# StorageTek Enterprise Library Software Release Notes





StorageTek Enterprise Library Software Release Notes, Release 7.2 For MSP

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# **Preface**

This publication provides release guidelines and requirements for StorageTek Enterprise Library Software (ELS) Release 7.2 for MSP. It also provides updates and enhancements to the original product documentation.

When applicable, use the procedures and information in this guide in place of the original documentation. Any applicable references to the original documentation are provided.

# **Diversity and Inclusion**

Oracle is fully committed to diversity and inclusion. Oracle recognizes the influence of ethnic and cultural values and is working to remove language from our products and documentation that might be considered insensitive. While doing so, we are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is an ongoing, long-term process.

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# Product Guidelines and Installation Requirements

This section provides product guidelines and installation requirements for Enterprise Library Software (ELS) release 7.2 for MSP.

- · Product Highlights
- Product Documentation
- Installation Notes
- Coexistence with Previous Releases

# **Product Highlights**

This section highlights key features introduced in ELS 7.2 for MSP.



For a complete list of ELS 7.2 features, refer to the publication *Introducing ELS 7.2*. ELS 7.0 and 7.1 Software Product Enhancements (SPEs) are included as base features in ELS 7.2

Key features include:

# **CDSCREat Utility Command**

The new CDSCREat utility command uses a small set of parameters to define the CDS for a tapeless configuration. A tapeless configuration may include VLE hardware but may not include any defined ACSs or real tape drives.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **SLUCONDB Utility**

The SLUCONDB utility supports a new keyword format used to specify the input parameter to the utility. Note that the existing positional format is still supported.

This keyword format includes the GRACE parameter, which allows you to specify a grace period (in hours) for scratch eligibility. A volume accessed after the start of the SLUCONDB run, minus the grace period, is not eligible for scratch.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.



# **SMC MONitor LOWscratch Command**

The SMC MONitor LOWscratch parameter default is changed from 60 to OFF, specifying that SMC does not perform scratch threshold checking.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **MEDVERfy Utility Command**

The new MEDVERfy utility command performs a Media Verification (MV) by verifying that VTV data can be read on MVCs or VMVCs.

## Additionally:

- Display ACTive output may include the MEDVERfy field
- Display MVC output may include the LAST VERIFIED field

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

## **CLean and MNTD Commands**

The CLean command includes the IMMED parameter, used to specify that an immediate clean of the device is to be preformed if the drive is idle.

Expanded MNTD Autocln parameter ON value.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **SMC POLicy Command**

Updated SMC POLicy command parameter descriptions to match help text output.

Refer to the ELS Command, Control Statement, and Utility Reference for more information.

# **SMC MOUNTDef SWAPLIMIT and SWAPREUSE Commands**

- SWAPLIMIT issues message SMC0233 and responds no to the IGF5090 message.
- SWAPREUSE issues message SMC0108 and if SWAPAUTOREPLY is ON, replies no to messages IGF500D or IGF509D.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **CONFIG RTD Command**

The CONFIG RTD command is now known as the CONFIG RTDpath command, used to define a data path from the VTSS to either a VLE or an RTD connected to the VTSS.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.



# **MVCDRain Command**

Revised MVCDRain EJECT parameter to include VMCs (virtual MVCs).

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **VTVRPt Command**

The VTVRPt command includes the SINCE parameter, used to specify a time in minutes. Only VTVs that have been accessed within the specified time are processed.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **DELETSCR and LOGUTIL Commands**

Updated subsystem requirements for these commands.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

## SET VOLPARM to Disable POOLPARM/VOLPARM Statement

Added information about using SET VOLPARM to disable POOLPARM/VOLPARM statements.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Display SMC Command**

The new Display SMC command is used to display SMC status, including start time, release, and host information.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Display Policy Command**

The new Display Policy command is used to displays all policy information. Additional parameters allow you to limit which policies are listed, and how much detail is displayed.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Display SERVer Command**

The new Display SERVer command is used display status information for TapePlex server paths.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Display STORMNGR Command**

The new Display STORMNGR command is used to list VLE information.



Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Display TAPEPlex Command**

The new Display TAPEPlex command is used to lists TapePlex information.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **SDD Utility Command**

Added support for Remote UUI Input and Output using the SDD utility command with the SMCUUUI utility.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# POLicy, SERVer, STORMNGR, and TAPEPlex Commands

The NAME keyword is no longer required for the POLicy, SERVer, STORMNGR, and TAPEPlex commands. The name is now a positional parameter.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

## Removal of Obsolete SMC Commands and Parameters

- The Library command is replaced by TAPEPlex commands in the SMC start procedure. In addition, the SERVer command no longer accepts the library keyword as a synonym for TapePlex.
- The ALLOCDef command VTVMAXvol parameter is removed. Instead, use the POLICY parameter IDAXVOLCNT. Refer to Configuring and Managing SMC for more information about selecting IDAX policies.
- The MSGDef command LOWscratch parameter is removed. You can specify this parameter on the IDAX command.
- The RESYNChronize command RESTART parameter is removed. The MONITOR command PREFPRIMARY parameter controls whether a RESYNC switches back to a server defined earlier in the server list.
- The SMSDef command MOD parameter is removed. You can specify this parameter on the IDAX command.
- The TCPip command MONitor and PREFprimary parameters are removed.
- The MONitor command controls all monitoring functions.

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# Removal of Obsolete HSC CDS Journaling Support

Removal of obsolete HSC CDS journaling support from the following commands and utilities:

- BACKup
- Display CDS



- OFFLoad
- Set TCHNIQE
- SLICREAT

Refer to the *ELS Command, Control Statement, and Utility Reference* for more information.

# **Drive Exclusion Table**

Added tertiary sources to the drive exclusion table for Pre-reg 3 and Level 3.

Refer to Configuring and Managing SMC for more information.

# **Product Documentation**

This *Release Notes* publication provides supplemental updates to the original documentation for Enterprise Library Software (ELS) release 7.2 for MSP. The information in this publication supersedes the information found in the existing ELS publication set:

- Introducing ELS
- Installing ELS
- ELS Command, Control Statement, and Utility Reference
- ELS Syntax Quick Reference
- ELS Messages and Codes
- ELS Programming Reference
- ELS Legacy Interfaces Reference
- Configuring HSC and VTCS
- Managing HSC and VTCS
- Configuring and Managing SMC
- ELS Disaster Recovery and Offsite Data Management Guide

These publications are available for download from the Oracle Help Center.

# **Installation Notes**

This section provides pre-installation considerations and installation requirements.

- SMC, HSC, VTCS, and CDRT share a common load library, SEALINK.
- Complete instructions for installing the various ELS components is provided in the publication *Installing ELS*. Please refer to the latest version of this publication.
- Ensure that on completion of the apply/accept of the FMIDs that the latest HOLDDATA is received and the latest PTFs are received and applied. Follow your own internal guidelines regarding the SMP ACCEPT of the PTFs.

