# Hercules System/370, ESA/390, z/Architecture Emulator

# **Hercules – Messages and Codes**

Version 3 Release 09



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# 1. Preface

# 1.1 Edition information

This edition applies to the Hercules S/370, ESA/390 and z/Architecture Emulator Release 3.09.0 and to all subsequent versions, releases and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of software you are using.

# 1.2 What this book is about

This book describes all messages and codes of the Hercules Emulator.

For guidance in operating or debugging Hercules, for a general overview or for guidance in installation of the product, additional manuals are available. Please see Chapter "Related Publications" for more information on these manuals.

Please note that some information can be found in more than one manual. This redundancy is not intended to unnecessarily expand the manuals but should help to find all necessary information in one place.

# 1.3 Who should read this book

This book is mainly intended for people who are responsible for operating the Hercules Emulator. It serves as a starting point for resolving errors in the Hercules environment.

# 1.4 What you need to know to understand this book

To understand this book you should be somewhat familiar with the Windows, Linux or Mac OS X operating systems. You should also be familiar with the installation and operation of the Hercules Emulator itself.

Last but not least you should be familiar with the hardware and software of IBM mainframe environments and their underlying ideas and concepts, as Hercules emulates IBM mainframe hardware.

# 1.5 How to use this book

This book is designed as a reference book for all messages and codes of the Hercules Emulator and related products. It is not intended to be read chapter by chapter.

#### 1.6 Revision Notice

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Revision Number: HEMC030900-00

Date: July 15, 2013

# 1.7 Readers Comments

If you like or dislike anything about this book please send an email to the address below. Feel free to comment on any errors or lack of clarity. Please limit your comments on the information in this specific book and also include the "Revision Notice" just above. Thank you for your help.

Send your comments by email to the Hercules-390 discussion group:

hercules-390@yahoogroups.com

# 1.8 Legal Advice

Hercules implements only the raw S/370, ESA/390, and z/Architecture instruction set, it does not provide any operating system facilities. This means that you need to provide an operating system or standalone program which Hercules can load from an emulated disk or tape device. You will have to write the operating system or standalone program yourself, unless you possess a license from IBM to run one of their operating systems on your PC, or use IBM programs and operating systems which have been placed in the public domain.

NOTE: It is <u>YOUR</u> responsibility to comply with the terms of the license for the operating system you intend to run on the Hercules Emulator.

# 1.9 Trademarks

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- UMX Virtual Mainframe is a registered trademark of UMX Technologies.

# 1.10 Acknowledgements

The Hercules manuals would not have been possible without the assistance of many people and I would like to thank all those who helped me. In particular I would like to thank:

- The Hercules developers for their documentation on various websites from which I derived a
  great deal of information.
- Roger Bowler and Fish for proof-reading the manuals.
- Loris Degoianni for allowing me to use parts of the original WinPcap documentation.
- Tom Brennan for allowing me to use parts of his Vista tn3270 documentation.
- My colleagues for working with early previews of the documentation, beginning with just a few pages.
- · Mike Cairns for reviewing and editing the manuals.
- Robert Allan for providing the "Linux Installation" part.
- Lutz Mader for providing the "Mac OS X Installation" part.

If anyone feels they have been forgotten on this list please let me know.

Peter Glanzmann

# 2. Related Publications

# 2.1 Hercules Emulator – General Information

The Hercules "General Information" manual provides an overview of the ideas and concepts of the Hercules Emulator as well as documentation of the emulators functionality. It explains what Hercules does and does not and helps you decide if the software fits to your needs and if it can fulfill all your requirements.

### 2.2 Hercules Emulator – Installation Guide

The Hercules "Installation Guide" shows you how to install Hercules and all related optional and required software components under the Microsoft Windows, Linux and Apple MacIntosh OS X operating systems.

After going through the installation guide you will have a working emulator environment ready to IPL a S370, S/390 or z/Architecture mainframe operating system.

# 2.3 Hercules Emulator – User Reference Guide

The Hercules "User Reference" leads you through all aspects of the emulators operation. It provides instruction in the operation of the Hercules Emulator with and without the Windows GUI. The usage details for all Hercules utilities are also covered in this guide.

After reading this manual you should be able to work with Hercules and the Hercules console, create virtual devices, understand backup/restore procedures and general housekeeping within the Hercules environment.

# 2.4 Hercules Emulator – Messages and Codes

The "Messages and Codes" manual provides a detailed explanation of all Hercules related messages. It is the primary source for troubleshooting and debugging when you experience problems with Hercules.

# 2.5 Hercules Emulator – Reference Summary

The Hercules "Reference Summary" booklet lists all the system parameters, device definitions, console commands, Hercules utilities etc. along with their arguments.

This booklet is intended as a quick reference guide for experienced users. Consult the Hercules "User Reference Guide" for more detailed and additional information.

# 3. Introduction

# 3.1 Overview

This Chapter gives an introduction to the messages and codes of the Hercules Emulator and related tools, as well as the messages written from the various standalone utility programs.

# 3.2 Locations

All messages are written to the Hercules console (native console as well as the Hercules Windows GUI / Hercules Studio) and to the Hercules log file, if a log file is specified in the startup command.

# 3.3 Message Format

All Hercules-issued messages have the following format:

#### HHCmmnnns text

The follwing table explains the various parts of the message format:

Part	Explanation
ннс	HHC is the message prefix for Hercules. All Hercules messages will have this prefix.
mm	"mm" specifies the function that issued the message. A detailed list of all functions can be found in section 3.4.
nnn	"nnn" specifies the message number. This number is assigned more or less sequentially.
s	"s" is the message severity. Details can be found in section 3.5.
text	"text" is the actual message text.

**Table 1: Message Format** 

# 3.4 Function List

The following table presents all the Hercules function prefixes from the messages, along with a short description of the function:

Prefix	Function
AO	Hercules Automatic Operator

Prefix	Function
CA	Communication Adapter Emulation
CF	Configuration File Processing
СР	CPU Emulation
СТ	Channel-to-Channel Adapter Emulation
CU	CCKD Utilities
DA	DASD Emulation (CKD, CCKD and FBA
DC	DASDCOPY Utility
DG	Dyngui.DLL
DI	DASDINIT Utility
DL	DASDLOAD Utility
DS	DASDISUP Utility
DT	DASDCAT Utility
DU	DASD Utilities Common Functions
HD	Hercules Dynamic Loader
HE	HETINIT Utility
HG	HETGET Utility
нм	HETMAP Utility
нт	HTTP Server
HU	HETUPD Utility
IF	Network Interface Configuration Handler (hercifc)
IN	Hercules Initialization
LC	LCS Emulation
LG	System Log Functions
PN	Hercules Control Panel Command Messages
PR	Printer Emulation
PU	Card Punch Emulation

Prefix	Function
RD	Card Reader Emulation
SD	Socket Devices Common Functions
ТА	Tape Device Emulation
тс	TAPECOPY Utility
TE	Terminal Emulation
ТМ	TAPEMAP Utility
TS	TAPESPLT Utility
TT	TOD Clock and Timer Services
TU	TUN / TAP Driver Support
VM	VM / CP Emulation Facility

**Table 2: Hercules Function List** 

# 3.5 Message Severity

The following table shows the different message severities, issued by the Hercules Emulator.

Code	Meaning
S	Severe error. This type of error causes immediate termination of Hercules.
E	Error. The function being executed did not execute correctly but Hercules should continue running
W	Warning. Not necessarily an error but something to take note of and possibly correct.
ı	Information. General messages that do not require any further action.
Α	Action. You need to do something.
D	Debug. Debugging Messages.

**Table 3: Message Severity** 

# 3.6 Message Examples

The following figure shows some Hercules messages. Although these messages are from a real IPL, please note that they are not complete i.e some messages have been deleted. The messages are shown just as an example of how messages look, especially the variable parts of messages.

```
01:13:24 Hercules Version 3.05
01:13:24 (c)Copyright 1999-2007 by Roger Bowler, Jan Jaeger, and others
01:13:24 Built on Jun 24 2007 at 07:37:21
01:13:24 Build information:
01:13:24
          Win32 (MSVC) build
          Modes: S/370 ESA/390 z/Arch
01:13:24
01:13:24 Max CPU Engines: 8
01:13:24 Using fthreads instead of pthreads
01:13:24 Dynamic loading support
01:13:24 Loadable module default base directory is . 01:13:24 Using shared libraries
           Using shared libraries
01:13:24 HTTP Server support
01:13:24 No SIGABEND handler
01:13:24 Regular Expressions support
01:13:24 Automatic Operator support
01:13:24
          Machine dependent assists: cmpxchg1 cmpxchg4 cmpxchg8 fetch_dw store_dw
01:13:24 Running on LENA Windows_NT-5.1 i686 MP=2
01:13:24 Crypto module loaded (c) Copyright Bernard van der Helm, 2003-2007
01:13:24 HHCCF020W Vector Facility support not configured
01:13:24 HHCCF065I Hercules: tid=000006AC, pid=1900, pgid=1900, priority=0
01:13:24 HHCTE001I Console connection thread started: tid=00000FBC, pid=1900
01:13:24 HHCTE003I Waiting for console connection on port 3270
01:13:24 HHCDA020I D:/MVS/DASD/WORK00.140c cyls=555 heads=30 tracks=16650 trklen=19456
01:13:24 HHCDA020I D:/MVS/DASD/TST003.34Bc cyls=560 heads=30 tracks=16800 trklen=19456
01:13:24
01:13:24 HHCCF069I Run-options enabled for this run:
01:13:24
                   NUMCPU:
01:13:24
                   ASN-and-LX-reuse: DISabled
01:13:24
                   DIAG8CMD:
                                     DISabled
01:13:24 HHCCP002I CPU0000 thread started: tid=00000820, pid=1900, priority=0
01:13:24 HHCCP003I CPU0000 architecture mode S/370
01:13:24 HHCTT002I Timer thread started: tid=000007A4, pid=1900, priority=-20
01:13:24 HHCCP002I CPU0001 thread started: tid=000008E4, pid=1900, priority=0
01:13:24 HHCCP003I CPU0001 architecture mode S/370
01:13:24 HHCPN001I Control panel thread started: tid=000006AC, pid=1900
01:13:24 HHCHT001I HTTP listener thread started: tid=00000818, pid=1900
01:13:24 HHCHT013I Using HTTPROOT directory "D:\Hercules\html\'
01:13:24 HHCA0001I Hercules Automatic Operator thread started;
                   tid=00000F58, pri=0, pid=1900
01:13:24
01:13:24 HHCHT006I Waiting for HTTP requests on port 8081
01:13:34 quit
01:13:34 HHCIN900I Begin Hercules shutdown
01:13:34 HHCIN901I Releasing configuration
01:13:34 HHCAO002I Hercules Automatic Operator thread ended
01:13:34 HHCCP008I CPU0000 thread ended: tid=00000820, pid=1900
01:13:34 HHCCP008I CPU0001 thread ended: tid=000008E4, pid=1900
01:13:34 HHCCF047I Subchannel 0:0000 detached
01:13:34 HHCCF047I Subchannel 0:000E detached
```

01:13:34 HHCTE004I	Console connection thread	terminated	1			
01:13:34 HHCCD210I	size free nbr s	t reads	writes	12reads	hits	
switches						
01:13:34 HHCCD212I						
01:13:34 HHCCD213I	[*] 37956 0% 0	0	0	0	0	0
01:13:34 HHCCD215I	D:/MVS/DASD/SORT00.130c					
01:13:34 HHCCD216I	[0] 37956 0% 0 r	w 0	0	0		
01:13:34 HHCTT003I	Timer thread ended					
01:13:34 HHCCF047I	Subchannel 0:000F detached	l				
01:13:34 HHCCD210I	size free nbr s	st reads	writes	12reads	hits	
switches						
	[*] 148260 0% 0	0	0	0	0	0
	D:/MVS/DASD/TST003.34Bc					
01:13:34 HHCCD216I		w 0	0	0		
	Subchannel 0:0030 detached	_				
	Subchannel 0:0031 detached					
	Configuration release comp					
	Calling termination routin	ies				
	Begin shutdown sequence					
	Calling panel_cleanup					
	panel_cleanup complete					
	Calling console_shutdown					
	console_shutdown complete					
01:13:34 HHCHD901I	_					
	Begin HDL termination sequ	ience				
	logger thread terminating					
01:13:34 HHCIN0991	Hercules terminated					

Figure 1: Sample Messages

# 4. Messages HHCAOnnns - Hercules Automatic Operator

# **HHCAOnnns**

Messages HHCAOnnns are not yet documented.

# 5. Messages HHCCAnnns - Communication Adapter Emulation

# HHCCA001I

# HHCCA001I CCUU:Connect out to ipaddr:port failed during initial status: System Cause Text

#### **Explanation**

Hercules attempted to make an outgoing TCP connection to *ipaddr:port* but the system indicated that there was an error while processing the request.

#### **System Action**

The DIAL or ENABLE CCW that caused the connection attempt ends with Unit Check and Intervention Required. The reason for the failure is indicated in the *System Cause Text* field

#### **Operator Action**

None

#### **Programmer Action**

Correct the RHOST/RPORT configuration statements in the configuration file. If this message occured during a program initiated DIAL, correct the dial data.

# HHCCA002I

#### HHCCA002I CCUU:Line Communication thread thread id started

#### **Explanation**

The thread responsible for asynchronous operations for the BSC emulated line CCUU has been started.

# **System Action**

The system continues.

#### **Operator Action**

None. This is an informational message.

# **Programmer Action**

None. This is an informational message.

# HHCCA003E

# HHCCA003E CCUU:Cannot obtain socket for incoming calls : System Cause Text

### **Explanation**

A system error occured while attempting to create a socket to listen for incoming calls.

#### **System Action**

The device creation is aborted.

#### **Operator Action**

None.

#### **Programmer Action**

Check the System Cause Text for any information relating to the host system. Notify support.

# HHCCA004W

#### HHCCA004W CCUU: Waiting 5 seconds for port port to become available

#### **Explanation**

While attempting to reserve port port to listen to, the system indicated the port was already being used.

#### **System Action**

The system waits 5 seconds and then retries the operation.

#### **Operator Action**

Terminate the device if the port is in error.

#### **Programmer Action**

Determine the program holding the specified port. If the port cannot be made available, use a different port.

# HHCCA005I

#### HHCCA005I CCUU:Listening on port port for incoming TCP connections

#### **Explanation**

The system is now listening on port *port* for incoming a tcp connection.

# **System Action**

The system continues.

#### **Operator Action**

None. This is an informational message.

# **Programmer Action**

None. This is an informational message.

# HHCCA006T

#### HHCCA006T CCUU:Select failed: System Cause Text

# **Explanation**

An error occured during a 'select' system call.

#### **System Action**

The BSC thread is terminated.

# **Operator Action**

None.

#### **Programmer Action**

Check the System Cause Text for any indication of where the error might come from. Notify Support.

### HHCCA007W

# HHCCA007W CCUU:Outgoing call failed during ENABLE/DIAL command : System Cause Text

#### **Explanation**

The system reported that a previously initiated TCP connection could not be completed.

#### **System Action**

The I/O operation responsible for the TCP outgoing connection is ended with Unit Check and Intervention Required.

#### **Operator Action**

If the error indicates that the error is temporary, retry the operation.

#### **Programmer Action**

Check that the destination for this line is correctly configured. If the operation was a DIAL attempt, check in the application configuration or operation data.

# HHCCA008I

# HHCCA008I CCUU:cthread - Incoming Call

#### **Explanation**

The BSC thread has received an incoming call.

# **System Action**

Depending on configuration and operational status, the call is either accepted or rejected. Eventually an ongoing I/O operation may complete.

#### **Operator Action**

None. This is an informational message.

#### **Programmer Action**

None. This is an informational message.

# HHCCA009I

# HHCCA009I CCUU:BSC utility thread terminated

#### **Explanation**

The BSC thread has ended.

### **System Action**

The system continues.

#### **Operator Action**

Refer to any previous error message to determine if this message was not unexpected.

#### **Programmer Action**

Refer to any previous error message to determine if this message was not unexpected.

# HHCCA010I

# HHCCA010I CCUU:initialization not performed

#### **Explanation**

The Device initialization process has failed.

#### **System Action**

The system terminates or continues, depending on the reason for which the device was initialization was initiated.

#### **Operator Action**

Refer to any previous error message.

#### **Programmer Action**

Refer to any previous error message.

#### HHCCA011E

#### HHCCA011E CCUU: Error parsing Keyword

# **Explanation**

The device keyword parser found an error while parsing a known keyword.

#### **System Action**

The system continues. The device initialization routine turns on a NOGO flag.

#### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

# HHCCA012E

# HHCCA012E CCUU: Unrecognized parameter Keyword

#### **Explanation**

The device keyword parser found an unknown keyword in the device parameter list.

#### **System Action**

The system continues. The device initialization routine turns on a NOGO flag.

### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

# HHCCA013E

# HHCCA013E CCUU:Incorrect local port/remote port/local host/remote host specification value

#### **Explanation**

The device initialization routine could not correctly parse a parameter value.

#### **System Action**

The system continues. The device initialization routine turns on a NOGO flag.

#### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

# HHCCA014E

# HHCCA014E CCUU:Incorrect switched/dial specification value; defaulting to DIAL=OUT

#### **Explanation**

The device initialization routine found an incorrect DIAL value.

#### **System Action**

The system continues. The device initialization routine turns on a NOGO flag.

#### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

# HHCCA015E

# HHCCA015E CCUU:Missing parameter : DIAL=NO/IN/OUT/INOUT and LPORT/RPORT/LHOST/RHOST not specified

#### **Explanation**

The device initialization routine found that a mandatory parameter was not provided for a specific DIAL Value.

# **System Action**

The system continues. The device initialization routine turns on a NOGO flag.

#### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

#### Note

For DIAL=NO , LPORT, RPORT and RHOST are needed For DIAL=IN , LPORT is required

# HHCCA016W

# HHCCA016W CCUU:Conflicting parameter : DIAL=NO/IN/OUT/INOUT and LPORT/RPORT/LHOST/RHOST=value specified

#### **Explanation**

The device initialization routine found that a parameter was provided for a parameter that is not relevant for a specific DIAL value.

#### **System Action**

The parameter is ignored. The system continues.

#### **Operator Action**

For a runtime initialization, correct the device initialization parameters, otherwise notify the programmer.

#### **Programmer Action**

For an engine initialization, correct the device configuration parameters in the configuration file.

#### Note

For DIAL=IN, RPORT and RHOST are ignored

For DIAL=OUT, LPORT, LHOST, RPORT and RHOST are ignored

For DIAL=INOUT, RPORT and RHOST are ignored

# HHCCA017I

# HHCCA017I CCUU:LPORT/RPORT/LHOST/RHOST parameter ignored

# **Explanation**

The system indicates that the parameter specified is ignored. This message is preceded by message HHCCA016W.

# **System Action**

The system continues.

#### **Operator Action**

None.

#### **Programmer Action**

None.

#### HHCCA018E

### HHCCA018E CCUU:Bind failed: System Cause Text

#### **Explanation**

While attempting to bind a socket to a specific host/port, the host system returned an uncorrectable error.

#### **System Action**

BSC Thread terminates.

#### **Operator Action**

None.

#### **Programmer Action**

Check that the LHOST parameter for this device is indeed a local IP address, otherwise notify support.

# HHCCA019E

#### HHCCA019E CCUU:BSC comm thread did not initialise

#### **Explanation**

The BSC communication thread reported that it terminated while the device was initialising.

#### **System Action**

The device is not initialised.

#### **Operator Action**

Check for any previously issued error message.

#### **Programmer Action**

Check for any previously issued error message.

# HHCCA020E

# HHCCA020E CCUU: Memory allocation failure for main control block

# **Explanation**

A memory allocation failure occurred, while attempting to reserve memory for the Communication Adapter control block.

# **System Action**

The device is not initialised.

#### **Operator Action**

None.

# **Programmer Action**

Contact support.

# HHCCA021I

#### HHCCA021I CCUU: Initialization failed due to previous errors

# **Explanation**

The initialization process for device CCUU did not complete successfully.

#### **System Action**

The device is not initialised.

# **Operator Action**

None.

# **Programmer Action**

Refer to any previous error message.

# HHCCA300D

# HHCCA300D Debug Message

# **Explanation**

This is a debug message. CCW Tracing has been turned on for this device and the Line Handler issues debug messages to help diagnose interface, conformance and protocol issues.

#### **System Action**

The system continues.

# **Operator Action**

If the debug messages are no longer necessary, turn off CCW tracing (panel command: 't-CCUU').

#### **Programmer Action**

None.

# 6. Messages HHCCFnnns - Configuration File Processing

# HHCCF001S

#### HHCCF001S Error reading file filename line lineno: error

#### **Explanation**

An error was encountered reading the configuration file named *filename* at line number *lineno*. The error is described by *error*.

