has been attached to the Sernet started task.

SER0873E   `Rejected; Unknown task {`*`task`*`}`

Explanation: An unknown task was specified in a Sernet MODIFY COMMAND.

Solution: Correct the command and re-submit.

SER0874W   `Rejected; Address Space Manager already attached`

Explanation: Warning, an attempt was made to attach the Address Space Manager, but it is already attached and active.

Solution: Determine the source of the attach, examine SERPRINT and SYSLOG for any related messages.

SER0875I   `Address Space Manager detached`

Explanation: Information, the Address Space Manager has been detached.

SER0876W   `Rejected; Address Space Manager not currently attached`

Explanation: Warning, an attempt was made to detach the Address Space Manager, but the Address Space Manager is not attached.

Solution: Determine the source of the detach, examine SERPRINT and SYSLOG for any related messages.

SER0879W   `{`*`command`*`} command not implemented; Future usage`

Explanation: Warning, this command isn't ready.

SER0880I   `TEST Turned on.`

Explanation: Information, command was issued to turn TEST on.

SER0881I   `TEST Turned off.`

Explanation: Information, command was issued to turn TEST off.

SER0882I   `TRACE Turned on.`

Explanation: Information, TRACE command was issued to turn on trace ID.

SER0883I   `TRACE ID {`*`id`*`} turned off`

Explanation: Information, a MODIFY TRACE command was issued to turn off trace ID.

SER0884I	TRACE Turned on with message option: {*trace option*}

SER0885I   TRACE ID {*id*} Toggled on.

Explanation: Information, TRACE command was issued to toggle on trace ID.

SER0886I   TRACE ID {*id*} Toggled off

Explanation: Information, TRACE command to toggle trace ID is off.

SER0890E   Unicode initialization failed with rc={*return code*}, rsn={*reason code*}.

Explanation: See z/OS Unicode Services User's Guide and Reference for additional information.

SER0891E   Unicode conversion failed with rc={*return code*}, rsn={*reason code*}.

Explanation: See z/OS Unicode Services User's Guide and Reference for additional information.

SER0892I   Trace ID {*id*} removed

Explanation: Information, a MODIFY TRACE command was issued to remove trace ID *id*.

SER0893I   XDC not active.

Explanation: Information, XDC is not active.

SER0900W   No active ASID is defined. Specify ASID in start up parameters.

Explanation: Warning, ASID must be defined in the started task.

SER0901I   Number of Address Spaces:{*integer1*} Expiration Timeout:{*integer2*} Minutes

Explanation: Information from a MODIFY ASIDS COMMAND, showing the number (*integer1*) of address spaces and the timeout value in minutes (*integer2*).

SER0902I   Initiator:{*initiator*} Classes:{*classes*} Maximum:{*int1*} Active:{*int2*}

Explanation: Information, in response to a MODIFY ASINITS COMMAND, displays the initiator *classes*, maximum number (*int2*) of active address spaces, and current number (*int2*) of active address spaces for the given *initiator*.

SER0903I   Jobname:{*jobname*} Class:{*class*} Expires:{*hh*:*mm*} Parms:{*parms*}

Explanation: Information, a MODIFY ASIDS command was issued to display address space activity. The jobname, class, expiration time (*hh*:*mm*) and parameters (*parms*) are displayed for active address spaces.

SER0904I   {*integer*} active address spaces are running at this time.

Explanation: Information, displays the number (*integer*) of active address spaces.

SER0910I   TCPIP Shutdown Started.

Explanation: Information, TCPIP shutdown has been started.

SER0911I   TCPIP Shutdown Complete.

Explanation: Information, TCPIP shutdown is complete.

SER0912W   `TCPIP Shutdown already in progress.`

Explanation: Warning, TCPIP is in the process of shutting down.

SER0913I   `TCPIP Started.`

Explanation: Information, TCPIP has started.

SER0914I   `TCPIP Startup complete.`

Explanation: Information, TCPIP startup has completed.

SER0915I   `TCPIP Start Requested`

Explanation: Information, a TCPIP START has been requested.

SER0916I   `TCPIP Stop Requested`

Explanation: Information, a TCPIP STOP was requested.

SER0917I   `TCPIP Restart Requested`

Explanation: Information, a TCPIP RESTART was requested.

SER0918I   `TCPIP Start already in progress.`

Explanation: Information, a TCPIP start has already been started.

SER0919I   `TCPIP Stop already in progress.`

Explanation: Information, a stop for TCPIP has been requested for but there is already a TCPIP stop in progress already.

SER0920I   `Current Users:{`*`integer1`*`} Maximum Users:{`*`integer2`*`}`

Explanation: Information, in response to a MODIFY USERS command, displays the current number of users (integer1) and the maximum number of allowed users (integer2).

SER0921I   `No traces are currently active`

Explanation: Information, in response to a MODIFY TRACE command.

SER0922I   `Trace information follows:`

Explanation: Information, in response to a MODIFY TRACE command.

SER0923I   `Trace ID: {`*`integer`*`} User ID: {`*`userid`*`}`

Explanation: Information, in response to a MODIFY TRACE command, displays the trace ID (integer) for the userid.

SER0924I   `Trace started for user: {`*`userid`*`}, ID: {`*`integer`*`}`

Explanation: Information, a trace for user userid was started with ID (integer).

SER0930E   `ISGQUERY error, RC={`*`return code`*`}, RS={`*`reason code`*`}.`

Explanation: Displays when an inquiry on enqueue status using IBM's ISGQUERY interface failed with the return and reason codes shown.

Solution: Contact Micro Focus Customer Care.

SER0931I   `User: {`*`userid`*`} QName: {`*`qname`*`} RName: {`*`rname`*`}`

Explanation: Information only. Displays when issuing the ENQ operator command and details an outstanding enqueue.

NOTE The replacement values in the message are as follows:

User: aaaaaaaa bbbb QName: cccccccc RName: ddddddddddddddddd

- aaaaaaaa='SYSTEM' or userid enqueue was raised on behalf of

- bbbb = Shr or Excl- enqueue type

- cccccccc = the QNAME value from the ENQ invocation

- ddddddddddddddddd = the RNAME value from the ENQ invocation

SER0932E Enqueue not found, QName: {*qname*} RName: {*rname*}

Explanation: QName: cccccccc RName: ddddddddddddddddd was not found. IBM's ISGQUERY interface indicated no outstanding enqueue exists for the specified QName/RName combination.

Solution: Ensure the QName/RName combination exists by reissuing the ENQ command.

SER0933I Enqueue successfully released.

Explanation: Information, a dataset was successfully dequeued.

SER0934E Only Names of type SPFEDIT, SYSIEWLP, SYSDSN and CHGMAN may be dequeued.

Explanation: An unacceptable name type has been entered.

Solution: Correct and resubmit.

SER0940I Warning; EXPIRE/RUNFOR time nearing: {*hh:mm*}

Explanation: Information, the Sernet started task is approaching shutdown time of *hh:mm*.

SER0941I EXPIRE/RUNFOR time reached; Shutting down

Explanation: Information, the Sernet started task will be shutting down.

SER0942I SHUTDOWN time reached; Shutting down

Explanation: Information, the Sernet started task is shutting down.

SER0943I SerNet orderly SHUTDOWN initiated; Grace period of {*integer*} minutes allowed

Explanation: A SHUTDOWN request for the SERNET started task has been made. If users are connected, the shutdown will proceed after the expiration of the specified grace period minutes. If no users are connected when the SHUTDOWN request is made, the shutdown proceeds immediately.

Solution: Users must complete their current tasks and logoff.

SER0944I SerNet orderly SHUTDOWN initiated; No grace period; Immediate termination

Explanation: SERNET is shutting down, and users are detached immediately.

Solution: No action required, but users are not allowed to complete their tasks.

SER0945I Notifying applications of pending shutdown.

Explanation: SERNET is shutting down and notification have been issued.

Solution: Users must logoff.

SER0946I   `Notifying applications to terminate immediately.`

Explanation: Information, a notification has been sent to SERNET to terminate immediately.

SER0947I   `Waiting for application tasks to terminate.`

Explanation: Information, waiting for SERNET started task to terminate.

SER0948I   `Waiting for system tasks to terminate.`

Explanation: Information, the system tasks are terminating.

SER0949I   `Final shutdown. Detaching all tasks.`

Explanation: Information, all tasks are being detached for final shutdown.

SER0950W   `Timeout waiting for application {`*`application`*`} to terminate.`

SER0951E   `Timeout waiting for application {`*`application`*`} to terminate. Forcing abend with dump.`

Explanation: The application termination has timed out forcing an abend with a dump.

Solution: Review the dump/problem resolution, contact Micro Focus Customer Care for further assistance.

SER0952W   `Intentional abend <S0C3> requested`

Explanation: Informational warning, the Sernet started task is terminated with a S0C3, at the request of a MODIFY ABEND command.

Solution: Save the output of the started task for dump/problem resolution.

SER0953E   `Task abnormally terminated: Comp={`*`code`*`} Function={`*`main`*`}/{`*`sub`*`} NSI={`*`next sequential instruction`*`}`

Explanation: Severe error, the Sernet started task has abnormally terminated with system completion code *code*. The failing module's function (*main*) and subfunction (*sub*) are displayed along with the address of the instruction after the one which just failed (*next sequential instruction*).

Solution: Save the output of the started task for dump/problem resolution, contact Micro Focus Customer Care.

SER0954E   `Task abnormally terminated: Comp={`*`code`*`} Function={`*`main`*`}/{`*`sub`*`} NSI={`*`next sequential instruction`*`} (dump suppressed)`

Explanation: Severe error, the Sernet started task has abnormally terminated with system completion code *code*. The failing module's function (*main*) and subfunction (*sub*) are displayed along with the address of the instruction after the one which just failed (*next sequential instruction*).

Solution: Save the output of the started task for dump/problem resolution, contact Micro Focus Customer Care.

SER0955I   `Recovery routines: Cleanup={`*`cleanup`*`} Retry={`*`retry`*`}`

Explanation: Information, displays the names of the Cleanup (*cleanup*) and Retry (*retry*) routines for the ESTAE exit, established for attached users.

SER0956I   `Abending program: {`*`program`*`}+{`*`offset`*`}`

Explanation: Information, the name of the abending program (*program*) and the hexadecimal offset to the failing instruction (*offset*).

SER0957I PSW at time of abend: {*pswhigh*} {*pswlow*}

Explanation: Information, displays an eight byte PSW at the time of ABEND, the high order bytes are in *pswhigh*, the low order bytes are in *pswlow*.

SER0958I GPR {*reglabel*}: {*regcon1*} {*regcon2*} {*regcon3*} {*regcon4*}

Explanation: Information, displays the contents of GPRs (*reglabel*) in *regcon1*, *regcon2*, *regcon3*, *regcon4*. This is repeated three times to display all sixteen GPRs.

SER0959I XML syntax warning has been turned off

Explanation: Information, the XML syntax warning feature has been disabled.

SER0960I XML syntax warning has been turned on

Explanation: Information, the XML syntax warning feature has been enabled.

SER0961I XML syntax warning is: {*value*}

Explanation: The current status (*value*) of the XML warning feature.

SER0962E Invalid syntax for WARN= command

Explanation: Error, the WARN command has a syntax error.

Solution: Check the ChangeMan ZMF Installation Guide, Appendix B for the format of the WARN command.

SER0963E Invalid trace component entered (Must be 'CMN' or 'SER').

Explanation: An invalid trace component has been entered. The allowed trace components are CMN or SER.

Solution: Enter a valid trace component and resubmit.

SER0964I Trace classes set.

Explanation: Information.

SER0965I User or class must be specified.

Explanation: Information, you must specify user or class.

SER0966I Classes active for component '*component name*'.

Explanation: Information, class status for specified component.

SER0967I Task abnormally terminated: Comp={*completion code*}
Function={*function1*}/{*function2*} NSI={*next sequential instruction*}.

Explanation: Information; Displays when the task has terminated based on the specific function. See dump that is produced.

SER0968I Task abnormally terminated: Comp={*completion code*}
Function={*function1*}/{*function2*} NSI={*next sequential instruction*}
(*dump suppressed*).

Explanation: Information; Displays when the task has terminated based on the specific function. No dump is produced for this message.

SER0969I IPv6 support has been turned on.

Explanation: Information.

SER0982I   `STOP command Issued`

Explanation: Information, a STOP command was issued.

SER0983E   `Not APF authorized - terminating`

Explanation: Severe error, the Sernet started task terminates.

Solution: Determine why the Sernet program libraries are not authorized.

SER0989I   `Waiting for application to terminate: {app}`

Explanation: Information, issued during shutdown processing, waiting for a Sernet application (*app*) to terminate.

Solution: If the Sernet started task is not shutting down, this message may identify the reason. For example, if there are currently ZDD users logged on, the Sernet started task is waiting for the XCH application to terminate.

SER0990I   `Statistics; Real time:        {HnnMnnSnn}`

Explanation: Information, shutdown statistics, the elapsed time for the Sernet started task in hours (*Hnn*) minutes (*Mnn*) and seconds (*Snn*).

SER0991I   `Statistics; Applications:     {integer}`

Explanation: Information, shutdown statistics, the number (*integer*) of active Sernet started task applications (XCH, CMN, AST etcetera).

SER0992I   `Statistics; Users attached:   {integer}`

Explanation: Information, shutdown statistics, the number (*integer*) of users attached during this run of the Sernet started task.

SER0993I   `Statistics; Called count:     {integer}`

Explanation: Information, shutdown statistics, the number (*integer*) of calls.

SER0994I   `Statistics; Concurrent max:   {integer}`

Explanation: Information, shutdown statistics, the maximum number of concurrent users during this run of the Sernet started task.

SER0995I   `Statistics; Abended:          {integer}`

Explanation: Information, shutdown statistics, the number (*integer*) of programs which had abnormal endings (ABENDs).

SER0996I   `Statistics; Detached inactive: {integer}`

Explanation: Information, shutdown statistics, the number (*integer*) of inactive users detached at termination of the Sernet started task.

SER0997I   `Trace user set.`

Explanation: Information, a trace command to set the user has been issued.

SER0999I   `SerNet server "{ssid}" termination complete, RC={code}`

Explanation: Information, the Sernet Started task with sub system ID (*ssid*) was terminated, ending with a return code of *code*.

SER1000 SERCOMM

Provide general purpose communications API.

SER1000I   `{`*`sernet-task`*`}` `TCP/IP` `environment` `active` `at` `{`*`ip-address`*`}..{`*`port`*`}`

Explanation: Information, the TCP/IP environment for application (*sernet-task*) is active with IP address *ip-address* and port *port*.

SER1001I   `{`*`sernet-task`*`}` `TCP/IP` `local` `host` `name:` `{`*`host`*`}`

Explanation: Information, the local host name is *host*.

SER1005E   `{`*`sernet-task`*`}` `Invalid` `TCP/IP` `protocol` `header` `received:` `{`*`header`*`}` `{`*`header`*`+4}`

Explanation: Error, an invalid TCP/IP protocol header was received for *sernet-task*. The first four bytes of the header are in *header*, the next four bytes of the *header* are in *header*+4.

Solution: Contact Micro Focus Customer Care.

Solution:

SER1014E   `XCH` `*Error*` `Specified` `port` `number` `already` `in` `use:{`*`pppp`*`}`

Explanation: The port specified {*pppp*} is in use elsewhere.

SER1017E   `The` `specified` `TCP/IP` `procedure` `is` `not` `active:` `{`*`procedure`*`}`

Explanation: Error, the TCPIP procedure name is incorrect.

Solution: Determine the correct procedure name for TCP/IP and re-submit.

SER1018I   `The` `following` `TCP/IP` `procedures` `are` `active:` `{procedure}`

Explanation: Information, the name of the active TCP/IP procedure.

SER1019E   `There` `are` `no` `TCP/IP` `procedures` `active`

Explanation: Information, there are no active TCP/IP procedures.

SER1020I   `{`*`sernet-task`*`}` `TCP/IP` `{`*`function`*`}:` `RC={`*`code`*`}` `ErrNo={`*`error`*`}` `TCA={`*`tca-address`*`}` `Task={`*`sernet-task`*`}` `TCB={`*`tcb-address`*`}` `TIE={`*`tie-address`*`}` `Sock={`*`socket`*`}`

Explanation: TCP/IP error information for function *function*.

Solution: Look up the *error* in z/OS V2R1.0 Communications Server: IP and SNA codes - SC27-3648-xx and proceed accordingly.

SER1023E   `There` `are` `no` `TCP/IP` `procedures` `active`

Explanation: Error, Sernet cannot use TCP/IP because TCP/IP is not active.

Solution: If TCP/IP is required for Sernet, determine why there are no active TCP/IP procedures on this LPAR.

SER1024E   `{`*`sernet-task`*`}` `SERCOMM` `Attach:` `TCA={`*`tca-address`*`}` `unknown` `connection` `method` `{`*`connection method`*`}`

Explanation: Error, an unknown connection method (*connection method*) was specified. There are two valid methods of connection, XM (Cross Memory) and TCP/IP.

Solution: Internal error, contact Micro Focus Customer Care.

SER1025E   `{`*`sernet-task`*`}` `SERCOMM` `Session` `not` `in` `SEND` `state:` `TCA={`*`tca-address`*`}` `State={`*`state`*`}`

Explanation: Error, SERCOMM expected the *sernet-task* session to be in the SEND state, instead it is in the (*state*) state.

Solution: Contact Micro Focus Customer Care.

SER1026E   `{`*`sernet-task`*`}` `SERCOMM Session not in RECEIVE state: TCA={`*`tca-address`*`}` `State={`*`state`*`}`

Explanation: Error, SERCOMM expected the *sernet-task* session to be in the RECEIVE state, instead it is in the (*state*) state.

Solution: Contact Micro Focus Customer Care.

SER1057W   `{`*`sernet-task`*`}` `SERCOMM Attach: TCA={`*`tca-address`*`}` `IP={`*`ip-address`*`}..{`*`port`*`}`

Explanation: NETTRACE information.

SER1100 SERSTMGR

Storage Manager.

SER1100T   `{`*`sernet-task`*`}` `Storage obtain: TCB={`*`tcb-address`*`}` `PSW={`*`low order fullword`*`}` `R0={`*`register0`*`}, Out: RC={`*`code`*`}` `R1={`*`register1`*`}` `Size={`*`size`*`}`

Explanation: Trace information regarding the request for storage.