# **Pre-Installation Considerations**

Before installing ELS 7.3, consider the following:



- SMC, HSC, VTCS, and CDRT share a common load library, SEALINK.
- Complete instructions for installing the various ELS components is provided in the publication *Installing ELS*. Please refer to the latest version of this publication.
- Ensure that on completion of the apply/accept of the FMIDs that the latest HOLDDATA is received and the latest PTFs are received and applied. Follow your own internal guidelines regarding the SMP ACCEPT of the PTFs.

## **Installation Materials**

This package includes installation media in a downloaded zip file containing the ELS 7.2 base software. The zip file contains a README.html file which provides detailed instructions on installing ELS.

As part of installation, you must obtain the latest cumulative maintenance (PTFs and HOLDDATA) for the ELS 7.2 product set and for any release of Oracle StorageTek software that will coexist with ELS 7.2. Download cumulative maintenance from the My Oracle Support (MOS) site.

Visit this site frequently for HOLDDATA and PTF updates and install cumulative maintenance updates on a regular schedule.

# **ELS 7.2.0 SMP FMIDs**

Select the FMIDs that are required to support your configuration. The following SMP FMIDs are distributed with ELS 7.2 (MSP):

Table 1-1 SMP FMIDs

FMID	Description		
SEA@720	HSC, SMC, VTCS, and CDRT load modules, distributed modules, and samples. This is a base FMID.		
SMZ@720	<ul> <li>SMC JES3 support load modules, distributed macros, and samples for MVS systems running:</li> <li>JES3 Release 5.2.1</li> <li>JES3 OS/390 Release 1.1 and higher</li> <li>JES3 Release 1.0 and higher</li> </ul>		

# Note:

- Ensure that the base FMID(s) and all PTF maintenance for the base FMID(s) is accepted before installing any dependent FMIDs. For certain levels of SMP, the restriction applies that a dependent FMID cannot be installed if the base FMID and service have not been ACCEPTED.
- When installing ELS 7.2.0 in an SMP PRJ containing earlier NCS versions, the SMP installation deletes the FMIDs of all earlier NCS versions; it is therefore recommended that you back up the ELS SMP PRJ prior to installing the ELS 7.2 product components.

# Coexistence with Previous Releases



This section describes ELS 7.2 coexistence and compatibility.

# **SMC 7.2 Coexistence**

SMC 7.2 is compatible with the following software releases:

- HSC/VTCS 7.2 on the same host
- HSC/VTCS 6.2, 7.0, 7.1, and 7.2 on a different host

## **HSC/VTCS 7.2 Coexistence**

HSC/VTCS 7.2 is compatible with the following software releases:

- SMC 7.2 on the same host
- SMC 6.2, 7.0, 7.1, and 7.2 on a different host
- ExPR 6.1 only

# **Compatibility PTFs**

SMC 7.2 is completely compatible with HSC 6.2, 7.0, and 7.1 (with compatibility PTFs listed below) running on the same or different host. In addition, SMC 6.2, 7.0, and 7.1 are completely compatible with HSC 7.2 running on the same or different host.

Before attempting to start ELS 7.2, ensure that the following compatibility PTFs are installed on the down-level releases that share the CDS:

**Table 1-2 Compatibility PTFs** 

Product (FMID)	Compatibility PTF
SMC 6.2 (SMC@620)	N/A
HSC 6.2 (SOS@620)	LF620GW
VTCS 6.2 (SWS@620)	N/A

In addition, it is strongly recommended to obtain the latest service (including HOLDDATA) for the down-level host systems. The suggested method of implementing ELS 7.2.0 is:

- 1. Install the latest service on production hosts.
- 2. Install ELS 7.2.0 on one ore more test hosts.
- 3. Test and verify ELS 7.2.0 on the test hosts.
- 4. Schedule the roll out of ELS 7.2.0 to production hosts.



# **Documentation Updates**

This section provides supplemental updates to the original documentation for Enterprise Library Software (ELS) release 7.2 for MSP. This information supersedes the information found in the existing ELS publication set.

- New or Modified HSC/VTCS Commands
- New or Modified HSC/VTCS Messages
- New or Modified ECAM Messages and Return Codes
- New or Modified SMF Record Formats

# New or Modified HSC/VTCS Commands

ELS 7.2 includes the following new or modified HSC/VTCS commands:

- CONFIg GLOBAL
- CONFIG HOST

These updates supersede the information found in the existing *ELS Command, Control Statement, and Utility Reference*.

# **CONFIG GLOBAL**

# This update applies to:

ELS 7.2 Command, Control Statement, and Utility Reference

Chapter 3, HSC Commands, Utilities, and Control Statements

# **Summary:**

The VTCS CONFIG GLOBAL statement adds the VTVCHAIN parameter.

# Description

The CONFIg GLOBAL statement specifies VTCS global values. This statement is required.

# **Syntax**

The following figure shows the VTCS CONFIg GLOBAL command syntax:



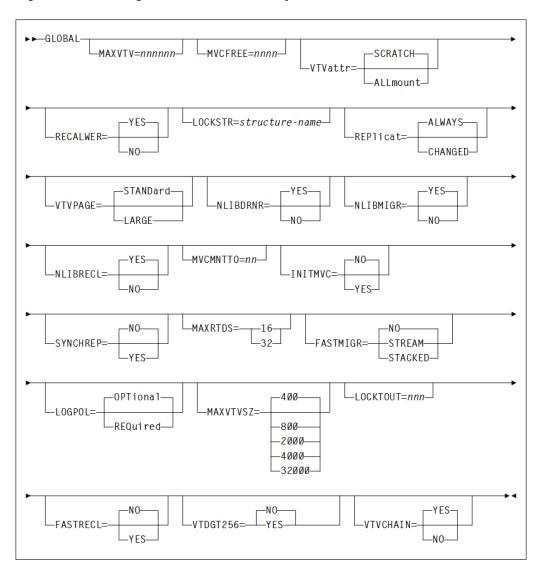


Figure 2-1 CONFIg GLOBAL Command Syntax

# **Parameters**

The VTCS CONFIG GLOBAL command includes the following parameters:

# MAXVTV=nnnnnn

optionally, specifies the maximum number of VTVs that can be migrated to a single MVC.

nnnnn indicates the number of VTVs. Valid values include:

- 4 to 32000 for a D, E or F level CDS
- 4 to 65000 for a G level CDS

# MVCFREE=nnnn

optionally, specifies the minimum number of free MVCs in the MVC pool. A free MVC has 100% usable space and does not contain any migrated VTVs. Valid values are 0 to 255. The default is 40.



If free MVCs is equal or less than this value, VTCS issues message SLS6616I and starts an automatic space reclamation.



If you set MVCFREE=0, VTCS actually uses the default value (40).

## **VTVattr**

optionally, specifies when VTCS assigns a Management Class to a VTV.

#### **SCRATCH**

Assign a Management Class only when VTCS does a scratch mount of the VTV (the default).