#### **Action**

Correct the error and restart Hercules.

# HHCCF002S

#### HHCCF002S File filename line lineno is too long

#### **Explanation**

The line at line number *lineno* in the configuration file *filename* is too long and cannot be processed.

#### **Action**

Correct the line and restart Hercules.

# HHCCF003S

# HHCCF003S Cannot open file filename: error

#### **Explanation**

The configuration file named *filename* could not be opened. The error is described by *error*.

#### Action

Correct the error and restart Hercules.

# HHCCF004S

#### HHCCF004S No device records in file filename

#### **Explanation**

The configuration file named *filename* does not contain any device definition records. Without these, Hercules cannot do any meaningful work.

#### **Action**

Specify one or more device definitions in the configuration file and restart Hercules.

# HHCCF005S

# HHCCF005S Unrecognized argument argument

#### **Explanation**

An invalid argument, argument, was specified on the HTTPPORT configuration statement in the file named *filename* at line number *lineno*. Only the arguments auth and noauth are valid.

#### Action

Correct the invalid argument and restart Hercules.

# HHCCF006S

#### HHCCF006S Error in filename line lineno: Userid, but no password given userid

#### **Explanation**

A userid, *userid*, was specified on the HTTPPORT configuration statement in the file named *filename* at line number *lineno*, but no password was provided. A password is required if a userid is present.

#### **Action**

Either remove the userid, or specify a password, and restart Hercules.

# HHCCF007S

#### HHCCF007S Error in filename line lineno: Missing argument

#### **Explanation**

The HTTPROOT configuration statement was specified in the file named *filename* at line number *lineno*, but no directory was specified. A directory is required.

#### Action

Specify the directory where the Hercules web server will find its HTML files and restart Hercules.

# HHCCF008E

#### HHCCF008E Error in filename line lineno: Unrecognized keyword keyword

#### **Explanation**

An invalid configuration statement was specified in the file named *filename* at line number *lineno*. The invalid keyword was *keyword*.

#### **Action**

Correct the invalid statement and restart Hercules.

# HHCCF009S

# HHCCF009S Error in filename line lineno: Incorrect number of operands

#### **Explanation**

The configuration statement at line *lineno* of the file named *filename* had an invalid number of operands. For all but the HTTPPORT statement exactly one operand is required.

#### Action

Correct the invalid statement and restart Hercules.

# HHCCF010S

# HHCCF010S Error in *filename* line *lineno*: Unknown or unsupported ARCHMODE specification *mode*

### **Explanation**

The ARCHMODE configuration statement at line *lineno* of the file named *filename* specified an invalid architecture. Only S/370, ESA/390, or ESAME are valid. If one of these was specified, then support for that architecture was excluded when the copy of Hercules in use was compiled.

#### **Action**

Correct the specified value and restart Hercules. If the message was issued because support for the desired architecture was excluded, then recompile Hercules.

#### HHCCF011S

#### HHCCF011S Error in filename line lineno: serialno is not a valid serial number

#### **Explanation**

The serial number *serialno* specified on the CPUSERIAL configuration statement at line number *lineno* of the file named *filename* must be exactly six digits long and must be a valid hexadecimal number.

#### **Action**

Correct the serial number and restart Hercules.

# HHCCF012S

#### HHCCF012S Error in filename line lineno: modelno is not a valid CPU model

#### **Explanation**

The model number *modelno* specified on the CPUMODEL configuration statement at line number *lineno* of the file named *filename* must be exactly four digits long, and must be a valid hexadecimal number.

# Action

Correct the model number and restart Hercules.

# HHCCF013S

# HHCCF013S Error in filename line lineno: Invalid main storage size size

#### **Explanation**

The main storage size size specified on the MAINSIZE configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number whose value is at least 2. For 32-bit platforms the value must not exceed 4095.

#### **Action**

Correct the main storage size and restart Hercules.

# HHCCF014S

#### HHCCF014S Error in filename line lineno: Invalid expanded storage size size

#### **Explanation**

The expanded storage size specified on the XPNDSIZE configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number between 0 and 16777215.

#### Action

Correct the expanded storage size and restart Hercules.

# HHCCF015S

# HHCCF015S Error in filename line lineno: Invalid console port number port

#### **Explanation**

The console port number *port* specified on the CNSLPORT configuration statement at line number *lineno* of the file named *filename* must be a valid nonzero decimal number.

#### **Action**

Correct the console port number and restart Hercules.

# HHCCF016S

#### HHCCF016S Error in filename line lineno: Invalid threadname thread priority priority

#### **Explanation**

The thread priority priority specified on the xxxPRIO configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number.

#### **Action**

Correct the priority on the statement and restart Hercules.

# HHCCF017W

# HHCCF017W Hercules is not running as setuid root, cannot raise threadname priority

#### **Explanation**

A negative value for the *threadname* thread priority parameter *xxx*PRIO was specified but Hercules is not running as the root user (either directly or via the setuid mechanism). This parameter value would cause the priority of the CPU execution thread to be raised above the normal level if Hercules were running as root. Since it is not, however, the parameter will have no effect.

#### Action

Either specify a positive value to lower the CPU thread priority, zero to not alter the priority, or omit the statement entirely to use the Hercules default CPU thread priority of 15.

# HHCCF018S

#### HHCCF018S Error in filename line lineno: Invalid number of CPUs number

#### **Explanation**

The number of emulated CPUs *number* specified on the NUMCPU configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number between 1 and the maximum number defined when Hercules was built (usually 2; this number is never more than 2 for S/370 mode, or 16 for ESA/390 or ESAME mode).

#### Action

Correct the number of emulated CPUs and restart Hercules.

# HHCCF019S

# HHCCF019S Error in filename line lineno: Invalid number of VFs number

#### **Explanation**

The number of emulated Vector Facility engines *number* specified on the NUMVEC configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number between 1 and the maximum number defined when Hercules was built (usually 2).

#### Action

Correct the number of emulated Vector Facility engines and restart Hercules.

# HHCCF020W

#### **HHCCF020W Vector Facility support not configured**

#### **Explanation**

A request for Vector Facility support was made by the NUMVEC configuration statement, but Hercules was built without the Vector Facility code. The request has been ignored.

#### Action

If Vector Facility support is desired, recompile Hercules. If not, remove the NUMVEC configuration statement.

# HHCCF021S

#### HHCCF021S Error in filename line lineno: Invalid maximum number of CPUs number

#### **Explanation**

The maximum number of emulated CPUs *number* specified on the MAXCPU configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number. It must not exceed the maximum number (MAX CPU ENGINES) defined when Hercules was built.

#### Action

Correct the MAXCPU parameter and restart Hercules.

# HHCCF022S

#### HHCCF022S Error in filename line lineno: epoch is not a valid system epoch

#### **Explanation**

The system epoch epoch specified on the SYSEPOCH configuration statement at line number *lineno* of the file named *filename* must be one of the following: 1900, 1928, 1960, 1988, or 1970.

#### Action

Correct the system epoch and restart Hercules. If a different epoch is desired, a change must be made to the Hercules source file config.c and Hercules rebuilt.

# HHCCF023S

#### HHCCF023S Error in filename line lineno: offset is not a valid timezone offset

#### **Explanation**

The system timezone offset offset specified on the TZOFFSET configuration statement at line number *lineno* of the file named *filename* must be five characters long and a valid decimal number of the form (+|-) number, where number must be between zero and 2359 (representing 23 hours, 59 minutes).

#### Action

Correct the time zone offset and restart Hercules.

# HHCCF024S

#### HHCCF024S Error in filename line lineno: Invalid TOD clock drag factor drag

#### **Explanation**

The TOD clock drag factor *drag* specified on the TODDRAG configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number between 1 and 10000.

#### Action

Correct the TOD clock drag factor and restart Hercules.

# HHCCF025S

# HHCCF025S Error in filename line lineno: Invalid panel refresh rate rate

#### **Explanation**

The control panel refresh rate *rate* specified on the PANRATE configuration statement at line number *lineno* of the file named *filename* must be either F, S, or a valid decimal number between 1 and 5000.

#### Action

Correct the control panel refresh rate and restart Hercules.

# HHCCF026S

#### HHCCF026S Error in filename line lineno: Unknown OS tailor specification tailor

#### **Explanation**

The OS tailoring value *tailor* specified on the OSTAILOR configuration statement at line number *lineno* of the file named *filename* must be either OS/390, VSE, VM, LINUX, NULL, or QUIET.

#### **Action**

Correct the OS tailoring value and restart Hercules.

# HHCCF027S

#### HHCCF027S Error in filename line lineno: Invalid maximum device threads threads

#### **Explanation**

The maximum device threads specified on the DEVTMAX configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number greater than -1.

#### Action

Correct the maximum device threads and restart Hercules.

# HHCCF028S

# HHCCF028S Invalid program product OS permission permission

#### **Explanation**

The program product OS permission *permission* specified on the PGMPRDOS configuration statement must be either LICENSED or RESTRICTED. The alternative spelling LICENCED is also accepted.

#### **Action**

Correct the program product OS permission and restart Hercules.

# HHCCF029S

# HHCCF029S Invalid HTTP port number port

#### **Explanation**

The HTTP server port number port specified on the HTTPPORT configuration statement must be either 80, or a valid decimal number greater than 1024.

#### **Action**

Correct the HTTP server port number and restart Hercules.

# HHCCF030S

#### HHCCF030S Error in filename line lineno: Invalid I/O delay value delay

#### **Explanation**

The I/O delay value *delay* specified on the IODELAY configuration statement at line number *lineno* of the file named *filename* must be a valid decimal number.

#### **Action**

Correct the I/O delay value and restart Hercules.

# HHCCF031S

# HHCCF031S Cannot obtain sizeMB main storage: error

# **Explanation**

An attempt to obtain the amount of main storage specified by MAINSTOR failed for the reason described by *error*.

#### Action

Correct the error and restart Hercules.

# HHCCF032S

### HHCCF032S Cannot obtain storage key array: error

#### **Explanation**

An attempt to obtain storage for the array of storage keys failed for the reason described by error.

#### **Action**

Correct the error and restart Hercules.

# HHCCF033S

# HHCCF033S Cannot obtain sizeMB expanded storage: error

#### **Explanation**

An attempt to obtain the amount of expanded storage specified by XPNDSTOR failed for the reason described by *error*.

#### **Action**

Correct the error and restart Hercules.

# HHCCF034W

# HHCCF034W Expanded storage support not installed

#### **Explanation**

A request was made for expanded storage by the XPNDSTOR configuration parameter, but Hercules was built without expanded storage support. The request was ignored.

#### Action

Either remove the XPNDSTOR configuration parameter or recompile Hercules with expanded storage support included.

# HHCCF035S

# HHCCF035S Error in filename line lineno: Missing device number or device type

#### **Explanation**

The I/O device definition statement at line number *lineno* of the file named *filename* did not contain a device number or a device type.

#### **Action**

Supply the missing value and restart Hercules.

# HHCCF036S

#### HHCCF036S Error in filename line lineno: number is not a valid device number(s) specification

#### **Explanation**

The I/O device definition statement at line number *lineno* of the file named *filename* specified an invalid device number *number*. The device number must be one to four hexadecimal digits.

#### **Action**

Correct the device number and restart Hercules.

# HHCCF037S

# HHCCF037S Message pipe creation failed: error

#### **Explanation**

An attempt to create a pipe for communication with the control panel failed. The error is described by error.

#### **Action**

Correct the error and restart Hercules.

# HHCCF038S

#### HHCCF038S Message pipe open failed: error

#### **Explanation**

An attempt to open the pipe for communication with the control panel failed. The error is described by *error*.

#### **Action**

Correct the error and restart Hercules.

# HHCCF039W

HHCCF039W PGMPRDOS LICENSED specified. A licensed program product operating systems is running. You are responsible for meeting all conditions of your software license.

#### **Explanation**

The configuration parameter PGMPRDOS LICENSED was specified and Hercules has detected that the operating system is a licensed program product. This message is issued to remind you that compliance with the terms of the license for your system's software is your responsibility.

#### **Action**

Be sure you know what you are doing.

# HHCCF040E

#### HHCCF040E Cannot create CPU number thread: error

#### **Explanation**

An attempt to create a new thread for execution of CPU *number* failed. The error is described by *error*. The CPU has not been added to the configuration.

### **Action**

Correct the error and retry the operation.

# HHCCF041E

# HHCCF041E Device address already exists

#### **Explanation**

An attempt was made to define a device at address address. There is already a device at that address.

#### **Action**

Either choose another device address or use the detach command to remove the existing device.

# HHCCF042E

# HHCCF042E Device type type not recognized

#### **Explanation**

An attempt was made to define a device of type *type*. This device type is not supported by Hercules. It may also indicate that the system was unable to load the device handler for the specified device type.

#### Action

Specify a supported device type. If the device type is supported, make sure the the system can load the load modules necessary for device operations. Either use the LD\_LIBRARY\_PATH environment variable or use Idconfig(8) to customize the library search path.

# HHCCF043E

#### HHCCF043E Cannot obtain device block for device address: error

#### **Explanation**

An attempt to allocate memory for the control block describing the device with address address failed. The error is described by *error*. The device has not been defined.

#### **Action**

Correct the error and retry the operation.

# HHCCF044E

#### HHCCF044E Initialization failed for device address

# **Explanation**

The device at address address could not be initialized. The device initialization routine has issued a message describing the problem in further detail; refer to that message for more information.

#### **Action**

Correct the error and retry the operation.

# HHCCF045E

#### HHCCF045E Cannot obtain buffer for device address: error

#### **Explanation**

An attempt to allocate memory for the data buffer for the device with address *address* failed. The error is described by *error*. The device has not been defined.

#### **Action**

Correct the error and retry the operation.

# HHCCF046E

#### HHCCF046E Device address does not exist

#### **Explanation**

An attempt was made to remove a device at address address. There is no device at that address.

#### Action

Choose another device address to remove, if desired.

# HHCCF047I

#### HHCCF047I Device address detached

#### **Explanation**

The device at address address has been successfully removed from the system.

#### Action

None.

# HHCCF048E

#### HHCCF048E Device address does not exist

#### **Explanation**

An attempt was made to rename a device at address address. There is no device at that address.

#### Action

Choose another device address to rename, if desired.

# HHCCF049E

# HHCCF049E Device address already exists

#### **Explanation**

An attempt was made to rename a device to address address. There is already a device at that address.

#### Action

Either choose another device address or use the detach command to remove the existing device.

## HHCCF050I

## HHCCF050I Device oldaddr defined as newaddr

### **Explanation**

The device which was previously defined with the address *oldaddr* has been changed to the address *newaddr*.

#### **Action**

None.

## HHCCF051S

## HHCCF051S Error in filename line lineno: verid is not a valid CPU version code

## **Explanation**

The version code *verid* specified on the CPUVERID configuration statement at line number *lineno* of the file named *filename* must be exactly two digits long and must be a valid hexadecimal number.

#### **Action**

Correct the model number and restart Hercules.

## HHCCF052S

## HHCCF052S DIAG8CMD invalid option: option

## **Explanation**

The argument option on the DIAG8CMD is invalid. Valid options are enable, disable, echo, and noecho.

#### **Action**

Correct the statement and restart Hercules.

## HHCCF053E

#### HHCCF053E Incorrect second device number in device range near character c

## **Explanation**

The second argument of a device range contains an incorrect device number

### **Action**

Correct the statement and restart Hercules.

## HHCCF054E

## HHCCF054E Incorrect Device count near character c

#### **Explanation**

The count field in a device count specification is invalid

#### Action

Correct the statement and restart Hercules.

## HHCCF055E

## HHCCF055E Incorrect device address specification near character c

#### **Explanation**

The first or only CUU in a device specification statement is invalid

#### **Action**

Correct the statement and restart Hercules.

## HHCCF056E

## HHCCF056E Incorrect device address range. CUU1>CUU2

#### Explanation

The first device number of a range is greater than the last device number

#### Action

Correct the statement and restart Hercules.

## HHCCF057E

#### HHCCF057E CUU is on wrong channel (1st device defined on channel CC)

#### **Explanation**

At least one of the devices in a device number specification is on a different channel than a previously defined device number within the same specification. All device numbers on a single configuration line must be on a single channel (Group of 256 devices)

## Action

Correct the statement and restart Hercules.

## HHCCF058E

## HHCCF058E Some or all devices in CUU-CUU duplicate devices already defined

## **Explanation**

At least one of the device numbers on a device specification statement defines a device number that is already specified on that same statement.

#### Action

Correct the statement and restart Hercules.

## HHCCF061W

## HHCCF061W ECPS:VM Statement deprecated. Use ECPSVM instead

### **Explanation**

The "ECPS:VM" statement was encountered. This statement is deprecated in favor of the "ECPSVM" statement.

#### Action

The configuration statement is still carried out but the statement syntax should be changed as soon as possible.

## HHCCF062W

## HHCCF062W Missing ECPSVM level value. 20 Assumed

#### **Explanation**

The "ECPSVM" statement keyword "LEVEL" was encountered but no numeric level followed it.

#### **Action**

The default level of 20 is used and the ECPS:VM feature is made available. The statement should be corrected as soon as possible.

## HHCCF063W

## HHCCF063W Specifying ECPSVM level directly is deprecated. Use the 'LEVEL' keyword instead

#### **Explanation**

The deprecated "ECPSVM" level syntax form (without the LEVEL keyword) was found.

#### Action

The ECPS:VM Level is set to the specified value. The configuration statement should be updated to include the "LEVEL" keyword.

## HHCCF064W

## HHCCF064W Hercules set priority priority failed: error

### **Explanation**

An attempt to change the priority of the Hercules process to *priority* failed. The error is described by *error*. The process priority has not been changed. Hercules overall performance may be impaired as a result.

## Action

If performance problems are noted, correct the error and restart Hercules.

## HHCCF065I

HHCCF065I Hercules: tid=threadid, pid=processid, pgid=processgroupid, priority=priority

## **Explanation**

Hercules thread id is *threadid*, its process id is *processid*, its process group id is *processgroupid* and its execution priority is *priority*.

#### **Action**

None.

## HHCCF066E

## **HHCCF066E Invalid HTTPROOT: error**

#### **Explanation**

The pathname specified on your HTTPROOT statement is invalid. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCCF067S

## HHCCF067S Incorrect keyword keyword for the ASN\_AND\_LX\_REUSE statement

## **Explanation**

The keyword specified for the ASN\_AND\_LX\_REUSE statement is not ENABLE or DISABLE.

#### Action

Correct the error and restart Hercules.

## HHCCF068E

HHCCF068E Invalid value: value; Enter "help scsimount" for help.

## **Explanation**

The automatic SCSI tape mount value is not "NO" nor a value between 1 and 99 seconds inclusive.

#### **Action**

Reissue the SCSIMOUNT command.

## HHCCF069I

HHCCF069I Run-options enabled for this run:

NUMCPU: n

ASN-and-LX-reuse: Enabled/Disabled

**DIAG8CMD:** Enabled/Disabled

#### **Explanation**

This message confirms the setting of various run-time options specified in the configuration file at startup time.

#### Action

None.

## HHCCF074E

## HHCCF074E Unspecified error occured while parsing Logical Channel Subsystem Identification

## **Explanation**

A logic error occured while parsing the Logical Channel Subsystem Identification component of a device number or device number group.

#### **Action**

Notify Hercules support. This is an error in the Hercules parsing routines.

## HHCCF075E

#### HHCCF075E No more than 1 Logical Channel Subsystem Identification may be specified

#### **Explanation**

While specifying a device number or device number group, more than one ':' character was encountered while parsing the Logical Channel Subsystem Identification component. There can be only one Logical Channel Subsystem Identification for a device or group of devices.

#### Action

Correct the device number or device number group specification and either reissue the command or restart the Hercules engine, depending on whether the error occured while issuing a command or while starting the engine.

## HHCCF076E

## HHCCF076E Non numeric Logical Channel Subsystem Identification XX

#### **Explanation**

While specifying a device number or device number group, a non-decimal value was encountered while parsing the Logical Channel Subsystem Identification component. The Logical Channel Subsystem Identification for a device or group of devices must be specified as a numeric value.

#### Action

Correct the device number or device number group specification and either reissue the command or restart the Hercules engine, depending on whether the error occured while issuing a command or while starting the engine.

## HHCCF077E

#### HHCCF077E Logical Channel Subsystem Identification NN exceeds maximum of 3

#### **Explanation**

While specifying a device number or device number group, a Logical Channel Identification was encountered that exceeded the architecture maximum value of *NN*. The Logical Channel Subsystem Identification for a device or group of devices must be within 0 and 3 (inclusive).