SER1101T   `{`*`sernet-task`*`}` `Storage release: TCB={`*`tcb-address`*`}` `PSW={`*`low order fullword`*`}` `R0={`*`register0`*`}` `R1={`*`register1`*`}, Out: RC={`*`code`*`}` `Size={`*`size`*`}`

Explanation: Trace information regarding the request for storage.

SER1200 SERLOGER

SerNet Message Logger - WTO messages to the console or SYSLOG and write them to the log file. The default is to write messages to the log file only.

SER1200W   `Message logger Write failed to obtain storage`

Explanation: The message logger failed to write a message to the log file because it could not obtain necessary working storage.

Solution: Look for error messages in the server's joblog. If the storage shortage is caused by a storage shortage then try to increase the region size.

SER1201W   `Message logger Close failed because the caller is in cross memory mode`

Explanation: The message logger was called to close the log file but the caller was in cross memory mode. This is a logic error that should never occur.

Solution: Report this error to Micro Focus Customer Care.

SER1202W   `Serloger called to write a message but the log control block is missing`

Explanation: The message logger was called to write a message but the log control block could not be found.

Solution: Make sure Serloger is called to open the log file and build its log control block before issuing any messages. If the log was opened and has not been closed then report this error to Micro Focus Customer Care.

SER1204W   Message logger Open failed to create the log file environment

Explanation: The message logger failed to create its log file environment due to an error in one of the following initialization steps: 1. Name/Token Create (IEANTCR) 2. Load for one of the required modules 3. Open for the log file

Solution: Look for error messages in the joblog. If this is not caused by a configuration error then report this error to Micro Focus Customer Care.

SER1205W   Message logger unable to obtain XM storage because there is no Log cb

Explanation: The message logger tried to obtain storage in cross memory mode but it could not determine which TCB to use because there was no Log control block.

Solution: Report this error to Micro Focus Customer Care.

SER1206W   Message logger unable to release XM storage because there is no Log cb

Explanation: The message logger tried to release storage in cross memory mode but it could not determine which TCB to use because there was no Log control block.

Solution: Report this error to Micro Focus Customer Care.

SER1207W   Message logger request failed because the Log cb id is invalid

Explanation: Message logger Write or Close failed because the Log control block id was invalid.

Solution: Report this error to Micro Focus Customer Care.

SER1208W   Message logger Open failed because caller is in cross memory mode

Explanation: Message logger open was called in cross memory mode. This is a logic error that should not occur.

Solution: Report this error to Micro Focus Customer Care.

SER1209W   Message logger Open failed to obtain the Log cb

Explanation: The message logger failed to open the log file because it could not obtain storage for the Log control block.

Solution: Look for error messages in the server's joblog. If the storage shortage is not caused by an error then try to increase the region size.

SER1300 SERVXPCC

This Module is used for peer to peer communication with the client workstation.   It is a component of the X:CHANGE messenger facility. This module is invoked internally, users don't normally have access to this function. The following example shows the KEYWORDS generated for a representative SERVXPPC invocation:

```
//LISTC102 JOB  (85012,MS75),'SPETH',MSGCLASS=X
//VTAMDEF  EXEC  PGM=DFHCSDUP
//STEPLIB  DD  DSN=SYS2.CICSTS.SDFHLOAD,DISP=SHR
//DFHCSD  DD  DSN=CICS.DFHCSD,DISP=SHR
//SYSPRINT  DD  SYSOUT=*
//SYSIN  DD  *
*
LIST LIST(C102LIST) OBJECTS
/*
//        EXEC $SR8NTFY
//*
//*
//*
//XPPCIN  DD   *
MSG='%SPETH '
A=10.30.224.13,P=09327
RECVNAME=,RECVID=USER25,PRODUCT=XChange,TOKEN=059BC8E5
SMF=(C001,DEFAULT)
/*
```

SER1300E   `SERVXPPC Invalid parameter syntax`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1301E   `SERVXPPC Invalid parameter for TCP/IP`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1302E   `SERVXPPC MSG= text must be enclosed in single quotes`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1303E   `SERVXPPC MSG= text exceeds maximum length of 128 characters`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1304E   `SERVXPPC Unrecognized keyword: {`*`keyword`*`}`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1305E   `SERVXPPC Required keyword missing: Specify A= or N=`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1306E   `SERVXPPC SMF= parameters must be enclosed in parentheses`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1307E   `SERVXPPC Communication failure`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1308I   `SERVXPPC Notify user IP: {`*`ip-address`*`} Msg: {`*`message`*`}`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1400 SERMODLR

Started Task Module Loader - Load, refresh and display load modules used by the SerNet started task.

SER1400E `Module name not found for {`*`command`*`} command: {`*`module`*`}`

Explanation: The named *module* was not found.

Solution: Correct the *module* name, verify the STEPLIB/JOBLIB concatenation contains the correct SERCOMM and CMNZMF load libraries.

SER1401E `Module name found but not refreshable: {`*`module`*`}`

Explanation: The *module* was found, but is not refreshable.

Solution: Recycle the Sernet started task to pick up the new module.

SER1402I `Name={`*`module`*`} old/new EPA={a`*`ddressold`*`}/{`*`addressnew`*`} RC={`*`code`*`}`

Explanation: Information, the module *module* at *addressold* was replaced with a new copy at *addressnew*.

SER1403I `Name={`*`module`*`} old/new token={`*`old-token`*`}/{`*`new-token`*`}`

Explanation: Information, the *old-token* for *module* was replaced with *new-token*.

SER1404I `Name={module} EPA={address} token={token}`

Explanation: Information, in response to a MODLIST command (for example MODLIST,ALL), displays the entry point address *address* and *token* for the named module *module*.

SER1405I `Name={`*`module`*`} {`*`module-function`*`}`

Explanation: Information, in response to a MODLIST command (for example MODLIST,ALL), displays the *module-function* for the named module.

SER1406I `Name={`*`module`*`} Module prologue description suppressed - nonstandard`

Explanation: Information, the named module has a nonstandard header, no prologue description is available.

SER1410T `SERMODLR VSAM Open RC={`*`code`*`}`

Explanation: TRACE information, the SERMODLR VSAM OPEN ended with a return code of CODE.

SER1600 SERVSRVC

Make a nested service request - Invokes a service from within a service. NOT TO BE CONFUSED with "within SerNet STC" It attaches SERVSRVA and waits for it to finish.

SER1600E `Unable to attach SERVSRVA`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER1601E `CMNVROUT did not find service: {`*`major-function`*`} {`*`minor-function`*`} {`*`parameter`*`}`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER1650E   `Invalid length passed: {`*`length`*`}`

Explanation: Internal error, contact Micro Focus Customer Care.

SER1700

SER1721E   `Creation of token Serena.ASinit failed, R15={`*`xx`*`}`

Explanation: While executing as a part of address space creation module SERASINI invoked IBM's IEANTCR service which failed with the return code shown.

Solution: Report this error to Micro Focus Customer Care.

SER1731E   `Retrieval of token Serena.ASinit failed, R15={`*`xx`*`}`

Explanation: Module SERMOUNT invoked IBM's IEANTRT service which failed with the return code shown.

Solution: Report this error to Micro Focus Customer Care.

SER1732E   `Failure in extraction of address space parm, R15={`*`xx`*`}, R0={`*`xx`*`}`

Explanation: Module SERMOUNT invoked IBM's ASEXT service which failed with the return and reason codes shown.

Solution: Report this error to Micro Focus Customer Care.

SER1733E   `{`*`xxx`*`} XM post failed, R15={`*`yyyyyyyy`*`}, R0={`*`zzzzzzzz`*`}`

Explanation: One of a sequence of cross-memory POSTs failed with the return and reason codes shown.

Solution: Report this error to Micro Focus Customer Care.

SER1734E   `Recall R15={`*`xxxxxxxx`*`}, R0={`*`xxxxxxxx`*`} for {`*`dsname`*`}`

Explanation: The recall of the specified dataset ended with the return and reason codes shown.

Solution: This message is for information only.

SER1800 SERTCBM

SER1802I   `TCB manager termination started.`

Explanation: Shutdown of the SerNet started task has started so the TCB manager has been told to quiesce.

Solution: Information only

SER1803I   **Explanation:** `TCB manager termination ended.`

Solution: The TCB manager has finished its quiesce process.

Solution: Information only

SER1804I   `TCB manager used {`*`xxx`*`} of {`*`yyy`*`} TCBs.`

Explanation: This message is issued to permit tuning of the TCB parameter in SERSYSIN. It shows the high water mark for the number of TCBs in concurrent use by the TCB manager facility, *xxx*, and the TCB setting *yyy*.

Solution: If there's a sizeable difference between *xxx* and *yyy* then it might be a good idea to reduce the TCB setting in SERSYSIN. Note that the minimum and maximum values for this keyword are 8 and 64.

SER2000 SERMAIN

SerNet applications driver - This module is responsible for initializing the communications environment within the MVS side of SerNet. There is also some cross-memory responsibility. SERMAIN maintains the listening process for TCP/IP. This module is also responsible for processing commands passed through from SERVER, for example:

- F SERx,SHUTDOWN

- F SERx,XCH,USERS

SER2000I   `{`*`sernet-task`*`} Serena Network shutting down; Please exit!`

Explanation: Information, the Sernet started task is shutting down.

SER2001I   `{`*`sernet-task`*`} Warning! 60 seconds before detaching inactive task: {userid}`

Explanation: Information, userid is approaching the inactive TIMEOUT interval specified when the Sernet started task was initialized.

SER2003I   `Ending {`*`sernet-task`*`} session for inactive user {`*`userid`*`} with TCA={`*`tca-address`*`}`

Explanation: Information, userid with tca-address has been de-activated due to reaching the inactive TIMEOUT interval specified at Sernet initialization.

SER2004I   `{`*`sernet-task`*`} Detach user {`*`userid`*`}: TCA={`*`tca-address`*`} IP={`*`ip-address`*`}..{`*`port`*`}`

Explanation: Information, a request has been made to detach *userid* with *tca-address* and *ip-address/port.*

SER2005I   `{`*`sernet-task`*`} Detach user {`*`userid`*`}: TCA={`*`tca-address`*`} ASID={`*`asid`*`}`

Explanation: Information, a request has been made to detach *userid* with *tca-address* and *asid.*

SER2006E   `{`*`sernet-task`*`} CMNSTART unavailable; Application CMN terminated: S{`*`load-abend-code`*`}-{`*`load-reason code`*`}`

Explanation: Error, unable to load module CMNSTART, the Sernet started task fails at initialization.

Solution: Look up the *load-abend-code* and *load-reason code* in z/OS MVS System Codes, SA38-0665-xx, and proceed accordingly. If the *load-abend-code* ends in '78', try increasing the region size and re submit.

SER2007W   `Detaching stalled {`*`sernet-task`*`} subtask for user {`*`userid`*`} with TCA={`*`tca-address`*`}`

Explanation: Sernet has detected and detached a stalled userid.

Solution: Check for any outstanding TAPE mounts, check if the stalled userid is waiting for a migrated dataset, check for any outstanding REPLIES at the z/OS CONSOLE.

SER2009I   `{sernet-task} Users: {integer}.`

Explanation: User count.

SER2010I   `{`*`sernet-task`*`}` `###<User_ID><T_Elapsed><T_LastAct><Partner`
               `Identifier> Users={`*`integer`*`}`

   Explanation: Information, in response to a MODIFY USERS command, report header for
   information that follows in message (S) SER2011I. Displays the total elapsed time
   (T_Elapsed), last active time (T_LastAct), PartnerIdentifier (usually IP address) and the
   number of active users (*integer*).
   Example output from a MODIFY STC,USERS command:
   SER0850I Operator command: USERS
   SER0920I Current Users:1 Maximum Users:32767
   SER2010I CMN ###<User_ID><T_Elapsed><T_LastAct><Partner Identifier> Users=1
   SER2011I CMN 001 USER015 H00M00S15 H00M00S12 10.35.11.100

SER2011I   `{`*`sernet-task`*`}` `{`*`usernum`*`}` `{`*`userid`*`}` `{`*`HnnMnnSnn1`*`}`   `{`*`HnnMnnSnn2`*`}`
               `{`*`partner-id`*`}`

   Explanation: Information in response to a MODIFY USERS command, displays the USER
   NUMBER (*usernum*), total elapsed time in hours minutes and seconds (*HnnMnnSnn1*), last
   active time in hours minutes and seconds (*HnnMnnSnn2)* and IP address (*partner-id*) for
   the named userid. See SER2010I for an example (above).

SER2012I   `{`*`sernet-task`*`}` `No active users found`

   Explanation: Information, no active users.

SER2013I   `{`*`sernet-task`*`}` `<User_ID><T_Elapsed><Type><Locked_DsName(Member)...>`

               `Total={`*`integer`*`}`

   Explanation: Information, in response to a MODIFY LOCK command, report header for
   information that follows in SER2014I and/or SER2016I message (s).

SER2014I   `{`*`sernet-task`*`}` `{`*`userid`*`}` `{`*`elapsed`*`}`   `{`*`type`*`}`   `{`*`dataset`*`}`

   Explanation: Information, in response to a MODIFY LOCK command, displays the
   USERID, ELAPSED time, TYPE and DATASET name for a lock.

SER2015I   `{`*`sernet-task`*`}` `{`*`userid`*`}` `{`*`elapsed`*`}`   `{`*`type`*`}`   `{`*`dataset`*`}({`*`member`*`})`

   Explanation: Information, in response to a MODIFY LOCK command, displays the
   USERID, ELAPSED time, TYPE, DATASET, and MEMBER name for a lock.

SER2016I   `{`*`sernet-task`*`}` `No active locks found`

   Explanation: Information, in response to a MODIFY LOCK command.

SER2017E   `{`*`sernet-task`*`}` `Unable to detach user {`*`userid`*`}`

   Explanation: Sernet was unable to detach userid.

   Solution: Check SYSLOG and Sernet started task output, was the USERID active, is
   there an outstanding reply at the z/OS console, did the USERID end abnormally?

SER2018I   `{`*`sernet-task`*`}` `Detach user {`*`userid`*`}` `TCA={`*`tca-address`*`}`

   Explanation: Information, a request was issued to detach *userid* with *tca-address*.

SER2061W   `Unrecognized operator command`

   Explanation: Warning, an unrecognized operator command was issued.

   Solution: Consult the *ChangeMan ZMF Installation Guide*, Appendix B Modify
   Commands, correct the command and re-submit.

SER2113T   SERASTSK: CsvQuery says Rc: {0,X4:08} Rs: {1,X4:08} Attrs: {2,X4:08}

Explanation: To permit SERDRT operation SERASTSK will manage the presence of module SERASINI in the LPA. This message documents the results of a CSVQUERY invocation.

Solution: This message is for tracing purposes only.

Solution:

SER2114T   SERASTSK: CsvDyLpa says Rc: {0,X4:08} Rs: {1,X4:08} Erdat: {2,X8:16}

Explanation: To permit SERDRT operation SERASTSK will manage the presence of module SERASINI in the LPA. This message documents the results of a CSVDYLPA invocation.

Solution: Non-zero Rc and Rs values represent a problem that should be reported to Micro Focus Customer Care.

SER2115T   SERASTSK: Failure in trying to add SERASINI to the LPA

Explanation: An attempt at adding module SERASINI to the LPA failed.

Solution: Use of SERDRT will be restricted to asynchronous callers. Report this error to Micro Focus Customer Care

SER2116T   SERASTSK: Maximum Recall Address Spaces active

Explanation: The number of instances of SERDRT, set by the ASIDS4RECALL SERSYSIN control statement, has been reached.

Solution: New instances of SERDRT will await termination of existing instances.

SER2117T   SERASTSK: No longer at Maximum Recall Address Spaces

Explanation: The number of instances of SERDRT, set by the ASIDS4RECALL SERSYSIN control statement, has dropped below its maximum.

Solution: This message is for information only.

SER2150 SERLFLSH

SerNet Local Call Receive - SERLFLSH implements the local call version of the "flush" function for the client side. The function of SERLFLSH is similar to the cross-memory equivalent, SERXFLSH.

SER2150E   Local session disconnected from SerNet

Explanation: Internal error, contact Micro Focus Customer Care.

SER2151I   Local session disconnected from SerNet

Explanation: Information, part of shutdown processing.

SER2152E   Local receive failed: Server task completion code {CODE}

Explanation: Internal error, contact Micro Focus Customer Care.

SER2153E   Local flush operation timeout.

Explanation: Timeout error in SERLFLSH processing.

Solution: If this persists, contact Micro Focus Customer Care.

SER2200 SERDB2CA

DB2 Call Attach Facility monitoring.

SER2200I   `Attempting DB2 CAF Connect, ID={ssid}`

Explanation: Information, attempting to connect to DB2 with subsystem ID of SSID.

SER2201W   `DB2 CAF down; attempting reconnect`

Explanation: Warning, the DB2 subsystem is not available. Sernet will periodically attempt to reconnect to DB2.

SER2202W   `DB2 CAF down; attempting reconnect`

Explanation: Warning, the DB2 subsystem is not available. Sernet will periodically attempt to reconnect to DB2.

SER2203I   `DB2 CAF connect OK, ID={ssid}`

Explanation: Information, the Sernet started task has successfully connected to DB2 with sub-system ID of SSID.

SER2204I   `DB2 CAF connect OK, ID={ssid}, DB2 VRM={db2-version}`

Explanation: Information, the Sernet started task has successfully connected to DB2 with sub-system ID of *ssid* and *db2-version*.

SER2205I   `Detected DB2 "Stop Quiesce"`

Explanation: Information, the DB2 subsystem is terminating.

SER2206I   `DB2 CAF disconnect`

Explanation: Information, the Sernet started task has disconnected from the DB2 Call Attach Facility.

SER2207E   `Unable to load DSNALI: DB2 Call Attach Interface`

Explanation: Error.

Solution: Assure the DB2 SDSNLOAD dataset is available to the Sernet started task (STEPLIB/JOBLIB concatenation or LNKLST).

SER2208W   `DB2 CAF shutting Down: FORCE/ABTERM, ID={ssid}`

Explanation: Warning, the DB2 Call Attach Facility is abruptly terminating.

SER2209E   `DB2 CAF, ID={ssid} RC={code} Reason={db2-code}; CAF Problem`

Explanation: Error, the Sernet started task is unable to connect to DB2(*ssid*).