# **ALLmount**

Assign a Management Class whenever VTCS mounts the VTV.



# **Caution:**

If you specify that VTCS assigns a Management Class whenever VTCS mounts a VTV, these attributes can change, which can cause undesirable or unpredictable results.

For example, if an application writes data set PROD. DATA to VTV100 with a Management Class of PROD, then writes data set TEST. DATA to VTV100 with a Management Class of TEST, then the VTV (and both data sets) has a Management Class of TEST. Similarly, it is possible to write TAPEREQ statements or SMS routines that assign different Management Classes to the same data set (for example, based on job name), which can also cause a VTV's Management Class to change.

# **RECALWER**

optionally, specifies whether VTCS recalls VTVs with read data checks (applies to recall and drain operations).

#### **YES**

Recall VTVs with read data checks (the default).

## NO

Do not recall VTVs with read data checks.

## LOCKSTR=structure-name

optionally, specifies the Coupling Facility Structure that holds VTCS Lock Data. structure-name indicates the coupling facility structure. It must be 16 characters or less and conform to IBM's standard for naming Coupling Facility Structures. Refer to Oracle's ELS publication *Installing ELS* for more information.



# Caution:

CONFIG RESET is required to add LOCKSTR=structure-name to a CDS that did not previously use LOCKSTR=structure-name and to remove LOCKSTR=structure-name from a CDS. CONFIG RESET is not required to change lock structure names (for example, going from LOCKSTR=VTCSL1 to LOCKSTR=VTCSL2).

#### **REPlicat**

optionally, specifies when VSM replicates the VTV.

## **ALWAYS**

The replicate request is added to the VTCS replication queue every time the VTV is dismounted, regardless of whether the VTV was changed while it was mounted (the default).

## **CHANGED**

The replicate request is added to the VTCS replication gueue if either of the following have occurred:

- The VTV was changed while it was mounted.
- The VTV was only read while mounted but less than the expected number of MVC copies of the VTV exist.

Once the expected number of MVC copies exist, replication does not occur. Regardless of the CONFIG GLOBAL REPlicat setting, replication also requires that:

- The VTV must be dismounted in a VTSS that supports replication and there cannot be an identical copy of the VTV in the other VTSS in the Cluster.
- In addition to the CONFIG GLOBAL REPlicat value, you must specify REPlicat(YES) on a VTV's Management Class for replication to occur.

# **VTVPAGE**

optionally, specifies the page size used to store VTV data in the VTSS and on the MVCs. This setting only applies to 400 and 800 MB VTVs. If VTVPAGE is not specified on either the MGMTclas statement or the CONFIG GLOBAL statement, the default is STANDard.

# **STANDARD**

standard page size, which is compatible with all VSM3 or VSM4 models and microcode levels.

# **LARGE**

large page size, which can provide improved performance within the VTSS and for migrates and recalls. Large page size requires a G level CDS. For more information on CDS levels, refer to the "CONFIg" command section in the ELS Command, Control Statement, and Utility Reference. For 2 and 4 GB VTVs (MAXVtvsz 2000 or 4000), a VTVPAGE setting of LARGE is always used. VTVPAGE does not apply to VSM2s. VTVPAGE(LARGE) requires VSM4 or VSM5 microcode D02.02.00.00 or VSM3 microcode N01.00.77.00. No installed option is required.



MGMTCLAS VTVPAGE, if specified, overrides the CONFIG GLOBAL VTVPAGE value. If VTVPAGE is not specified on either the MGMTclas Statement or the CONFIG GLOBAL statement, the default is STANDard. Consider the following:

- The page size of a VTV can only be changed by a VTV scratch mount.
   Additional restrictions may also apply for scratch VTVs that were previously resident in a VTSS.
- If you specify LARGE and the CDS level or VTSS microcode do not support LARGE, VTCS issues warning messages and VTVPAGE defaults to STANDard.
- If you specify STANDard for 2 or 4 GB VTVs VTCS issues warning messages and defaults to LARGE.
- Creating VTVs with large pages makes these VTVs unreadable in configurations that do not support large VTV pages.

# **NLIBDRNR**

optionally, specifies how VTCS handles non-library resident MVCs for drain or reclaim processing.

## **YES**

VTCS requests the mount of the non-library MVC. This is the default.

#### NO

VTCS suppresses the mount and purges the request.



- For reclaim, only library resident MVCs can be selected for processing, never non-library ones. However, between the time a library resident MVC is selected and the time it is actually processed, it may have become non-resident by being ejected.
- For drain, non-library resident MVCs can be selected.

# **NLIBMIGR**

optionally, specifies whether non-library resident MVCs will be selected for Migration processing.

# YES

Allow non-library resident MVCs to be selected (default).

# NO

Do not allow non-library resident MVCs to be selected.

## **NLIBRECL**

optionally, specifies whether non-library resident MVCs will be selected for Recall processing.

# **YES**

Allow non-library resident MVCs to be selected (default).



## NO

Do not allow non-library resident MVCs to be selected.

#### MVCMNTTO=nn

optionally, specifies the value in minutes when a mount of an MVC will timeout. *nn* indicates the time in minutes. Valid values are 5 to 30 minutes. The default is 15.

#### INITMVC

optionally, specifies whether un-initialized MVCs are to be initialized when they are first mounted.

## NO

Un-initialized MVCs should not be initialized. This is the default.

#### YES

Un-initialized MVCs should be initialized.

## **SYNCHREP**

optionally, specifies whether VTV synchronous replication feature is enabled.

#### NO

Synchronous replication is not enabled (the default).

#### YES

Synchronous replication is enabled.



SYNCHREP=YES only enables synchronous replication. To actually implement synchronous replication, you must create a Management Class that specifies REPLicat=YES\_SYNC. For more information, refer to the "MGMTclas Control Statement" section in the ELS Command, Control Statement, and Utility Reference.

# **MAXRTDS**

optionally, specifies the maximum number of RTDs supported.

#### 16

up to 16 RTDs supported.

## 32

up to 32 RTDs supported.

# **FASTMIGR**

optionally, specifies whether the stacked or streamed migrates feature is enabled for all VTSSs that support this feature.

# **STREAM**

Specifies to use the streaming method for migrations. VTCS monitors responses from the RTD and uses them to decide as to when a VTV has become migrated. Full advantage is made of the buffer within the RTD to improve the throughput when performing migration.

This option also implies the use of the STACKED feature.



## **STACKED**

Specifies to use the stacked method for migrations. VTCS maintains a small queue of requests to the VTSS. Advantage is made of the various buffers in the VTSS and RTD to improve the throughput when performing a migration. For backward compatibility, the value YES is the equivalent of STACKED.

## NO

Disable stacked migrates (the default).