#### Action

Correct the device number or device number group specification and either reissue the command or restart the Hercules engine, depending on whether the error occured while issuing a command or while starting the engine.

## HHCCF079A

# HHCCF079A A licensed program product operating system has been detected. All processors have been stopped.

## **Explanation**

Hercules has detected that the operating system is a licensed program product, but the PGMPRDOS LICENSED parameter was not specified in the Hercules configuration file.

#### **Action**

Hercules enters the stopped state. To run this operating system you must obtain a license from the operating system supplier and specify the PGMPRDOS LICENSED parameter in the configuration file. If you are unable to obtain a valid license allowing you to run this operating system on your machine, you must use another operating system (such as MVS 3.8J or Linux for System z) which does not require a license.

## HHCCF081I

## HHCCF081I fname will ignore include errors.

#### **Explanation**

An ignore include\_errors statement was encountered in file *fname* requesting that any include statements subsequently found within file *fname* which happen to reference include files which do not exist should simply cause a HHCCF084W warning instead of a HHCCF085S fatal error.

#### Action

Processing continues. This is an informational-only message.

## HHCCF082S

## HHCCF082S Error in fname line nnn: Maximum nesting level (nn) reached

#### **Explanation**

The maximum number of nested include statements has been exceeded. The include statement which caused the maximum nesting level of *nn* to be exceeded is identified as statement number *nnn* of file *fname*.

#### **Action**

This is a fatal error. Configuration file processing is immediately terminated and Hercules startup is aborted. Correct the error and restart Hercules.

## HHCCF083I

#### HHCCF083I fname1 Including fname2 at nnn.

#### **Explanation**

An include statement for file fname2 was encountered on line nnn of file fname1.

#### Action

Configuration file processing switches immediately to processing the statements contained in file *fname2*. Once all of the ststements in file *fname2* have been completely processed, configuration file processing will then return to statement *nnn*+1 of file *fname1*. This is an informational-only message.

## HHCCF084W

#### HHCCF084W fname1 Open error ignored file fname2: error

## **Explanation**

File fname1 contained an include statement for file fname2 which could not be opened because of error.

#### **Action**

Processing continues. This is a informational warning only. Check to make sure the filename specified by *fname2* was spelled correctly and restart Hercules if desired.

## HHCCF085S

## HHCCF085S fname1 Open error file fname2: error

## **Explanation**

File fname1 contained an include statement for file fname2 which could not be opened because of error.

#### **Action**

This is a fatal error. Configuration file processing is immediately terminated and Hercules startup is aborted. Correct any misspelling of filename *fname2* and restart Hercules.

## HHCCF086S

## HHCCF086S Error in filename: NUMCPU nn must not exceed MAXCPU mm

## **Explanation**

The number of online CPUs *nn* specified in the NUMCPU configuration statement in the file named *filename* cannot exceed the maximum number of CPUs *mm* specified in the MAXCPU configuration statement.

## **Action**

Either decrease the NUMCPU parameter, or increase the MAXCPU parameter, and restart Hercules.

## HHCCF089S

## HHCCF089S Error in fname line linenum: Invalid log option keyword val

## **Explanation**

File *fname* containes an invalid log option keyword *val* on line *num*.

#### Action

Correct the log option keyword in file *fname* and restart Hercules.

## 7. Messages HHCCPnnns - CPU Emulation

## HHCCP001W

## HHCCP001W CPU thread set priority priority failed: error

#### **Explanation**

An attempt to change the priority of the CPU thread to *priority* failed. The error is described by *error*. The thread priority has not been changed. Hercules overall performance may be impaired as a result.

#### **Action**

If performance problems are noted, correct the error and restart Hercules.

## HHCCP002I

## HHCCP002I CPU number thread started: tid=threadid, pid=processid, priority=priority

## **Explanation**

The execution thread for CPU number *number* has been started. Its thread id is *threadid*, its process id is *processid* and its execution priority is *priority*.

#### Action

None.

## HHCCP003I

#### HHCCP003I CPU number architecture mode mode

#### **Explanation**

CPU number has been set to the mode architecture mode.

## **Action**

If a different architecture mode is desired, it may be changed with the ARCHMODE configuration statement or the archmode control panel command.

## HHCCP004I

## HHCCP004I CPU number Vector Facility online

## **Explanation**

The Vector Facility for CPU *number* is online and available for use.

#### Action

## HHCCP005E

## HHCCP005E CPU number thread already started

#### **Explanation**

An attempt was made to add CPU number number to the configuration. This CPU already exists.

#### Action

If another CPU is desired in the configuration, select a different number.

## HHCCP006S

#### HHCCP006S Cannot create timer thread: error

#### **Explanation**

An attempt to create the thread used for timing functions has failed. The error is described by *error*. The CPU thread terminates and successful continuation of Hercules is not possible.

#### Action

Correct the error and restart Hercules.

## HHCCP007I

## HHCCP007I CPU number architecture mode set to mode

## **Explanation**

CPU number number has been changed to the architecture mode mode.

#### Action

None.

## HHCCP008I

## HHCCP008I CPU number thread ended: tid=threadid, pid=processid

## **Explanation**

The execution thread for CPU number *number* has ended. Its thread id was *threadid*, and its process id was *processid*.

### **Action**

## HHCCP009E

HHCCP009E CPU MASK MISMATCH: prevmask - currmask. Last instruction: instruction.

#### **Explanation**

The CPU interrupt mask has changed unexpectedly. The previous mask was *prevmask* and the current mask is *currmask*. The last instruction executed was *instruction*. This is an internal error.

#### Action

Report this message and the circumstances to the Hercules developers.

## HHCCP010I

HHCCP010I CPU number store status completed.

## **Explanation**

CPU number number has completed a store status operation.

#### Action

None.

## HHCCP011I

HHCCP011I CPU number: Disabled wait state

## **Explanation**

CPU number *number* has entered a disabled wait state. It will not execute any further instructions unless it is reset or restarted. This is usually done to report a severe error in execution of an operating system.

#### **Action**

Correct the error denoted by the wait state code if applicable.

## HHCCP023I

**HHCCP023I External interrupt: Interrupt key** 

#### **Explanation**

The CPU has taken an external interrupt because the operator pressed the interrupt key or issued the panel command ext.

#### **Action**

## HHCCP024I

## **HHCCP024I External interrupt: Clock comparator**

#### **Explanation**

The CPU has taken a clock comparator interrupt. This message is issued only when the CPU is in single-stepping or instruction-tracing mode.

#### Action

None. External interrupts are part of normal system operation.

## HHCCP025I

## HHCCP025I External interrupt: CPU timer=xx...xx

#### **Explanation**

The CPU has taken a CPU timer interrupt. *xx...xx* is the hexadecimal value of the CPU timer. This message is issued only when the CPU is in single-stepping or instruction-tracing mode.

#### **Action**

None. External interrupts are part of normal system operation.

## HHCCP026I

## **HHCCP026I External interrupt: Interval timer**

#### **Explanation**

The CPU has taken an external interrupt caused by the interval timer. This message is issued only when the CPU is in single-stepping or instruction-tracing mode.

#### Action

None. External interrupts are part of normal system operation.

## HHCCP027I

## HHCCP027I External interrupt: Service signal intparm

#### **Explanation**

The CPU has taken a service signal external interrupt. *intparm* is the interrupt parameter. This message is issued only when the CPU is in single-stepping or instruction-tracing mode.

#### **Action**

None. External interrupts are part of normal system operation.

## HHCCP090W

HHCCP090W The configuration has been placed into a system check-stop state because of an incompatible service call

## **Explanation**

A READ SCP INFO (code X'00020001') Service call has been issued from a CPU which is not a CP engine. All the CPUs in the configuration are put into a Check-Stop state.

## Action

Ensure the CPU that issues the service call is a CP engine and restart the program.

# 8. Messages HHCCTnnns - Channel-to-Channel Adapter Emulation

## **HHCCTnnns**

Messages HHCCTnnns are not yet documented.

## 9. Messages HHCCUnnns - CCKD Utilities

## 9.1 Format of the CCKD utilities messages

Messages generate by the CCKD utilities are in the format *message\_id file message\_text*. The format of the message ID is the same as with all other Hercules messages. *file* will either be the part of the file name following the last slash ("/" or "\") when called by a utility command, or will be *xxxx*: *file*[n] where *xxxx* is the device number and n is the shadow file number when called by Hercules.

The file portion of the message is omitted in the sections below for brevity.

## HHCCU101I

## HHCCU101I converting to endian-format

## **Explanation**

The file is in the wrong endian (byte order) format for the host architecture. The file is being converted to the host endian format *endian-format*.

#### **Action**

None.

## HHCCU102I

## HHCCU102I compress successful, n bytes released

#### **Explanation**

The compress function successfully completed and free *n* bytes from the file. If *n* is 0, then the level 2 tables were repositioned to the beginning of the file in order.

#### **Action**

None.

## HHCCU103I

## HHCCU103I file already compressed

#### **Explanation**

The compress function determined that the file is already compressed. The file is not updated.

## Action

## HHCCU104I

## **HHCCU104I** free space rebuilt

#### **Explanation**

Free space errors were detected and free space has been successfully rebuilt.

#### Action

None.

## HHCCU300I

## HHCCU300I number space images recovered

#### **Explanation**

Recovery phase 1 completed, recovering *number spaces* (trks or blkgrps).

#### Action

None.

## HHCCU301I

## HHCCU301I space[id] recovered offset offset len length

#### **Explanation**

The space space (trk or blkgrp) was recovered at offset offset and length length. id is the trk or blkgrp number.

#### **Action**

None.

## HHCCU500W

## HHCCU500W recovery not completed, file opened read-only

#### **Explanation**

Phase 3 recovery did not complete because the file is not opened for write.

#### Action

Omit the *-ro* option for cckdcdsk or change the file permissions to enable the file to be opened for readwrite for Hercules.

## HHCCU501W

## HHCCU501W recovery not completed, missing compression

#### **Explanation**

Phase 3 recovery did not complete because one or more trk or blkgrp images were compressed using a compression (zlib or bzip2) that was not built into Hercules.

#### Action

Processing terminates. The file has not been updated. Build Hercules with the missing compression libraries.

## HHCCU502W

## HHCCU502W free space not rebuilt, file opened read-only

#### **Explanation**

Free space errors were detected but the free space was not rebuilt because the file is not opened for write.

#### Action

Omit the *-ro* option for cckdcdsk or change the file permissions to enable the file to be opened for readwrite by Hercules.

## HHCCU600W

## HHCCU600W forcing check level level[; reason]

#### **Explanation**

Errors have been detected in the compressed file that warrant the escalation of the check level to *level*. An additional explanation *reason* may be supplied.

#### **Action**

At a minimum, free space will be rebuilt.

## HHCCU601W

## HHCCU601W cdevhdr inconsistencies found code=code

#### **Explanation**

The space statistics in the cckddasd device header (cdevhdr) contain inconsistencies described by *code*. *code* is a 16-bit bit field and more than one bit may be on. See cckdutil.c for the different bit settings.

#### **Action**

At a minimum, free space will be rebuilt.

## HHCCU602W

#### HHCCU602W space offset offset len length is out of bounds

#### **Explanation**

The space space (trk, blkgrp or l2) either precedes the end of the L1 table (at the beginning of the file) or exceeds the end of the file.

#### **Action**

The space will be recovered. If the space is an L2 table, then all tracks or block groups associated with the table will also be recovered.

## HHCCU603W

## HHCCU603W space1 offset offset1 len length overlaps space2 offset offset2

#### **Explanation**

The space space1 overlaps space space2.

#### Action

The spaces will be recovered. If either space is an L2 table, then all tracks or block groups associated with that table will also be recovered.

## HHCCU604W

## HHCCU604W space I2 inconsistency: len length, size size

#### **Explanation**

The space *space* (trk or blkgrp) has an inconsistent l2 entry. Either the length *length* is too small or is too large or exceeds the size *size*.

#### Action

The space will be recovered.

## HHCCU610W

#### HHCCU610W free space errors detected

#### **Explanation**

Free space is not consistent.

#### Action

Free space will be rebuilt.

## HHCCU620W

## HHCCU620W space[id] hdr error offset offset: xxxxxxxxxx

## **Explanation**

A header error was found for *space* (trk or blkgrp) during validation. *id* is the trk or blkgrp number. The header is located at file offset *offset*. The contents of the 5 byte header is *xxxxxxxxxx* in hex.

The first byte of the header should be either 00 (compress none), 01 (compress zlib) or 02 (compress bzip2).

For ckd, the next two bytes is the cylinder (in big-endian byte order) and the two bytes after that is the head (also in big-endian byte order).

For fba, the next four bytes is the block group number (in big-endian byte order).

The header contains an invalid value. Either the offset is incorrect or the header has been overlaid.

#### Action

The space will be recovered.

## HHCCU621W

## HHCCU621W space[id] compressed using compression, not supported

#### **Explanation**

During validation, the header for *space* (trk or blkgrp) indicates that the space was compressed using *compression* (zlib or bzip2) but support for that compression method was not built into Hercules. *id* is the trk or blkgrp number.

#### Action

Processing continues. However no recovery will take place. Build Hercules with the specified compression library.

## HHCCU622W

## HHCCU622W space[id] offset offset len length validation error

#### **Explanation**

The *space* (trk or blkgrp) at offset *offset* and length *length* failed validation. *id* is the trk or blkgrp number. Either the space did not uncompress successfully or the uncompressed space contains some kind of error. This error is detected during check level 3 validation.

#### **Action**

The space will be recovered.

## HHCCU700E

#### HHCCU700E open error: error text

#### **Explanation**

Open failed for the file. The text associated with the error number is displayed.

#### Action

Processing for the file terminates.

## HHCCU701E

## HHCCU701E fstat error: error text

## **Explanation**

The file status system call failed. The text associated with the error number is displayed.

#### Action

Function processing terminates. Probable Hercules logic error. Contact the Hercules mailing list for assistance.

## HHCCU702E

#### HHCCU702E Iseek error offset offset: error text

#### **Explanation**

File reposition to offset offset failed. The text associated with the error number is displayed.

#### Action

Function processing terminates. Probable Hercules logic error. Contact the Hercules mailing list for assistance.

## HHCCU703E

## HHCCU703E read error rc=retcode offset offset len length: error text

#### **Explanation**

A read failed at offset for length *length*. If *retcode* is not negative then the read was incomplete and the value indicates how many bytes were read. Otherwise the text associated with the error number is displayed.

#### **Action**

Function processing terminates. Possible Hercules logic error. Possible hardware error. Contact the hercules mailing list for assistance.

## HHCCU704E

## HHCCU704E write error rc=retcode offset offset len length: error text

#### **Explanation**

A write failed at offset offset for length length. If retcode is not negative then the write was incomplete and the value indicates how many bytes were written. Otherwise the text associated with the error number is displayed.

#### Action

Function processing terminates. Possible Hercules logic error. Possible hardware error. Contact the hercules mailing list for assistance.

## HHCCU705E

## HHCCU705E malloc error, size size: error text

## **Explanation**

Malloc (allocate memory) failed for size size.

#### Action

Function processing terminates. Try reducing Hercules storage requirements (e.g. mainsize).

## HHCCU706E

## HHCCU706E calloc error, size size: error text

#### **Explanation**

Calloc (allocate cleared memory) failed for size size.

#### Action

Function processing terminates. Try reducing Hercules storage requirements (eg mainsize).

## HHCCU707E

## HHCCU707E OPENED bit is on, use -f

#### **Explanation**

The file OPENED bit is on in the cckd header but -f was not specified.

#### Action

File processing terminates. Make sure the file is not in use. If it is not, try the command again specifying the *-f* option.

## HHCCU708E

## HHCCU708E chkdsk errors

#### **Explanation**

The utility called cckd\_chkdsk for the file and it returned in error.

#### Action

File processing terminates. Perform the actions suggested by the preceding cckd\_chkdsk errors.

## HHCCU900E

## HHCCU900E dasd lookup error type=type cyls=cyls

## **Explanation**

The device type *type* from the device header along with the number of cylinders *cyls* did not match a table entry in dasdtab.c. Note that *type* is the last two bytes of the device type (eg *90* for a *3390* device type).

### Action

Function processing terminates. Specify the correct file name or manually correct the device header.

## HHCCU901E

HHCCU901E bad trksize: size1, expecting size2

### **Explanation**

The track size *size1* from the device header does match the track size *size2* from the table entry in dasdtab.c.

#### Action

Function processing terminates. Specify the correct file name or manually correct the device header.

## HHCCU902E

#### HHCCU902E bad number of heads: heads1, expecting heads2

#### **Explanation**

The number of heads *heads1* from the device header does match the number of heads *heads2* from the table entry in dasdtab.c.

#### **Action**

Function processing terminates. Specify the correct file name or manually correct the device header.

## HHCCU903E

## HHCCU903E bad `numl1tab': nbr1, expecting nbr2

#### **Explanation**

The number of L1 table entries *nbr1* in the cckd device header does not match the number calculated *nbr2*. The number calculated is the number of cylinders times the number of heads (i.e. the number of tracks) divided by 256, rounded up by 1 if there is a remainder.

#### Action

Function processing terminates. Specify the correct file name or manually correct the device headers.

## HHCCU904E

#### HHCCU904E file too small to contain L1 table: %size1, need size2

#### **Explanation**

The size of the file *size1* is not large enough to contain all L1 table entries; the size required is *size2*. The minimum size of a cckd file is 512 + 512 + (4 \* number of L1 entries).

#### **Action**

Function processing terminates. Specify the correct file name.

## HHCCU905E

## HHCCU905E not enough file space for recovery

#### **Explanation**

During phase 2 recovery there was not enough space in the maximum file size to contain the rebuilt L2 tables. This is an unusual situation and probably indicates some kind of programming error.

#### **Action**

Function processing terminates. The file has not been updated. Contact the hercules mailing list for assistance.

## HHCCU910E

## **HHCCU910E error during swap**

#### **Explanation**

Error occurred during cckd\_swap().

#### **Action**

See the preceding error messages.

## HHCCU999E

## HHCCU999E not a compressed file

## **Explanation**

The first 8 bytes of the file did not match an expected identifier. For a cckd file, the identifier must be either *CKD\_C370* or *CKD\_S370*. For a cfba file, the identifier must be either *FBA\_C370* or *FBA\_S370*.

### **Action**

Function processing terminates. Specify the correct file name.

# 10. Messages HHCDAnnns - DASD Emulation (CKD, CCKD and FBA)

## **HHCDAnnns**

Messages HHCDAnnns are not yet documented.

# 11. Messages HHCDCnnns - DASDCOPY Utility

## HHCDC001E

## HHCDC001E progname: filename open error: error

#### **Explanation**

An error was encountered when trying to open the input file named *filename* to determine its type. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDC002E

## HHCDC002E progname: filename read error: error

## **Explanation**

An error was encountered when trying to read the input file named *filename* to determine its type. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDC003E

#### HHCDC003E progname: filename open failed

#### **Explanation**

An error was encountered when trying to open the input file named *filename* for copying. A previous message described the error.

#### Action

Correct the error and retry the operation.

## HHCDC004E

## HHCDC004E progname: ckd lookup failed for size cyls

## **Explanation**

There was no disk drive table entry that matched the number of cylinders in the CKD source file, *size*. The program cannot determine how much data to copy.

#### **Action**

Correct the error and retry the operation.

## HHCDC005E

## HHCDC005E progname: fba lookup failed, blks size

#### **Explanation**

There was no disk drive table entry that matched the number of blocks in the FBA source file, *size*. The program cannot determine how much data to copy.

#### **Action**

Correct the error and retry the operation.

## HHCDC006E

## HHCDC006E progname: filename create failed

## **Explanation**

An error was encountered when trying to create the output file named *filename*. A previous message described the error.

#### Action

Correct the error and retry the operation.

## HHCDC007E

## HHCDC007E progname: filename open failed

#### **Explanation**

An error was encountered when trying to open the newly created output file named *filename*. A previous message described the error.

#### Action

Correct the error and retry the operation.

## HHCDC008E

## HHCDC008E progname: filename read error (track|block) number stat=status

#### **Explanation**

An error was encountered when trying to read a block or track from the input file named *filename*. The block or track is number *number*. The status returned is shown as *status*.

#### **Action**

Correct the error and retry the operation.

## HHCDC009E

## HHCDC009E progname: filename write error (track|block) number stat=status

## **Explanation**

An error was encountered when trying to read a block or track from the input file named *filename*. The block or track is number *number*. The status returned is shown as *status*.

## **Action**

Correct the error and retry the operation.

## HHCDC010I

## HHCDC010I Copy successful !!!

## **Explanation**

The copy operation has completed successfully.

## **Action**

# 12. Messages HHCDGnnns - Dyngui.DLL

## HHCDG001I

## HHCDG001I dyngui.dll - name - version vers initiated

## **Explanation**

The dyngui loadable module was successfully loaded and initiated.