Solution: Look up the *db2-code* in DB2 Version 11 for z/OS Codes GC19-4053. This is probably a release mix-up, verify the SDSNLOAD dataset available to the Sernet started task is the same as the SDSNLOAD dataset for DB2(*ssid*).

SER2210E   `DB2 CAF, ID={ssid} RC={code} Reason={db2-code}; Subsystem problem`

Explanation: Error, the Sernet started task is unable to connect to DB2(*ssid*).

Solution: Look up the *db2-code* in DB2 Version 11 for z/OS Codes GC19-4053.

SER2211E	DB2 CAF, ID={*ssid*} RC={*code*} Reason={*db2-code*}; Subsystem problem: SUBSYS

Explanation: Error, the Sernet started task is unable to connect to DB2(*ssid*).

Solution: Look up the db2-code in DB2 Version 11 for z/OS Codes GC19-4053.

SER2212E	DB2 CAF, ID={*ssid*} RC={*code*} Reason={*db2-code*}; Subsystem problem: PLAN

Explanation: Error, the Sernet started task is unable to connect to DB2(*ssid*).

Solution: Look up the *db2-code* in DB2 Version 11 for z/OS Codes GC19-4053.

SER2250T	SERDB2CA: DB2 F1={*major-function*} F2={*minor-function*}

Explanation: Trace information

SER2300 SERIMSCA

IMS monitoring.

SER2300E	Failed to attach DFSRRC00: RC={*code*}

Explanation: The Sernet started task was unable to attach the IMS region controller.

Solution: Internal error, contact Micro Focus Customer Care.

SER2301I	Unable to load DFSRRC00, subtask terminated: RC=8

Explanation: Assure the IMS RESLIB is available to the Sernet started task (JOBLIB/STEPLIB or LNKLST).

SER2302I	IMS disconnect

Explanation: Information, part of shutdown processing.

SER2303E	PCB window {*pcbname*} not found in PSB {*psbname*}

Explanation: Internal error, contact Micro Focus Customer Care.

SER2304E	Get Next error code={*dl/i-status-code*}, RC=8

Explanation: Internal error. Look up the DL/I-STATUS-CODE in IMS Messages and Codes Reference, Volume 4: IMS Component Codes (GC18-9715-01), Chapter 8 DL/I codes. Contact Micro Focus Customer Care

SER2305E	ESTAE exit abend code: {*code*}

Explanation: The IMS region controller (DFSRRC00) has taken the ESTAE exit with abend code *code*.

Solution: Look up the code in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242, contact Micro Focus Customer Care.

SER2310E	Control region {*imsid*} abend {*code*}

Explanation: The IMS subsystem (*imsid*) has issued an abend (*code*).

Solution: Look up the code in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242, contact Micro Focus Customer Care.

SER2311E   `Control region {`*`imsid`*`} abend {`*`code`*`}: Control region down`

Explanation: The IMS subsystem (*imsid*) is terminating, and has sent a termination message (U0002) to each IMS dependent region.

Solution: This may be a normal part of shutdown processing.

SER2312E   `Control region {`*`imsid`*`} abend {`*`code`*`}: PSB not found`

Explanation: A U0428 has been received from IMS, indicating the requested PSB cannot be found.

Solution: Look up the code in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242. Determine if this is the correct PSBNAME, if the PSBNAME is correct maybe the IMSID specified at startup is invalid. Has this ever worked? If it has worked in the past, try to determine what has changed since the last time it worked.

SER2313E   `Control region {`*`imsid`*`} abend {`*`code`*`}: Application group name or resources not valid`

Explanation: IMS security violation (U0437) the requested IMS resources (LTERM, PSB, TRANSACTION CODE etc.) are not available to this dependent region (the Sernet started task). Look up the code in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242. If this is a new application assure that local security definitions have been applied.

SER2314E   `Control region {`*`imsid`*`} abend {`*`code`*`}: PSB stopped or locked, restart (/START) advised`

Explanation: The requested PSB is stopped or locked.

Solution: IMS error (U0456), determine why the PSB is locked or stopped. Issue a START command if necessary. Look up the *code* in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242.

SER2315E   `Control region {`*`imsid`*`} abend {`*`code`*`}: PSB already scheduled in another region`

Explanation: IMS error (U0457), the requested PSB is currently scheduled, no parallel scheduling has been specified in the IMSGEN for this PSB.

Solution: Determine why a duplicate job for the PSB was submitted. If parallel scheduling is desired re-examine the SCHDTYP operand on the APPLCTN macro in the IMSGEN for this PSB. Look up the CODE in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242.

SER2316E   `Control region {`*`imsid`*`} abend {`*`code`*`}: At least one data base in PSB stopped or locked`

Explanation: IMS error (U0458), at least one of the data bases for this program (PSB) has been stopped.

Solution: Determine why the data base is stopped. Look up the CODE in IMS Messages and Codes Reference, Volume 3: IMS Abend Codes GC19-4242.

SER2317E   `Control region {IMSID} abend {CODE}: Control program not active`

Explanation: IMS operational error (U0688), the IMSID control region is not active.

Solution: Determine why the IMSID control region is inactive (Is the IMSID specified at Sernet startup valid?).

SER2400 SERVMDUU

XML MDUL Unicode converter SERVMDUU is called by SERUSER to convert XML MDULs before they are compressed for transmission and just after they are decompressed after reception.

SER2400E   `Invalid SERVMDUU parameter specified: Reason={`*`reason`*`}`

Explanation: Internal Error. See the Notes in the following section on SERCHCV.

SER2401E   `Invalid record length prefix.`

SER2500 SERCHCV

SerNet Characters Converter - Converts a block of text from one CCSID to another.

Notes:

1. z/OS Administration Issues

This module uses z/OS Unicode Services. Refer to the z/OS Unicode Services User's Guide and Reference - SA38-0680-xx.

Prior to z/OS 1.7 and APARs for some earlier releases conversion may fail because the installation has not installed the required conversion definitions. The following instructions apply to such pre-z/OS 1.7 installations:

Use "D UNI,FROMID=nnnnn" and "D UNI,TOID=nnnnn" operator commands to see which conversions have been installed. The output tells you pairs of CCSIDs and the conversion technique search order for each pair. "00037-01208-ER" for example.

SERCHCV uses CCSID 00037 (U.S. EBCDIC) when it generates error response text. Therefore for UNICODE users the installation must install conversion "00037-01208-ER" (UTF-8) or "00037-01200-ER" (UTF-16).

The server's CCSID is specified by its LCLCCSID=nnnnn start parameter. The default is LCLCCSID=00037. If the server's CCSID number is "nnnnn" then, prior to dynamic conversions in z/OS 1.7, when the installation runs the CUNMIUTL utility to generate the system's conversion image they must code conversion definitions like this:

For UTF-8:

- CONVERSION 01208,nnnnn,ER;
- CONVERSION nnnnn,01208,ER;
- CONVERSION 00037,01208,ER;

For UTF-16:

- CONVERSION 01200,nnnnn,ER;
- CONVERSION nnnnn,01200,ER;
- CONVERSION 00037,01200,ER;

2. UNICODE Primer

UNICODE text may begin with a Byte-Order-Mark (BOM) that indicates the encoding, as shown in the following table.

Table 1.

CCSID	Description
01208	The highest available version of UTF-8
01200	The highest available version of UCS-2
13488	UCS-2 Unicode 2.0 and ISO/IEC 10646-1 (Subset of 01200)

The number of bytes for each UCS-2 character in UTF-8 format can be determined from the following table:

Table 2.

UCS-2 (hex)	UTF-8 (binary)	Description
0000 to 007F	0xxxxxxx	ASCII
0080 to 07FF	110xxxxx 10xxxxxx	up to U+07FF
0800 to FFFF	1110xxxx 10xxxxxx 10xxxxxx	other UCS-2

NOTE: The range D800 to DFFF is to be excluded from treatment by the third row of this table which governs the UCS-4 range 0000 0800 to 0000 FFFF.

In each of the above, a series of x's is the UCS bit representation of the character. For example, UCS-2 U0080 transforms into UTF-8 11000010 10000000.

See http://www.unicode.org/charts/ for UNICODE 8.0 character code charts i.e. the character sets (glyphs).

SER2500I   CCSID {*source-ccsid*} to {*target-ccsid*} RC={*code1*} Rsn={*code2*}, {*bytes-in-done*} of {*bytes-in-todo*} in, {*bytes-out-done*}

Explanation: Summary statistics for CCSID character conversion.

SER2501E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: CUNLCNV RC={*return code*} Rsn={*reason code*}

Explanation: The unicode conversion failed.

Solution: Look up the return code and reason code in z/OS Unicode Services User's Guide and Reference - SA38-0680-xx and proceed accordingly.

SER2502E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Invalid character in source text

Explanation: During conversion a character was encountered which is not defined in CCSID2.

Solution: Look up CUN_RS_SUB_ACT_TERM in z/OS Unicode Services User's Guide and Reference - SA38-0680-xx and proceed accordingly. If further assistance is needed contact Micro Focus Customer Care.

SER2503E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Truncated MBCS
                  character in source

Explanation: An incomplete multi byte character was found.

Solution: Look up CUN_RS_MBC_INCOMPLETE in z/OS Unicode Services User's Guide
and Reference - SA38-0680-xx and proceed accordingly. If further assistance is needed
contact Micro Focus Customer Care.

SER2504E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Unconvertible
                  character in source

Explanation: An invalid character was found in the source buffer.

Solution: Look up CUN_RS_MAL_CHAR_ACT_TERM in z/OS Unicode Services User's
Guide and Reference - SA38-0680-xx and proceed accordingly. If further assistance is
needed contact Micro Focus Customer Care.

SER2505E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Undefined CCSID
                  conversion

Explanation: The specified conversion is not supported in the current conversion image.

Solution: Use the DISPLAY UNI command as shown at the beginning of this section to
determine the current conversions. Refer to z/OS MVS System Commands - SA38-0666-
xx for the DISPLAY UNI command format. Look up CUN_RS_CCSID_NOT_SUPP in z/OS
Unicode Services User's Guide and Reference - SA38-0680-xx and proceed accordingly. If
further assistance is needed contact Micro Focus Customer Care.

SER2506E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Conversion service
                  rejected its DDA storage

Explanation: The DDA buffer is too small.

Solution: Sernet will attempt to retry the conversion with a bigger DDA buffer. Look up
CUN_RS_DDA_BUF_SMALL in z/OS Unicode Services User's Guide and Reference - SA38-
0680-xx and proceed accordingly. If further assistance is needed contact Micro Focus
Customer Care.

SER2507E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Bad stage 2 UCS-2
                  character at offset {OFFSET}

Explanation: An invalid character was encountered at OFFSET.

Solution: Look up CUN_RS_STAGE2_FAIL in z/OS Unicode Services User's Guide and
Reference - SA38-0680-xx and proceed accordingly. If further assistance is needed
contact Micro Focus Customer Care.

SER2508E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Work buffer is too
                  small

Explanation: The work buffer is too small.

Solution: Look up CUN_RS_WRK_EXH in z/OS Unicode Services User's Guide and
Reference - SA38-0680-xx and contact Micro Focus Customer Care.

SER2509E   CCSID {*ccsid1*} to {*ccsid2*} conversion failed: Output buffer full

Explanation: Output buffer too small, Sernet will try again with a bigger buffer.

Solution: Look up CUN_RS_TRG_EXH in z/OS Unicode Services User's Guide and
Reference - SA38-0680-xx and proceed accordingly. If further assistance is needed
contact Micro Focus Customer Care.

SER2510E   `Hex input data at offset {`*`offset`*`}: {`*`data`*`}`

Explanation: Input buffer for debugging purposes.

SER2511E   `Byte {`*`byte`*`}x at offset {`*`offset`*`} is undefined in CCSID {`*`ccsid`*`}`

Explanation: The content of the undefined BYTE at OFFSET for CCSID is displayed for debugging purposes.

SER3100 SERPANEL

Display information in the dynamic area of a panel instead of using ISPF table services. Called by several programs. ultra fast. These messages have a SHORT and LONG description, separated by a '|'.

SER3100I   `Command not recognized | Enter (I)nsert, (D)elete, (R)epeat, (E)dit, e(X)clude|`

Explanation: An unrecognized command has been entered.

Solution: Correct the command.

SER3101I   `Protected area | Line commands are permitted in the first two positions only`

Explanation: A line command is in the wrong spot, is should be in the two leftmost positions.

Solution: Correct the command.

SER3102I   `Invalid command | Follow "Locate" with a space and an argument up to 8 characters long`

Explanation: A locate command has been entered with invalid syntax.

Solution: Correct the command.

SER3103I   `(COMMAND) Pending | Block command {`*`command`*`) is pending`

Explanation: A COMMAND is pending.

Solution: The COMMAND is on a screen not currently visible to the user. Page forward or backward to locate the command, or enter a 'RESET ALL' to reset the COMMAND and start over.

SER3104I   `Command conflict | Block command {`*`command`*`} is pending; complete it or blank it out`

Explanation: Block COMMAND mismatch, for example a CC is entered as one block command and a DD is entered for the other block command.

Solution: The BLOCK COMMANDS must match, correct and re-enter.

SER3105I   `Invalid command | Enter "F" or "L", plus a numeric, blank or "*" on excluded lines`

Explanation: Invalid exclude reset command.

Solution: Correct the command and re-enter.

SER3106I   `Invalid command | Enter HELP for valid primary command syntax`

Explanation: ISPF command error.

Solution: Enter HELP for more information including a list of valid commands.

SER3107I   `Invalid command | Follow "Locate" or "Begin" with a numeric value from 0 to 999999`

Explanation: Invalid LOCATE COMMAND syntax.

Solution: Correct the command and re-enter.

SER3108I   `Invalid command | Enter "F"/"L"/"U", plus a numeric, blank or "*" on deleted lines`

Explanation: Invalid DELETEd LINE COMMAND.

Solution: Correct the command and re-enter.

SER3109I   `Not supported| "{`*`scroll left/scroll right`*`}" is not supported`

Explanation: SCROLL LEFT and SCROLL RIGHT are not supported.

SER3110I   `Severe error | End the session; Contact local help desk`

Explanation: Severe error.

Solution: Contact your Sernet administrator.

SER3111I   `PQUERY Service error | ISPF PQuery Service error; Contact local help desk`

Explanation: Severe error.

Solution: Contact your Sernet administrator.

SER4000 SERVDSNO

SerNet service for DSN Object - Process these requests for DATASET objects:

- AUTHCHK - Check authorization for data set
- CATALOG - Catalog a data set
- COMPARE - SERCMPAR data sets (PDS/SEQ/PAN/LIB)
- COMPAREX - COMPAREX anything to anything
- CREATE   - Create a new data set
- DATA   - Data file access, information/download
- DATABIND - Data Binary Down
- DATABINU - Data Binary Up
- DDDOWNLD - Download from a server ddname
- DELETE   - Delete a data set
- DETAIL   - Provide data set information
- DOWNLOAD - Copy a data set down to a PC file
- HMIGRATE - HSM Migrate DSN to cheaper medium
- HRECALL - HSM Recall DSN from cheaper medium
- JES4XJR - XJR; SDSF/IOF replacement
- LIST   - Provide a list of data sets
- LOCKCAN - Cancel any outstanding lock

- LOCKCHEK - Check on existence of a lock

- LOCKENQ - Issue a lock

- RELEASE - Free unused space

- RENAME   - Rename data set

- SCAN   - Scan for character string

- SCANDPND - Scan for dependencies (SCAN variation)

- SMFACTIV - Get active SMF dataset info

- SUBMIT   - Submit job, uploaded or HOST data set

- UNCATLG - Remove a data set from the catalog

- UPLOAD   - Copy a PC file up to a HOST data set

- ZIPIT   - Compress PDS

SER4000E   `End of data`

Explanation: Information, all data has been retrieved (End Of File).

SER4001E   `Job not found`

Explanation: The requested JOB does not exist.

Solution: Check the NAME and JOBID for accuracy.

SER4002E   `Spool data set not found`

Explanation: The requested JES SPOOL dataset does not exist for the given JOB.

Solution: Check the NAME, JOBID, DSID and STARTLINE for accuracy.

SER4003E   `Duplicate jobnames and no jobid specified`

Explanation: Duplicate jobnames.

Solution: Include the correct JOBID for the desired job.

SER4004E   `Not authorized`

Explanation: You are not authorized to view this job output.

Solution: Access to JES jobs is normally controlled by resource classes JESJOBS and JESSPOOL. Verify that your userid is allowed access to JES output with proper permissions to these resource classes.

NOTE Legacy SERNET exit SEREX003 also enforces restrictions on JES output access, and this exit is enabled as it is delivered to customers. If resource classes JESJOBS and JESSPOOL are activated and if appropriate rules have been established by your security administrator, we recommend that you disable exit SEREX003. Instructions for disabling this exit are provided in the *ChangeMan ZMF Customization Guide*.

SER4005E   `Invalid jobname/jobid combination`

Explanation: This JOBNAME/JOBID combination doesn't exist.

Solution: Correct the NAME or JOBID or both and re-submit.

SER4006E   `Invalid parameters`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4007E   Invalid jobid syntax

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4008E   Invalid destination specified

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4009E   Unable to process request now, try later

Explanation: Self explanatory.

Solution: Submit the request again.

SER4010E   Maximum number of jobs exceeded for job list

Explanation: Too many jobs, not enough room to list them all.

Solution: Try narrowing down the answer set by specifying the JOB NAME in the XML request.

SER4011E   Not cancelled, job is on output queue

Explanation: Self explanatory.

SER4012E   Not cancelled, active started task or TSO user

Explanation: Self explanatory.

SER4013E   Security token map failed

Explanation: Security problem.

Solution: Assure the USERID has access to these resources (JESSPOOL, JESJOBS), contact your security administrator.

SER4014E   Dynamic allocation error

Explanation: Dynamic allocation failed.

Solution: Register 0 contains the return code from the SVC 99 (dynamic allocation). Contact Micro Focus Customer Care.

SER4015E   Unable to open SYSOUT data set

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4016E   Data set is not open

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4017E   Data set positioning error

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4018E   I/O error reading SYSOUT data set

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4019E   `JES2/JES3 not available`

Explanation: You're really in trouble.

Solution: Contact Micro Focus Customer Care.