FASTMIGR=STREAM or STACKED has the following prerequisites:

- FASTMIGR=STACKED: VSM4/VSM5 microcode D02.05.00.00 or higher. If this level of microcode is not installed on all VTSSs in the configuration, Stacked Migration will be limited to the VTSSs that have it installed.
- FASTMIGR=STREAM: VSM4/VSM5 microcode D02.15.xx.00 or higher. If this level of microcode is not installed on all VTSSs in the configuration, Streamed Migration will be limited to the VTSSs that have it installed.
- ELS 7.0 or higher with PTFs.
- CDS level G or higher.
- FICON ports for FICON RTDs and CLINKs.

For the Stacked Migration feature to be enabled, all hosts must be running the prerequisites, otherwise:

- If a host is active and does not support or tolerate stacked migrates, then the CONFIG utility returns an error.
- If a host is started and does not support or tolerate this feature, then the host shuts down.

## **LOGPOL**

optionally, specifies whether VTCS CDS logging is optional or required.

#### **OPTional**

Logging is optional. This is the default. This mode is required for configurations that include 7.1, 7.2, and lower level hosts.

# **REQuired**

Logging is enabled for all events on all hosts that share the CDS. This requires all hosts to be at level 7.0 or higher. The following events are logged:

- new version of VTV
- imported VTV
- first use or reuse of an MVC
- imported MVC
- add VTV to MVC
- VTV on an imported MVC
- unlink VTV from MVC
- reclaim VTV from MVC



- reset MVC EOT backward
- electronic export of VTV

## **MAXVTVSZ**

optionally, specifies a default maximum compressed VTV size (MB) that may be used during the creation of VTVs. Valid values for this parameter depend on both the CDS level and the microcode levels of the applicable VTSSs.

#### 400

400MB. This is the default.

#### 800

800MB. The CDS must be at E level or above.

# 2000

2GB. The CDS must be at G level or above.

#### 4000

4GB. The CDS must be at G level or above.

#### 32000

32 GB. The CDS must be at I level.

## Considerations:

- The size of a VTV changes only after it goes through a scratch cycle. Therefore, if you change the Management Class and DISP=MOD, then it will still retain the original size.
- If you specify a VTV size that is not supported by the configuration, VTCS issues warning messages and MAXVtvsz defaults to the largest VTV size supported by the configuration.
- MAXVtvsz does not apply to VSM2s.
- MAXVTVSZ(2000) or MAXVTVSZ(4000) requires VSM4 or VSM5 microcode D02.02.00.00 or VSM3 microcode N01.00.77.00. No installed option is required.
- MAXVTVSZ(32000) requires VSM6 minimum microcode level 6.2 and VLE minimum microcode level 1.5.1, if VLE is in the configuration.

The CONFIG GLOBAL and MGMTCLAS MAXVTVSZ parameters interact as follows:

- If MAXVTVSZ is specified on MGMTCLAS, this value overrides the CONFIG GLOBAL MAXVTVSZ value.
- If MAXVTVSZ is not specified on MGMTCLAS, the CONFIG GLOBAL MAXVTVSZ value, if specified, is used. Otherwise, MAXVTVSZ defaults to 400MB.
- If MAXVTVSZ is not specified on MGMTCLAS or on CONFIG GLOBAL, MAXVTVSZ defaults to 400MB.

# LOCKTOUT=nnn

optionally, specifies the minimum number of minutes that a resource is locked before message SLS6946E is issued.

nnn indicates the number of minutes. Valid values are 0, or any value between 5 and 240. If 0 is specified, message SLS6946E will not be issued when a required resource is locked. If this parameter is not specified, the current default of 10 minutes is retained.





LOCKTOUT is only supported at 'F' level CDS (V61ABOVE) and above.

#### **FASTRECL**

Optionally specifies whether VTCS should perform Early Time to First Byte (ETTFB), also known as concurrent tape recall/mount, for all VTSSs that support the feature. This parameter applies to recalls from RTDs and recalls from VLE.

## NO

Disable the ETTFB feature. This is the default.

#### YES

Enable the ETTFB feature. If you globally enable this feature, you can disable it for individual VTSSs through the CONFIG VTSS NOERLYMT parameter. Refer to the "CONFIG VTSS Statement" section in the *ELS Command, Control Statement, and Utility Reference*.

# VTDGT256

Optionally, specifies whether greater than 256 VTDs are to be used.

#### NO

Specifies that only the first 256 VTDs will be used. The first 256 VTDs are on control unit 00 - 0F of the VTSS with VDID address of x0000 - x0F0F.  $_{\rm NO}$  is the default.

# YES

Specifies that all configured VTDs in the VTSS can be used. This is only valid if the VTSS supports greater than 256 devices. The feature is globally enabled and applies to all VSMs that support greater than 256 devices. The feature can be disabled for an individual VTSS through the CONFIG VTSS NOGT256 parameter. Refer to "CONFIG VTSS NOGT256" in the *ELS Command, Control Statement, and Utility Reference* for more information.



VTDGT256 (YES) is only valid with VSM model 6 and above.

# **VTVCHAIN**

optionally, specifies globally if VTCS VTV chaining is enabled for multi-volume datasets.

# YES

VTV chaining for multi-volume datasets is enabled. This is the default.

# NO

VTV chaining for multi-volume datasets is disabled. Recall look-ahead will not be performed.



# Note:

- VTV recall look-ahead will not be performed for any existing chained VTVs.
- If a dataset is created while VTV chaining is disabled then the dataset's VTV chaining is disabled on all systems, even if the other system is running with VTV chaining enabled.

# **CONFIG HOST**

# This update applies to:

ELS 7.2 Command, Control Statement, and Utility Reference

Chapter 3, HSC Commands, Utilities, and Control Statements

# **Summary:**

The VTCS CONFIG HOST statement adds the VTVCHAIN parameter.

# **Description**

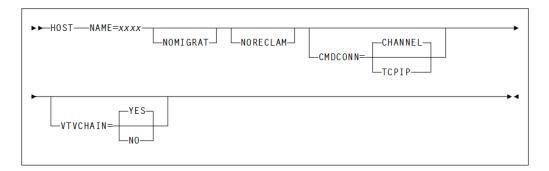
The CONFIG HOST statement is an optional statement that defines an MSP host and, optionally, the NOMIGRAT or NORECLAM parameters.

If specified, the HOST statement must follow the VTSS statement for the VTSS attached to that host. You must either specify all host definitions or none; if you specify only some hosts attached to a VTSS, VTCS issues an error.

# **Syntax**

The following figure shows the VTCS CONFIG HOST command syntax:

Figure 2-2 CONFIg HOST Command Syntax



#### **Parameters**

The CONFIG HOST command includes the following parameters:



## NAME=xxxx

specifies the LIBGENED host name. xxxx indicates the host name.

## **NOMIGRAT**

optionally, specifies that this host cannot perform migrations, consolidations, or export by VTV or Management Class from the VTSS(s) that the host accesses. NOMIGRAT controls both automatic and demand migrations and consolidations.