#### Action

None. This message is informational only.

## HHCDG002I

#### HHCDG002I dyngui.dll terminated

#### **Explanation**

The dyngui loadable module was successfully terminated.

#### Action

None. This message is informational only.

## HHCDG003S

## HHCDG003S select failed on input stream: errmsg

## **Explanation**

The socket select function call failed on the input stream. errmsg describes the exact error.

#### **Action**

None; this is a fatal error, the system is immediately terminated.

## HHCDG004S

## HHCDG004S read failed on input stream: errmsg

## **Explanation**

An unrecoverable i/o error occurred while reading from the input stream. *errmsg* describes the exact error.

## Action

None; this is a fatal error; the system is immediately terminated.

## HHCDG005E

## HHCDG005E Device query buffer overflow! (device=xxxx)

#### **Explanation**

The device query buffer is not large enough to hold all of the information returned by the device handler. xxxx is the device whose information was being queried at the time the error occurred.

#### Action

The system attempts to continue functioning but unpredictable results may occur (i.e. the system could crash). You should report this error to the Hercules developers immediately so that they can build you a new dyngui.dll with a larger device query buffer. Since the dyngui.dll is an unloadable module you will need to restart Hercules in order to begin using the newly fixed version of dyngui.dll.

## HHCDG006S

## HHCDG006S malloc pszInputBuff failed: errmsg

#### **Explanation**

There was not enough virtual memory on the host system to satisfy the malloc request for the input stream buffer. *errmsg* describes the exact error.

#### Action

None; this is a fatal error, the system is immediately terminated. You should increase the size of your host system's virtual memory allocation so that there is enough for Hercules to run, or else decrease the amount of memory that Hercules needs in order to run (e.g. decrease your MAINSIZE value).

## HHCDG007S

## HHCDG007S malloc pszCommandBuff failed: errmsg

#### **Explanation**

There was not enough virtual memory on the host system to satisfy the malloc request for the command processing buffer. *errmsg* describes the exact error.

#### Action

None; this is a fatal error, the system is immediately terminated. You should increase the size of your host system's virtual memory allocation so that there is enough for Hercules to run, or else decrease the amount of memory that Hercules needs in order to run (e.g. decrease your MAINSIZE value).

# 13. Messages HHCDInnns - DASDINIT Utility

## HHCDI001I

HHCDI001I DASD initialization successfully completed.

## **Explanation**

The requested DASD volume has been successfully initialized and is ready for use.

#### Action

None.

## HHCDI002I

HHCDI002I DASD initialization unsuccessful.

## **Explanation**

Initialization of the requested DASD volume was not successful.

#### Action

Refer to preceding error messages to determine the cause.

# 14. Messages HHCDLnnns - DASDLOAD Utility

## HHCDL001E

## HHCDL001E Cannot open filename: error

#### **Explanation**

The control file named filename cannot be opened. The error is described by error.

#### Action

Correct the error and rerun dasdload.

## HHCDL002E

## HHCDL002E Volume serial statement missing from filename

## **Explanation**

The control file named filename does not contain a volume serial statement. A volume serial is required.

#### Action

Supply a volume serial statement and rerun dasdload.

## HHCDL003E

## HHCDL003E Volume serial serial in filename line lineno is not valid

#### **Explanation**

The volume serial *serial* supplied in line *lineno* of the control file named *filename* is not valid. It must be from one to six characters long.

#### **Action**

Supply a valid volume serial and rerun dasdload.

## HHCDL004E

#### HHCDL004E Device type in filename line lineno is not recognized

#### **Explanation**

The device type type specified in line *lineno* of the control file named *filename* is not a supported CKD device.

#### Action

Specify a supported CKD device type and rerun dasdload.

## HHCDL005E

## HHCDL005E count in filename line lineno is not a valid cylinder count

#### **Explanation**

The requested number *count* of cylinders for the volume in line *lineno* of the control file named *filename* is invalid. It must be a decimal number.

#### Action

Supply a valid cylinder count and rerun dasdload.

## HHCDL006I

## HHCDL006l Creating type volume serial: tracks trks/cyl, length bytes/track

#### **Explanation**

The volume named *serial* of type *type* is being created with *tracks* tracks per cylinder and *length* bytes per track.

## Message Level

0.

#### **Action**

None.

## HHCDL007E

## **HHCDL007E Cannot create filename**

#### **Explanation**

The DASD image file named *filename* cannot be created. A previous message described the problem.

#### Action

Correct the reported error and rerun dasdload.

## HHCDL008E

## HHCDL008E Cannot open filename

## **Explanation**

The DASD image file named *filename* could not be opened. A previous message described the problem.

#### **Action**

Correct the reported error and rerun dasdload.

## HHCDL009I

## HHCDL009l Loading type volume serial

#### **Explanation**

The newly created volume with serial serial of type type is being loaded.

## Message Level

0

## **Action**

None.

## HHCDL010E

## HHCDL010E Cannot obtain storage for DSCB pointer array: error

#### **Explanation**

An attempt to obtain storage for the array of DSCB pointers, which will populate the VTOC, failed. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

## HHCDL011E

## HHCDL011E Invalid statement in filename line lineno

#### **Explanation**

An invalid control statement was found at line lineno of the control file named filename.

## **Action**

Correct the invalid statement and rerun dasdload.

## HHCDL012I

## HHCDL012I Creating dataset dsn at cyl cylinder head head

#### **Explanation**

The dataset named *dsn* is being created. It begins at cylinder *cylinder* head *head*.

## Message level

1

## **Action**

## HHCDL013I

## HHCDL013I Dataset dsn contains size tracks

#### **Explanation**

The dataset named dsn is size tracks long.

## Message level

2

#### Action

None.

## HHCDL014I

#### HHCDL014I Free space starts at cyl cylinder head head

#### **Explanation**

Free space on the volume begins at cylinder cylinder head head and extends to the end of the volume.

## Message level

1

## **Action**

None.

## HHCDL015W

## HHCDL015W Volume exceeds cylinders

#### **Explanation**

The amount of space used on the volume exceeds the number of cylinders requested in the control file. The number of cylinders was explicitly requested instead of being allowed to default to the size of a full volume for the device type. The volume has been extended to accommodate the data written.

#### **Action**

Specify more cylinders in the control file or allow the number to default.

## HHCDL016I

## HHCDL016I Total of count cylinders written to filename

#### **Explanation**

A total of count cylinders have been written to the DASD image file named filename.

## Message level

0

## Action

## HHCDL017I

## HHCDL017I Updating VTOC pointer pointer

#### **Explanation**

The pointer to the VTOC in the volume label is being updated to point to the VTOC at location pointer.

## Message level

5

## **Action**

None.

## HHCDL018E

## **HHCDL018E Cannot read VOL1 record**

#### **Explanation**

An attempt to read the volume label failed. A previous message described the error.

#### Action

Correct the error and rerun dasdload.

## HHCDL019E

## HHCDL019E Cannot read filename line lineno: error

## **Explanation**

An error was encountered while trying to read the statement at line number *lineno* of the control file named *filename*. The error is described by *error*.

## **Action**

Correct the error and rerun dasdload.

## HHCDL020E

## HHCDL020E Line too long in filename line lineno

#### **Explanation**

The line at line number *lineno* of the control file named *filename* is too long to be processed. This error can be caused by failing to terminate the last line with an end-of-line marker.

#### **Action**

Correct the error and rerun dasdload.

## HHCDL021E

## **HHCDL021E DSNAME** or initialization method missing

#### **Explanation**

Either the dataset name or the method to be used to initialize it is missing from the control file. Both are required.

#### **Action**

Supply the missing value and rerun dasdload.

## HHCDL022E

## HHCDL022E Invalid initialization method: method

## **Explanation**

The method specified to initialize the dataset *method* is invalid. It must be one of xmit, vs, empty, dip, cvol, vtoc, or seq.

#### Action

Correct the initialization method and rerun dasdload.

## HHCDL023E

## **HHCDL023E Initialization file name missing**

## **Explanation**

A dataset was specified as being initialized by either the xmit, vs, or seq initialization methods but no source file was specified to provide the data to be loaded.

#### Action

Specify a source file name or specify the empty dataset initialization method if the dataset is not to be loaded.

## HHCDL024E

## HHCDL024E Invalid allocation units: units

#### **Explanation**

The allocation unit specified *units* is invalid. It must be either cyl or trk.

#### **Action**

Specify a valid allocation unit and rerun dasdload.

# HHCDL025E

# HHCDL025E Invalid primary space: space

### **Explanation**

The primary space requested space is not a valid decimal number greater than 0.

### Action

Specify a valid space request and rerun dasdload.

# HHCDL026E

# HHCDL026E Invalid secondary space: space

### **Explanation**

The secondary space requested space is not a valid decimal number greater than 0.

#### **Action**

Specify a valid space request and rerun dasdload.

# HHCDL027E

# HHCDL027E Invalid directory space: space

### **Explanation**

The PDS directory space requested space is not a valid decimal number greater than 0.

### Action

Specify a valid space request and rerun dasdload.

# HHCDL028E

# HHCDL028E Invalid dataset organization: dsorg

### **Explanation**

The requested dataset organization *dsorg* is invalid. It must be one of is, ps, da, or po.

#### Action

Specify a valid dataset organization and rerun dasdload.

# HHCDL029E

# HHCDL029E Invalid record format: recfm

### **Explanation**

The requested record format recfm is invalid. It must be one of f, fb, fbs, v, vb, vbs, or u.

#### Action

Specify a valid record format and rerun dasdload.

# HHCDL030E

# HHCDL030E Invalid logical record length: Irecl

### **Explanation**

The requested logical record length Irecl is invalid. It must be a decimal number between 0 and 32767.

#### Action

Specify a valid logical record length and rerun dasdload.

# HHCDL031E

## HHCDL031E Invalid block size: blksize

### **Explanation**

The requested block size blksize is invalid. It must be a decimal number between 0 and 32767.

#### **Action**

Specify a valid block size and rerun dasdload.

# HHCDL032E

# HHCDL032E Invalid key length: keylen

### **Explanation**

The requested key length keylen is invalid. It must be a decimal number between 0 and 255.

### Action

Specify a valid key length and rerun dasdload.

# HHCDL033E

# HHCDL033E CCHH=cchh not found in extent table

### **Explanation**

The absolute track address *cchh* was not found in the table listing the locations occupied by the dataset being loaded. There is likely a problem with the input file.

#### Action

Correct the input file and rerun dasdload.

# HHCDL034E

# HHCDL034E Cannot open filename: error

### **Explanation**

The file named *filename*, which was specified as the source of IPL text to be written to the volume, could not be opened. The error is described by *error*.

#### Action

Correct the error and rerun dasdload.

# HHCDL035E

# HHCDL035E Cannot read filename: error

### **Explanation**

An error was encountered while reading the IPL text file named *filename*. The error is described by *error*. If no error is reported, the file did not contain an integral number of 80-byte card images.

#### Action

Correct the reported error or supply a valid IPL text file consisting of 80-byte card images and rerun dasdload.

# HHCDL036E

# HHCDL036E filename is not a valid object file

### **Explanation**

The IPL text file named *filename* is not a valid object file. A record read from the file did not contain the required flag in the first byte.

#### Action

Supply a valid object file and rerun dasdload.

# HHCDL037I

# HHCDL037I IPL text address=addr length=length

### **Explanation**

The object code from the current record of the IPL text file will be loaded into memory at address *address*, and is *length* bytes long.

# Message level

5

# Action

None.

# HHCDL038E

# HHCDL038E TXT record in filename has invalid count length

# **Explanation**

A text record in the IPL text file named *filename* has an invalid length *length*. The length cannot exceed 56.

## Action

Supply a valid IPL text file and rerun dasdload.

# HHCDL039E

# HHCDL039E IPL text in filename exceeds buflen bytes

### **Explanation**

The IPL text file named *filename* is too long to fit in the available space on the volume. The IPL text cannot exceed *buflen* bytes in length.

#### **Action**

Supply a shorter IPL text file or specify a volume with a larger track size and rerun dasdload.

# HHCDL040E

# HHCDL040E Input record CCHHR=cchhr exceeds output device track size

### **Explanation**

The block to be written at absolute address cchhr is too large to fit on a track on the disk being loaded.

#### Action

Specify a device with a larger track size and rerun dasdload.

# HHCDL041E

# HHCDL041E Dataset exceeds extent size: reltrk=track, maxtrk=maxtrk

# **Explanation**

The data to be written to the dataset is too large for the space requested for it. If the space request was allowed to default, the input file is corrupt.

# Action

If the space request was made explicitly, then request more space. If the request was defaulted, supply a valid input file. Rerun dasdload.

# HHCDL042E

# HHCDL042E Input record CCHHR=cchhr exceeds virtual device track size

### **Explanation**

The block to be written at absolute address *cchhr* is too large to fit on a track on the disk being loaded. In addition, this message being issued instead of message HHCDL040E indicates an internal inconsistency in the way Hercules computes the space available on a track.

### **Action**

Specify a device with a larger track size and rerun dasdload. Report the inconsistenct to the Hercules development team.

# HHCDL043E

# HHCDL043E filename cyl cylinder head head read error

### **Explanation**

The data at cylinder *cylinder*, head *head* of the disk image file named *filename* could not be read in order to be updated. A previous message described the error.

#### Action

Correct the previously reported error and rerun dasdload.

# HHCDL044E

# HHCDL044E filename cyl cylinder head head invalid track header header

### **Explanation**

The track header header at cylinder cylinder, head head in the disk image file named filename contained an address that did not match the actual address.

#### **Action**

Rerun dasdload. If the error persists, report it to the Hercules development team.

# HHCDL045E

# HHCDL045E filename cyl cylinder head head record record record not found

### **Explanation**

The record requested for update at cylinder cylinder, head head, record record of the DASD image file named filename was not found.

#### Action

Rerun dasdload. If the error persists, report it to the Hercules development team.

# HHCDL046E

# HHCDL046E Cannot update cyl cylinder head head rec record: Unmatched KL/DL

### **Explanation**

The record to be written at cylinder *cylinder*, head *head*, record *record* does not have the same key or data length as the record that already exists at that location. This is not allowed for a record update operation.

#### Action

Rerun dasdload. If the error persists, report it to the Hercules development team.

# HHCDL047E

# HHCDL047E filename cyl cylinder head head read error

### **Explanation**

A read error was encountered when reading the track at cylinder *cylinder*, head *head*, in the disk image file named *filename*. A previous message described the error.

### **Action**

Correct the error reported by the previous message and rereun dasdload.

# HHCDL048I

# HHCDL048I Updating cyl cylinder head head rec record kl keylen dl datalen

### **Explanation**

The record at cylinder cylinder, head head, record record is being updated. It has a key length of keylen and data length datalen.

# Message level

4

# **Action**

None.

# HHCDL049E

### HHCDL049E Cannot obtain storage for DSCB: error

# **Explanation**

An attempt to obtain storage to build a DSCB to describe a dataset on the volume being loaded failed. The error is described by *error*.

## **Action**

Correct the error and rerun dasdload.

# HHCDL050E

# HHCDL050E DSCB count exceeds maximum, increase MAXDSCB

### **Explanation**

There are too many datasets on the volume being loaded and an internal structure in dasdload is full.

#### Action

Increase the value of the symbol MAXDSCB in the source program and recompile dasdload, then rerun the program.

# HHCDL051E

# HHCDL051E Cannot obtain storage for DSCB: error

### **Explanation**

An attempt to obtain storage to build a DSCB to describe the VTOC on the volume being loaded failed. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL052E

# HHCDL052E DSCB count exceeds maximum, increase MAXDSCB

### **Explanation**

There are too many datasets on the volume being loaded and an internal structure in dasdload is full.

#### Action

Increase the value of the symbol MAXDSCB in the source program and recompile dasdload, then rerun the program.

# HHCDL053E

# HHCDL053E Cannot obtain storage for DSCB: error

### **Explanation**

An attempt to obtain storage to build a DSCB to describe the free space on the volume being loaded failed. The error is described by *error*.

#### Action

Correct the error and rerun dasdload.

# HHCDL054E

# HHCDL054E DSCB count exceeds maximum, increase MAXDSCB

### **Explanation**

There are too many datasets on the volume being loaded and an internal structure in dasdload is full.

### Action

Increase the value of the symbol MAXDSCB in the source program and recompile dasdload, then rerun the program.

# HHCDL055E

# HHCDL055E VTOC too small, tracks tracks required

### **Explanation**

The VTOC allocation of tracks is too small to hold the VTOC.

#### Action

Specify at least tracks tracks for the VTOC and rerun dasdload.

# HHCDL056E

# HHCDL056E Error reading VTOC cyl cylinder head head

### **Explanation**

The first track of the VTOC could not be read so it could be updated. A previous message described the error.

#### **Action**

Correct the error reported by the previous message and rerun dasdload.

# HHCDL057I

# HHCDL057I VTOC starts at cyl cylinder head head and is tracks tracks

# **Explanation**

The VTOC on the volume being loaded starts at cylinder cylinder, head head and is tracks tracks long.

### Message level

1

# **Action**

None.

# HHCDL058I

# HHCDL058I Format format DSCB CCHHR=cchhr (TTR=ttr) dsname

### **Explanation**

The format format DSCB is located at absolute address *cchhr* and relative address within the VTOC *ttr*. If *format* is 1, the dataset described by the DSCB is named *dsname*.

# Message level

4

#### Action

# HHCDL059I

# HHCDL059I Format 0 DSCB CCHHR cchhr (TTR=ttr)

### **Explanation**

A format 0 (empty) DSCB is located at absolute address cchhr and relative address within the VTOC ttr.

# Message level

4

# **Action**

None.

# HHCDL060E

# HHCDL060E Error reading track cyl cylinder head head

### **Explanation**

An error was encountered reading the track at cylinder *cyl*, head *head*. A previous message described the error.

### **Action**

Correct the error reported by the previous message and rerun dasdload.

# HHCDL061E

# **HHCDL061E Incomplete text unit**

### **Explanation**

An text unit read from the input file was too short to contain a valid header. The input data is probably corrupt.

### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL062I

# HHCDL062I position tuname key fields

### **Explanation**

The text unit at *position* of the input buffer has the name *tuname* and the numeric key value *key*. There are *fields* fields in the text unit.

# Message level

4

### Action

# HHCDL063E

# HHCDL063E Too many fields in text unit

### **Explanation**

A text unit was read from the input file that had too many fields in the header for that type of text unit. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL064E

# **HHCDL064E Incomplete text unit**

### **Explanation**

A text unit read from the input file was too short to contain a valid field length. The input data is probably corrupt.

#### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL065E

# **HHCDL065E** Incomplete text unit

# **Explanation**

A text unit read from the input file was shorter than the length in the field header. The input data is probably corrupt.

### Action

Supply a valid input file and rerun dasdload.

# HHCDL066E

### HHCDL066E filename read error: error

### **Explanation**

An error was encountered when reading the input file named *filename*. The error is described by *error*.

# Action

Correct the error and rerun dasdload.

# HHCDL067E

# HHCDL067E filename invalid segment header: header

### **Explanation**

A segment read from the file named *filename* has an invalid header *header*. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL068E

# HHCDL068E filename first segment indicator expected

### **Explanation**

A segment read from the file named *filename* should have the first segment indicator set but does not. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL069E

# HHCDL069E filename first segment indicator not expected

### **Explanation**

A segment read from the file named *filename* should not have the first segment indicator set but does. The input file is probably corrupt.

### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL070E

# HHCDL070E filename control record indicator mismatch

# **Explanation**

There was a mismatch between the first segment and the control record. The input file is probably corrupt.

# Action

Supply a valid input file and rerun dasdload.

# HHCDL071E

### HHCDL071E filename read error: error

# **Explanation**

An error was encountered when reading a segment from the input file named *filename*. The error is described by *error*.

# Action

Correct the error and rerun dasdload.

# HHCDL072E

# HHCDL072E filename read error: error

### **Explanation**

An error was encountered when reading a COPYR1 record from the input file named *filename*. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL073E

# HHCDL073E filename read error: error

### **Explanation**

An error was encountered when reading a COPYR2 record from the input file named *filename*. The error is described by *error*.

#### Action

Correct the error and rerun dasdload.

# HHCDL074E

# HHCDL074E filename read error: error

### **Explanation**

An error was encountered when reading a data block header from the input file named *filename*. The error is described by *error*.

#### Action

Correct the error and rerun dasdload.

# HHCDL075E

### HHCDL075E filename read error: error

# **Explanation**

An error was encountered when reading a data block from the input file named *filename*. The error is described by *error*.

### **Action**

Correct the error and rerun dasdload.

# HHCDL076I

HHCDL076I File number: number

### **Explanation**

The file being processed is number number.