SER4020E   `Severe error`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4021E   `Invalid userid`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4022E   `Invalid system name`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4023E   `Invalid job class`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4024E   `Invalid output class`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4025E   `Invalid node name`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4026E   `Unknown error`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4100E   `*** I/O Error detected. SerNet terminated download at this point. ***`

Explanation: Data set OPEN error.

Solution: Open failure can occur for many reasons, one of which is that the VSAM file has SHAREOPTIONS=(2,3) and it is already opened elsewhere.

SER4101I   `Same fingerprint`

Explanation: Information, the files have the same fingerprint.

SER4102I   `Stamp on server older`

Explanation: Information, the file on the server (PC) is older than the file on the mainframe (z/OS).

SER4103E   `Request locked by another user`

Explanation: Self explanatory.

SER4104E   Request locked by user {*userid*}

Explanation: Self explanatory.

SER4105E   Invalid target data set organization

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4106I   Confirm data set upload request

Explanation: Internal information.

SER4107I   Confirm data set load request

Explanation: Internal information.

SER4108W   Data set upload request cancelled

Explanation: Internal warning.

SER4109W   Data set load request cancelled

Explanation: Internal warning.

SER4110E   Record format U not supported

Explanation: Only RECFM of F, FB, V, VB are supported.

SER4111E   Invalid header length; Must be 8 bytes

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4112E   No files uploaded

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4113E   No files loaded

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4114I   File uploaded

Explanation: Information.

SER4115I   Files loaded

Explanation: Information.

SER4116E   Address space creation failed

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4117E   Volume entry not found for unload data set: RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4118E   IEBCOPY failed: RC={*return code*} Reason={*reason code*}

Explanation: Sernet has encountered a problem with IEBCOPY that it can not resolve.

Solution: Record return code and reason code, contact Micro Focus Customer Care.

SER4119E   IEBCOPY failed: Comp=S{*abend-code*}-{*reason code*}

Explanation: IEBCOPY has abended.

Solution: Record abend-code and reason code, contact Micro Focus Customer Care.

SER4120E   IEBCOPY SYSPRINT file already in use; RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4121W   IEBCOPY completed with warnings; RC=4

Explanation: Internal warning.

SER4122I   User authorized: {*dataset*}

Explanation: Information, the user is authorized for access to DATASET.

SER4123W   Undefined entity: {*dataset*}

Explanation: Internal warning, DATASET is undefined.

SER4124I   Data set {*dataset*} created

Explanation: Information, DATASET is created.

SER4125E   Comparex not licensed

Explanation: Comparex is not licensed.

Solution: Contact your Sernet administrator.

SER4126E   Unable to load Comparex: RC=12

Explanation: The LOAD for Comparex failed.

Solution: Make sure the Comparex load library is available to the Sernet started task, check the STEPLIB/JOBLIB concatenation and LNKLST.

SER4127I   Data set {*dataset*} cataloged

Explanation: Information.

SER4128E   Record length exceeds maximum allowable

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4129E   File considered empty

Explanation: No records transferred to client.

SER4130E   {*dataset*} not deleted, reason={*reason code*}

Explanation: Dataset was not deleted.

Solution: Look up the SVC 99 reason code in z/OS MVS Programming: Authorized Assembler Services Guide - SA23-1371-xx, Chapter 26, section Interpreting DYNALLOC Return Codes and proceed accordingly.

`SER4131I`	`Data set {`*`dataset`*`} deleted`

Explanation: Information, the dataset was deleted.

`SER4132W`	`Data set information not available`

Explanation: The dataset may be migrated.

`SER4133I`	`HMIGRATE issued for {`*`dataset`*`}`

Explanation: Information, a request to MIGRATE the dataset was issued.

`SER4134W`	`Data set {`*`dataset`*`} already migrated`

Explanation: Warning, a request was made to MIGRATE a dataset which is already migrated.

`SER4135E`	`HMIGRATE request failed: RC={`*`return code`*`}`

Explanation: The request to MIGRATE a dataset failed.

Solution: Look up the return code in z/OS DFSMShsm Managing Your Own Data - SC23-6870-xx, Appendix B section Return Codes from User Macros, and proceed accordingly.

`SER4136E`	`HMIGRATE request failed: DFSMShsm not active`

Explanation: DFSMShsm is not active.

Solution: Start DFSMShsm.

`SER4137E`	`HMIGRATE request failed: Locate error`

Explanation: Unable to locate the target dataset (return code = 402).

Solution: The dataset may no longer exist, perhaps another user/task deleted or renamed the dataset since the last time the ZDD client refreshed the dataset list.

`SER4138I`	`HRECALL issued for {`*`dataset`*`}`

Explanation: Information, a RECALL request was issued for DATASET.

Explanation:

`SER4140E`	`HRECALL request failed: RC={`*`return code`*`}`

Explanation: The RECALL request failed.

Solution: Look up the return code in z/OS DFSMShsm Managing Your Own Data - SC23-6870-xx, Appendix B section Return Codes from User Macros, and proceed accordingly.

`SER4143E`	`Job Review not licensed`

Explanation: XCH is not licensed.

Solution: Determine why XCH is not licensed.

`SER4144E`	`Invalid request`

Explanation: Internal error, something is wrong with the JOBID for a XJR request.

Solution: Contact Micro Focus Customer Care.

`SER4145I`	`Job {`*`jobname`*`}({`*`jobid`*`}) cancelled`

Explanation: Information.

`SER4146I`	`Job {`*`jobname`*`}({`*`jobid`*`}) deleted`

Explanation: Information.

SER4147I   Job {*jobname*}({*jobid*}) data set {*dataset*} deleted

Explanation: Information.

SER4148I   Job {*jobname*}({*jobid*}) requeued

Explanation: Information.

SER4149I   Job {*jobname*}({*jobid*}) data set {*dataset*} requeued

Explanation: Information.

SER4150W   No matching data sets found

Explanation: Internal warning (no bytes used by this object).

SER4151E   Superlocate error

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4152E   Invalid data set name filter mask

Explanation: An invalid mask has been passed to SERVLDSN.

Solution: See the following discussion.

SERVLDSN performs a super locate and returns a list of data set names which match a filter provided by the caller. SERVLDSN can optionally return additional data set information from the catalog and/or VTOC.

The filter consists of a fully or partially qualified data set name. A partially qualified data set name can contain any combination of the following wild characters: "?" or "*".

?	A question mark indicates that exactly one alphanumeric or national character can occupy that position.
*	A single asterisk by itself indicates that one qualifier must occupy that position. A single asterisk within a qualifier indicates that zero or more characters can occupy that position.
**	A double asterisk indicates that zero or more qualifiers can occupy that position. A double asterisk is invalid within a qualifier. It must be preceded or followed by either a period or blank.

If any wild characters are specified in high level qualifier, all catalogs will be searched and performance will be significantly degraded.

Examples:

Filter	ABC.TEST???.D?TA
Match	ABC.TEST001.DATA
No Match	ABC.TEST001.DAATA

Filter	ABC.T*.*.DATA
Match	ABC.TEST.NEW.DATA
No Match	ABC.TEMP.VERY.OLD.DATA ABC.TEST.DATA ABC.PROD.NEW.DATA

Filter	ABC.*X*.DATA
Match	ABC.X.DATA ABC.AX.DATA ABC.AAXBB.DATA ABC.XYZ.DATA
No Match	ABC.X.Y.DATA ABC.AABB.DATA

Filter	ABC.**.DATA
Match	ABC.DATA ABC.TEMP.DATA ABC.VERY.OLD.DATA
No Match	ABC.TEMP.DATA.JUNK

SER4153E   `Invalid function code`

Explanation: Valid function codes are list names only (00), list catalog information (01), list full information (02), list VTOC (03), and free dataset list (255).

SER4154I   `Serial lock obtained`

Explanation: Information.

SER4155E   `Serial lock could not be obtained`

Explanation: Lock is already owned.

SER4156I   `Serial lock released`

Explanation: Information.

SER4157I   `Serial lock is owned`

Explanation: Information.

SER4158E   `Serial lock not found`

Explanation: Internal notification.

SER4159E   `{dataset} space release rc={svc99 return code}`

Explanation: Unable to release the UNUSED SPACE for this DATASET.

SER4160I   `Unused space released: {`*`dataset`*`}`

       Explanation: Information.

SER4161I   `Data set renamed to {`*`newname`*`}`

       Explanation: Information.

SER4162E   `Data set not cataloged`

       Explanation: Internal notification.

SER4163E   `Data set not found: OBTAIN RC={`*`return code`*`} Reason={`*`reason code`*`}`

       Explanation: Data set not found.

       Solution: Look up return code and for the OBTAIN function in z/OS DFSMSdfp Diagnosis - SC23-6863-xx.

SER4164E   `Volume not available: UCBLOOK RC={`*`return code`*`} Reason={`*`reason code`*`}`

       Explanation: The volume may be offline.

       Solution: Contact operations to verify the volume is available.

SER4165E   `Rename failed: RENAME RC={`*`return code`*`} Reason={`*`status-code`*`}`

       Explanation:

       Solution: Look up the return code and status-code for RENAME in z/OS V1R8.0 DFSMSdfp Advanced Services (SC26-7400-06) and proceed accordingly.

SER4166E   `Recatalog failed: CATALOG RC={`*`return code`*`} Reason={`*`reason code`*`}`

       Explanation: The recatalog function failed.

       Solution: Look up the return code and status-code for CATALOG in z/OS V1R8.0 DFSMSdfp Advanced Services (SC26-7400-06) and proceed accordingly.

SER4167E   `No matches found for these criteria`

       Explanation: SERSCAN was unable to find any datasets matching the specified criteria.

       Solution: Examine the criteria, determine if this is an error.

SER4168E   `Scan of a load module is not supported`

       Explanation: Scanning a load module is not supported.

       Solution: Determine why the target dataset is in load module format.

SER4169E   `Enter components in alphabetical order.`

       Explanation: Components must be in alphabetical order.

       Solution: Correct the component order.

SER4170E   `String exceeds end of record using this starting point`

       Explanation: The string is too long.

       Solution: Correct the string length.

SER4171I   `Scan request cancelled`

       Explanation: Information, the scan request has been cancelled.

SER4172E   Severe error detected while scanning

Explanation: Severe error.

Solution: Contact Micro Focus Customer Care.

SER4173I   Confirm submit jobs request

Explanation: Internal dialogue processing request.

SER4174I   Submit jobs request cancelled

Explanation: Internal dialogue processing request.

SER4175I   Data set {*dataset*} uncataloged

Explanation: Information, the dataset was uncataloged.

SER4176E   IEBCOPY compress rc={*return code*} for {*dataset*}

Explanation: Unable to compress the dataset with IEBCOPY.

Solution: Contact Micro Focus Customer Care.

SER4177I   Compress request is only valid for partitioned data set

Explanation: Information.

SER4178I   Data set {*dataset*} compressed

Explanation: Information

SER4179I   {*userid*} created data set {*dataset*}

Explanation: Information.

SER4180I   {*userid*} updated data set {*dataset*}

Explanation: Information.

SER4181I   {*userid*} updated member {*dataset*}({*member*})

Explanation: Information.

SER4182I   {*userid*} deleted data set {*dataset*}

Explanation: Information.

SER4183E   Download from ddname {*ddname*} is not supported

Explanation: Error, unsupported DDNAME.

Solution: The valid DDNAMES for the DATASET DDDOWNLD SERVICE are ZDDOPTS, SERSYSIN, and SER#PARM.

SER4184E   {*object*} {*message*} request is not allowed with product {*product*}

Explanation: A TSO user was trying to issue a forbidden (for TSO) request.

Solution: Determine why this request was attempted.

SER4185I   File uploaded: Hash <{*token*}-{*byte-count*}>

Explanation: Information.

SER4186I   File uploaded: Time <{*time*}> Size <{*size*}>.

Explanation: Displays time and size of file.

SER4187I   `Same timestamp.`

SER4188E   `Data set could not be opened.`

Explanation: Data set being opened or downloaded. There may be various causes - security, resources etc.

SER4189E   `Member not found.`

Explanation: The member entered is not found.

Solution: Correct member and resubmit.

SER4190E   `Invalid data format.`

Explanation: The date format entered is invalid.

Solution: Enter correct date format YYYYMMDD

SER4191E   `I/O error.`

Explanation: There is an input/output error on selected dataset. Look at logs for more information.

SER4192E   `Insufficient space`

Explanation: Look at logs for more information.

SER4193E   `Directory full`

Explanation: The directory you are attempting to use does not contain sufficient space for dataset allocation.

Solution: Clean up the selected directory and retry.

SER4194E   `Record format U required for binary data.`

Explanation: Displays when the record format for binary dataset is not defined as RECFM=U.

SER4195E   `Load module update is not supported`

Explanation: Update operation is not supported for load modules.

SER4226E   `{`*`userid`*`} SERVDSNO Download truncated: RecLen={`*`record-length`*`}`
                  `RecCount={`*`record-count`*`}`

Explanation: Trace information.

SER4251E   `Download from a DDname requested but the DDname is blank`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4252E   `Dataset ENQ failure Dsn='{`*`data set`*`}'.`

Explanation: Another task may be holding the dataset.

Solution: Determine the task if it is still holding and free the dataset.

SER4253E   `Unable to acquire lock table lock.`

Explanation: Internal error

Solution: If persists, contact Micro Focus Customer Care.

SER4254E   Abend while processing the lock table - see dump.

                  Explanation: Internal error

                  Solution: If the error persists, contact Micro Focus Customer Care.

SER4255E   Lock table is full.

                  Explanation: Internal error

                  Solution: If the error persists, contact Micro Focus Customer Care.

SER4256E   Lock table does not exist.

                  Explanation: Internal error

                  Solution: If the error persists, contact Micro Focus Customer Care.

SER4300 SERVMBRO

SerNet Service for Member Object - The main purpose of this module is to process the following request for MEMBER object:

- DELETE - Delete a member

- LIST   - Provide a member list

- RENAME - Rename a member

- COPY   - Copy member(s) from DSN1 to DSN2

SER4300I   Confirm copy request

                  Explanation: Internal copy dialogue confirmation request.

SER4301I   Copy request cancelled

                  Explanation: Internal copy dialogue, request cancelled.

SER4302I   Copy complete

                  Explanation: Information.

SER4303I   Copy complete: Members={*member-count*} Records={*record-count*}

                  Explanation: Information.

SER4304W   IEBCOPY completed with warnings; RC=4

                  Explanation: Information, processing continues.

SER4305E   {*dataset*} {*access-type*} denied, rc=8

                  Explanation: ACCESS-TYPE to DATASET is denied.

                  Solution: Determine why the ACCESS-TYPE is denied, contact your security administrator.

SER4306E   {*dsorg*} copy not supported: {*dataset*}

                  Explanation: DSORG not supported for COPY.

                  Solution: Correct the DATASET, determine why this DSORG occurs for the given DATASET.

SER4307E   `Open failed for data set {`*`dataset`*`}`

Explanation: Open for dataset failed.

Solution: Determine the time of the error, examine the SYSLOG and the Sernet job output for the corresponding time, look for messages related to the same DATASET.

SER4308E   `RECFM=U not supported: {`*`dataset`*`}`

Explanation: Dataset has a record format (RECFM) of U, which is not supported.

Solution: Correct the DATASET.

SER4309E   `No members matched in {`*`dataset`*`}`

Explanation: Nothing was done, no matching members in dataset.

Solution: The dataset may be empty. Examine this dataset and determine why no members matched.

SER4310E   `No members allowed from {`*`dataset`*`}`

Explanation: Nothing was done, SEREX005/Member Level Security has dis-allowed all members in dataset.

Solution: Determine if this is working the way you think it should be working. Contact your security administrator.

SER4311E   `Read error on data set {`*`dataset`*`}`

Explanation: A read error has occurred.

Solution: Note the timestamp of this message. Examine SYSLOG and the Sernet SYSPRINT/SERPRINT/JOB LOG datasets for DATASET messages corresponding to the recorded timestamp.

SER4312E   `Write error on data set {`*`dataset`*`}`

Explanation: A write error has occurred.

Solution: Note the timestamp of this message. Examine SYSLOG and the Sernet SYSPRINT/SERPRINT/JOB LOG datasets for DATASET messages corresponding to the recorded timestamp.

SER4313E   `S{ABEND-CODE}-{`*`reason code`*`} abend writing {`*`dataset`*`}`

Explanation: An error occurred while writing DATASET.

Solution: Look up ABEND-CODE and reason code in z/OS MVS System Codes, SA38-0665-xx, and proceed accordingly.

SER4314E   `IEBCOPY failed: RC={`*`return code`*`} Reason={`*`reason code`*`}`

Explanation: Internal error.

Solution: Record return code and reason code, contact Micro Focus Customer Care.

SER4315E   `IEBCOPY failed: Comp=S{`*`abend-code`*`}-{`*`reason code`*`}`

Explanation: Internal error.

Solution: Record ABEND-CODE and reason code, contact Micro Focus Customer Care.

SER4316E   `IEBCOPY SYSPRINT file already in use; RC=8`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4317I   Member {*dataset*}({*member*}) deleted

Explanation: Information

SER4318W   No members found

Explanation: Information.

SER4319I   Member {*oldname*} renamed to {*newname*}

Explanation: Information.

SER4320E   Member {*member*} already exists

Explanation: This MEMBER name already exists.

SER4400 SERVSYSO

- Service for SYSTEM object - The main purpose of this module is to process the following requests for the SYSTEM object:

- LIST   - List SerNet appls, options, interfaces

- OPER   - Issue operator commands

SER4400E   Unknown system request type: {*request*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4401E   No system information found

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER4402I   Timeout enabled

Explanation: Information, a TIMEOUT or SDNOTIFY KEYWORD was included at Sernet startup.

SER4403I   Timeout disabled

Explanation: Information, TIMEOUT has been disabled.

SER4404I   Operator command issued

Explanation: Information, an operator command was issued.

SER4407E   Unknown Product name {ppp}

Explanation: The SERVICE/PRODUCT/USERS XML service takes as input a {ppp} specification and the supplied value was unrecognised. Valid values are ALL, XCH, CMN, ZMF, RLM, ZDD, ECL and CLP.

Solution: Correct the {ppp} specification and resubmit the XML service request.

SER4408I   {n} users reported

Explanation: Gives a count on the number of users reported upon by the SERVICE/PRODUCT/USERS XML service.