# Note:

- Specifying NOMIGRAT also causes NORECLAM to be set.
- IMMEDmig KEEP and IMMEDmig DELETE are mutually exclusive with CONFIG HOST NOMIGRAT. If you specify both, the IMMEDmig value overrides NOMIGRAT, and VTCS does not issue a message about this override.

## **NORECLAM**

optionally, specifies that this host cannot initiate automatic or demand reclaim processing using the VTSS(s) that the host accesses. The host can still perform MVC drains using MVCDRain.

# **CMDCONN**

optionally, specifies one of the following VTSS access methods:

## **CHANNEL**

indicates ESCON or FICON channel access. This is the default.

## **TCPIP**

indicates TCP/IP access. TCPIP requires a valid CONFIG VTSS IPCONN=(name-list) value.

## **VTVCHAIN**

optionally, specifies locally if VTCS VTV chaining is enabled for multi-volume datasets. The VTVCHAIN parameter on the CONFIG HOST statement overrides the CONFIG GLOBAL VTVCHAIN parameter.

# **YES**

VTV chaining for multi-volume datasets is enabled. This is the default.

#### NO

VTV chaining for multi-volume datasets is enabled. Recall look-ahead will not be performed.



# Note:

- VTV recall look-ahead will not be performed for any existing chained VTVs.
- If if a dataset is created while VTV chaining is disabled then the dataset's VTV chaining is disabled on all systems, even if the other system is running with VTV chaining enabled.

# New or Modified HSC/VTCS Messages

ELS 7.2 includes the following new or modified HSC/VTCS system messages:



These updates supersede the information found in the *ELS Messages and Codes Guide*, Chapter 2, HSC, VTCS, and CDRT Messages.

- SLS5079E
- SLS6751I
- SLS9004I
- SLS9005E
- SLS9006I
- SLS9007I
- SLS9008I
- SLS9050I
- SLS9051I
- SLS9052I
- SLS9053I
- SLS9054I
- SLS9055I
- SLS9056E

# **SLS5079E**

 ${\tt SLS5079E}$  MOUNT of  ${\tt VVVVVV}$  on  ${\tt DDDD}$  -  ${\tt Failed}$  (RC) -  ${\tt ERRTEXT}$ 

Explanation: The mount of volume *VVVVVV* on VIRTUAL drive *DDDD* failed. The reason for the failure is defined in the *ERRTEXT* portion of the message. *RC* is the return code from HSC/VTCS.



Explanations, System Actions and User Responses for the various Error Texts are presented below. The context in which the message is issued should always be determined, as the text for a given Reason describes the most likely case and may not match the specific case in which it was output.

# **Error Text (ERRTEXT) Values**

Message SLS5079E adds the following error text values:

- VTV mount suppressed by subsequent Mount/Dismount request
- Recall from tapeplex TTTTTTT failed
- SMC comms error (RC=RRR)
- VTV is mounted or in-use for Migrate or Recall

For reference, all error text values are described in the following listing:

Drive already has a VTV mounted

**Explanation:** A Mount was requested of Volume *VVVVVV* on device *DDDD*. VTCS determined that the device already has a VTV mounted on it.

System Action: The Mount fails.

**User Response:** Determine which VTV is Mounted on the device. If it should not be Mounted, attempt to Unload/Dismount it using the MSP Unload command and the HSC Dismount command.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

Internal error occurred RC=RRRRRRRR

**Explanation:** A mount was requested of volume *VVVVVV* on device *DDDD*. VTCS suffered an internal error (Return Code *X'RRRRRRR*') while processing the Mount.

System Action: The Mount fails.

**User Response:** Contact Oracle StorageTek Software Support.

Invalid virtual subpool PPPPPPPP

**Explanation:** A Mount was requested of Scratch volume *VVVVVV* on device *DDDD*. The Scratch volume was associated with Subpool *PPPPPPP* (for example, TAPEREQ statement), but the Subpool was found to be invalid. To be valid, the Subpool must exist and contain Scratch volumes.

System Action: The Mount fails.

**User Response:** Determine how the Subpool was selected (for example, TAPEREQ statement). Check that *PPPPPPPP* is the name of a Subpool and that it contains scratch volumes. Make any necessary corrections.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

Invalid VTD address SSSSSSS for VTV.



**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*. VTCS failed to find the internal control block for device (VTD) *DDDD* which is in VTSS *SSSSSSSS*.

System Action: The Mount fails.

**User Response:** Contact Oracle StorageTek Software Support.

MVC: MMMMMM canceled by operator

**Explanation:** A Mount was requested of migrated volume *VVVVVV* on device *DDDD*. Before the Recall and Mount were complete, the request was canceled by the operator, using the VT CANCEL command to cancel the Recall.

System Action: The Mount fails.

# **User Response:**

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

MVC: MMMMMM MVC could not be mounted

**Explanation:** A Mount was requested of Migrated volume *VVVVVV* on device *DDDD*. VTCS initiated a Recall of the VTV from MVC *MMMMMM*, but the MVC could not be mounted.

System Action: The Mount fails.

**User Response:** Review specific error messages to determine why the MVC Mount failed. Correct any problems found.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

MVC: MMMMMM No access to VTSS SSSSSSS to verify VTV location

**Explanation:** A Mount was requested of Migrated volume *VVVVVV* on device *DDDD*. The VTV had previously been resident in VTSS *SSSSSSS*. The VTSS could not be accessed by this host to determine if it contains a copy of the VTV.

System Action: The Mount fails.

**User Response:** Check that VTSS SSSSS can be accessed by, and is Online to, this Host.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

 $\ensuremath{\mathsf{MVC}}\colon \ensuremath{\mathsf{\mathit{MMMMMM}}}$  No RTDs for requested media and ACS

**Explanation:** A mount was requested of migrated volume *VVVVVV* on device *DDDD*. During recall processing, it was determined that there were no RTDs in the ACS that could mount the requested media type.

System Action: The Mount fails.



**User Response:** This is probably due to a configuration change. Determine the MVC media type and ACS location of the volume, or if other MVCs are available to access the VTV.

- If the mount is still required, move the MVC to an ACS with RTDs of the correct type and re-drive the mount -or- make other MVC copies available to use for recalling the VTV.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

MVC: MMMMMM VTD status changed during Recall/Mount

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*.

In the case of a Migrated VTV the message will contain MVC: MMMMM to show the MVC containing the VTV and indicates a change of VTD status during Recall. When the Recall from MVC MMMMMM was complete, VTCS found that the device was associated with a different VTCS request. A common scenario that gives this message is:

- A Batch Job requests VTV VVVVVV be mounted on a device DDDD.
- As the VTV is migrated, VTCS initiates a Recall.
- The Batch Job is canceled.
- A second job requests a different VTV be Mounted on device DDDD.
- The Recall of VTV VVVVV completes.
- VTCS attempts to satisfy the original Mount, but finds the device is no longer processing volume VVVVVV.

If the VTV was Resident, the message will not contain MVC: MMMMM and indicates a change of VTD status during Mount.