# Message level

4

# **Action**

None.

# HHCDL077E

# HHCDL077E Invalid text unit at offset offset

### **Explanation**

An invalid text unit was read from position *offset*. A previous message described the error. The input file is probably corrupt.

### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL078I

# HHCDL078I File filenum: DSNAME=dsname

### **Explanation**

The dataset name of file number filenum is dsname.

# Message level

2

#### Action

None.

# HHCDL079I

# HHCDL079I DSORG=dsorg RECFM=recfm LRECL=lrecl BLKSIZE=blksize KEYLEN=keylen DIRBLKS=dirblks

# **Explanation**

For the dataset listed in the preceding HHCDL078I message the dataset organization is *dsorg*, the record format is *recfm*, the logical record length is *lrecl*, the block size is *blksize*, the key length is *keylen* and the directory block count is *dirblks*.

# Message level

2

### **Action**

None.

# HHCDL080E

# HHCDL080E Invalid text unit at offset offset

### **Explanation**

An invalid text unit was read from position *offset*. A previous message described the error. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL081E

# HHCDL081E COPYR1 record length is invalid

### **Explanation**

The length of the COPYR1 record is invalid. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL082E

### HHCDL082E COPYR1 header identifier not correct

# **Explanation**

The header identifier of the COPYR1 record is invalid. The input file is probably corrupt.

#### Action

Supply a valid input file and rerun dasdload.

# HHCDL083E

# HHCDL083E COPYR1 unload format is unsupported

### **Explanation**

The COPYR1 record indicates that the file was unloaded in a format that is not supported by dasdload. The file may be corrupt or it may simply be in a newer format than is supported by this version of dasdload.

# **Action**

Supply a supported input file and rerun dasdload.

# HHCDL084I

# HHCDL084I Original dataset: DSORG=dsorg RECFM=recfm LRECL=lrecl BLKSIZE=blksize KEYLEN=keylen

### **Explanation**

For the original dataset, the dataset organization is *dsorg*, the record format is *recfm*, the logical record length is *lrecl*, the block size is *blksize*, the key length is *keylen* and the directory block count is *dirblks*.

# Message level

2

### Action

None.

# HHCDL085I

# HHCDL085I Dataset was unloaded from device type ucbtype (device)

# **Explanation**

The dataset was unloaded from a device device, with UCB device type ucbtype.

# Message level

2

# **Action**

None.

# HHCDL086I

# HHCDL086I Original device has cylinders cyls and heads heads

# **Explanation**

The device listed in the preceding HHCDL085I message has cylinders cylinders and heads heads.

### Message level

2

#### **Action**

None.

# HHCDL087E

# HHCDL087E COPYR2 record length is invalid

# **Explanation**

The length of the COPYR2 record just read is not valid. The input file is probably corrupt.

### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL088E

# HHCDL088E Invalid number of extents extents

### **Explanation**

The number of extents reported in the COPYR2 record is invalid, either less than 1 or more than 16. The input file is probably corrupt.

### Action

Supply a valid input file and rerun dasdload.

# HHCDL089I

# HHCDL089I Extent extent: Begin CCHH=begcchh End CCHH=endcchh Tracks=tracks

### **Explanation**

For extent number *extent*, the extent starts at cylinder and head *begcchh*, and ends at *endcchh*, for a total of *tracks* tracks.

# Message level

4

# **Action**

None.

# HHCDL090I

### **HHCDL090I End of directory**

### **Explanation**

The end of the PDS directory has been reached.

# Message level

3

# **Action**

None.

# HHCDL091E

# HHCDL091E Directory block record length is invalid

### **Explanation**

The directory block read from the input file has the wrong length. It must be 276 bytes long. The input file is probably corrupt.

# **Action**

Supply a valid input file and rerun dasdload.

# HHCDL092E

# HHCDL092E Cannot obtain storage for directory block: error

### **Explanation**

An attempt to obtain storage for the directory block being processed failed. The error is described by error.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL093E

# HHCDL093E Number of directory blocks exceeds maxdblk, increase MAXDBLK

### **Explanation**

The number of directory blocks in the dataset being processed exceeds the size of an internal control structure. The maximum number is *maxdblk*.

#### **Action**

Increase the value of the constant MAXDBLK in the program source and recompile dasdload.

# HHCDL094E

# HHCDL094E Directory block byte count is invalid

### **Explanation**

The length of the current directory block is invalid. The input file is probably corrupt.

### **Action**

Supply a valid input file and rerun dasdload.

# HHCDL095I

# HHCDL095I (Alias|Member) *memname* TTR=*ttr* Userdata=*userdata*

### **Explanation**

The alias or member named *memname* is located at relative address *ttr*. If user data is present, it is printed as *userdata*.

# Message level

3

# **Action**

# HHCDL096I

# HHCDL096I Member name TTR=oldttr replaced by newttr

### **Explanation**

In the directory entry for member *name*, the old pointer to the mamber *oldttr* was replaced by the member's actual relative address *newttr*.

# Message level

4

### **Action**

None.

# HHCDL097E

### HHCDL097E Member name TTR=ttmot found in dataset

### **Explanation**

A request was made to update the directory entry for the member named *name* but there was no directory entry to update.

#### Action

This is likely an internal logic error. Report the error to the Hercules development team.

# HHCDL098I

# HHCDL098I Updating note list for member name at TTR=ttr CCHHR=cchhr

# **Explanation**

The note list for the member named *name*, at relative address *ttr*, absolute address *cchhr*, is being updated.

# Message level

4

### **Action**

None.

# HHCDL099E

# HHCDL099E filename cyl cylinder head head read error

### **Explanation**

An attempt to read the track in the DASD image file named *filename* at cylinder *cylinder*, head *head*, failed. A previous error described the failure.

#### Action

Correct the error reported by the previous message and rerun dasdload.

# HHCDL100E

# HHCDL100E filename cyl cylinder head head invalid track header header

### **Explanation**

The header header of the track in the DASD image file named *filename* at cylinder cylinder, head head did not agree with the actual address of the track. This is probably an internal logic error.

#### Action

Report the error to the Hercules development team.

# HHCDL101E

### HHCDL101E filename cyl cylinder head head rec record note list record not found

### **Explanation**

A request was made to update a note list record at cylinder cylinder, head head, record record, but the record was not found. The input dataset may be corrupt.

#### **Action**

Supply a valid input dataset and rerun dasdload.

# HHCDL102E

# HHCDL102E Member member note list at cyl cylinder head head rec record dlen datalen is too short for numttrs TTRs

### **Explanation**

The data length *datalen* of the note list record for member *member* at cylinder *cylinder*, head *head*, record *record*, is too short to contain the requested number *numttrs* of record pointers. The input dataset is probably corrupt.

#### Action

Supply a valid input dataset and rerun dasdload.

# HHCDL103E

# HHCDL103E filename track read error cyl cylinder head head

# **Explanation**

An attempt to read the track in the DASD image file named *filename* at cylinder *cylinder*, head *head*, failed. A previous error described the failure.

### **Action**

Correct the error reported by the previous message and rerun dasdload.

# HHCDL104I

# HHCDL104I Updating cyl cylinder head head rec record kl keylen dl datalen

# **Explanation**

The record at cylinder, head *head*, record *record*, with key length *keynel* and data length *datalen* is being updated.

# Message level

4

### Action

None.

# HHCDL105E

# HHCDL105E Directory block byte count is invalid

# **Explanation**

The length of the current directory block is invalid. The input file is probably corrupt.

### Action

Supply a valid input file and rerun dasdload.

# HHCDL106E

# HHCDL106E Cannot open file filename: error

### **Explanation**

An attempt to open the IEBCOPY input file named filename failed. The error is described by error.

# Action

Correct the error and rerun dasdload.

# HHCDL107E

# HHCDL107E Cannot obtain input buffer: error

#### **Explanation**

An attempt to obtain a 64K byte input buffer for reaading the IEBCOPY input file failed. The error is described by *error*.

### **Action**

Correct the error and rerun dasdload.

# HHCDL108E

# HHCDL108E Cannot obtain storage for directory block array: error

# **Explanation**

An attempt to obtain storage for the internal array used to store directory blocks failed. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL109E

# HHCDL109E Cannot obtain storage for TTR table: error

# **Explanation**

An attempt to obtain storage for the internal array used to store track pinters for later conversion failed. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL110I

# **HHCDL110I Processing file filename**

### **Explanation**

The input file named filename is being processed.

# Message level

1

#### **Action**

None.

# HHCDL111I

# HHCDL111I Control record: recname length length

# **Explanation**

A control record named recname of length length has been read.

# Message level

4

### Action

# HHCDL112I

# HHCDL112I File number: filenum ((not) selected)

### **Explanation**

The data file, number filenum, was (or was not) selected for processing.

# Message level

4

### Action

None.

# HHCDL113I

### HHCDL113I Data record: length length

### **Explanation**

A data record of length length has been read.

# Message level

4

# Action

None.

# HHCDL114E

# HHCDL114E write error: input record CCHHR=cchhr (TTR=ttr) KL=keylen DL=datalen

#### **Explanation**

An error was encountered writing the data record at absolute address *cchhr*, relative address *ttr*, with key length *keylen* and data length *datalen*. A previous message described the error.

#### Action

Correct the error described by the previous message and rerun dasdload.

# HHCDL115I

# HHCDL115I CCHHR=incchhr (TTR=inttr) KL=keylen DL=datalen -> CCHHR=outcchhr (TTR=outttr)

# **Explanation**

The record at absolute address *incchhr*, relative address *inttr*, with key length *keylen* and data length *datalen*, is being written to the output DASD image at absolute address *outcchhr*, relative address *outttr*.

# Message level

4

# **Action**

# HHCDL116E

# HHCDL116E TTR count exceeds maxttr, increase MAXTTR

### **Explanation**

The list of relative address pointers exceeds the size of the internal array used to contain them, maxttr.

#### Action

Increase the constant MAXTTR in the program source and recompile dasdload.

# HHCDL117I

# HHCDL117I Catalog block at cyl cylinder head head rec record

### **Explanation**

A catalog record has been written to disk at cylinder cylinder, head head and record record.

### Message level

4

### **Action**

None.

# HHCDL118I

# HHCDL118I Catalog block at cyl cylinder head head rec record

### **Explanation**

A catalog index record has been written to disk at cylinder cylinder, head head and record record.

# Message level

4

# **Action**

None.

# HHCDL119I

# HHCDL119I Catalog block at cyl cylinder head head rec record

### **Explanation**

An empty catalog record has been written to disk at cylinder cylinder, head head and record record.

### Message level

1

# **Action**

# HHCDL120I

# HHCDL120I DIP complete at cyl cylinder head head record record

### **Explanation**

The LOGREC dataset has been initialized. The last block written was at cylinder cylinder, head head, record record.

# Message level

3

### Action

None.

# HHCDL121E

# HHCDL121E SEQ dsorg must be PS or DA: dsorg=dsorg

### **Explanation**

The dataset organization specified for the input dataset was dsorg. It must be either PS or DA but is not.

#### **Action**

Specify a valid dataset organization for sequential file processing or specify the correct processing option for the file being loaded and rerun dasdload.

# HHCDL122E

# HHCDL122E SEQ recfm must be F or FB: recfm=recfm

### **Explanation**

The record format specified for the input dataset was recfm. It must be either F or FB but is not.

#### Action

Specify a valid record format for sequential file processing and rerun dasdload.

# HHCDL123E

# HHCDL123E SEQ invalid Irecl or blksz: Irecl=Irecl blksz=blksz

# **Explanation**

The logical record length specified for the input dataset was *lrecl*, and the block size was *blksz*. Either the block size was not a multiple of the logical record length and the record format was specified as FB or the block size was different from the logical record length and the record format was specified as F.

### **Action**

Specify a valid logical record length and block size for sequential file processing and rerun dasdload.

# HHCDL124E

# HHCDL124E SEQ keyIn must be 0 for blocked files

### **Explanation**

The key length was specified as nonzero and the record format was specified as FB. This combination is invalid.

#### **Action**

If a key is required, specify a record format of F. If no key is required, specify a key length of 0. Rerun dasdload.

# HHCDL125E

# HHCDL125E Cannot open filename: error

### **Explanation**

An error was encountered when attempting to open the input file named *filename*. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdload.

# HHCDL126E

# HHCDL126E Cannot stat filename: error

### **Explanation**

An error was encountered when attempting to obtain the size of the file named *filename*. The error is described by *error*.

# **Action**

Correct the error and rerun dasdload.

# HHCDL127E

# HHCDL127E filename cyl cylinder head head read error

#### **Explanation**

An attempt to read the track in the DASD image file named *filename* at cylinder *cylinder*, head *head*, failed. A previous error described the failure.

### **Action**

Correct the error reported by the previous message and rerun dasdload.

# HHCDL128E

# HHCDL128E filename read error: error

# **Explanation**

An error was encountered reading the input file named *filename*. The error is described by *error*.

# **Action**

Correct the error and rerun dasdload.

# 15. Messages HHCDSnnns - DASDISUP Utility

# HHCDS001E

# HHCDS001E Cannot obtain storage for member array: error

### **Explanation**

An attempt to obtain storage for the array of SYS1.SVCLIB members failed. The error is described by *error*.

#### **Action**

Correct the error and rerun dasdisup.

# HHCDS002I

# HHCDS002I End of directory: count members selected

# **Explanation**

The end of the SYS1.SVCLIB directory has been reached. *count* members have been selected for processing.

#### **Action**

None.

# HHCDS003E

# HHCDS003E Directory block byte count is invalid

# **Explanation**

The length of the directory block read is invalid. The SYS1.SVCLIB directory is probably corrupt.

# **Action**

Rebuild SYS1.SVCLIB and rerun dasdisup.

# HHCDS004E

# HHCDS004E Number of members exceeds MAX\_MEMBERS

# **Explanation**

SYS1.SVCLIB has too many members to fit in the array used to store their information.

### **Action**

Increase the value of MAX\_MEMBERS in dasdisup.c and recompile the program, then run it again.

# HHCDS005E

# HHCDS005E Member member TTR count is zero

### **Explanation**

The member named *member* has no data associated with it. Since aliases have been skipped already, this means that the SYS1.SVCLIB directory is corrupt.

#### **Action**

Rebuild SYS1.SVCLIB and run dasdisup again.

# HHCDS006W

# HHCDS006W Member member is not single text record

### **Explanation**

The member named *member* is not contained in a single text record. This is an invalid condition. The member will be skipped later and message HHCDS011E will be issued.

#### Action

If this member must be processed, rebuild SYS1.SVCLIB and rerun dasdisup.

# HHCDS007W

# HHCDS007W Member member size size exceeds X'7F8' bytes

### **Explanation**

The member named *member* is too long. The maximum length of an OS/360 SVC load module is X'7F8' (2040 decimal) bytes. The member will be processed but OS/360 may not process it correctly.

#### Action

Correct the member in SYS1.SVCLIB and rerun dasdisup.

# HHCDS008W

# HHCDS008W Member member size size is not a multiple of 8

### **Explanation**

The member named *member* is not a multiple of 8 bytes long. Its actual size is *size*. This is not valid for an OS/360 load module. OS/360 will issue an ABEND when an attempt is made to load the module.

### **Action**

Correct the member in SYS1.SVCLIB and rerun dasdisup.

# HHCDS009I

# HHCDS009I Alias alias skipped

### **Explanation**

The alias named alias has been skipped, since no processing is necessary for it.

# **Action**

None.

# HHCDS010I

# HHCDS010I Member member skipped

### **Explanation**

The member named *member* has been skipped, since it does not have an XCTL table.

#### **Action**

If the member should have an XCTL table, rebuild it in SYS1.SVCLIB and rerun dasdisup.

# HHCDS011E

# HHCDS011E Member member has multiple text records

# **Explanation**

The member named *member* has multiple text records. This is not a valid condition for an OS/360 SVC module. The member will not be processed. Message HHCDS006W was issued for this member earlier.

#### Action

If this member must be processed, rebuild it in SYS1.SVCLIB and rerun dasdisup.

# HHCDS012E

### HHCDS012E Member member has invalid TTR ttr

# **Explanation**

The pointer to the text record for the member named *member* is invalid. The pointer found is *ttr*. The member cannot be located to be processed. The SYS1.SVCLIB directory is probably corrupt.

### **Action**

Rebuild SYS1.SVCLIB and rerun dasdisup.

# HHCDS013I

# HHCDS013I Processing member member text record TTR=ttr CCHHR=cchhr

### **Explanation**

The member named *member* is being processed. Its relative location is *ttr* and its absolute location is *cchhr*.

#### **Action**

None.

# HHCDS014E

# HHCDS014E Member member error reading TTR ttr

### **Explanation**

An attempt to read the member named *member*, at the relative location *ttr*, failed. The member cannot be processed.

#### Action

Rebuild SYS1.SVCLIB and rerun dasdisup. If this is unsuccessful, rebuild the entire DASD volume.

# HHCDS015E

# HHCDS015E Member member TTR ttr text record length length is not valid

### **Explanation**

The length *length* of the text record at location *ttr* of the member named *member* is less than 8, greater than 1024, or not a multiple of 8. All of these conditions must be met for the length to be valid. The member is probably corrupt.

# Action

Rebuild the member in SYS1.SVCLIB and rerun dasdisup.

# HHCDS016E

# HHCDS016E Member member TTR ttr text record length textlength does not match length dirlength in directory

# **Explanation**

The length *textlength* of the text record at location *ttr* is not the same as the length *dirlength* in the directory entry for member *member*. Either the member, or the directory, is probably corrupt.

### **Action**

Rebuild the member in SYS1.SVCLIB and rerun dasdisup. If this does not correct the problem, rebuild SYS1.SVCLIB in its entirety.

# HHCDS017E

# HHCDS017E Member member TTR ttr XCTL table improperly terminated

### **Explanation**

The XCTL table in member *member* at location *ttr* runs past the end of the text record. The member is probably corrupt.

### **Action**

Rebuild the member and rerun dasdisup.

# HHCDS018I

# HHCDS018I member (Alias|Member) skipped

### **Explanation**

The member or alias named *member* is not an Open, Close, or EOV module, and so does not have an XCTL table that needs to be updated. It has been skipped.

#### Action

None.

# HHCDS019I

# HHCDS019I In member member: reference TTRL=ttrl status

### **Explanation**

A reference to the member named *reference* in the member named *member* was found, the referenced member is at the location *ttrl* in the table. *status* is optional; it may be one of:

# \*\* Member reference not found

The referenced member was not found in SYS1.SVCLIB. The reference cannot be updated. replaced by TTRL=newttrl flag

The reference was updated to point to the referenced member's actual location at *newttrl*. If *flag* is \*\*\*\*, the actual length of the referenced member is different from the length of the member in the reference pointer.

#### Action

# 16. Messages HHCDTnnns - DASDCAT Utility

# HHCDT001E

# HHCDT001E failed to open image filename

### **Explanation**

An error was ancountered trying to open the DASD image file named *filename*. A previous message described the error.

#### **Action**

Correct the error and rerun dasdcat.

# HHCDT002E

# HHCDT002E Can't make 80 column card images from block length length

# **Explanation**

A block read from the member specified is not a multiple of 80 characters long, and so cannot be split evenly into 80-character card images. The actual length read is *length*.

#### Action

Select a different member, or omit the c flag from the member specification.

# HHCDT003E

# HHCDT003E Directory block byte count is invalid

### **Explanation**

The length of a PDS directory block in the specified dataset is invalid. The PDS directory is corrupt or the dataset is not a PDS.

#### Action

Make sure the dataset specified is a PDS (partitioned dataset). If it is, then the dataset is corrupt.

# HHCDT004E

# HHCDT004E non-PDS-members not yet supported

### **Explanation**

This version of dasdcat does not support reading sequential datasets.

# **Action**

Specify a PDS as input to dasdcat.

# HHCDT005E

# HHCDT005E unknown dataset name option: 'option'

# **Explanation**

An invalid option was specified on the dataset name specification. Only the options 'a' and 'c' are valid.

# **Action**

Remove the invalid option from the dataset name specification and rerun dasdcat.

# 17. Messages HHCDUnnns - DASD Utilities Common Functions

# HHCDU001I

# HHCDU001I Updating cyl cylinder head head

### **Explanation**

The track at cylinder number *cylinder* and head number *head* is being rewritten after being modified. This message is only issued if verbose message reporting has been selected.

# **Action**

None.

# HHCDU002E

### HHCDU002E filename write track error: stat=status

### **Explanation**

An attempt to rewrite a track from the DASD image named *filename* failed. The status returned was *status*.

#### **Action**

Correct the error and retry the operation.

# HHCDU003I

# HHCDU003I Reading cyl cylinder head head

### **Explanation**

The track at cylinder number *cylinder* and head number *head* is being read. This message is only issued if verbose message reporting has been selected.