SER4500 SERVMVSO

Inter-MVS Object transfer - Copy from source data set to target data set across different MVS platforms

SER4500I   `Inter-system copy request has been scheduled`

Explanation: Information.

SER4501I   `Inter-system copy request cancelled`

Explanation: Information.

SER4502I   `Confirm inter-system copy request`

Explanation: Internal copy dialogue confirmation.

SER4503E   `{`*`keyword`*`} data set is not specified`

Explanation: Internal error, data set name is blank.

Solution: Contact Micro Focus Customer Care.

SER4504E   `{`*`keyword1`*`} must be specified for {`*`keyword2`*`} data set`

Explanation: Internal dialogue error concerning UNIT or VOLUME.

Solution: Contact Micro Focus Customer Care

SER4505E   `Allocation requested, but {`*`keyword`*`} not provided`

Explanation: Internal dialogue to allocate a new data set, concerning data set characteristics (space allocation type (cylinders, tracks, blocks) primary and secondary allocation, directory block allocation, VOLUME, UNIT, RECFM, LRECL, BLKSIZE).

Solution: Contact Micro Focus Customer Care.

SER4506E   `{`*`userid/password`*`} not provided for target` *`logon`*

Explanation: Internal error, something is missing when attempting to logon to the target system.

Solution: Contact Micro Focus Customer Care.

SER4507E   `No communication type specified`

Explanation: TCP/IP is required to communicate between systems, no communication type was specified for this request.

Solution: Contact Micro Focus Customer Care.

SER4508E   `No member entries in source list`

Explanation: No members in source dataset, nothing to copy.

SER4509E   `{`*`dataset`*`} {`*`accesstype`*`} access denied`

Explanation: The user does not have the authority to perform ACCESS-TYPE on dataset.

Solution: Contact your security administrator.

SER4510E   `{`*`dsorg`*`} unsupported to copy {dataset}`

Explanation: Supported DSORGs are Panvalet/Librarian, SEQ, and PDS.

SER5000 SERXSEND

SerNet Cross Memory Send - This is the cross-memory PC routine for sending requests from the client address space to the started task address space.

SER5000E   `SerNet shutting down, try later`

Explanation: Information.

SER5001E   `Application {appl} not active`

Explanation: The requested SERNET application is not currently active.

Solution: Determine why the application is inactive.

SER5002E   `User disconnected from SerNet`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5003I   `User disconnected from SerNet`

Explanation: Information, Sernet is going through a normal shutdown process.

SER5004E   `Cross-memory send failed: Server task completion code {code}`

Explanation: Internal error.

Solution: Record CODE and this error message, contact Micro Focus Customer Care.

SER5005E   `Cross-memory send operation timeout`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5050 SERXRECV

SerNet Cross Memory Receive - This is the cross-memory PC routine for receiving results from the started task address space to the client address space.

SER5050E   `SerNet shutting down, try later`

Explanation: Information.

SER5051E   `Application {appl} not active`

Explanation: The requested SERNET application is not currently active.

Solution: Determine why the application is inactive.

SER5052E   `User disconnected from SerNet`

Explanation: Internal Error.

Solution: Contact Micro Focus Customer Care.

SER5053I   `User disconnected from SerNet`

Explanation: Information, Sernet is going through a normal shutdown process.

SER5054E   `Cross-memory receive failed: Server task completion code {code}`

Explanation: Internal Error.

Solution: Record code and this error message, contact Micro Focus Customer Care.

SER5056E   `Cross-memory receive operation timeout`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5100 SERLSEND

SerNet Local Call Send - SERLSEND implements the local call version of the "send" function for the client side. The function of SERLSEND is similar to the cross-memory equivalent, SERXSEND.

SER5100E   `SerNet shutting down, try later`

Explanation: Information.

SER5101E   `Incorrect application specified for local call: {`*appl*`}`

Explanation: Valid applications are CMN, CPX, and STR.

Solution: Correct the application.

SER5102E   `Local session disconnected from SerNet`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5103I   `Local session disconnected from SerNet`

Explanation: Information, Sernet is going through a normal shutdown process.

SER5104E   `Local send failed: Server task completion code {`*code*`}`

Explanation: Internal error.

Solution: Record code, contact Micro Focus Customer Care.

SER5105E   `Local send operation timeout`

Explanation: Task has been abandoned or an internal active task limit has been reached.

SER5106E   `Local receive operation timeout`

Explanation: Task has been abandoned or an internal active task limit has been reached.

SER5107E   `Local task attach error: RC={`*code*`}`

Explanation: An ATTACH Macro has failed.

Solution: Look up code in z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN - SA23-1372-xx. Contact Micro Focus Customer Care.

SER5128E   `Unable to acquire lock table lock.`

Explanation: Internal use only.

Solution: Contact Micro Focus Customer Care.

SER5129E   `Abend while processing the lock table - see dump.`

Explanation: Internal use only.

Solution: Contact Micro Focus Customer Care.

SER5150 SERLRECV

SerNet Local Call Receive - SERLRECV implements the local call version of the "receive" function for the client side. The function of SERLRECV is similar to the cross-memory equivalent, SERXRECV.

SER5150E   `Local session disconnected from SerNet`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5151I   `Local session disconnected from SerNet`

Explanation: Information, session disconnected as part of normal shutdown processing.

SER5152E   `Local receive failed: Server task completion code {code}`

Explanation: Internal Error.

Solution: Record code, contact Micro Focus Customer Care.

SER5153E   `Local receive operation timeout.`

Explanation: Task has been abandoned or an internal active task limit has been reached.

SER5200 SERXFLSH

SerNet Cross Memory Flush - This is the cross-memory PC routine for flushing any outstanding results destined for the client address space.

SER5200E   `SerNet shutting down, try later`

Explanation: Information.

SER5201E   `Application {appl} not active`

Explanation: APPL is not active.

Solution: Determine if APPL is valid. If APPL is valid, determine why APPL is inactive. Examine the SERPRINT file, did APPL ever start?

SER5202E   `User disconnected from SerNet`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5203I   `User disconnected from SerNet`

Explanation: Information, User disconnected as part of normal shutdown processing.

SER5204E   `Cross-memory receive failed: Server task completion code {code}`

Explanation: Internal error.

Solution: Record code, contact Micro Focus Customer Care.

SER5205E   `Cross-memory flush operation timeout`

Explanation: Task has been abandoned or an internal active task limit has been reached.

SER5900 SERSMTPC

SerNet email SMTP client

SER5900E   `Invalid XML document`

Explanation: Can't find key tags in XML.

Solution: Determine why the XML is invalid. Contact Micro Focus Customer Care.

SER5901E   `Unable to load Code Pages`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER5902E   `Invalid Port Number`

Explanation: Internal error.

Solution: Determine why the port number is invalid. Correct and re-try the failing operation. Contact Micro Focus Customer Care if unsuccessful.

SER5903E   `TCP/IP Abend error`

Explanation: TCP/IP has returned an error-code.

Solution: Examine related message(s) SER5908I, attempt to determine why TCP/IP returned an error-code. Contact Micro Focus Customer Care.

SER5904E   `Unable to contact TCP/IP`

Explanation: Internal error.

Solution: Examine SERPRINT and the JES2 datasets for the Sernet started task, verify that TCP/IP was successfully started (SER1000I, SER1001I).

SER5905E   `Email Host name unknown`

Explanation: Unable to locate the target host.

Solution: Check the spelling of the host name.

SER5906E   `Unable to contact Email Server`

Explanation: Internal error.

Solution: Check the spelling of the host name and the port for the email server, check the status of the email server (is it available, is a network cable unplugged, is it powered off?).

SER5907E   `Write Fail to Email Server`

Explanation: Internal error.

Solution: Check the status of the email server (is it available, is a network cable unplugged, is it powered off?).

SER5908I   `TCP/IP info: Type={`*type*`} RC={`*code*`} ErrNo={`*errornumber*`}`

Explanation: Information related to a prior message.

Solution: Look up value for ERRORNUMBER in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx. Contact Micro Focus Customer Care.

SER5950 SERSMTPT

This module is responsible for an SMTP call from the MVS batch environment in XML format to SERSMTPC.

SER5950E   `Unable to open XMLIN - abending`

Explanation: Internal error.

Solution: Verify DDNAME XMLIN has been provided. Verify the data set pointed to by XMLIN exists.

SER5951E   `Invalid XML document`

Explanation: Internal error.

Solution: Determine why the XML document is invalid. Has this XML document ever been successfully processed? Has the document changed since the last time it was successfully processed?

SER5952E   `The XML request exceeded the element count, recommend 256.`

Explanation: Internal error.

Solution: Reduce the element count to 256 or less and re-submit.

SER5953E   `Unable to load SERSMTPC`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6000 SERCLIEN

Client driver to SerNet started task. This is the client piece that drives the proper communication to the SerNet started task from an MVS address space such as a TSO/ISPF user or batch job regardless of originating machine.

SER6001E   `Already connected, to {`*host*`} please disconnect first`

Explanation: Explanation: Sernet Batch Client error. The Sernet batch client must connect before attempting communication. In this case, a connection had already been established. In order to connect again, a disconnect must precede.

Solution: Code a disconnect call before attempting a connect. If you can't solve the problem, contact Micro Focus Customer Care.

SER6002E   `Must Connect before attempting {`*communication*`}`

Explanation: Sernet Batch Client error. The Sernet batch client must connect before attempting communication.

Solution: Code a connect call before attempting communication. If you can't solve the problem, contact Micro Focus Customer Care.

SER6003W   `Connect method request {`*request*`} must be T, X or L. Default is T.`

Explanation: Sernet Batch Client error. The Sernet batch client must request a connection method that is T, X or L. A blank implies a choice of methods. The meanings of these codes are T - TCP/IP, X - Cross Memory, L - Local Call. Our preferred choice is T for TCP/IP.

Solution: Code a valid method on the connect call or simply leave this parameter blank.

SER6004E   `The SER#PARM dataset is required for TCP/IP connection`

Explanation: Internal error.

Solution: Code a DDNAME of SER#PARM and point to the proper data set.

SER6005E   `Member {`*member*`} not found in SER#PARM data set`

Explanation: Probable user error.

Solution: Correct the spelling of *member* and resubmit. Is the SER#PARM DDNAME pointing to the correct data set?

SER6006E   `Local connect request not from within a SerNet started task`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6007E   `SerNet started task "{`*subsys*`}" is not active Error={`*code*`}`

Explanation: The SerNet started task is not available.

Solution: Is this really the started task you are trying to access? Has the task been terminated?

SER6008E   `No sockets are available. Connection terminated.`

Explanation: Information.

Solution: Try again later. If the problem persists contact Micro Focus Customer Care.

SER6009E   `The connection request failed.`

Explanation: Information.

Solution: Contact Micro Focus Customer Care.

SER6010I   `Func={`*function*`} complete RC={`*code*`} Reason={`*reason*`}`

Explanation: Information.

SER6011I   `Request={`*request*`}`

Explanation: Information.

SER6012E   `Client abended: {`*code*`}`

Explanation: The client has ended abnormally.

Solution: Look up *code* in z/OS MVS System Codes, SA38-0665-xx, contact Micro Focus Customer Care.

SER6013E   `Data length exceeds 32500 maximum`

Explanation: Internal error.

Solution: Reduce the length of the client request to 32,500 or less.

SER6014E   `Record contains invalid length prefix`

Explanation: Internal error, prefix is corrupted.

Solution: Contact Micro Focus Customer Care.

SER6015E   `End of data`

Explanation: Information, end of data has been reached.

SER6016E   Invalid function

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6017E   Must do PRIM/BUMP first

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6018E   Must PRIM/BUMP/UPDT before SEND

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6019E   Cannot send STOP must DISCONCT

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6020E   SerNet restarted since last call

Explanation: Information, Sernet has been restarted since the last call from the client.

Solution: Proceed with caution.

SER6021E   SerNet has been stopped

Explanation: Information.

SER6022E   {*user*} connected

Explanation: Information.

SER6023E   {*user*} disconnected

Explanation: Information.

SER6024E   I/O error reading SER#PARM data set

Explanation: Internal error.

Solution: Examine SYSLOG, SERPRINT, and the Sernet started task's JES2 datasets for related messages.

SER6025E   SER#PARM data set could not be opened

Explanation: Internal error.

Solution: Is a SER#PARM DDNAME coded? Does the SER#PARM data set exist? Examine SYSLOG, SERPRINT, and the Sernet started task's JES2 datasets for related messages.

SER6026E   Server entry not found in {*member*} member of SER#PARM

Explanation: Internal error.

Solution: Is the SER#PARM DDNAME pointing to the correct data set?

SER6027E   Invalid parameters passed to IEEMB878

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6031E   `TCP/IP: Task={`*`task`*`} Type={`*`type`*`} RC={`*`code`*`} ErrNo={`*`error-number`*`}`

Explanation: Information related to a prior message.

Solution: Look up value for ERROR-NUMBER in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx. Contact Micro Focus Customer Care.

SER6032I   `TCP/IP: Task={`*`task`*`} Type={`*`type`*`} RC={`*`code`*`} ErrNo={`*`error-number`*`}`

Explanation: Information related to a prior message.

Solution: Look up value for ERROR-NUMBER in z/OS Communications Server: IP Messages Volume 3 (EZY) - SC27-3656-xx, z/OS UNIX System Services Programming: Assembler Callable Services Reference - SA23-2281-xx and z/OS UNIX System Services Messages and Codes - SA23-2284-xx. Contact Micro Focus Customer Care.

SER6033E   `{`*`function`*`} There are no TCP/IP procedures active`

Explanation: TCP/IP is not active.

Solution: Determine why TCP/IP is not active, examine SYSLOG, SERPRINT, and the JES2 datasets for the Sernet started task. Was TCP/IP successfully activated at Sernet startup?

SER6034E   `Unable to generate a passticket (Name='{`*`name`*`}' RC='{`*`return code`*`}').`

Explanation: A token services retrieve (IEANTRT) error for 'name' specified may indicate the SERSET utility has not been executed.

Solution: Execute the SERSET utility in batch or bring up a SerNet started task which will execute the utility.

NOTE Return codes for IEANTRT are most easily located in SYS1.MACLIB(IEANTASM) starting with equate IEANT_OK. If the return code is not 04 (IEANT_NOT_FOUND), contact Micro Focus Customer Care.

SER6035E   `Passticket generation failed, RCVTPTGN RC='{`*`return code`*`}'.`

Explanation: This message is displayed when there is a failure in the secured signon service pointed to by RCVTPTGN in the RCVT control block (RACF).

Solution: Return codes for RCVTPTGN can be found in the RACF Macros and Interfaces Manual. This failure may be an indication of a RACF setup issue. If the problem persists, contact Micro Focus Customer Care.

SER6036E   `Failure in fetching data.`

Explanation: Internal use only.

Explanation: Contact Micro Focus Customer Care.

SER6100 SERXMLBC

Batch interface for XML requests. This module is responsible for a client call from the MVS batch environment in XML format.

SER6100E   `{`*`ddname`*`} open failed`

Explanation: OPEN for DDNAME XMLIN failed.

Solution: Look for related IEC* messages in SYSLOG, Sernet started task JES2 and SERPRINT datasets, BATCH JOB JES2 datasets.

SER6101E   "{*tagname*}" tag missing "name="

Explanation: TAGNAME is missing.

Solution: Examine the XML statement, correct or include the missing TAGNAME.

SER6102E   "{*tagname*}" tag value must be {*integer*} characters long

Explanation: Invalid length (INTEGER) specified for TAGNAME.

Solution: Correct and resubmit

SER6103E   Required "{*tag*}" tag is missing

Explanation: Missing TAG.

Solution: Correct and resubmit.

SER6104E   XML request exceeds maximum length

Explanation: Information.

Solution: Try reducing the scope of your XML request, for example instead of specifying a wildcard character (*) specify a partial value, or better yet the full value of the tag to reduce the amount of returned data.

SER6105E   Connection failed

Explanation: Internal error. May occur if Sernet/ZMF started task is down, TCP/IP is not available, or XML services job needs cross-memory services that are not available.

Solution: Validate that started task is up and connectivity is available and resubmit. If the problem persists contact Micro Focus Customer Care.

SER6200 SERXMLCC

This module is responsible for a client call from the Cobol environment in XML format.

SER6200E   "{*tagname*}" tag missing "name="

Explanation: TAGNAME is missing.

Solution: Examine the XML statement, correct or include the missing TAGNAME.

SER6201E   "{*tagname*}" tag value must be {*integer*} characters long

Explanation: Invalid length (*integer*) specified for TAGNAME.

Solution: Correct and re-submit.

SER6202E   Required "{*tag*}" tag is missing

Explanation: Missing tag.

Solution: Correct and resubmit.

SER6203E   Internal buffers are full. Request terminated.

Explanation: Maximum length for an XML reply is 32,500 bytes.

Solution: Try reducing the scope of your XML request, for example instead of specifying a wildcard character (*) specify a partial value, or better yet the full value of the tag to reduce the amount of returned data.

SER6204E   `The result buffer is full. Output terminated.`

Explanation: Information.

Solution: For Cobol XML Services jobs that execute SERXMLCC, adjust the value of RESULT-COUNT to limit the number of returned <result> data structures. The default is 999.

Otherwise:
- Try increasing the size of your result buffer, up to a maximum of 32,500 bytes.
- Try reducing the scope of your XML request. For example, instead of specifying a wildcard character (*) specify a partial value, or better yet the full value of the tag to reduce the amount of returned data.

SER6205E   `Connection failed`

Explanation: Internal error.

Solution: Resubmit. If the problem persists, contact Micro Focus Customer Care.

SER6300 SERXMLAC

This module is responsible for a client call from an assembler program in XML format. The caller supplies an input buffer containing a valid XML request, it's length, an output buffer for the XML reply, and it's length. SERXMLAC performs the XML request and places a reply in the output buffer supplied. The caller pre allocates the buffers and must make sure they are big enough to contain the data.The caller is then responsible for parsing the returned XML reply in the output buffer.

SER6300E   `"{`*tagname*`}" tag missing "name="`

Explanation: TAGNAME is missing.

Solution: Examine the XML statement, correct or include the missing TAGNAME.

SER6301E   `"{`*tagname*`}" tag value must be {`*integer*`} characters long`

Explanation: Invalid length (INTEGER) specified for TAGNAME.

Solution: Correct and re-submit.