System Action: The Mount fails.

# **User Response:**

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

No MVCs available

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*. Because the VTV was Resident in a different VTSS from the one that contains device *DDDD*, a VTV transfer was initiated. The transfer is achieved by Migrating the VTV from the other VTSS and Recalling it into the VTSS containing device *DDDD*.

The VTV could not be Migrated from the other VTSS because no MVCs were available.

System Action: The Mount fails.

**User Response:** Determine where VTV VVVVV is Resident. Then, either:

- Change the JCL to select a device in that VTSS, or
- Investigate why no MVCs could be selected for Migration. Correct any problems found.



If the Mount is still required, re-drive it. If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

Problem decoding VCI request

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*. An internal error occurred within VTCS while processing the Mount.

System Action: The Mount fails.

**User Response:** Contact Oracle StorageTek Software Support.

Subsystem terminating

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*. VTCS could not process the Mount as the Task for the VTSS containing device *DDDD* was terminating/had terminated, for example, as the result of a VT VARY VTSS (SSSSSSS) OFFLINE command.

System Action: The Mount fails.

**User Response:** Check the status of the VTSS containing device *DDDD*. If it should be Online but is not, issue VT VARY VTSS(SSSSSS) ONLINE. VTCS will process the Mount when the VTSS comes Online.

If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV contents suspect

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*. The VTV was found to be "fenced".

System Action: The Mount fails.

**User Response:** As for message SLS6657E, contact Oracle StorageTek Software Support.

VTV mount suppressed by subsequent Mount/Dismount request

**Explanation:** A Mount was requested of volume VVVVVV on device DDDDDD.

If (MVC:VVVVVV) appears in the message it means that after a successful VTV recall from MVC VVVVVV, a different VTV was now required to be mounted on VTD DDDDDD.

A common scenario that gives this message is:

- 1. A job requests VTV VVVVV be mounted on VTD DDDDDD.
- 2. As volume *VVVVVV* is found to be migrated, the VTCS initiates a recall of VTD *VVVVVV* from MVC *VVVVVV*.
- 3. The batch job requesting VTV VVVVVV is canceled.
- 4. A second job requests a different VTV and is assigned the same VTD DDDDDD.
- 5. The recall of *VVVVVV* initiated by the canceled job completes.
- VTCS attempts to complete the mount of VTV VVVVVV but finds that VTD DDDDDD is no longer processing VTV VVVVVV.



If (MVC:VVVVVV) does not appear it means that requests received from different SMC clients were received in an illogical order by the HSC/VTCS server.

A common scenario that gives this message is:

- 1. A job from host 1 requests mount of VTV VVVVVV on VTD DDDDDD.
- 2. A mount request is sent from the SMC on host 1 to the HSC/VTCS server but due to network delays is not immediately received.
- 3. The job on host 1 is canceled. A dismount request is sent from the SMC on host 2 to the HSC/VTCS server.
- 4. A job from host 2 requests mount of VTV and is assigned VTD DDDDDD.
- 5. A mount request is sent from the SMC on host 2 to the HSC/VTCS server and is received before the mount and dismount requests from host 1.

System Action: The Mount fails.

**User Response:** If the failed mount is still required, redrive it. If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV: VVVVVV Inaccessible/bad VTSS SSSSSSS referenced

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD* in VTSS SSSSSSS. VTV *VVVVVV* could not be Mounted due to either:

- The state of the VTSS. The VTSS could not be accessed by this Host or was not Online.
- In the case of a Scratch Mount, the Mount failing and being re-tried too many times. This can happen if another product repeatedly rejects the VTV as not being in Scratch status.

System Action: The Mount fails.

**User Response:** In the case of a specific (non-scratch) Mount, check that VTSS SSSSSSS can be accessed by, and is Online to, this Host. Correct any problems found.

In the case of a Scratch Mount, determine if another product is rejecting the Mount, for example, because its scratch definitions are not synchronized with those of VTCS.

Make any necessary changes.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV: VVVVVV Attempts to select a scratch VTV have been exhausted

**Explanation:** A scratch mount was requested on device *DDDD* in VTSS *SSSSSSS*. The mount request failed after an internally specified number of VTVs were selected as a scratch and then found to not be a qualified scratch.

Volume *VVVVVV*, which is listed in the message, is the last VTV found in this state. This error can occur if another product repeatedly rejects each VTV as not being in scratch status or if the VTV scratch status in the CDS is not synchronized with the VTCS internal scratch counts.

**System Action:** The VTV scratch mount request will be retried later.



**User Response:** Determine if another product is rejecting the mount, for example, because its scratch definitions are not synchronized with those of VTCS.

Make any necessary changes. If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV: VVVVVV is still mounted

**Explanation:** A Mount was requested of volume *VVVVVV* on device DDDD. VTCS determined that the VTV is still Mounted from a previous Mount.

System Action: The Mount fails, though VTCS will attempt to re-drive it.

**User Response:** Determine whether the previous Mount of VTV *VVVVVV* was on a different Host to the current Mount. If it was, check that SYSZVOLS ENQueues are being correctly propagated across Hosts.

- If the previous Mount was on the same Host, attempt to determine if there was any reason for the Dismount to have failed. Correct any problems found.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

**VVVVVV** is not a valid VTV

**Explanation:** A Mount was requested of volume *VVVVVV* on device *DDDD*.

VTCS determined that *VVVVVV* is not defined in the VTCS Configuration, via a VTVVOL statement, as being Virtual.

System Action: The Mount fails.

**User Response:** Determine why a non-virtual allocation was directed to virtual device (VTD) *DDDD*. Esoterics, JCL, TAPEREQ statements, ACS routines and User Exits influence allocation and should be reviewed.

Make any necessary corrections.

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV: VVVVVV ECAM error CC=CCC RC=RRR

**Explanation:** VTV VVVVVV failed to mount due to an ECAM error. The ECAM completion code is CCC and the return code is RRR.

System Action: The Mount fails.

**User Response:** Consult the appropriate ELS publication. If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

VTV: VVVVVV Volume access control gave RC=RRRRRRRR

**Explanation:** VTV *VVVVVV* was selected to satisfy a scratch mount, but the mount was rejected because of User Exit 14:

- Set Return Code UX14RJCT (reject).
- Set Return Code UX14PWRD (password check) and the password check performed by HSC failed.



- Set Return Code UX14RACF/UX14RACL (RACROUTE check) and the RACROUTE check performed by HSC indicated the requestor does not have access to VTV VVVVVV.
- Set Return Code UX14RACF/UX14RACL (RACROUTE check) and the RACROUTE check performed by HSC indicated the requestor has READ, but not UPDATE, access to VTV VVVVV. HSC therefore requested VTV VVVVVV be mounted as write-protected.
- Set Return Code UX14NWRT (write-protect).

This message may be preceded by one or more of messages SLS2978A, SLS2979I, SLS2980I, SLS2985I or SLS2986I.