#### **Action**

None.

# HHCDU004E

### HHCDU004E filename read track error: stat=status

# **Explanation**

An attempt to read a track from the DASD image named filename failed. The status returned was status.

#### Action

Correct the error and retry the operation.

# HHCDU005I

# HHCDU005I Searching extent 0 begin (begcyl,beghead) end (endcyl,endhead)

### **Explanation**

The first extent of the dataset is being searched for a key. The extent starts at the track at cylinder *begcyl*, head *beghead*, and ends at the track at cylinder *endcyl*, head *endhead*. This message is only issued if verbose message reporting has been selected.

### **Action**

None.

# HHCDU006I

# HHCDU006I Searching extent extent begin (begcyl, beghead) end (endcyl, endhead)

### **Explanation**

An extent, extent, of the dataset is being searched for a key. The extent starts at the track at cylinder begcyl, head beghead, and ends at the track at cylinder endcyl, head endhead. This message is only issued if verbose message reporting has been selected.

### **Action**

None.

# HHCDU007E

### HHCDU007E Track track not found in extent table

### **Explanation**

An attempt was made to convert a track number to an absolute address, but the track specified, *track*, is beyond the end of the dataset.

#### Action

Correct the error and retry the operation. The dataset, the VTOC, or the DASD image may be corrupt.

# HHCDU008E

# HHCDU008E Cannot obtain storage for device descriptor buffer: error

# **Explanation**

An attempt to obtain storage for the buffer used to hold a CKD DASD image description failed. The error is described by *error*.

### **Action**

Correct the error and retry the operation.

# HHCDU009E

# HHCDU009E Cannot open filename: error

### **Explanation**

The CKD image file named *filename* could not be opened. The error is described by error.

#### Action

Correct the error and retry the operation.

# HHCDU010E

### HHCDU010E filename read error: error

### **Explanation**

An error was encountered while reading the CKD header record from the file named *filename*. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

# HHCDU011E

# HHCDU011E filename CKD header invalid

# **Explanation**

The file *filename* is not a valid CKD DASD image file. Either the first record is not the length of a CKD header record or the marker in the header record is not correct.

### **Action**

Supply the name of a valid CKD DASD image file and retry the operation.

# HHCDU012E

# HHCDU012E DASD table entry not found for devtype type

### **Explanation**

The device type in the CKD header record does not correspond to any known DASD device. The CKD DASD image file may be corrupt or the device is not supported by Hercules.

#### Action

Supply the name of a supported CKD DASD image file and retry the operation.

## HHCDU013E

#### HHCDU013E CKD initialization failed for filename

#### **Explanation**

The device-specific initialization routine for the file named *filename* failed. Another message describes the specific failure.

#### **Action**

See the specific message for the action needed.

## HHCDU014I

#### HHCDU014I filename heads=heads trklen=trklen

#### **Explanation**

The device represented by the CKD DASD image file named *filename* has *heads* heads and tracks of *trklen* bytes length. This message is only issued if verbose message reporting has been selected.

#### **Action**

None.

## HHCDU015I

## HHCDU015I Updating cyl cylinder head head

#### **Explanation**

During processing of a request to close the CKD image file, the track at cylinder number *cylinder* and head number *head* is being rewritten, since it has been modified. This message is only issued if verbose message reporting has been selected.

#### **Action**

None.

## HHCDU016E

## HHCDU016E filename write track error: stat=status

#### **Explanation**

During processing of a request to close the CKD image file, an attempt to rewrite a track from the DASD image named *filename* failed. The status returned was *status*.

#### **Action**

## HHCDU017E

## HHCDU017E Cannot obtain storage for device descriptor buffer: error

#### **Explanation**

An attempt to obtain storage for the buffer used to hold a FBA DASD image description failed. The error is described by *error*.

## **Action**

Correct the error and retry the operation.

## HHCDU018E

#### HHCDU018E DASD table entry not found for devtype type

#### **Explanation**

The default FBA device type does not correspond to any known DASD device. This is likely an internal programming error.

#### **Action**

Report the bug to the Hercules development team.

## HHCDU019E

## HHCDU019E FBA initialization failed for filename

#### **Explanation**

The device-specific initialization routine for the file named *filename* failed. Another message describes the specific failure.

#### **Action**

See the specific message for the action needed.

## HHCDU020I

#### HHCDU020I filename sectors=sectors size=size

#### **Explanation**

The device represented by the FBA DASD image file named *filename* has sectors sectors of size bytes length. This message is only issued if verbose message reporting has been selected.

#### **Action**

None.

## HHCDU021E

#### HHCDU021E VOL1 record not found

#### **Explanation**

The volume being processed does not have a volume label. It is probably blank and unformatted.

#### Action

Format the volume or specify a formatted volume and retry the operation.

## HHCDU022I

#### HHCDU022I VOLSER=serial VTOC=cchhr

#### **Explanation**

The volume being processed has the volume serial *serial* and its VTOC format 4 DSCB is at absolute location *cchhr*. This message is only issued if verbose message reporting has been selected.

#### Action

None.

## HHCDU023I

## HHCDU023I VTOC start begcchh end endcchh

#### **Explanation**

The VTOC of the volume being processed begins at cylinder and head *begcchh* and ends at cylinder and head *endcchh*. This message is only issued if verbose message reporting has been selected.

#### **Action**

None.

## HHCDU024E

## HHCDU024E Dataset dsn not found in VTOC

#### **Explanation**

The requested dataset dsn was not found in the VTOC and does not exist on this volume.

## Action

Specify the correct dataset name or select the volume on which it appears.

## HHCDU025I

#### HHCDU025I DSNAME=dsn F1DSCB CCHHR=cchhr

## **Explanation**

The format 1 DSCB for the requested dataset *dsn* is at absolute location *cchhr*. This message is only issued if verbose message reporting has been selected.

#### Action

None.

## HHCDU026E

## HHCDU026E F1DSCB record not found

#### **Explanation**

The requested dataset is listed in the VTOC but its format 1 DSCB record was not found when an attempt was made to read it. The VTOC may be corrupt.

#### Action

Recreate the dataset and retry the operation.

## HHCDU027E

#### HHCDU027E F3DSCB record not found

#### **Explanation**

The requested dataset is reported to contain more than three extents in the format 1 DSCB but its format 3 DSCB record was not found when an attempt was made to read it. The VTOC may be corrupt.

#### **Action**

Recreate the dataset and retry the operation.

## HHCDU028E

## HHCDU028E filename open error: error

#### **Explanation**

An attempt to create the CKD DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU029E

#### HHCDU029E filename device header write error: error

#### **Explanation**

An attempt to write the device header to the CKD DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

## HHCDU030E

## HHCDU030E filename compressed device header write error: error

#### **Explanation**

An attempt to write the compressed device header to the CKD DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU031E

#### HHCDU031E Cannot obtain I1tab buffer: error

#### **Explanation**

An attempt to obtain storage for the primary lookup table buffer failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU032E

## HHCDU032E filename primary lookup table write error: error

#### **Explanation**

An attempt to write the primary lookup table to the CKD DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU033E

#### HHCDU033E filename secondary lookup table write error: error

#### **Explanation**

An attempt to write the secondary lookup table to the CKD DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU034E

#### HHCDU034E filename dasdcopy ftruncate error: error

## **Explanation**

An attempt to truncate the CKD DASD image file named filename failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU035E

## HHCDU035E filename cylinder cyl head head write error: error

#### **Explanation**

An attempt to write the track at cylinder *cyl*, head *head* to the CKD DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU036E

#### HHCDU036E filename compressed device header Iseek error: error

#### **Explanation**

An attempt to reposition to the beginning of the CKD DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU037E

## HHCDU037E filename compressed device header write error: error

#### **Explanation**

An attempt to rewrite the compressed device header record of the CKD DASD image file named *filename* failed. The error is described by *error*.

## Action

Correct the error and retry the operation.

## HHCDU038E

#### HHCDU038E filename secondary lookup table Iseek error: error

#### **Explanation**

An attempt to reposition to the secondary lookup table of the CKD DASD image file named *filename* failed. The error is described by *error*.

## Action

## HHCDU039E

## HHCDU039E filename secondary lookup table write error: error

#### **Explanation**

An attempt to rewrite the secondary lookup table of the CKD DASD image file named *filename* failed. The error is described by *error*.

## **Action**

Correct the error and retry the operation.

## HHCDU040E

## HHCDU040E filename close error: error

#### **Explanation**

An attempt to close the CKD DASD image file named filename failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU041I

## HHCDU041I count cylinders successfully written to file filename

#### **Explanation**

The CKD DASD image file named *filename* has been successfully created. It contains *count* cylinders.

#### Action

None.

## HHCDU042E

## HHCDU042E Cylinder count count is outside range min-max

## **Explanation**

The requested number of cylinders *count* is outside the valid range from *min* to *max*.

#### Action

Specify a valid number of cylinders and retry the operation.

## HHCDU043E

## HHCDU043E Cannot obtain track buffer: error

#### **Explanation**

An attempt to obtain storage for the track buffer failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU044I

## HHCDU044I Creating type volume serial: cylinders cyls, tracks trks/cyl, length bytes/track

#### **Explanation**

A new volume is being created of device type *type* and volume serial number *serial*. It has *cylinders* cylinders, *tracks* tracks per cylinder and *length* bytes per track.

#### Action

None.

## HHCDU045E

## HHCDU045E Sector count count is outside range min-max

#### **Explanation**

The requested number of sectors count is outside the valid range from min to max.

#### Action

Specify a valid number of cylinders and retry the operation.

## HHCDU046E

#### HHCDU046E Cannot obtain sector buffer: error

#### **Explanation**

An attempt to obtain storage for the sector buffer failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU047I

## HHCDU047I Creating type volume serial: sectors sectors, length bytes/sector

#### **Explanation**

A new volume is being created of device type type and volume serial number serial. It has sectors sectors and *length* bytes per sector.

#### **Action**

None.

## HHCDU048E

## HHCDU048E filename open error: error

#### **Explanation**

An attempt to create the FBA DASD image file named filename failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU049E

## HHCDU049E filename dasdcopy ftruncate error: error

#### **Explanation**

An attempt to truncate the FBA DASD image file named filename failed. The error is described by error.

#### **Action**

Correct the error and retry the operation.

## HHCDU050E

#### HHCDU050E filename sector sector write error: error

#### **Explanation**

An attempt to write sector number *sector* to the FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU051E

## HHCDU051E filename close error: error

#### **Explanation**

An attempt to close the FBA DASD image file named filename failed. The error is described by error.

#### Action

Correct the error and retry the operation.

## HHCDU052I

## HHCDU052I count sectors successfully written to file filename

#### **Explanation**

The FBA DASD image file named *filename* has been successfully created. It contains *count* sectors.

#### Action

None.

## HHCDU053E

## HHCDU053E File size too large: size [11tab]

#### **Explanation**

The requested file size *size* would result in a primary lookup table that is too large. The DASD image cannot be created as a compressed image.

#### Action

Either specify fewer sectors or create the DASD image uncompressed.

## HHCDU054E

## HHCDU054E filename open error: error

#### **Explanation**

An attempt to create the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU055I

## HHCDU055I Creating type compressed volume serial: sectors sectors, length bytes/sector

#### **Explanation**

A new compressed FBA volume is being created of device type *type* and volume serial number *serial*. It has *sectors* sectors and *length* bytes per sector.

#### Action

None.

## HHCDU056E

#### HHCDU056E filename devhdr write error: error

#### **Explanation**

An attempt to write the device header to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

## Action

## HHCDU057E

#### HHCDU057E filename cdevhdr write error: error

#### **Explanation**

An attempt to write the compressed device header to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU058E

#### HHCDU058E filename l1tab write error: error

#### **Explanation**

An attempt to write the primary lookup table to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU059E

#### HHCDU059E filename l2tab write error: error

#### **Explanation**

An attempt to write the secondary lookup table to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU060E

#### HHCDU060E filename block header write error: error

## **Explanation**

An attempt to write a compressed block header to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

## HHCDU061E

#### HHCDU061E filename block write error: error

#### **Explanation**

An attempt to write a compressed block to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU062E

## HHCDU062E filename block write error: error

#### **Explanation**

An attempt to write an uncompressed block to the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU063E

#### HHCDU063E filename cdevhdr Iseek error: error

#### **Explanation**

An attempt to reposition to the beginning of the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU064E

#### HHCDU064E filename cdevhdr rewrite error: error

#### **Explanation**

An attempt to rewrite the compressed device header record of the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

## HHCDU065E

#### HHCDU065E filename l2tab Iseek error: error

#### **Explanation**

An attempt to reposition to the secondary lookup table of the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU066E

#### HHCDU066E filename 12tab rewrite error: error

#### **Explanation**

An attempt to rewrite the secondary lookup table of the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCDU067E

#### HHCDU067E filename close error: error

#### **Explanation**

An attempt to close the compressed FBA DASD image file named *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

## HHCDU068I

## HHCDU068I count sectors successfully written to file filename

## **Explanation**

The compressed FBA DASD image file named *filename* has been successfully created. It contains *count* sectors.

#### **Action**

None.

# 18. Messages HHCHDnnns - Hercules Dynamic Loader

## HHCHD001E

## HHCHD001E registration alloc failed for entry

#### **Explanation**

Storage could not be obtained to register entrypoint entry

#### Action

Correct the error and restart Hercules.

## HHCHD002E

## HHCHD002E cannot allocate memory for DLL descriptor: error

#### **Explanation**

Initialisation of the dynamic loader environment failed due to the error described by error.

#### Action

Correct the error and restart Hercules.

## HHCHD003E

#### HHCHD003E unable to open Hercules as DLL: error

#### **Explanation**

The main Hercules load module could not be opened by the dynamic loader. The dynamic loader error is described by *error* 

## **Action**

Correct the error and restart Hercules.

## HHCHD004I

#### HHCHD004l No initializer in module: error

## **Explanation**

The initializer in DLL named *module* could not be found. The error is described by *error* 

## **Action**

Correct the error and restart Hercules.

## HHCHD005E

## HHCHD005E module already loaded.

#### **Explanation**

An attempt was made to load an already loaded module.

#### Action

Unload to module first.

## HHCHD006S

## HHCHD006S cannot allocate memory for DLL descriptor: error

#### **Explanation**

Initialisation of the dynamic loader environment failed due to the error described by error.

#### **Action**

Correct the error and restart Hercules.

## HHCHD007E

## HHCHD007E unable to open DLL module: error

## **Explanation**

The DLL named *module* could not be opened. The error is described by *error*.

#### Action

Ensure that the correct module is specified and is accessible.

## HHCHD008I

#### HHCHD008I No initializer in module: error

#### **Explanation**

The initializer in DLL named *module* could not be found. The error is described by *error* 

#### Action

Correct the error and restart Hercules.

## HHCHD009E

## HHCHD009E module not found

#### **Explanation**

An attempt was made to unload a module that was not loaded.

#### Action

No action required.

## HHCHD010I

## HHCHD010I Dependency check failed for module, version(vers\_actual) expected(vers\_exp)

#### **Explanation**

The version of the module's required dependency does not match the version of the dependency in the module that contains the dependency.

#### **Action**

No action required.

## HHCHD011I

#### HHCHD011I Dependency check failed for module, size(size\_actual) expected(size\_exp)

#### **Explanation**

The size of the modules required dependency does not match the size of the dependency in the module that contains the dependency.

#### Action

No action required.

## HHCHD012E

## HHCHD012E No depency section in module: error

#### **Explanation**

The module being loaded does not contain the required dependency section. The error is described by *error*.

#### **Action**

Rebuild the module with the required HDL\_DEPENDENCY\_SECTION defined.

## HHCHD013E

#### HHCHD013E No depency section in module: error

#### **Explanation**

The module being loaded does not contain the required dependency section. The error is described by *error*.

#### Action

Rebuild the module with the required HDL\_DEPENDENCY\_SECTION defined.

## HHCHD014E

## HHCHD014E Dependency check failed for module module

#### **Explanation**

One or more required dependencies were not satisfied. The preceding HHCHD010I and/or HHCHD011I message(s) identifies which of the dependencies failed and the reason why.

#### **Action**

If the module was not loaded, rebuild the module using the same version of the required dependency as the module that contains the dependency and try again.

## HHCHD015E

## HHCHD015E Unloading of module not allowed

#### **Explanation**

An attempt was made to unload a module that was not allowed to be unloaded.

#### Action

No action required.

## HHCHD018I

## HHCHD018I Loadable module directory is dir

## **Explanation**

The default loadable module directory was manually changed to *dir* via either a supplied MODPATH configuration file statement or via the -d command line option.

#### **Action**

No action required.

## HHCHD100I

#### HHCHD100I Loading module ...

#### **Explanation**

Module module is being loaded.

## Action

No action required.

## HHCHD101I

#### HHCHD101I Module module loaded

## **Explanation**

Module module has been loaded.

## **Action**

No action required

## HHCHD102I

## HHCHD102I Unloading module ...

## **Explanation**

Module *module* is being unloaded.

#### **Action**

No action required

## HHCHD103I

## HHCHD103I Module module unloaded

## **Explanation**

Module module has been unloaded.

#### **Action**

No action required

# 19. Messages HHCHEnnns - HETINIT Utility

## **HHCHEnnns**

Messages HHCHEnnns are not yet documented.

# 20. Messages HHCHGnnns - HETGET Utility

## **HHCHGnnns**

Messages HHCHGnnns are not yet documented.

# 21. Messages HHCHMnnns - HETMAP Utility

## **HHCHMnnns**

Messages HHCHMnnns are not yet documented.

# 22. Messages HHCHTnnns - HTTP Server

## HHCHT001I

#### HHCHT001I HTTP listener thread started: tid=threadid, pid=processid

#### **Explanation**

The HTTP server thread to accept and process incoming requests has been started. The thread id is *threadid* and the process id is *processid*.

#### **Action**

No action required.

## HHCHT002E

#### HHCHT002E socket: error

## **Explanation**

An attempt to obtain a TCP socket to receive HTTP requests failed. The error is described by error.

#### **Action**

Correct the error and restart Hercules.

## HHCHT003W

## HHCHT003W Waiting for port port to become free

## **Explanation**

The thread that handles HTTP connection requests is waiting for the TCP port denoted by *port* to become available for use.

#### Action

If this message persists, some other program has control of the TCP port listed. Find out which one it is and terminate it.

## HHCHT004E

#### HHCHT004E bind: error

#### **Explanation**

An attempt to bind the socket to the TCP port to receive HTTP requests failed. The error is described by error.

#### **Action**

Correct the error and restart Hercules.

## HHCHT005E

HHCHT005E listen: error

#### **Explanation**

An attempt to put the socket into listening state for HTTP requests failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCHT006I

## HHCHT006I Waiting for HTTP requests on port port pid=num

#### **Explanation**

Hercules is ready to accept HTTP requests on port port.

#### **Action**

No action required.

## HHCHT007E

HHCHT007E select: error

#### **Explanation**

An attempt to wait for data from HTTP requests failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCHT008E

HHCHT008E accept: error

#### **Explanation**

An attempt to accept a TCP connection for HTTP requests failed. The error is described by *error*.

#### Action

Correct the error and restart Hercules.

## HHCHT009E

HHCHT009E fdopen: error

## **Explanation**

An attempt to open the socket for reading HTTP requests failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCHT010E

## HHCHT010E http\_request create\_thread: error

#### **Explanation**

An attempt to create a thread for processing HTTP requests failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCHT011E

## HHCHT011E html\_include: Cannot open filename: error

#### **Explanation**

The file named *filename*, which was included from another file, could not be opened. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

## HHCHT014I

## HHCHT014I HTTPROOT = pathname

## **Explanation**

The root directory path for the HTTP server is pathname.

#### Action

No action required.

# 23. Messages HHCHUnnns - HETUPD Utility

# **HHCHUnnns**

Messages HHCHUnnns are not yet documented.

# 24. Messages HHCIFnnns - Network Interface Configuration Handler (hercifc)

## HHCIF001E

HHCIF001E programname: Must be called from within Hercules.

#### **Explanation**

This program can only be called from Hercules itself and may not be executed from the command line. The program was executed using the name *programname*.

#### **Action**

Don't do that.

## HHCIF002E

HHCIF002E programname: Cannot obtain socket: error

#### **Explanation**

An attempt to obtain a socket for controlling the destination interface failed. The error is described by *error*. The program was executed using the name *programname*.

#### **Action**

Correct the error and retry the operation.

## HHCIF003E

HHCIF003E programname: I/O error on read: error

#### **Explanation**

An attempt to read a request from Hercules failed. The error is described by *error*. The program was executed using the name *programname*.

#### **Action**

Correct the error and retry the operation.

## HHCIF004W

HHCIF004W programname: Unknown request: request.