SER6302E   `Required "{`*tag*`}" tag is missing`

Explanation: *tag* is missing.

Solution: Correct and resubmit.

SER6303E   `The result buffer is full. Output terminated.`

Explanation: Information.

Solution: Try increasing the size of your result buffer, up to a maximum of 32,500 bytes. Try reducing the scope of your XML request, for example instead of specifying a wildcard character (*) specify a partial value, or better yet the full value of the tag to reduce the amount of returned data.

SER6304E   `Problem encounter with internal service call.`

Explanation: Internal error.

Solution: Resubmit. If the problem persists, contact Micro Focus Customer Care.

SER6400 SERXMLDB

XML Data Space Management Module

SER6400E   `SERXMLDB XML data space invalid`

Explanation: Internal error.

Solution: Verify the XMLSPACE DDNAME points to the correct dataset. Contact Micro Focus Customer Care.

SER6401E   `SERXMLDB XML data space create failed: RC={`*code*`}`

Explanation: Internal error.

Solution: Verify the XMLSPACE DDNAME points to the correct dataset. Contact Micro Focus Customer Care.

SER6402E   `SERXMLDB XML data space access failed: RC={`*code*`}`

Explanation: Internal error.

Solution: Verify the XMLSPACE DDNAME points to the correct dataset. Contact Micro Focus Customer Care.

SER6403E   `SERXMLDB XML data space map failed: RC={`*code*`}`

Explanation: Internal error.

Solution: Verify the XMLSPACE DDNAME points to the correct dataset. Contact Micro Focus Customer Care.

SER6404E   `SERXMLDB XML data space save failed: RC={`*code*`}`

Explanation: Internal error.

Solution: Verify the XMLSPACE DDNAME points to the correct dataset. Contact Micro Focus Customer Care.

SER6414I   `SERXMLDB Header: {`*header*`} For example:`

Explanation: `SER6414I SERXMLDB Header: SERNET XML Dsect Cross Reference. Created: 13 Jul 2015 07:11:16. Version: 811`

Solution: Information.

SER6500 SEREXSRV

This module is responsible for a client call from the Rexx environment of TSO or BATCH.

SER6500E   `Subsys parameter invalid`

Explanation: Missing subsystem parameter in XML request.

Solution: Examine your XML statements, include a valid subsystem parameter.

SER6501I   `Using default test option'`

Explanation: Information.

SER6502I   `Using specified test option {`*option*`}`

Explanation: Information.

SER6503I   `Product parameter defaulting to SerNet`

Explanation: Information.

SER6504E   `Object parameter invalid`

Explanation: Object parameter must be at least one byte and less than or equal to eight bytes in length.

Solution: Correct the XML statement.

SER6505E   `Message parameter invalid`

Explanation: Message parameter must be at least one byte and less than or equal to eight bytes in length.

Solution: Correct the XML statement.

SER6600 SERXMLRC

SerNet XML client interface for REXX execs. SERXMLRC sends and receives SerNet XML requests and responses for REXX execs. It is invoked by REXX statements like: 'address LINKMVS "SERXMLRC root"'.

SER6600E   `Subsys parameter missing or invalid`

Explanation: Information.

Solution: Examine your invocation JCL, include a valid subsys parameter. See the ChangeMan ZMF XML Services User's Guide for more information.

SER6601I   `Using default TEST option`

Explanation: Information, default test option of no test is in effect.

SER6602I   `Using defined TEST option {option}`

Explanation: Information, using a TEST option of OPTION.

SER6603I   `Using specified IncludeInRequest: {request}`

Explanation: Information.

SER6604I   `Using specified IncludeInResult:  {result}`

Explanation: Information.

SER6605E   `Service parameter missing or invalid`

Explanation: Service parameter must be present, and must be at least one byte and less than or equal to eight bytes in length.

Solution: Correct the XML request and resubmit.

SER6606E   `Message parameter missing or invalid`

Explanation: Message parameter must be present, and must be at least one byte and less than or equal to eight bytes in length.

Solution: Correct the XML request and resubmit.

SER6607E   `Userid parameter missing or invalid`

Explanation: Userid parameter must be present, and must be at least one byte and less than or equal to eight bytes in length.

Solution: Correct the XML request and resubmit.

SER6608E   Unable to make the dataspace XML cache persistent

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6609E   Error accessing variable: {*variable*}

Explanation: Information.

Solution: Examine your REXX for the named VARIABLE, correct and resubmit.

SER6610E   Unable to create Dataspace XML cache

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6611I   XML cache is: {*eyeball-characters*}

Explanation: Information.

SER6612E   More than 12 includeInResult.n variables

Explanation: Information.

Solution: Reduce the number of variables to 12 or less.

SER6613I   Too much REXX data to generate XML

Explanation: Information.

Solution: Try reducing the amount of REXX data.

SER6614W   DIV clleanup failed

Explanation: Warning.

SER6615E   Local MAPDATA not valid for service

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6616E   Local service module not available

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER6617E   Open failed on local master file {*name*}

Explanation: Internal error.

Solution: Make sure of the existence of the data set pointed to by NAME.

SER6618E   Service not available from local files

Explanation: Probable configuration error.

Solution: Contact your local Sernet administrator.

SER6619I   {MINOR-FUNCTION}) Package service completed.

Explanation: Information.

SER6620E   Both CMNPMAST and CMNCMPNT missing.

Explanation: The DDnames CMNPMAST and CMNCMPNT for SERNET are missing.

Solution: Resolve and resubmit.

SER6621E   Unable to open CMNCMPNT - abending.

Explanation: The file open issued by SERPMLOD for DDname CMNCMPNT was unsuccessful causing it to abend.

Solution:

SER6622E   Unable to open CMNPMAST - abending.

Explanation: Unable to open CMNPMAST for 'server' causing it to abend.

Solution: Correct and resubmit.

SER6623I   DATE AND TIME OF THIS BACKUP: {*date.time*}

Explanation: If the XML interface SERXMLRC has JCL that specifies a backup version rather than the CMNPMAST VSAM file, then the contents of the file header appear with this message prefix. For example:

SER6623I DATE AND TIME OF THIS BACKUP: 20150612.13121764

SER6624I   SERNET Closed - {*number*} records written.

Explanation: Progress information.

SER6625W   Cannot have RECFM=U.

Explanation: Warning; Correct the data set format.

SER6626I   SERNET processing - {*number*} records read - key {*key*}.

Explanation: Progress information.

SER6627I   SERNET processing - Record bypassed - key {*key*}.

Explanation: Progress information.

SER6628E   Unable to open CMNELDSP - abending.

Explanation: The file open issued by SERPMLOD for DDname CMNELDSP was unsuccessful.

Solution: Ensure that the file at CMNELDSP is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6629E   //MAPDATA DD statement missing.

Explanation: The SERPMLOD job JCL includes no input MAPDATA DD statement.

Solution: Code a MAPDATA DD statement in the job JCL. See the description of SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6630E   Unable to open CMNCMPNL - abending.

Explanation: The file open issued by SERPMLOD for DDname CMNPMPNL was unsuccessful.

Solution: Ensure that the file at CMNCMPNL is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6700 SERPMLOD

Batch program SERPMLOD extracts data from ChangeMan ZMF package and component master files and writes the data to sequential files as XML message replies.

SER6700W   Unable to open XMLOUT - {*ddname*}

Explanation: The file open issued by SERPMLOD for the specified output DDname was unsuccessful.

Solution: Determine the cause of the open failure and resubmit the job. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6701E   no extract files present

Explanation: The SERPMLOD job JCL includes no output CMN$ssss DD statements.

Solution: Code one or more CMN$ssss DD statements in the job JCL. For a list of valid CMN$ssss DDnames, see the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6702I   {*mapdata header*}

Explanation: Displays the header information read from the MAPDATA file input to SERPMLOD. Example:

```
SERNET XML Dsect Cross Reference. Created: 6 Feb 2012 11:33:20
```

Solution: Information only message. However, the MAPDATA file must be synchronized with the vrm of the SERCOMC LOAD library that contains SERPMLOD.

SER6703E   //MAPDATA DD statement missing

Explanation: The SERPMLOD job JCL includes no input MAPDATA DD statement.

Solution: Code a MAPDATA DD statement in the job JCL. See the description of SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6704E   both CMNPMAST or CMNCMPNT missing

Explanation: The SERPMLOD job JCL includes no input CMNPMAST or CMNELDSP DD statements.

Solution: Code a CMNPMAST DD statement and/or a CMNELDSP DD statement in the job JCL. See the description of SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6705E   Unable to open CMNCMPNT - abending

Explanation: The file open issued by SERPMLOD for DDname CMNCMPNT was unsuccessful.

Solution: Ensure that the package master at DDname CMNPMAST is a VSAM KSDS file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6706E   Unable to open CMNPMAST - abending

Explanation: The file open issued by SERPMLOD for DDname CMNPMAST was unsuccessful.

Solution: Ensure that the package master at DDname CMNPMAST is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6708I   {*ddname*} Closed - {*count*} records written

Explanation: Shows the number of records that were written to the displayed output DD statement.

Solution: Progress information message.

SER6709W   Cannot have RECFM=U - {*ddname*}

Explanation: The output file at the displayed DDname has RECFM=U, which is invalid.

Solution: For valid output file attributes, see the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6710I   {*ddname*} processing - {*count*} records read - key {*lastkey*}

Explanation: Shows the number of records and the last VSAM key that were read at the displayed input DD statement.

Solution: Information only message.

SER6711I   {*ddname*} processing - {*count*} records bypassed - key {*key*}.

Explanation: Shows the number of records bypassed at the displayed input DD statement.

Solution: Progress information message.

SER6712E   Unable to open CMNELDSP - abending

Explanation: The file open issued by SERPMLOD for DDname CMNELDSP was unsuccessful.

Solution: Ensure that the package master at DDname CMNELDSP is a VSAM LDS file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*.

SER6712I   SERNET processing - {*number*} eligible physical records detected.

SER6713I   SERNET processing - {*number*} logical records output.

SER6714I   SERNET processing - {*number*} XML records read.

SER6715E   Unable to open CMNPMAST.

Explanation: The file open issued by SERPMLOD for DDname CMNPMAST was unsuccessful.

Solution: Ensure that the package master at DDname CMNPMAST is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide.*

SER6716I   'number' component master records have been processed in this run.

Explanation: Information, displays the number of component master records processed.

SER6717E   Unable to open CMNPMXML.

Explanation: The file open issued by SERPMLOD for DDname CMNPMXML was unsuccessful.

Solution: Ensure that the file at DDname CMNPMXML is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6718E   Unable to open CMNPMSRT.

Explanation: The file open issued by SERPMLOD for DDname CMNPMSRT was unsuccessful

Solution: Ensure that the file at DDname CMNPMSRT is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6719E   Unable to open CMNPMIDR.

Explanation: The file open issued by SERPMLOD for DDname CMNPMIDR was unsuccessful

Solution: Ensure that the file at DDname CMNPMIDR is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6722E   Unable to open CMNPMSEQ.

Explanation: The file open issued by SERPMLOD for DDname CMNPMSEQ was

Solution: Ensure that the file at DDname CMNPMSEQ is a VSAM file. See the description of program SERPMLOD in the *ChangeMan ZMF Customization Guide*

SER6723E   Both CMNCMPNT and CMNCMPNL must be allocated for component data extraction.

Explanation: Ensure both VSAM files, CMNCMPNT and CMNCMPNL are allocated for this request.

Solution: Contact Micro Focus Customer Care

SER7000 SERJES

JES2/JES3 Interface. General purpose interface module for JES2/JES3 subsystem functions. On each call, a function code is passed by the caller to indicate the type of function to be performed:

- Initialize
- Job List
- Active Job List
- Data set list
- Cancel job
- Delete held output
- Re queue held output - change class/dest
- Open data set
- Get record
- Close data set
- Free list - job, data set, or message list
- Job summary message list
- Terminate

SER7002I   {*userid*} cancelled job {*jobname*}, jobid={*jobid*}

Explanation: Job cancelled using XML Services or an interface like ChangeMan ZDD.

Solution: Information only; no action required.

SER7008I   {*userid*} canceled job {*jobname*} and purged the output, jobid={*jobid*}

Explanation: Job purged using XML Services or an interface like ChangeMan ZDD.

Solution: Information only; no action required.

SER7100 SERXFLIO

File input and output, including PDS/SEQ I/O through SERBSAM; PAN/LIB reads through SERIFACE; PAN/LIB updates through PAN#1 or <libr>

SER7100I   `Function {`*`function`*`} complete: RC=0`

Explanation: Information.

SER7101I   `Null file {`*`operation`*`} operation complete: RC=0`

Explanation: Information.

SER7102E   `Unable to allocate {`*`dataset`*`}: RC=8`

Explanation: Information.

Solution: Check the spelling of dataset.

SER7103E   `Null member list; RC=8`

Explanation: Data set being processed is either PDS, PANVALET or LIBRARIAN; all three require a member list containing at least one member.

Solution: Supply a list of members.

SER7104E   `File type {`*`type`*`} not supported`

Explanation: Invalid file type.

Solution: Correct the file type. Valid file types are SEQuential, PANVALET or LIBRARIAN.

SER7105E   `{`*`value`*`} parameter error: RC=8`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7106E   `Incorrect file type: Request={`*`request`*`} Actual={`*`actual`*`} RC=8`

Explanation: Incorrect file type.

Solution: Determine why the file type is incorrect.

SER7107E   `Invalid request: Member list requested for sequential data set`

Explanation: A sequential data set is a single entity, and is not subdivided into members.

Solution: Correct the request.

SER7108E   `Invalid request: Member name specified for sequential data set`

Explanation: A sequential data set is a single entity, and is not subdivided into members.

SER7109E   `Invalid request: Panvalet member already disabled`

Explanation: An attempt was made to DELete (disable) a Panvalet member which is already DELeted (disabled).

SER7110E   `Invalid request: Member name missing`

Explanation: Member name required for PDS, PANVALET, or LIBRARIAN data sets.

Solution: Supply a member name.

SER7111E	`Record format U not supported`

Explanation: RECFM=U is not supported.

Solution: Change to a supported record format (RECFM=F,FB,V,VB).

SER7112E	`Data set {`*`dataset`*`} in use`

Explanation: Another function has exclusive use of the DATASET.

Solution: Try again later.

SER7113E	`Probable Panvalet library on host: Terminated RC=8`

Explanation: A PUT for a SEQ data set looks suspiciously like a PUT for a PANVALET dataset, and has been terminated.

Solution: Contact Micro Focus Customer Care.

SER7114E	`Open error: Dsn={`*`dataset`*`}`

Explanation: The DATASET failed to open.

Solution: Examine SYSLOG, SERPRINT, and the JES2 datasets for the Sernet started task for related information.

SER7115E	`{dataset} Open abend S{`*`abend-code`*`}-{`*`reason code`*`}`

Explanation: DATASET failed to open.

Solution: Lookup the ABEND-CODE and reason code in z/OS MVS System Codes, SA38-0665-xx. Examine SYSLOG, SERPRINT, and the JES2 data sets for related messages, look these messages up in z/OS MVS System Messages, Vol 7 (IEB-IEE) SA38-0674-xx. Contact Micro Focus Customer Care.

SER7116W	`Member {`*`member`*`} not found`

Explanation: Information.

SER7117E	`Update error: RC=8`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7118E	`Update error: RC=8, abend S{`*`abend-code`*`}-{`*`reason code`*`}`

Explanation: Internal error.

Solution: Lookup the ABEND-CODE and reason code in z/OS MVS System Codes, SA38-0665-xx. Examine SYSLOG, SERPRINT, and the JES2 data sets for related messages, look these messages up in z/OS MVS System Messages, Vol 7 (IEB-IEE) SA38-0674-xx. Contact Micro Focus Customer Care.

SER7119E	`Update error: Directory full`

Explanation: Unable to update because the data set's directory is full.

Solution: Try compressing the dataset. If this doesn't fix the problem try allocating a similar dataset with more directory blocks than the original, copy the original data set to the new data set, rename the new data set to the original data set and try again.

SER7120E	`Update error: Stow error RC={`*`return code`*`} Reason={`*`reason code`*`}`

Explanation: Information.

Solution: Look up return code and reason code in z/OS DFSMS Macro Instructions for Data Sets SC23-6852-xx, Chapter 5, STOW Completion Codes. Contact Micro Focus Customer Care.

SER7121E   `Cannot rename Panvalet superset.subset: RC=8`

Explanation: Super.sub format not supported.

Solution: Contact Micro Focus Customer Care.

SER7122E   `SERIFACE error: {error}`

Explanation: Internal error. Contact Micro Focus Customer Care.

SER7200 SERXDATA

Xch DATA handling.

Functions:

- Xch DATA

- PDS/SEQ I/O through SERBSAM;

- VSAM native

Calls:

- SERBSAM - File Storage Area manipulation

- SERSTMGR - Getmain/Freemain storage

- SERTRACE - Issue trace messages to //SERPRINT

Comments:

It is always assumed that any given file has already been allocated via SERXFLIO and that Xio$Dsnm & Xio$Ddnm are filled to reflect that.

File attributes will be reflected in the SerXioDs block. If extended attributes are requested, such as for a VSAM cluster (data and index component names must be excluded) then this can only be gathered by first opening the file and getting the feedback. Unless otherwise specified, the file is then closed and resources released. It is kept open only when necessary such as in the case of a client wanting to download all or part of the file and a long dialogue is anticipated. Open failure can occur for many reasons, one of which is that the VSAM file has SHAREOPTIONS=(2,3) and it is already opened elsewhere. This must be explicitly detected and described, even to the point of tattling on just what other job name owns it.

Long dialogues must be aware that client power outages and task abends cannot leave the file open. Protection must be implicit such that interruptions are covered with a closing of any open file and resource freeing as necessary.

SER7200E   `{message} {message-text}`

Explanation: Information.

SER7201E   `Open error: RC=8`

Explanation: Information.

Solution: Examine SYSLOG, SERPRINT, and the JES2 data sets for the Sernet started task for related messages. Contact Micro Focus Customer Care.

SER7202E   `Record format U not supported for update: RC=8`

Explanation: Information.

SER7203E   Probable Librarian file: RC=8

Explanation: Information.

Solution: This file looks like a Librarian file, which is not supported by SERXDATA.

SER7204E   Probable Panvalet file: RC=8

Explanation: Information.