X'RRRRRRR' is the Return Code passed to VTCS by HSC after invoking User Exit 14 and performing any processing requested by User Exit 14.

- X'91309130' indicates the request to mount VTV VVVVV was denied by User Exit 14 or by HSC as a result of a password/RACROUTE check failing.
- X'91319131' indicates that VTCS was requested to mount VTV VVVVVV as write-protected. This was rejected by VTCS because the VTV selected to satisfy a scratch mount must be mounted write-enabled.

System Action: The Mount fails.

**User Response:** Look for any preceding message SLS2978A, SLS2979I, SLS2980I, SLS2985I or SLS2986I. Determine why VTCS received Return Code *X'RRRRRRR'* and whether this was the correct response for VTV *VVVVVV* given the details (for example, jobname) of the address space requesting the mount.

If the mount is still required, make any changes that are needed so that the mount does not fail again, then re-drive the mount.

VTV is import blocked

**Explanation:** VTV VVVVVV is not accessible as it is still pending completion of an IMPORT request.

System Action: The Mount fails.

**User Response:** Determine if there was an error condition during IMPORT processing. A possible cause of this would be having LOGPOL=REQUIRED specified, but logging is not active at the time of the IMPORT. This condition can be cleared by first correcting the problem that caused the failure and taking the following steps:

- Issue a Display VTV VVVVVV and note the line: Importing: NNNN (VTD address)
- 2. Issue Dismount VVVVVV NNNN

Attempt to mount the VTV again. If the reason for the failure is not understood, contact Oracle StorageTek Software Support.

MVC: MMMMMMM MMMMMMMM Partition map not found

**Explanation:** VTV *VVVVVV* has a migrated copy on MVC *MMMMMM*, which has been written in partitioned mode. Each partitioned mode MVC should have a record in the CDS that describes the usage of the partitions. This record is known as the partition (allocation) map. VTCS was unable to read the partition map for MVC *MMMMMM*.



System Action: The Mount fails.

User Response: Drain or audit MVC MMMMMM, then attempt the mount again.

Recall from tapeplex TTTTTTT failed

 $\textbf{Explanation:} \ \textbf{In order to mount VTV } \textit{VVVVVV}, \ \textbf{VTCS had to recall the VTV from}$ 

tapeplex TTTTTTT. The recall failed.

System Action: The Mount fails.

**User Response:** Message SLS7540E will also be issued to give details of the recall failure. Investigate and correct the cause of the failure.

SMC comms error (RC=RRR)

**Explanation:** In order to mount VTV VVVVV, VTCS had to issue an internal request to SMC. This command failed due to an SMC communications error. If output, RC=RRR is the non-zero Return Code.

System Action: The Mount fails.

**User Response:** Check the status of SMC on the local tapeplex.

- If message SLS6884E was issued, investigate and correct any errors reported.
- If message SLS7540E was also issued, indicating a failure to recall VTV VVVVVV from another tapeplex (TTT), perform the same checks on tapeplex TTT as well.

VTV is mounted or in-use for Migrate or Recall

**Explanation:** A mount was requested of volume *VVVVVV* on device *DDDD*. The VTV is currently active with a Migrate or Recall request and is unavailable until that process completes.

System Action: The Mount fails.

# **User Response:**

- If the Mount is still required, re-drive it.
- If the reason for the failure is not understood, contact Oracle StorageTek software Support.

# **SLS6751**I

CLINK vtssname/clinkid iftype ifaddr RETURNED ECAM ERROR CC=ccc RC=rrr

**Explanation:** VTCS encountered an ECAM error on Clustered VTSS link *clinkid* with *iftype ifaddr* on VTSS *vtssnam*. The command terminated with completion code *ccc* and reason code *rrr*. This may be caused by a hardware or software error, or some other unresolvable condition.

**System Action:** Depending on the nature of the error, the failing request may be re-tried on a different Clink.

**User Response:** Check the SYSLOG for other messages which may indicate the nature of the error.



# SLS90041

SLS9004I COMMPATH XXXXXXXX is ignored under MSP

**Explanation:** The METHOD=VTAM and VTAMPATH= are not supported under MSP and are ignored.

System Action: None.

User Response: Respecify the COMMPATH command with METHOD=CDS or METHOD=LMU.

# **SLS9005E**

SLS9005E Global module YYYY error, RC=XXXX

**Explanation:** The MSP global load routine failed to *YYYY* (load/delete) a module. *XXXX* is the return code set.

- 90A1 invalid LVT pointer
- 90A2 invalid @@VT pointer
- 90A3 invalid @@GETAB pointer in @@VT
- 90A4 unable to get lock for routine
- 90A5 unable to free lock for routine
- 90A6 unable to obtain global load table
- 90A7 BLDL failed
- 90A8 load failed
- 90A9 GETMAIN of CSA failed

**System Action:** Load or delete fails for specified module.

**User Response:** HSC may fail because of this error. If so, determine the cause of the problem and restart HSC after the problem is corrected. If message persists, contact your Oracle StorageTek Systems Support Representative (SSR).

# **SLS90061**

SLS9006I MSP@GCT subtable release error, RC=XXXX

**Explanation:** During MSP component termination processing, an error occurred when attempting to release a @GCT subtable. The return code (RC) can be used to identify this error. *XXXX* is the return code set.

- 90A1 invalid LVT pointer
- 90A3 invalid @@GETAB pointer in @@VT
- 90A4 unable to get lock for routine
- 90A5 unable to free lock for routine
- 90Aa CSA FREEMAIN error



- 90Ab error while releasing storage for an entry in the @GCT
- 90Ac FREEMAIN of GCT failed

System Action: None.

**User Response:** Some CSA storage may not be released at completion of task. If message persists contact your Oracle StorageTek Systems Support Representative (SSR).

# SLS90071

SLS9007I SSAT table has XX free slots remaining

**Explanation:** The MSP subsystem affinity table is nearly full, only *XX* slots remain.

System Action: HSC operations continue normally.

**User Response:** Attempt to reduce concurrent usage of HSC commands and facilities.



If the table is completely full then an abend U448 reason code 940-003 will occur. If this abend persists, contact your Oracle StorageTek Systems Support Representative (SSR).

# **SLS90081**

SLS9008I MMMM from NNNN to YYYY

**Explanation:** The LSM is in manual mode and volume MMMM from location NNNN will need to be mounted on drive YYYY.

System Action: None.

**User Response:** Manual mount the volume on the nominated drive.

# SLS90501

SLS9050I Clean-up of @GCT load table successful

**Explanation:** Debug message indicating clean-up by SLS@DEL completed successfully.

System Action: None.
User Response: None.

# SLS90511

SLS9051I Module XXXXXXXX is in problem state for global load request

**Explanation:** The MSP load routine was called while in problem state for a global load request.

System Action: Load continues.

**User Response:** Warning message only, HSC continues. If message persists, contact your Oracle StorageTek Support Representative (SSR).