#### **Explanation**

The request from Hercules was invalid. The request code was *request*. The request has been ignored. The program was executed using the name *programname*.

#### Action

Make sure that the hercifc program is the same version as the running copy of Hercules. If so, this is an internal error. Report it.

## HHCIF005E

## HHCIF005E programname: ioctl error doing operation on interface: error

## **Explanation**

An attempt to perform an ioctl operation *operation* on interface *interface* failed. The error is described by *error*. The program was executed using the name *programname*.

## **Action**

# 25. Messages HHCINnnns - Hercules Initialization

## HHCIN001S

#### HHCIN001S Cannot register SIGINT handler: error

#### **Explanation**

An attempt to register a handler for the SIGINT signal failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCIN002E

## HHCIN002E Cannot suppress SIGPIPE signal: error

## **Explanation**

An attempt to ignore the SIGPIPE signal failed. The error is described by *error*. This will cause Hercules to terminate abnormally if a printer device is defined to a pipe and that pipe is closed while data is being written to it.

#### Action

Correct the error and restart Hercules. Do not print to a pipe until you have corrected the error.

## HHCIN003S

#### HHCIN003S Cannot register SIGILL/FPE/SEGV/BUS/USR handler: error

#### **Explanation**

An attempt to register a handler for one of the listed signals failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCIN004S

## HHCIN004S Cannot create watchdog thread: error

#### **Explanation**

An attempt to create the watchdog thread to monitor Hercules execution failed. The error is described by *error*.

#### Action

Correct the error and restart Hercules.

## HHCIN005S

## HHCIN005S Cannot create http\_server thread: error

#### **Explanation**

An attempt to create the HTTP server thread failed. The error is described by error.

#### Action

Correct the error and restart Hercules.

## HHCIN006S

#### HHCIN006S Cannot create panel thread: error

#### **Explanation**

An attempt to create the operator control panel thread failed. The error is described by error.

#### **Action**

Correct the error and restart Hercules.

## HHCIN007S

#### HHCIN007S Cannot create devnum connection thread: error

#### **Explanation**

The shared device server was unable to create the thread meant to manage remote device *devnum*. The error is described by *error*.

#### **Action**

Correct the error and restart Hercules.

## HHCIN008S

#### HHCIN008S DYNGUI.DLL load failed; Hercules terminated.

#### **Explanation**

The external GUI interface module 'dyngui.dll' could not loaded. The preceding HHCHD007E message should provide the reason for the failure.

#### **Action**

Correct the error and restart Hercules. If the error is Win32 error 126 ("The specified module could not be found"), check your Windows PATH setting and/or your MODPATH control statement to ensure one or both of them includes the directory where Hercules is executing from.

# HHCIN099I

## **HHCIN099I** Hercules terminated

## Explanation

Hercules has ended.

## Action

No action required.

# 26. Messages HHCLCnnns - LCS Emulation

## HHCLC001E

#### HHCLC001E nnnn unable to allocate LCSBLK

## **Explanation**

There is insufficient storage to allocate the control block for LCS device number nnnn.

#### Action

Correct the error and restart Hercules.

## HHCLC017E

#### HHCLC017E nnnn invalid device name devname

#### **Explanation**

The value of the -n or -dev parameter in the configuration statement for LCS device number *nnnn* is missing or too long.

#### **Action**

Correct the parameter and reinitialize the device.

## HHCLC018E

#### HHCLC018E nnnn invalid MAC address macaddr

## **Explanation**

The value of the -m or -mac parameter in the configuration statement for LCS device number *nnnn* is not a valid MAC address.

## Action

Correct the parameter and reinitialize the device.

## HHCLC019E

#### HHCLC019E nnnn too many arguments in statement

#### **Explanation**

The configuration statement for LCS device number *nnnn* contains too many positional parameters.

#### Action

Correct the statement and restart Hercules.

## HHCLC020E

## HHCLC020E nnnn invalid IP address ipaddr

#### **Explanation**

The first positional parameter in the configuration statement for LCS device number *nnnn* is not a valid IP address.

#### Action

Correct the statement and reinitialize the device.

## HHCLC021E

## HHCLC021E Invalid HWADD statement in filename: stmt

#### **Explanation**

The port number parameter of the HWADD statement stmt in OAT file filename is not numeric.

#### **Action**

Correct the statement and reinitialize the device.

## HHCLC022E

## HHCLC022E Invalid MAC in HWADD statement in filename: stmt (macaddr)

#### **Explanation**

The second positional parameter of the HWADD statement *stmt* in OAT file *filename* is not a valid MAC address.

#### **Action**

Correct the parameter and reinitialize the device.

#### HHCLC023E

#### HHCLC023E Invalid ROUTE statement in filename: stmt

## **Explanation**

The port number parameter of the ROUTE statement stmt in OAT file filename is not numeric.

#### **Action**

Correct the statement and reinitialize the device.

#### HHCLC024E

#### HHCLC024E Invalid net address in ROUTE filename: stmt (netaddr)

#### **Explanation**

The second positional parameter of the ROUTE statement *stmt* in OAT file *filename* is not a valid IP network address.

#### Action

Correct the parameter and reinitialize the device.

## HHCLC025E

HHCLC025E Invalid net mask in ROUTE filename: stmt (netaddr)

#### **Explanation**

The third positional parameter of the ROUTE statement *stmt* in OAT file *filename* is not a valid IP network mask.

#### **Action**

Correct the parameter and reinitialize the device.

## HHCLC026E

HHCLC026E Error in filename: Missing device number or mode

#### **Explanation**

The OAT file *filename* contains a statement which cannot be identified.

#### Action

Correct the statement and reinitialize the device.

## HHCLC027E

HHCLC027E Error in filename: devnum: Invalid device number

#### **Explanation**

The device number devnum specified in the OAT file filename is not a valid hexadecimal number.

#### **Action**

Correct the statement and reinitialize the device.

## HHCLC028E

HHCLC028E Error in filename: stmt: Missing PORT number

#### **Explanation**

Statement stmt in OAT file filename for the IP port of an LCS device does not contain a port number.

#### Action

Correct the statement and reinitialize the device.

### HHCLC029E

HHCLC029E Error in filename: port: Invalid PORT number

### **Explanation**

The port number *port* specified in the OAT file *filename* for the IP port of an LCS device is not a valid decimal number.

#### Action

Correct the statement and reinitialize the device.

## HHCLC031E

## HHCLC031E Error in filename: stmt: Invalid entry starting at text

#### **Explanation**

The parameter text specified in statement stmt in the OAT file filename should be PRI, SEC, or NO.

#### Action

Correct the statement and reinitialize the device.

#### HHCLC032E

## HHCLC032E Error in filename: stmt: Invalid IP address (ipaddr)

#### **Explanation**

The parameter *ipaddr* specified in statement *stmt* in the OAT file *filename* is not a valid IP address.

#### Action

Correct the statement and reinitialize the device.

## HHCLC033E

## HHCLC033E Error in filename: stmt: Missing PORT number

#### **Explanation**

Statement stmt in OAT file filename for the SNA port of an LCS device does not contain a port number.

#### **Action**

Correct the statement and reinitialize the device.

## HHCLC034E

## HHCLC034E Error in filename: port: Invalid PORT number

#### **Explanation**

The port number *port* specified in the OAT file *filename* for the SNA port of an LCS device is not a valid decimal number.

#### Action

Correct the statement and reinitialize the device.

## HHCLC035E

## HHCLC035E Error in filename: stmt: SNA does not accept any arguments

### **Explanation**

Statement *stmt* in OAT file *filename* for the SNA port of an LCS device contains positional parameters which are not used for SNA ports.

#### Action

Correct the statement and reinitialize the device.

## HHCLC036E

HHCLC036E Error in filename: mode: Invalid MODE

#### **Explanation**

Mode mode specified in a device statement in the OAT file filename should be IP or SNA.

#### Action

Correct the statement and reinitialize the device.

## HHCLC037E

HHCLC037E Error reading file filename line nnnn: description

#### **Explanation**

An error occurred reading the OAT file for an LCS device. *description* is the operating system's description of the error. The error occurred at line *nnnn* of file *filename*.

#### Action

Check that the correct OAT file name is specified in the configuration file.

## HHCLC038E

HHCLC038E File filename line nnnn is too long

#### **Explanation**

An error occurred reading the OAT file for an LCS device. The error occurred at line *nnnn* of file *filename*. Either the line exceeds 255 characters, or there is no linefeed at the end of the file.

#### **Action**

Correct the OAT file.

## HHCLC039E

HHCLC039E Cannot open file filename: description

#### **Explanation**

An error occurred opening the OAT file *filename* for an LCS device. *description* is the operating system's description of the error.

#### Action

Check that the correct OAT file name is specified in the configuration file.

## HHCLC040E

HHCLC040E nnnn LCSDEV mmmm not in configuration

#### **Explanation**

The device number *mmmm* specified in the OAT file does not match the LCS device number *nnnn* in the configuration file.

#### Action

None.

## HHCLC055I

HHCLC055I tapn using MAC hh:hh:hh:hh:hh

#### **Explanation**

The MAC address assigned the TUN/TAP device *tapn* is *hh:hh:hh:hh:hh:hh:hh*.

#### Action

Correct the OAT file and reinitialize the device.

## HHCLC056W

HHCLC056W tapn NOT using MAC hh:hh:hh:hh:hh

#### **Explanation**

MAC address *hh:hh:hh:hh:hh:hh* was requested in the configuration statement or in the OAT file for an LCS device but the operating system did not accept the request to change the MAC address for TUN/TAP device *tapn*.

#### Action

The device will use the MAC address shown in the preceding HHCLC055I message.

## HHCLC073I

HHCLC073I nnnn: TAP device tapn opened

#### **Explanation**

LCS device number nnnn is now associated with the kernel TUN/TAP device named tapn.

#### **Action**

None.

# 27. Messages HHCLGnnns - System Log Functions

#### HHCLG001E

HHCLG001E Error redirecting stdout: error

#### **Explanation**

The stdout stream could not be redirected to the system logger. The error is described by error.

#### HHCLG002E

HHCLG002E Error reading syslog pipe: error

#### **Explanation**

An error occurred while reading the syslog pipe. The error is described by error.

#### HHCLG003E

HHCLG003E Error writing hardcopy log: error

#### **Explanation**

The error as indicated by error occurred while writing the hardcopy log.

#### HHCLG004E

HHCLG004E Error duplicating stderr: error

#### **Explanation**

Stdout could not be redirected to stderr. The error is described by error.

#### HHCLG005E

HHCLG005E Error duplicating stdout: error

#### **Explanation**

Stderr could not be redirected to stdout. The error is described by *error*.

#### HHCLG006E

HHCLG006E Duplicate error redirecting hardcopy log: error

#### **Explanation**

The error described by error occurred whilst redirecting the hardcopy log.

#### HHCLG007S

#### HHCLG007S Hardcopy log fdopen failed: error

#### **Explanation**

An attempt to open a stream for the hardcopy log failed. The error is described by error.

#### HHCLG008S

#### HHCLG008S logbuffer malloc failed: error

#### **Explanation**

An instorage buffer for the system log could not be obtained. The error is described by error.

#### HHCLG009S

#### HHCLG009S Syslog message pipe creation failed: error

#### **Explanation**

An attempt to create the pipe for the system logger failed. The error is described by error.

#### Action

Check that your firewall is not preventing Hercules from opening a listening pipe.

#### HHCLG012E

#### HHCLG012E Cannot create logger thread: error

#### **Explanation**

An attempt to create the logger thread failed. *Error* is the description of the error code returned by the pthread\_create call.

#### Action

If the error is "No error" ensure that Hercules has been correctly linked with the pthread library.

#### HHCLG014E

#### **HHCLG014E** Log not active

#### **Explanation**

A log off command was issued but there was no active log file.

#### Action

None.

#### HHCLG015I

#### **HHCLG015I** Log closed

#### **Explanation**

The active log file has been closed as a result of a log off command.

#### **Action**

None.

#### HHCLG016E

#### HHCLG016E Error opening log file filename: error

#### **Explanation**

The new log file requested by a *log* command could not be opened. *error* is the description of the error code returned by the open call.

#### Action

Reissue the log command with the correct filename.

#### HHCLG017S

#### HHCLG017S Log file fdopen failed for filename: error

#### **Explanation**

The logger was unable to obtain the file descriptor for the new log file requested by a *log* command. *error* is the description of the error code returned by the fdopen call.

#### Action

Reissue the *log* command with the correct filename.

#### HHCLG018I

#### HHCLG018I Log switched to filename

#### **Explanation**

As a result of a log command the logger is now writing to the requested log file.

#### Action

None.

# 28. Messages HHCPNnnns - Control Panel Command Messages

#### HHCPN001I

#### HHCPN001I Control panel thread started: tid=threadid, pid=processid

#### **Explanation**

The control panel thread has been started. Its thread id is threadid and its process id is processid.

#### Action

No action required.

#### HHCPN002S

#### HHCPN002S Cannot obtain keyboard buffer: error

#### **Explanation**

An attempt to obtain memory for the keyboard buffer, used to hold operator input, failed. The error is described by *error*.

#### **Action**

Correct the error and restart Hercules.

#### HHCPN003S

#### HHCPN003S Cannot obtain message buffer: error

#### **Explanation**

An attempt to obtain memory for the message buffer, used to hold operator output, failed. The error is described by *error*.

#### Action

Correct the error and restart Hercules.

#### HHCPN004E

#### HHCPN004E select: error

#### **Explanation**

An error was encountered while waiting for input from the console. The error is described by error.

#### **Action**

#### HHCPN005E

#### HHCPN005E keyboard read: error

#### **Explanation**

An error was encountered while attempting to read keyboard input. The error is described by error.

#### Action

Correct the error and retry the operation.

#### HHCPN006E

#### HHCPN006E message pipe read: error

#### **Explanation**

An error was encountered while attempting to read from the pipe used to communicate to the control panel thread from the rest of Hercules. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCPN007E

#### HHCPN007E RC file filename open failed: error

#### **Explanation**

The RC file containing commands to be executed at Hercules startup, named *filename*, could not be opened. The error is described by *error*.

#### **Action**

Correct the error and restart Hercules if necessary. The commands contained in the file may be issued manually.

#### HHCPN008I

#### HHCPN008I RC file processing thread started using file filename

#### **Explanation**

Processing of the commands contained in the file named *filename* has begun.

#### **Action**

No action required.

#### HHCPN009E

#### HHCPN009E RC file buffer malloc failed: error

#### **Explanation**

An attempt to obtain storage for the buffer for commands being read from the startup command file failed. The error is described by *error*.

#### Action

Correct the error and restart Hercules, if needed. The comands contained in the file may be issued manually.

#### HHCPN010W

#### HHCPN010W Ignoring invalid RC file pause statement: argument

#### **Explanation**

The argument *argument* on the pause statement in the startup command file is invalid. It must be a decimal number between 0 and 999. Processing will continue without any pause.

#### Action

Correct the invalid argument and restart Hercules, if desired.

#### HHCPN011I

#### HHCPN011I Pausing RC file processing for delay seconds...

#### **Explanation**

Processing of the startup command file is being delayed for *delay* seconds because of a pause statement in the file.

#### **Action**

No action required.

#### HHCPN012I

#### HHCPN012I Resuming RC file processing...

#### **Explanation**

Processing of the startup command file has resumed at the expiration of the delay interval.

#### **Action**

No action required.

#### HHCPN013I

#### HHCPN013I EOF reached on RC file. Processing complete.

#### **Explanation**

The end of the startup command file has been reached and processing of the file is complete.

#### Action

No action required.

#### HHCPN014E

#### HHCPN014E I/O error reading RC file: error

#### **Explanation**

An error was encountered while reading a command from the startup command file. The error is described by *error*. Any remaining commands in the file will not be processed.

#### Action

Correct the error and restart Hercules if desired. Any unprocessed commands may be issued manually.

#### HHCPN052E

#### HHCPN052E Target CPU nnnn type cputype does not allow ipl

#### **Explanation**

An IPL command was issued but the target CPU *nnnn* is a processor engine of type *cputype* which does not support the initial program load procedure.

#### **Action**

Use the CPU command to set the target CPU to a processor of type CP, IFL, or ICF, then re-issue the IPL command.

#### HHCPN162I

#### HHCPN162I Hercules instruction trace displayed in { regsfirst | noregs | traditional } mode

#### **Explanation**

This message shows the current setting of the traceopt mode.

#### **Action**

None.

#### HHCPN180E

#### HHCPN180E 'sh' commands are disabled

#### **Explanation**

The 'sh' (shell) command has been purposely disabled via a SHCMDOPT configuration file statement. Shell commands entered via the Hercules hardware console will not be processed.

#### Action

Remove or modify the SHCMDOPT configuration file statement and restart Hercules.

#### HHCPN181E

#### HHCPN181E Device number s:CCUU not found

#### **Explanation**

The device number "CCUU" on Logical Channel Subsystem "s" was not found in the configuration.

#### Action

Reissue the command with an existing device number.

#### HHCPN195I

#### HHCPN195I Log options: val

#### **Explanation**

This message displays the current logging options. It is issued when the LOGOPT command is entered without operands. *val* is TIMESTAMP or NOTIMESTAMP.

#### Action

None.

#### HHCPN196E

#### HHCPN196E Invalid logopt value val

#### **Explanation**

This message is issued when the operand of a LOPGOPT command is an invalid value. Valid values for *val* are TIMESTAMP or NOTIMESTAMP.

#### Action

Reenter the LOGOPT command with a valid operand.

#### HHCPN197I

#### HHCPN197I Log option set: val

#### **Explanation**

As the result of the LOGOPT command, the Hercules logging option *val* has been set. *val* is TIMESTAMP or NOTIMESTAMP.

#### **Action**

None.

## 29. Messages HHCPRnnns - Printer Emulation

#### HHCPR001E

#### HHCPR001E File name missing or invalid for printer address

#### **Explanation**

There was no file name specified for the printer at address *address*, or else there was one specified but it was too long.

#### **Action**

Correct the error in the Hercules configuration file. The device may be made available by specifying a filename with the devinit command.

#### HHCPR002E

#### HHCPR002E Invalid argument for printer address: argument

#### **Explanation**

An invalid argument was specified on the definition of the printer at address address.

#### Action

Correct or remove the invalid argument.

#### HHCPR003E

#### HHCPR003E address Error writing to filename: error

#### **Explanation**

An error was encountered when writing output for the printer at address address to the file named filename. The error is described by error.

#### Action

Correct the error and retry the operation.

#### HHCPR004E

#### HHCPR004E Error opening file filename: error

#### **Explanation**

An error was encountered when opening the file named *filename*. The error is described by *error*.

#### Action

#### HHCPR005E

#### HHCPR005E address device initialization error: pipe: error

#### **Explanation**

An error was encountered when opening a pipe for the printer at address *address*. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCPR006E

#### HHCPR006E address device initialization error: fork: error

#### **Explanation**

An error was encountered when starting the program to process the output from the printer at address address. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCPR007I

#### HHCPR007I pipe receiver (pid=processid) starting for address

#### **Explanation**

The program to process the output from the printer at address *address* is starting. Its process id is *processid*.

#### **Action**

No action required.

#### HHCPR008E

#### HHCPR008E address dup2 error: error

#### **Explanation**

The file descriptor for stdin could not be duplicated for the program to process the output from the printer at address *address*. The error is described by *error*.

#### **Action**

#### HHCPR009E

#### HHCPR009E address dup2 error: error

#### **Explanation**

The file descriptor for stdout could not be duplicated for the program to process the output from the printer at address *address*. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCPR010E

#### HHCPR010E address dup2 error: error

#### **Explanation**

The file descriptor for stderr could not be duplicated for the program to process the output from the printer at address address. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCPR011I

#### HHCPR011I pipe receiver (pid=processid) terminating for address

#### **Explanation**

The program to process the output from the printer at address *address* has ended sucessfully. Its process id was *processid*.

#### **Action**

No action required.

#### HHCPR012E

#### HHCPR012E address Unable to execute program: error

#### **Explanation**

The program named *program* to process the output from the printer at address *address* could not be started. The error is described by *error*.

#### **Action**

# 30. Messages HHCPUnnns - Card Punch Emulation

#### HHCPU001E

#### HHCPU001E File name missing or invalid

#### **Explanation**

The file name specified for punched output is invalid or no file name is given.

#### Action

Correct the error and retry the operation.

#### HHCPU002E

#### HHCPU002E Invalid argument: argument

#### **Explanation**

An invalid argument argument was specified for the card punch. Valid arguments are ascii, ebcdic, and crlf.

#### **Action**

Correct the invalid argument and retry the operation.