Solution: This file looks like a Panvalet file, which is not supported by SERXDATA.

SER7205E   PDS/SEQ information not supported: RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7206E   Only VSAM Clusters can be processed: RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7207E   Error in positioning to start key: RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7208E   Synchronous error: Fdbk={*feedback*} RecNo={*recno*} RC=8

Explanation: Internal error.

Solution: Record FEEDBACK and RECNO, contact Micro Focus Customer Care.

SER7209E   Logical error: Fdbk={*feedback*} RecNo={*recno*} RC=8

Explanation: Internal error.

Solution: Record feedback and recno, contact Micro Focus Customer Care.

SER7210E   I/O error RC={*return code*} Reason={*reason code*} Dsname={*dataset*}

Explanation: Internal error.

Solution: Record return code, reason code contact Micro Focus Customer Care.

SER7211E   I/O error Comp=S{*abend-code*}-{*reason code*} Dsname={*dataset*}

Explanation: Internal error.

Solution: Record the abend-code and reason code. Contact Micro Focus Customer Care.

SER7212W   Member {*member*} not found in data set {*dataset*}

Explanation: Information.

Solution: This member is no longer in dataset, perhaps another user has deleted this member.

SER7213E   Short record or RKP/KEYLEN specified incorrectly: RC=8

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER7214E   I/O error RC={*return code*} Reason={*reason code*} Ddname={*ddname*}

Explanation: Internal error.

Solution: Record return code, reason code, and ddname. Contact Micro Focus Customer Care.

SER7215E   I/O error Comp=S{*abend-code*}-{*reason code*} Ddname={*ddname*}

Explanation: Internal error.

Solution: Record return code, reason code, and ddname. Contact Micro Focus Customer Care.

SER8000 SEROSTRM

SerNet output streamer Transforms and transmits Mdus to clients

SER8000E   {*userid*} SEROSTRM {*tca_address*} invoked with nothing to send

Explanation: Internal error.

Solution: Try to determine what userid was doing at the time the error message was produced. If userid sseems to be doing something reasonable and the message still occurs contact Micro Focus Customer Care.

SER8001W   {*userid*} SEROSTRM {*tca_address*} ignored a response Mdu due to an earlier error

Explanation: Warning.

SER8002E   {*userid*} SEROSTRM {*tca_address*} XML generator initialization failed with rc={*return code*}, rsn={*reason code*}

Explanation: Internal error.

Solution: If the error is repeatable, Try using the NETWORK trace, to see what the XML looks like (F SRNETSTC,NT,ON,USER=USERID,SIZE=1024). See the ChangeMan ZMF Installation guide, Appendix B Modify Commands. Record return code and reason code, contact Micro Focus Customer Care.

SER8003E   {userid} SEROSTRM {*tca_address*} CCSID {*ccsidfrom*} to {*ccsidto*} conversion failed with rc={*return code*}, rsn={*reason code*}

Explanation: Internal error.

Solution: This may be a Unicode configuration issue. See the discussion for message SER2500 earlier in this chapter. Look up the return code and reason code in z/OS Unicode Services User's Guide and Reference - SA38-0680-xx and proceed accordingly.

SER8004E   {userid} SEROSTRM {*tca_address*} CCSID conversion initialization failed with rc={*return code*}, rsn={*reason code*}

Explanation: Internal error.

Solution: This may be a Unicode configuration issue. See the discussion for message SER2500 earlier in this chapter. Look up the return code and reason code in z/OS Unicode Services User's Guide and Reference - SA38-0680-xx and proceed accordingly.

SER8005E   {*userid*} SEROSTRM {*tca_address*} change direction failed with receiverc={*return code*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8006E   {*userid*} SEROSTRM {*tca_address*} change direction failed with check rc={*return code*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8007E   {*userid*} SEROSTRM {*tca_address*} send failed with rc={*return code*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8008E   {userid} SEROSTRM {*tca_address*} invalid record length prefix.

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8200 SERUSER

SerNet User Subtask in the server. Process conversations. receive request message data units (Mdus), handle connections, and route Mdus to their applications according to the given product, object, and message.

SER8200E   {*product*} {*object*} {*message*} request rejected, logon is required

Explanation: User must be logged on.

SER8201E   SERUSER {*tca_address*} denied access by user {*userid*} because maximum users are logged on

Explanation: Maximum users reached.

Solution: Try again later.

SER8202E   {*userid*} SERUSER {*tca_address*} rejected a downlevel client, client vrm={VRM}

Explanation: Client code is older than server code.

Solution: Upgrade the Client code.

SER8203E   User {*real-userid*} is not authorized to impersonate user {*userid*}

Explanation: Probably a security definition issue.

Solution: Contact your security administrator.

SER8204I   Password permanently changed on your security system

Explanation: Information.

SER8205E   Invalid user ID specified

Explanation: Error.

Solution: Correct the userid.

SER8206E   Password expired - you must specify a new password

Explanation: Information.

Solution: Specify a new password.

SER8207E   Invalid password specified

Explanation: This is dependent on your installation, for example, maybe you tried a password which has recently been used. Your installation may have rules preventing this.

Solution: Contact your security administrator.

SER8208E   Logon authorization failed - RC={*return code*} Reason={*reason code*}

Explanation: SERLCSEC has issued return code and reason code.

Solution: Examine SERLCSEC, determine if the exit is working properly.

SER8209I   Logon accepted for user {*userid*}; Local CCSID={*coded character set
                  identifier*}

Explanation: This message is displayed when a TSO user successfully connects to the
SERNET started task.

Solution: No action required.

SER8211E   Unsupported request {*object*} {*message*} rejected

Explanation: Internal error, valid OBJECT/MESSAGE combinations are CONNECT
LOGON, CONNECT PASSWORD, CONNECT LOGOFF, and CONNECT START.

Solution: Contact Micro Focus Customer Care.

SER8212W   Logoff unsuccessful because user is not logged on

Explanation: Warning.

SER8213I   User {*userid*} logged off

Explanation: Information.

SER8214I   {*message-number*} {*message*}

Explanation: SAF message, for example ICH408I USER(USER252) GROUP(USER).

SER8215W   User {*userid*} disconnected

Explanation: Warning.

SER8216E   User {*userid*} no XCH security environment created

Explanation: A RACF VERIFY call was issued to SERLCSEC which failed to cause an ACEE
to be created. The lack of an ACEE is a security problem so the connect request is
blocked.

Solution: Check SERLCSEC and, if in doubt, contact Micro Focus Customer Care.

SER8221E   Rejected {*tca-address*} {*initial-product*} {*initial object*} {*initial-
                  message*} with {*this-product*} {*this-object*} {*this-message*}

Explanation: Transmission error.

Solution: Contact Micro Focus Customer Care.

SER8222E   Received invalid compressed data, rc={*CODE*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8223I   {*userid*} Mail command: {*command*}

Explanation: Information.

SER8224E   New request rejected while responding to {*object*} {*message*} request

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8225E {*userid*} SERUSER {*tca-address*} received a request message with invalid lrecl {*lrecl*} (VmruLRLn)

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8226E {*userid*} SERUSER {*tca-address*} could not determine which ECB was posted

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8227E The server is terminating, request rejected

Explanation: Information.

SER8228E Data chunking request rejected, chunking is not allowed

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8230E {*userid*} SERUSER {*tca-address*} received a {*integer*} byte message but conversation state VCASTATE {*conversation-state*} is now invalid, VCAWHATR={*what-received*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8231E {*userid*} SERUSER {*tca-address*} rejected a connection request with multiple message blocks

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8272E CMN connections temporarily inhibited

Explanation: This message is displayed when an external logon is attempted at ZMF startup when such connections are disallowed while the delay file is being processed. External logons are initiated from batch processes like CMNWRITE, TSO users connecting to ZMF, XML Services requests for ZMF, etc.

Solution: Try the logon again or resubmit the batch process after delay file processing is finished and message CMN_461I is displayed in SERPRINT.

SER8273E Access denied to user {*userid*}; the maximum number of users of the product ({*product*}.

Explanation: A user has attempted to access SERNET where the maximum number of users has been reached.

Solution: Retry access after number of users has reduced.

SER8274E Unable to acquire lock table lock during termination of SERNET.

Explanation: Internal use only.

Solution: Contact Micro Focus Customer Care.

SER8275E Abend while processing the lock table - see dump.

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8276E   `Abend during {`*`function name`*`} function for {`*`userid`*`}; see logrec for details.`

Explanation: An abend occurred during the processing of a *'function name'* call to SERLCSEC for the userid specified.

Solution: The abend is typically in RACF code in response to a bad parameter list. Isolate the logrec entry (using ICFEREP) and give the information to Micro Focus Customer Care.

SER8300 SERXMLO

SerNet XML Output Generator. Generate XML from an output DSECT.

SER8300E   `Response XML not generated because of no XML data space`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8302E   `No output XML address passed to "Put" in the Xmlo parameter block`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8303E   `Id "{`*`id`*`}" ({`*`value`*`}) in the Xmlo parameter block is not "XMLO"`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8304E   `Level number {`*`level`*`} in the Xmlo parameter block is incorrect`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8305E   `Invalid function "{`*`function`*`}" ({`*`value`*`}) in the Xmlo parameter block`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8306E   `Residual {`*`code`*`} return code in the Xmlo parameter block`

Explanation: Information.

SER8308E   `No output buffer address passed to "Open" in the Xmlo parameter block`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8309E   `No output buffer length passed to "Open" in the Xmlo parameter block`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8310E   `The Xmlo output buffer length {`*`length`*`} is too short, it must be >5K`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8311E   No input buffer address passed in the Xmlo parameter block

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8312E   No input data passed to "Put" in the Xmlo parameter block

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8313E   No output buffer address passed to "Put" in the Xmlo parameter block

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8314E   The Xml Put exit buffer length {*length*} is too short, it must be >5K

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8315E   No XML defined for response message "{*object*} {*message*} {*parameter*}"

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8316E   Required output exit not passed to *SERXMLO*

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8317E   XML output address parameter precedes the output buffer

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8318E   XML output address parameter is beyond the output buffer

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8319E   No output buffer length passed to "Put" in the Xmlo parameter block

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER8400 SERXMLI

XML Message Input. This program examines an XML document and extracts any tags therein. The tags are recorded in the tag pool.

SER8400E   Invalid XML document in message body

Explanation: Internal error.

Solution: Examine the XML request, this is probably a syntax error. Contact Micro Focus Customer Care for further assistance.

SER8401E   `Invalid XML service combination: Obj={`*`object`*`} Msg={`*`message`*`}`

Explanation: Internal error.

Solution: Examine the XML statement, this is probably a syntax error. Contact Micro Focus Customer Care for further assistance.

SER8402E   `XML value is too long for field {`*`field`*`}`

Explanation: Internal error.

Solution: Examine the XML statement, this is probably a syntax error. Contact Micro Focus Customer Care for further assistance.

SER8403E   `XML dataspace in termination mode`

Explanation: Information, the Sernet started task is on its way down.

SER8404E   `XML dataspace VRM mismatch.`

Explanation: The default XMLSPACE has a version, release and modification (VRM) field in the dataspace root record. This must match the VRM of the server. The VRM is displayed at server start up along with the manufacture date/time. See message SER6414I

Solution: Reload the XMLSPACE using the XMLLOAD in the installation JCL.

SER8414W   `Unrecognized tag in request for user {`*`userid`*`}, tag: {`*`taglist`*`}`

Explanation: An unrecognized tag was found in the XML request

Solution: Examine the XML request, correct, and resubmit.

A tag name with incorrect case will cause this warning message.

Another example is a misspelled tag name. Consider the following XML request, where the "appl" TAG has been spelled incorrectly ("applE"). The NETWORK trace for user USER252 has been enabled with a buffersize of 1,024K, and the XML WARNING facility is enabled (value for KEYWORD WARN is YES).

```
<?xml version="1.0"?>
<service name="IMPACT">
 <scope name="CMPONENT">
  <message name="LIST">
   <header>
    <subsys>8</subsys>
    <product>CMN</product>
   </header>
  <request>
    <applE>ACTP</applE>
    <libType>SRS</libType>
    <component>ACPSRS00</component>
  </request>
  </message>
 </scope>
</service>
```

This will generate a message similar to the following:

```
SER2550T USER252  SERUSER INPUT: Address=1735B014 Length=0168 TCA=1726B000
SER2551T USER252  0000/00000000 00000000 00000000 00000000  00000000 00000000 00000000 00000000 *................................*
SER2551T USER252  0000/0020 Same as above
SER2551T USER252  0040/00000000 00000000 00000000 00000000  4C6FA794 9340A585 99A28996 957E7FF1 *................<?xml version="1*
SER2551T USER252  0060/4BF07F6F 6E404CA2 8599A589 83854095  8194857E 7FC9D4D7 C1C3E37F 6E404CA2 *.0"?> <service name="IMPACT"> <s*
SER2551T USER252  0080/83969785 40958194 857E7FC3 D4D7D6D5  C5D5E37F 6E404C94 85A2A281 87854095 *cope name="CMPONENT"> <message n*
SER2551T USER252  00A0/8194857E 7FD3C9E2 E37F6E40 4C888581  8485996E 404CA2A4 82A2A8A2 6EF84C61 *ame="LIST"> <header> <subsys>8</*
SER2551T USER252  00C0/A2A482A2 A8A26E40 4C979996 84A483A3  6EC3D4D5 4C619799 9684A483 A36E404C *subsys> <product>CMN</product> <*
SER2551T USER252  00E0/61888581 8485996E 404C9985 98A485A2  A36E404C 81979793 C56EC1C3 E3D74C61 */header> <request> <applE>ACTP</*
SER2551T USER252  0100/81979793 C56E404C 938982E3 A897856E  E2D9E24C 61938982 E3A89785 6E404C83 *applE> <libType>SRS</libType> <c*
SER2551T USER252  0120/96949796 958595A3 6EC1C3D7 E2D9E2F0  F04C6183 96949796 958595A3 6E404C61 *omponent>ACPSRS00</component> </*
SER2551T USER252  0140/998598A4 85A2A36E 404C6194 85A2A281  87856E40 4C61A283 9697856E 404C61A2 *request> </message> </scope> </s*
SER8255T USER252  SERUSER 1726B000 request has last payload FF0307261BD4E944, VmruByts=00007EF4, Vmru#LDR=00007EF4, VmruT#LR=00007
SER8258T USER252  SERUSER 1726B000 routing request XML DATA to application, VCAA1ARQ=1735B000 VCAA1ARS=172BD000
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=15B5BA8A R0=8100011C, Out: RC=00 R1=17288280 Size=0000011C
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=0001843C R0=81008000, Out: RC=00 R1=17327000 Size=00008000
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=00018606 R0=8100003D, Out: RC=00 R1=17288020 Size=0000003D
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=00018606 R0=8100003F, Out: RC=00 R1=17288210 Size=0000003F
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=00018606 R0=81000040, Out: RC=00 R1=172883A0 Size=00000040
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=00018606 R0=8100003F, Out: RC=00 R1=17288400 Size=0000003F
SER1100T USER252  Storage obtain: TCB=008B7020 PSW=00018606 R0=81000044, Out: RC=00 R1=17288440 Size=00000044
SER8410T USER252  SERXMLI Request: Prod=CMN Obj=IMPACT Msg=LIST Parm=CMPONENT
SER8411T USER252  SERXMLI Receive after conversion: Address=1735B064 Length=0053
SER8412T USER252  SERXMLI      0...4...8...C...10..4...8...C...20..4...8...C...30..4...8...C...
SER8413T USER252  SERXMLI 0000 0053       SRSACPSRS00                 name="CMPO
SER8414W Unrecognized tag in request for user USER252, tag: applE, service: IMPACT, scope: CMPONENT, message: LIST
```

SER8500 SERVAMH

SerNet API Message Handler. This only purpose is to call the correct module. There is no more reformatting of the input request. It is taken "as is" and this module does all of the required work in the VCA$.... areas. No extra storage is consumed.

SER8500E   `*Error* Service module not found for: {`*sernet-task*`}`

Explanation: The "product" in the XML request is probably wrong, for example it may be CMN when it should be XCH.

Solution: Correct the "product" and re-submit.

SER8600 SERXMSIP

Cross Memory Services, SER#PARM duties:

- XMS - Cross Memory Services on SerNet STC side.

- Manipulation of //SER#PARM PDS for member updates, additions;

- reading to determine TCP/IP addresses from SERCLIEN side.

- Creation/deletion of new address spaces.

SER8600E   `Unable to open //SER#PARM; connection refused`

Explanation: Check the spelling for DDNAME SER#PARM.
Solution: Correct and re-submit.

SER8601E   `SERXMSIP Abend 325; Reason code={`*code*`}`

Explanation: Internal error.
Solution: Contact Micro Focus Customer Care.

SER8602E   `Cannot find requested subsystem {`*subsys*`}; member {`*member*`}`

Explanation: Check the spelling of *member*.
Solution: Correct and re-submit.

SER8603I   XMS - Cross Memory Services active
                  Explanation: Information.

SER8604I   ****** This is member "#SER{*memsuffix*}" created {*when*} ****
                  Explanation: Information.

SER8605I   * The purpose of this member is to track the relationship
                  Explanation: Information.

SER8606I   * between this SerNet subsystem, applications and associated
                  Explanation: Information.

SER8607I   * TCP/IP dotted decimal address && port number.
                  Explanation: Information.

SER8608I   * The member is created/updated by SERVER/SERXMSIP as needed.
                  Explanation: Information.

SER8609I   * It may be manually (careful) edited but this is not recommended.
                  Explanation: Information.

SER8610I   * <== asterisk in column one denotes comment.
                  Explanation: Information.

SER8611I   * SMF-ID (SMFI) uniquely identifies the LPAR. Multiple APPs
                  possible.
                  Explanation: Information.

SER8612I   * SMFI.SUBS APP DOT.TED.DEC.MAL PORT# TCPIPROC --Update-Time-Stamp-
                  -
                  Explanation: Information.

SER8613I   *- Settings at creation above -*
                  Explanation: Information.

SER8614I   * END OF DATA
                  Explanation: Information.

SER8615I   CMN TCPIP information not detected - cannot be saved.
                  Explanation: Information.

SER8650 SERBUILD

(former CDFBUILD) Build and manipulate eight files database

SER8650I   LEGEND - Type of Changes Symbols:
                  Explanation: Information.