# **SLS90521**

SLS9052I EP NNNN at AAAA length LLLL has been MMMM

**Explanation:** Indicates that a module has been loaded or deleted.

- NNNN is the entry point name.
- AAAA is the entry point address.
- LLLL is the module length.
- MMMM is deleted or loaded.

System Action: None.
User Response: None.

# **SLS90531**

SLS9053I No journal datasets defined

**Explanation:** HSC was started without journal datasets defined and the JOURNAL operator command was issued.

System Action: None.

**User Response:** Warning message only, HSC continues.

# SLS90541

SLS9054I SYNCH GETMAIN for user exit failed

**Explanation:** HSC was unable to GETMAIN the memory required to load a user exit.

System Action: Load fails for specified user exit.

**User Response:** Warning message only, HSC continues. Check that the region parameter for the job is large enough. If the message persists, contact your Oracle StorageTek Systems Support Representative (SSR).

# SLS90551

SLS9055I No free QWRK task for ASCOMM, waiting for a while

**Explanation:** MSP has a TCB limitation of 256 active TCBs. To avoid an attach failure abend, HSC will wait for the number of active TCBs to drop below the 256 limit before attempting to attach a new ASCOMM QWRK task.



System Action: None.
User Response: None.

# **SLS9056E**

 ${\tt SLS9056E}$  MSP does not support CF(LOCKSTR parameter in VTCS config), VTCS terminating

**Explanation:** VTCS/MSP does not support a coupling facility structure. It is available for only VTCS/MVS.

System Action: VTCS terminates.

User Response: Configure CDS without LOCKSTR parameter.

# New or Modified ECAM Messages and Return Codes

ELS 7.2 includes the following new or modified ECAM messages and return codes:



These updates supersede the information found in the *ELS Messages and Codes Guide*, Chapter 7, ECAM and VLE UUI Return Codes.

# CC5 RC109

Return code CC5 RC109 is updated to include a new message:

CLINK VTSSNAME/CLINKID IFTYPE IFADDR RETURNED ECAM ERROR CC=5 RC=109

Messages associated with CC5 RC109 are described as follows:

CC5 RC109 RTD DDDDDD VTSS XXXXXXXX RETURNED ECAM ERROR CC=5 RC=109

**Explanation:** There is a communications error between the VTSS and the RTD. Possible cause of this condition could be that an MVC is mounted on an RTD, and the RTD drops ready due to a drive or cable problem.

System Action: The request fails.

**User Response:** Query the MVC to display it in SYSLOG for possible diagnostic purposes and then vary the RTD offline using the following commands:

```
.VT Q MVC(volser)
```

to determine the status of MVC.

```
.VT Q RTD(rtd-id)
```

to see if MVC is mounted on the RTD.

If the previous display indicates the MVC is not mounted on an RTD, then vary the RTD offline by issuing the following command:

```
.VT V RTD (rtd-id) OFFline
```

If the MVC is mounted on the RTD, vary the RTD online first and then offline to unload the MVC from the RTD. Issue the following commands:

```
.VT V RTD (rtd-id) ONline
.VT V RTD (rtd-id) OFFline
```

Contact Oracle StorageTek Hardware Support and supply the RTD address and MVC.

```
CC5 RC109
```

CLINK VTSSNAME/CLINKID IFTYPE IFADDR RETURNED ECAM ERROR CC=5 RC=109

**Explanation:** There is a communications error between on the specified CLINK. This could be caused by a hardware or software error, or some other unsolvable condition.

**System Action:** Depending on the nature of the error, the failing request may be re-tried on a different Clink.

**User Response:** Check the SYSLOG for other messages which may indicate the nature of the error.

# New or Modified SMF Record Formats

ELS 7.2 includes the following new or modified SMF Record formats:

VTCS SMF Subtype 11 Record (SLSSMF11)

These updates supersede the information found in the *ELS Programming Reference*, Chapter 5, SMF Record Formats.

# VTCS SMF Subtype 11 Record (SLSSMF11)

The VTCS SMF subtype 11 record format is updated:

- New VSM6 interface types are added to reflect each type of VSM6 interface.
   Under field SMF11TOL, the following new equates are added:
  - X'0003', SMF11V6H, VSM6 HOST INTERFACE
  - X'0004', SMF11V6R, VSM6 RTD INTERFACE
  - X'0005', SMF11V6I, VSM6 IP INTERFACE
- Under field SMF11CSP, the following equate is added under field SMF11CSP to indicate VSM6 FICON channel speed:
  - X'8000', SMF11V6F, VSM6 FICON CHANNEL
- Fields SMF11NIO and SMF11CUB have been redefined and documented to provide more meaningful statistics for VSM6 storage systems.

The complete and updated table for VTCS SMF subtype 11 record format is:



**Table 2-1 SLSSMF11 Record Format** 

Decimal Offset	Hex Offset	Туре	Length	Label	Description
0	0	start of record	-	SLSSMF11	VTCS SMF record subtype 11
0	0	character	8	SMF11VTS	VTSS ID
8	8	hexstring	2	SMF11CNT	Count of entries in this record the following fields repeat for each interface in this record
10	Α	data	-	SMF11ENT	Start of entry
10	Α	character	8	SMF11INM	Channel interface name
18	12	bitstring	2	SMF11CI	channel interface installed (y/n)
-	-	X'0000'	-	SMF11CIN	no
-	_	X'0001'	-	SMF11CIY	yes
20	14	bitstring	2	SMF11CE	channel interface enabled (y/n)
-	-	X'0000'	-	SMF11CEN	no
-	-	X'0001'	-	SMF11CEY	yes
22	16	hexstring	2	SMF11NAT	number of addresses trapped
24	18	hexstring	2	SMF11CSP	Channel type
-	-	X'0200'	-	SMF11CSE	ESCON channel
-	-	X'1000'	-	SMF11CSI	IP link
-	-	X'2000'	-	SMF11CSF	FICON channel
-	-	X'8000'	-	SMF11V6F	VSM6 FICON channel
26	1A	hexstring	8	SMF11NIO	Number of I/Os
34	22	hexstring	8	SMF11CUB	Control unit busy (in v -seconds)
42	2A	bitstring	2	SMF11TOL	Type of link
-	-	X'0000'	-	SMF11TLH	Host
-	-	X'0001'	-	SMF11TLR	RTD
-	-	X'0002'	-	SMF11TLI	IP CLINK
-	-	X'0003'	-	SMF11V6H	VSM6 host interface
-	-	X'0004'	-	SMF11V6R	VSM6 RTD interface
-	_	X'0005'	-	SMF11V6I	VSM6 IP interface
44	2C	length	-	SMF11VEN	End of variable area
-	-	character	8	SMF11TPX	TapePlex name

# Note:

The Tapeplex name field can be found in the SMF record after the repeating sections. It has been defined as part of the fixed area to allow it to be accessed using its name when the total length of the variable area is added to the starting address of the SMF record.