SER8651I   Common base   012345   relative Base record number
                  Explanation: Information.

SER8652I	Deleted base	< _B__	deleted Base record in version B

Explanation: Information.

SER8653I	Replaced base	< 2345	replaced Base record; see next

Explanation: Information.

SER8654I	Replacement	<>__C_	replacing record in version C

Explanation: Information.

SER8654I	Replacement	<>__C_	replacing record in version C

Explanation: Information.

SER8655I	Inserted line	> AB__	inserted line in versions A and B

Explanation: Information.

SER8656I	Cut Base line	<<___D	cut (moved around) Base line in version D

Explanation: Information.

SER8657I	Pasted Base line	>>___D	pasted (moved around) Base line in version D

Explanation: Information.

SER8658I	User deleted	/*3456	user deleted Base record

Explanation: Information.

SER8659I	User deleted	/*_B__	user deleted line of version B

Explanation: Informaton.

SER8660I	User overtyped	><___+	user overtyped line

Explanation: Information.

SER8661I	User deleted	/*_B__	user deleted line of version B

Explanation: Information.

SER8662I	User inserted	> ___+	user inserted line

Explanation: Information.

SER8663I	User cut	<<3456	user cut Base record

Explanation: Information.

SER8664I	User cut	<<__C_	user cut line of version C

Explanation: Information.

SER8665I	User pasted	>>___+	user pasted line

Explanation: Information.

SER8700 SERXMVS

SerNet MVS-MVS Processor

```
SER8700I          Transfer scheduled for transmission
```
Explanation: Information.

```
SER8701I          Transfer completed successfully
```
Explanation: Information.

```
SER8702I          {integer1} of {integer2} members copied successfully
```
Explanation: Information.

```
SER8703I          Transfer completed successfully with warnings
```
Explanation: Information.

```
SER8704I          At least one member excluded - superset-subset
```
Explanation: Information.

```
SER8712I          Error Sending data to partner
```
Explanation: Information, see related SER87nna messages.

```
SER8716E          Error - Target Dataset not found
```
Explanation: Information.
Solution: Determine if the target dataset exists.

```
SER8717E          Error - Member provided for sequential dataset
```
Explanation: Information.
Solution: Probable user error, is this the correct dataset? Remove member name if this is the correct dataset.

```
SER8718E          Error - Dataset organization not supported'
```
Explanation: Probable user error.
Solution: Verify the dataset names are correct.

```
SER8719E          Error - Target Member cannot contain wildcard
```
Explanation: The target dataset needs a real member name, not a wildcard.
Solution: Specify a real member name for the target dataset.

```
SER8720E          Error - DSORG conversion not supported
```
Explanation: DSORGs must be the same.

```
SER8721E          Error - Member required for SEQ/PDS copy
```
Explanation: Missing member name.
Solution: Supply a member name.

```
SER8722E          Error - Request is not supported
```
Explanation: Internal error.
Solution: Contact Micro Focus Customer Care.

```
SER8724E          Error - Unable to obtain target information
```
Explanation: Probable user error.
Solution: Verify the target dataset exists, and is the correct dataset.

SER8725E	Error - Unable to obtain source attributes
	Explanation: Probable user error.
	Solution: Verify the source dataset exists, and is the correct dataset.

SER8726E	Error - Source Dataset not found
	Explanation: Probable user error.
	Solution: Correct the name of the source dataset.

SER8727E	Error - Actual Source DSORG does not match specified DSORG
	Explanation: Probable user error.
	Solution: Examine user input and the dataset in question.

SER8728E	Error - Actual Target DSORG does not match specified DSORG
	Explanation: Probable user error.
	Solution: Examine user input and the dataset in question.

SER8729E	Error - Unable to allocate dataset; DSORG mismatch
	Explanation: Probable user error.
	Solution: Examine user input and correct.

SER8730E	Error - Unable to allocate dataset; Source DSORG must be SEQ or PDS
	Explanation: Information.
	Solution: Examine user input, correct and re-submit.

SER8732E	Error - Unable to obtain enqueue on SYSPRINT
	Explanation: Internal error.
	Solution: Contact Micro Focus Customer Care.

SER8733E	Error - IEBCOPY failed; RC={*return code*} Reason={*reason code*}
	Explanation: Information.
	Solution: Record return code and reason code, examine SYSLOG and the SERNET STC JES2 datasets for related messages. Contact Micro Focus Customer Care.

SER8734E	Error - Unable to obtain unload data set attributes
	Explanation: Probable user error.
	Solution: Verify the existence of the data set in question. Is this the correct dataset?

SER8740E	Error - Data set allocation failed
	Explanation: Probable user error.
	Solution: Examine user input and correct.

SER8741E	Address space creation failed
	Explanation: Internal error.
	Solution: Contact Micro Focus Customer Care.

SER8800 SERMMWD

MailMan watchdog This task is attached by the server at start up time. The purpose of this module is to read the MailIni file, record the IP address and port for MailMan, and keep an eye on the link to MailMan by pinging the IP-address and port periodically.

SER8805E   `Unable to open MAILINI file`

Explanation: Probable user error.

Solution: Check the spelling of the MAILINI DDNAME and associated dataset.

SER8806E   `Syntax: {`*`message`*`}`

Explanation: Internal error.

Solution: Record MESSAGE, contact Micro Focus Customer Care.

SER8850 SERSCAN

Scan for particular character string(s) within data set/member(s). Service requests come in from all directions but work is accomplished in started task.

SER8850E   `RECFM=U Disallowed`

Explanation: RECFM=U is not supported.

SER8851E   `Cannot scan Load library (Undefined record format)`

Explanation: Scanning load libraries is not supported.

SER8852E   `SERSCAN/SERXFLIO Error`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9200 SERPRINT

General utility to combine PRINT data sets created in previous job steps into a single data set. The program input parm determines which data sets are to be combined.

SER9200E   `Input parameter missing`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9201E   `Input file(s) not specified`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9202E   `Too many input files specified`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9203E   `Output file(s) not specified`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9204E	Too many output files specified

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9205E	Invalid DD name specified

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9206E	Invalid dsname specified

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9207E	Invalid carriage control type specified

Explanation: Carriage control type must be A or M. Internal error.

Solution: Contact Micro Focus Customer Care.

SER9208E	Invalid syntax: {*syntax*}

Explanation: Contact Micro Focus Customer Care.

SER9209E	Unrecognized keyword: {*keyword*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9210E	Term length error: {*error*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9211E	Open failed for ddname {*ddname*}

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9300 SERREAL

General routine to reallocate a data set and increase the size. The caller passes information which identifies the data set containing the data which is to be copied into the target data set. The size of the input data set and the number of members being copied from it are used to calculate how much space is required for the new data set.

SER9300E	Unable to reallocate: Data set {*dataset*} in use

Explanation: Information.

Solution: Attempt to determine who/what is using the *dataset*. Attempt to resolve this situation.

SER9301E	Unable to allocate {*integer*} tracks

Explanation: Out of space.

Solution: Look for related volume messages, attempt to free up space on the volume.

SER9302E   `Unable to allocate {`*`integer`*`} cylinders`

Explanation: Out of space.

Solution: Look for related volume messages, attempt to free up space on the volume.

SER9303E   `Unable to allocate {`*`integer`*`} tracks on volume {`*`volume`*`}`

Explanation: Out of space.

Solution: Attempt to free up space on the volume.

SER9304E   `Unable to allocate {`*`integer`*`} cylinders on volume {`*`volume`*`}`

Explanation: Out of space.

Solution: Attempt to free up space on the volume.

SER9305E   `Unable to scratch data set {`*`dataset`*`} on volume {`*`volume`*`}: RC={`*`return code`*`} Stat={`*`volume-status`*`} Diag={`*`diag-code`*`}`

Explanation: Internal error.

Solution: Look for related IEC614I messages. Look up the *return code* and *diag-code* in z/OS DFSMSdfp Diagnosis - SC23-6863-xx, contact Micro Focus Customer Care.

SER9306E   `Unable to rename data set {`*`dataset`*`} on volume {`*`volume`*`}: RC={`*`return code`*`} Stat={`*`volume-status`*`} Diag={`*`diag-code`*`}`

Explanation: Internal error.

Solution: Look for related IEC614I messages. Look up the return code and *diag-code* in z/OS DFSMSdfp Diagnosis - SC23-6863-xx, contact Micro Focus Customer Care.

SER9307E   `Unable to scratch data set {`*`dataset`*`} on volume {`*`volume`*`}: RC={`*`return code`*`} Reas={`*`diag-code`*`}`

Explanation: Internal error.

Solution: Look for related IEC614I messages. Look up the *return code* and *diag-code* in z/OS DFSMSdfp Diagnosis - SC23-6863-xx, contact Micro Focus Customer Care.

SER9308E   `Unable to scratch data set {`*`dataset`*`} RC={`*`return code`*`} Reas={`*`diag-code`*`}`

Explanation: Internal error.

Solution: Look for related IEC614I messages. Look up the *return code* and *diag-code* in z/OS DFSMSdfp Diagnosis - SC23-6863-xx, contact Micro Focus Customer Care.

SER9400 SERCOPY

For a detailed description of utility program SERCOPY, see the *ChangeMan ZMF Customization Guide*.

SER9400E   `Invalid syntax: {`*`statement`*`}`

Explanation: Option syntax error in the PARM= program execution parameter statement.

Solution: See the documentation reference at .

SER9401E	Invalid syntax: {*statement*}
	Explanation: Option syntax error in the PARM= program execution parameter statement.
	Solution: See the documentation reference at "SER9400 SERCOPY" on page 337.

SER9402E	OPEN failed for ddname (*ddname*}
	Explanation: The file at the specified DDname could not be opened.
	Solution: Examine SYSLOG, SERPRINT, and the Sernet STC JES2 datasets for related messages.

SER9403I	SERCOPY options: {*options*}
	Explanation: Displays the keyword options that are coded on the PARM= program execution parameter statement.
	Solution: Information only.

SER9404E	Invalid COMPRESS specified, default will be used: COMPRESS(7)
	Explanation: Invalid value used for COMPRESS(n) keyword option in the PARM= program execution parameter statement.
	Solution: Valid values for COMPRESS(n): n=2 for low compression, n=7 for high compression n=7.

SER9405I	Input dsname: {*dataset*}
	Explanation: Displays the input dsname for SERCOPY.
	Solution: Information only.

SER9406I	Output dsname: {*dataset*}
	Explanation: Displays the output dsname for SERCOPY.

SER9407I	Begin copy: INFILE={*ddname*} OUTFILE={*ddname*}
	Explanation: Displays the input and output DDnames.
	Solution: Information only.

SER9408W	Member not found: {*member*}
	Explanation: The member specified in the MEMBER(mem,...) keyword option in the PARM= program execution parameter statement or the member specified in SYSIN was not found in the input library.
	Solution: If this is not an acceptable result, correct the MEMBER(mem,...) option or the SYSIN list, or add the missing member to the input library.

SER9409I	Insufficient space: retry will be attempted
	Explanation: Information.

SER9410I	Insufficient space: reallocation will be attempted
	Explanation: Information.

SER9411I	PDS compress successful
	Explanation: Information.

SER9412E   `PDS compress failed`

Explanation: Information.

Solution: Examine SYSLOG, SERPRINT, and the Sernet STC JES2 datasets for related messages.

SER9413I   `Data set reallocation successful`

Explanation: Information.

SER9414E   `Data set reallocation failed`

Explanation: Information.

Solution: Examine SYSLOG, SERPRINT, and the Sernet STC JES2 datasets for related messages.

SER9415E   `Unsuccessful I/O for ddname {`*ddname*`}`

Explanation: Information.

Solution: Examine SYSLOG, SERPRINT, and the Sernet STC JES2 datasets for related messages.

SER9416E   `Directory full for ddname {`*ddname*`}`

Explanation: No more space.

Solution: You may have to manually define a new dataset with more directory blocks than the current dataset, copy all the members, and rename datasets accordingly.

SER9417E   `STOW error for member {`*member*`}`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9418E   `Compress/expand error: rc={`*return code*`}`

Explanation: Internal error.

Solution: Contact Micro Focus Customer Care.

SER9419W   `No input members to copy`

Explanation: Information.

SER9420I   `Member successfully copied: {`*member*`}`

Explanation: Information.

SER9421I   `Alias name added for {`*member*`}`

Explanation: Information.

SER9422E   `Input data set not partitioned`

Explanation: Probable user error.

Solution: Make sure this is the correct data set.

SER9423E   `Compressed file must have fixed length records: {`*ddname*`}`

Explanation: Probable user error.

Solution: Make sure data set referenced by DDNAME has fixed length records.

SER9424I	Number of members copied: {*integer*}

Explanation: Displays the number of members copied from the input dataset to the output dataset.

Solution: Information only.

SER9425I	Copy completed successfully

Explanation: Information.

SER9426W	No data copied

Explanation: Nothing was copied from the input dataset to the output dataset.

Solution: Look for SERCOPY messages in SYSPRINT and in the job log.

SER9427E	Copy terminated due to errors

Explanation: Information.

Solution: Examine SYSLOG, SERPRINT, and the Sernet STC JES2 datasets for related messages.

SER9500 SERENQ

Data set enqueue and dequeue routine. Performs serialization for SER appl's data set

updates. Qname may be any of the following:

- SPFEDIT - Normal data set enqueue (with or without member name). Used for serialization with ISPF and other SerNet sub-application functions.

- SYSIEWLP - Load library (data set name only) serialization with Linkage Editor.

- SYSDSN   - MVS data set serialization. Same as allocation with DISP=OLD.

- CHGMAN   - Change Man datasets. ENQ may be either exclusive or shared.

For SPFEDIT, SYSIEWLP and SYSDSN the enqueue is always performed for exclusive control. If multiple data sets are requested via a data set name address list, and exclusive control was previously obtained for some of those data sets, the corresponding addresses in the caller's list are cleared. This same list can then be passed back for the dequeue function and those data sets will not be dequeued.

SER9500I	Dataset in use: {*dataset*}

Explanation: Information.

SER9600 SERVUSS

SER9600I	USS REXX Service completed successfully.

Explanation: Information, process successful.

SER9601E	USS REXX address space creation failed: Rc={*return code*}.

Explanation: Possibly environmental. Displays when the address space creation for USS REXX has failed.

Solution: Review logs for additional message information address space and resubmit.

SER9602E   `No input command provided for USS REXX call.`

Explanation: An input command is required for USS REXX call.

Solution: Enter an input command to complete process.

SER9630 SERVUTIL

SER9630I   `Message(s) successfully issued.`

Explanation: Information.

SER9640 SERNTFYR

SER9641W   `TCB {tcb-address} Dynalloc of SMS log dataset failed; S99ERROR {S99 error code} S99INFO {S99 info code}.`

Explanation: An attempt was made to allocate a user-specific log dataset but it failed with the codes contained in the message.

Solution: Another attempt at allocating the data set will be made when the user next logs on. If the problem persists, contact Micro Focus Customer Care.

SER9642E   `TCB {tcb-address} Unable to gain exclusive control of {log dataset}.`

Explanation: An attempt was made to allocate a user specific log dataset with DISP=OLD but it failed due to the dataset being in use elsewhere.

Solution: Another attempt at allocating the data set will be made when the user next logs on. If the problem persists, contact Micro Focus Customer Care.

SER9643E   `Log data set {log data set} Open of DD {ddname} failed RC={return code} DSN={dsname}.`

Explanation: An attempt was made to open a user-specific log dataset but it failed with the return code shown in the message.

Solution: Another attempt at allocating and opening the data set will be made when the user next logs on. If the problem persists, contact Micro Focus Customer Care.

SER9644E   `Log data set {data set} Read of DD {ddname} failed RC={return code} DSN={dsname}.`

Explanation: An attempt was made to read a user-specific log dataset but it failed with the return code shown in the message.

Solution: Another attempt at reading the data set will be made when the user next logs on. If the problem persists, contact Micro Focus Customer Care.

SER9645I   `TCB {tcb-address} TCP/IP {function}: RC={return code} ERRNO={error code}.`

Explanation: An error has occurred in TCP/IP communications.

SER9646E   `TCB {tcb-address} TCP/IP communication attempt aborted due to error.`

Explanation: An error has occurred causing TCP/IP communications to abort.

SER9649E   LOCATE of log data set DSN {*dsname*} failed RC={*return code*}.

Explanation: A LOCATE macro was issued for a user-specific log dataset, as a part of the scratch process. but it failed with the return code shown in the message. The data set will not be deleted and any notifications it contains will be re-delivered when the user next logs on.

SER9650E   SCRATCH of log data set DSN {*dsname*} failed RC={*return code*}.

Explanation: An attempt at deleting a user-specific log dataset failed with the return code shown in the message. Any notifications it contains will be re-delivered when the user next logs on.

SER9660 SERNFYP

SER9660E   Dynalloc of new SMS log dataset failed; S99ERROR {*S99 error code*} S99INFO {*S99 info code*}.

Explanation: An attempt was made to allocate a user specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

Solution: If the problem persists, contact Micro Focus Customer Care.

SER9661E   Dynalloc of new non-SMS log dataset failed; S99ERROR {*s99 error code*} S99INFO {*s99 info code*}.

Explanation: An attempt was made to allocate a user-specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

Solution: If the problem persists, contact Micro Focus Customer Care.

SER9662E   Dynalloc of existing log dataset failed; SS99ERROR {*s99 error code*} S99INFO {*s99 info code*}.

Explanation: An attempt was made to allocate a user-specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

Solution: If the problem persists, contact Micro Focus Customer Care.

SER9663E   Log dataset open failure; Open of DD {*ddname*} failed RC={*return code*} DSN={*dsname*}

Explanation: An attempt was made to open a user specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

Solution: If the problem persists, contact Micro Focus Customer Care.

SER9664E   Log dataset move failure; Open of DD {*ddname*} failed RC={*return code*} RS={*reason code*}

Explanation: An attempt was made to open a user specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

If the problem persists, contact Micro Focus Customer Care.

SER9665I   `Log dataset put failure; DD={`*`ddname`*`} DSN={`*`dsname`*`} RC={`*`return code`*`}`
`RS={`*`reason code`*`}`

Explanation: An attempt was made to write to a user specific log dataset but it failed with the codes contained in the message. The notification will be delivered using a TSO SEND command.

Solution: If the problem persists, contact Micro Focus Customer Care.

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