#### HHCPU003E

#### HHCPU003E Error opening file filename: error

#### **Explanation**

The file named *filename* could not be opened for output of card punch data. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCPU004E

#### HHCPU004E Error writing to filename: error

#### **Explanation**

The file named *filename* encountered an error while writing card punch data. The error is described by *error*.

#### **Action**

# 31. Messages HHCRDnnns - Card Reader Emulation

#### HHCRD001E

#### **HHCRD001E Out of memory**

#### **Explanation**

A request to allocate memory for the list of files to be read failed.

#### Action

Correct the error and retry the operation.

#### HHCRD002E

HHCRD002E File name too long (max=max): "filename"

#### **Explanation**

The file name specified by *filename* is too long. The maximum length is *max*.

#### Action

Specify a shorter name.

#### HHCRD003E

#### HHCRD003E Unable to access file "filename": error

#### **Explanation**

The file specified by *filename* could not be accessed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD004E

#### **HHCRD004E Out of memory**

#### **Explanation**

A request to allocate memory for the list of files to be read failed.

#### **Action**

#### HHCRD005E

#### HHCRD005E Specify 'ascii' or 'ebcdic' (or neither) but not both

#### **Explanation**

Both of the character set translation options ascii and ebcdic were specified. At most one is allowed.

#### Action

Select only one character set translation option.

#### HHCRD006E

#### HHCRD006E Only one filename (sock\_spec) allowed for socket devices

#### **Explanation**

More than one filename argument was given for a socket card reader device. Only one is allowed. This error can also result if an option name is misspelled.

#### Action

Remove the extraneous filenames or correct the misspelled options.

#### HHCRD007I

#### HHCRD007I Defaulting to 'ascii' for socket device address

#### **Explanation**

The socket card reader device at address address has been set to ASCII mode since neither translation option was specified. The socket card reader device cannot automatically select the translation option.

#### **Action**

If you wish to read cards without translation from ASCII to EBCDIC, you must specify the ebcdic option on the reader definition.

#### HHCRD008W

#### HHCRD008W 'multifile' option ignored: only one file specified

#### **Explanation**

Only one file was specified for input to the card reader and the multifile option was specified. This option is Explanationless with only one input file. The option has been ignored.

#### **Action**

If you wish to read more than one input file without signalling end-of-file or intervention required between them, then all files must all be specified on the same reader definition. If you only wish to process one file, omit the multifile option.

#### HHCRD009E

#### HHCRD009E File name too long (max=max): "filename"

#### **Explanation**

The file name specified by *filename* is too long. The maximum length is *max*.

#### Action

Specify a shorter name.

#### HHCRD010E

#### HHCRD010E Unable to access file "filename": error

#### **Explanation**

The file specified by *filename* could not be accessed. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCRD011E

#### HHCRD011E Close error on file "filename": error

#### **Explanation**

An attempt to close the file specified by *filename* failed. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD012I

#### HHCRD012I ipaddr (hostname) disconnected from device address (socketspec)

#### **Explanation**

The client on the host named *hostname*, with the IP address *ipaddr*, has disconnected from the socket card reader device at address *address*, specified by *socketspec*.

#### Action

No action required.

#### HHCRD013E

#### HHCRD013E Error opening file filename: error

#### **Explanation**

The file named *filename* could not be opened for reading. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD014E

#### HHCRD014E Error reading file filename: error

#### **Explanation**

An error was encountered while attempting to read the first 160 bytes of the file named *filename* in order to determine its character set. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD015E

#### HHCRD015E Seek error in file filename: error

#### **Explanation**

An error was encountered while attempting to return to the beginning of file named *filename* after determining its character set. The error is described by *error*.

#### **Action**

Correct the error and retry the operation.

#### HHCRD016E

#### HHCRD016E Error reading file filename: error

#### **Explanation**

An error was encountered while attempting to read an EBCDIC card image from the file named *filename*. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD017E

#### HHCRD017E Unexpected end of file on filename

#### **Explanation**

Too few characters were read from the file named *filename*. The autopad option was not specified.

#### Action

Either ensure that all records in the file are 80 bytes long, or specify the autopad option on the reader definition.

#### HHCRD018E

#### HHCRD018E Error reading file filename: error

#### **Explanation**

An error was encountered while attempting to read an ASCII card image from the file named *filename*. The error is described by *error*.

#### Action

Correct the error and retry the operation.

#### HHCRD019E

#### HHCRD019E Card image exceeds size bytes in file filename

#### **Explanation**

A line in the file named *filename* is too long to fit on one card. The trunc option was not specified. The maximum length is *size* bytes.

#### **Action**

Either ensure that all lines in the file are less than *size* bytes long or specify the trunc option on the reader definition.

# 32. Messages HHCSDnnns Socket Devices Common Functions

#### **HHCSDnnns**

Messages HHCSDnnns are not yet documented.

# 33. Messages HHCTAnnns - Tape Device Emulation

## **HHCTAnnns**

Messages HHCTAnnns are not yet documented.

# 34. Messages HHCTCnnns - TAPECOPY Utility

#### **HHCTCnnns**

Messages HHCTCnnns are not yet documented.

# 35. Messages HHCTEnnns - Terminal Emulation

#### HHCTE001I

#### HHCTE001I Console connection thread started: tid=threadid, pid=processid

#### **Explanation**

The thread that handles connection requests from console devices has been started.

#### Action

No action required.

#### HHCTE002W

#### HHCTE002W Waiting for port port to become free

#### **Explanation**

The thread that handles connection requests from console devices is waiting for the TCP port denoted by *port* to become available for use.

#### **Action**

If this message persists, some other program has control of the TCP port listed. Determine the program involved and terminate it.

#### HHCTE003I

#### HHCTE003I Waiting for console connection on port port pid=num

#### **Explanation**

Hercules is ready to accept console connections on port port.

#### Action

No action required.

#### HHCTE004I

#### **HHCTE004I Console connection thread terminated**

#### **Explanation**

The thread that handles connection requests from console devices has been terminated.

#### Action

No action required.

#### HHCTE005E

#### HHCTE005E Cannot create console thread: reason

#### **Explanation**

The thread that handles connection requests from console devices could not be started. The reason is shown as *reason*.

#### **Action**

Correct the reason listed and restart Hercules.

#### HHCTE006A

#### HHCTE006A Enter input for console device address

#### **Explanation**

The 1052 console device at address is waiting for input.

#### Action

Type the desired input for the console and press the ENTER key. If you do not wish to get this message when input is requested, define the console with the option noprompt.

#### HHCTE007I

#### HHCTE007I Device address closed by client ipaddr

#### **Explanation**

The client at IP address *ipaddr* that was connected to the 3270 console at address *address* has closed the connection. The device is no longer available for use.

#### **Action**

No action required.

#### HHCTE008I

#### HHCTE008l Device address closed by client ipaddr

#### **Explanation**

The client at IP address *ipaddr* that was connected to the 1052 console at address *address* has closed the connection. The device is no longer available for use.

#### **Action**

No action required.

#### HHCTE009I

#### HHCTE009I Client ipaddr connected to type device address

#### **Explanation**

The client at IP address *ipaddr* has connected to Hercules as a *type* device and is now available at address *address*.

#### Action

No action required.

#### HHCTE010E

#### HHCTE010E CNSLPORT statement invalid: statement

#### **Explanation**

The CNSLPORT statement in the Hercules configuration file is invalid.

#### Action

Correct the CNLSPORT statement in the configuration file and restart Hercules.

#### HHCTE011E

#### HHCTE011E Device devn: Invalid IP address: ipaddr

#### **Explanation**

The IP address ipaddr is invalid.

#### Action

Correct the IP address in the configuration file and restart Hercules.

#### HHCTE012E

#### HHCTE012E Device devn: Invalid mask value: ipmask

#### **Explanation**

The mask value ipmask is invalid.

#### Action

Correct the mask value in the configuration file and restart Hercules.

#### HHCTE013E

#### HHCTE013E Device devn: Extraneous argument(s): xxx...

#### **Explanation**

The argument(s) xxx and any which follow it (if any) was not recognized or understood and are thus invalid.

#### **Action**

Correct the arguments in the configuration file and restart Hercules.

#### HHCTE014I

#### HHCTE014I type device devn disconnected.

#### **Explanation**

The client connected to device devn has abruptly terminated the connection (ECONNRESET).

#### **Action**

No action required.

#### HHCTE017E

#### HHCTE017E Device devn: Duplicate SYSG console definition.

#### **Explanation**

Device number *devn* has been defined as an integrated 3270 (SYSG) console, but a SYSG console already exists. Only one SYSG console can be defined per system.

#### Action

Correct the statement in the configuration file and restart Hercules.

# 36. Messages HHCTMnnns - TAPEMAP Utility

#### **HHCTMnnns**

Messages HHCTMnnns are not yet documented.

# 37. Messages HHCTSnnns - TAPESPLT Utility

## **HHCTSnnns**

Messages HHCTSnnns are not yet documented.

# 38. Messages HHCTTnnns - TOD Clock and Timer Services

#### HHCTT001W

#### HHCTT001W Timer thread set priority priority failed: error

#### **Explanation**

An attempt to change the priority of the timer thread to *priority* failed. The error is described by *error*. The thread priority has not been changed. Hercules overall performance may be impaired as a result.

#### **Action**

If performance problems are noted, correct the error and restart Hercules.

#### HHCTT002I

#### HHCTT002l Timer thread started: tid=threadid, pid=processid, priority=priority

#### **Explanation**

The thread for timing functions has been started. Its thread id is *threadid*, its process id is *processid* and the thread priority is *priority*.

#### **Action**

No action required.

#### HHCTT003I

#### **HHCTT003I Timer thread ended**

#### **Explanation**

The thread for timing functions has ended.

#### Action

No action required.

# 39. Messages HHCTUnnns - TUN / TAP Driver Support

## **HHCTUnnns**

Messages HHCTUnnns are not yet documented.

# 40. Messages HHCVMnnns - VM / CP Emulation

#### HHCVM001I

#### HHCVM001I \*panel\_command\* panel command Module guest

#### **Explanation**

The guest operating system has issued a DIAGNOSE 8 instruction to perform the *panel\_command* panel command to be carried out by the Hercules panel command processor

#### **System Action**

The Hercules panel command processor carries out the command if possible.

#### **Operator Action**

None

#### **Programmer Action**

No action is requested if this behaviour is expected. If this behaviour poses a security concern, the *DIAG8CMD* configuration statement should either be ommitted or specified with the *disabled* argument.

#### HHCVM002I

#### HHCVM002I \*panel\_command complete

#### **Explanation**

The *panel\_command* panel command has been carried out by the panel command processor. Note that this message only appears if the guest issued diagnose 8 instruction specified that it did not request the command response to be placed in a supplied buffer.

#### **System Action**

The system continues

#### **Operator Action**

None. This is an informational message

#### **Programmer Action**

None. This is an informational message

#### HHCVM003I

#### HHCVM003I Host command processing disabled by configuration statement

#### **Explanation**

The guest operating system attempted using the DIAGNOSE 8 Instruction to carry out a panel command, but the system configuration disabled this feature (with the *DIAG8CMD* configuration statement)

#### **System Action**

The panel command is ignored.

#### **Operator Action**

None.

#### **Programmer Action**

If it is deemed necessary for the guest operating system to issue DIAGNOSE 8 commands to issue panel commands, the *DIAG8CMD* with the *enable* argument should be specified in the configuration file.

#### HHCVM004E

#### HHCVM004E Host command processing not included in engine build

#### **Explanation**

The Hercules engine has been built without Diagnose 8 panel command facility support

#### **System Action**

The panel command is not issued. The system continues.

#### **Operator Action**

None

#### **Programmer Action**

If it is desired that DIAGNOSE 8 Instruction be carried out as panel commands, the facility should be included in the build process. Additionally, the *DIAG8CMD* configuration statement should be specified with the *enable* parameter.

# **Appendix A. Links**

• The Hercules System/370, ESA/390, and z/Architecture Emulator

http://www.hercules-390.eu

Hercules source code repositories

https://github.com/rbowler/spinhawk (release 3.xx development stream)

https://github.com/rbowler/sandhawk (release 4.xx development stream)

https://github.com/s390guy/hercules-390 (cutting-edge developer sandbox)

• Hercules Developer Snapshots (Dave Wade)

http://www.smrcc.org.uk/members/g4ugm/snapshots/

Hercules PDF Documentation (Peter Glanzmann)

http://hercdoc.glanzmann.org

• The MVS Tur(n)key System, Version 3 (Volker Bandke)

http://www.bsp-gmbh.com/turnkey/index.html

Hercules WinGUI ("Fish", David B. Trout)

http://www.softdevlabs.com/Hercules/hercgui-index.html

• CTCI-W32 ("Fish", David B. Trout)

http://www.softdevlabs.com/Hercules/ctci-w32-index.html

Hercules Studio (Jacob Dekel)

http://www.mvsdasd.org/hercstudio

Hebe – Hercules Image Manager (Robin Atwood)
 <a href="http://kde-apps.org/content/show.php/Hebe?content=126738">http://kde-apps.org/content/show.php/Hebe?content=126738</a>

• WinPcap, Politecnico di Torino

http://www.winpcap.org

• Vista tn3270, Tom Brennan Software

http://www.tombrennansoftware.com

• X3270, Paul Mattes

http://x3270.bgp.nu

AWSBROWSE ("Fish", David B. Trout)

http://www.softdevlabs.com/Hercules/hercgui-index.html

• XMIT Manager

www.cbttape.org

• CBT MVS Utilities Tape (CBTTAPE)

www.cbttape.org

• Microsoft Visual C++ 2008 Express

http://www.microsoft.com/express/download/

#### • ZLIB

http://www.zlib.net

http://www.softdevlabs.com/Hercules/ZLIB1-1.2.3-bin-lib-inc-vc2008-x86-x64.zip

#### • BZIP2

http://www.bzip.org

http://www.softdevlabs.com/Hercules/BZIP2-1.0.5-bin-lib-inc-vc2008-x86-x64.zip

#### PCRE

http://www.pcre.org

http://www.softdevlabs.com/Hercules/PCRE-6.4.1-bin-lib-inc-vc2008-x86-x64.zip

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HHCDL0891	HHCDL087E	87	HHCDS016E	102
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HHCDL105E         92         HHCDU09E         107           HHCDL106E         92         HHCDU09E         108           HHCDL107E         92         HHCDU10E         108           HHCDL108E         93         HHCDU11E         108           HHCDL109E         93         HHCDU12E         108           HHCDL110I         93         HHCDU01E         109           HHCDL111I         93         HHCDU01E         109           HHCDL112I         94         HHCDU01SI         109           HHCDL113I         94         HHCDU01E         109           HHCDL114E         94         HHCDU01E         110           HHCDL115I         94         HHCDU01E         110           HHCDL116E         95         HHCDU01E         110           HHCDL116E         95         HHCDU01E         110           HHCDL117I         95         HHCDU02I         111           HHCDL119I         95         HHCDU02I         111           HHCDL121E         96         HHCDU02I         111           HHCDL121E         96         HHCDU02E         111           HHCDL122E         96         HHCDU02E         112	HHCDL103E	91	HHCDU006I	107
HHCDL106E         92         HHCDU009E         108           HHCDL107E         92         HHCDU010E         108           HHCDL108E         93         HHCDU01E         108           HHCDL109E         93         HHCDU01E         108           HHCDL110I         93         HHCDU01SE         109           HHCDL111I         93         HHCDU014I         109           HHCDL112I         94         HHCDU016E         109           HHCDL113I         94         HHCDU016E         109           HHCDL114E         94         HHCDU017E         110           HHCDL115I         94         HHCDU018E         110           HHCDL116E         95         HHCDU018E         110           HHCDL117I         95         HHCDU020I         110           HHCDL118I         95         HHCDU020I         111           HHCDL121BI         95         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL122E         96         HHCDU02EE         112	HHCDL104I	92	HHCDU007E	107
HHCDL106E         92         HHCDU009E         108           HHCDL107E         92         HHCDU010E         108           HHCDL108E         93         HHCDU01E         108           HHCDL109E         93         HHCDU01E         108           HHCDL110I         93         HHCDU01SE         109           HHCDL111I         93         HHCDU014I         109           HHCDL112I         94         HHCDU016E         109           HHCDL113I         94         HHCDU016E         109           HHCDL114E         94         HHCDU017E         110           HHCDL115I         94         HHCDU018E         110           HHCDL116E         95         HHCDU018E         110           HHCDL117I         95         HHCDU020I         110           HHCDL118I         95         HHCDU020I         111           HHCDL121BI         95         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL121BI         96         HHCDU021E         111           HHCDL122E         96         HHCDU02EE         112	HHCDL105E	92	HHCDU008E	107
HHCDL107E         92         HHCDU010E         108           HHCDL108E         93         HHCDU011E         108           HHCDL1101         93         HHCDU013E         109           HHCDL1111         93         HHCDU014L         109           HHCDL112I         94         HHCDU015I         109           HHCDL113I         94         HHCDU016E         109           HHCDL114E         94         HHCDU017E         110           HHCDL115I         94         HHCDU018E         110           HHCDL116E         95         HHCDU019E         110           HHCDL116E         95         HHCDU019E         110           HHCDL117I         95         HHCDU020I         110           HHCDL118I         95         HHCDU020I         111           HHCDL119I         95         HHCDU020I         111           HHCDL120I         96         HHCDU023I         111           HHCDL121E         96         HHCDU024E         111           HHCDL122E         96         HHCDU025E         112           HHCDL124E         97         HHCDU027E         112           HHCDL125E         97         HHCDU027E         112	HHCDL106E	92		
HHCDL108E         93         HHCDU01E         108           HHCDL109E         93         HHCDU01E         108           HHCDL110I         93         HHCDU01SE         109           HHCDL111I         93         HHCDU015I         109           HHCDL112I         94         HHCDU016E         109           HHCDL114E         94         HHCDU01FE         110           HHCDL115I         94         HHCDU018E         110           HHCDL116E         95         HHCDU019E         110           HHCDL117I         95         HHCDU020I         110           HHCDL118I         95         HHCDU021E         111           HHCDL120I         96         HHCDU023I         111           HHCDL120I         96         HHCDU023I         111           HHCDL121E         96         HHCDU024E         111           HHCDL122E         96         HHCDU025I         111           HHCDL125E         97         HHCDU027E         112           HHCDL125E         97         HHCDU027E         112           HHCDL127E         97         HHCDU03E         113           HHCDL128E         99         HHCDU03E         113 </td <td></td> <td></td> <td></td> <td></td>				
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HHCDL111I         93         HHCDU014I         109           HHCDL112I         94         HHCDU015I         109           HHCDL113I         94         HHCDU016E         109           HHCDL114E         94         HHCDU017E         110           HHCDL115I         94         HHCDU018E         110           HHCDL116E         95         HHCDU019E         110           HHCDL117I         95         HHCDU020I         110           HHCDL118I         95         HHCDU021E         111           HHCDL120I         96         HHCDU022I         111           HHCDL121E         96         HHCDU024E         111           HHCDL121E         96         HHCDU024E         111           HHCDL122E         96         HHCDU025I         111           HHCDL124E         96         HHCDU025I         111           HHCDL124E         97         HHCDU026E         112           HHCDL124E         97         HHCDU027E         112           HHCDL126E         97         HHCDU030E         113           HHCDL127E         97         HHCDU030E         113           HHCDS001E         99         HHCDU03E         113				
HHCDL112I       94       HHCDU015I       109         HHCDL113I       94       HHCDU016E       109         HHCDL114E       94       HHCDU017E       110         HHCDL115I       94       HHCDU018E       110         HHCDL116E       95       HHCDU019E       110         HHCDL117I       95       HHCDU020I       110         HHCDL118I       95       HHCDU021E       111         HHCDL119I       95       HHCDU022I       111         HHCDL120I       96       HHCDU023I       111         HHCDL121E       96       HHCDU024E       111         HHCDL122E       96       HHCDU025I       111         HHCDL123E       96       HHCDU026E       112         HHCDL124E       97       HHCDU027E       112         HHCDL125E       97       HHCDU028E       112         HHCDL126E       97       HHCDU029E       112         HHCDL127E       97       HHCDU030E       113         HHCDS001E       99       HHCDU031E       113         HHCDS001E       99       HHCDU035E       113         HHCDS004E       99       HHCDU035E       114         H				
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HHCDL120I       96       HHCDU023I       111         HHCDL121E       96       HHCDU024E       111         HHCDL122E       96       HHCDU025I       111         HHCDL123E       96       HHCDU026E       112         HHCDL124E       97       HHCDU027E       112         HHCDL125E       97       HHCDU028E       112         HHCDL126E       97       HHCDU029E       112         HHCDL127E       97       HHCDU030E       113         HHCDL128E       98       HHCDU031E       113         HHCDSnnns       99       HHCDU032E       113         HHCDS001E       99       HHCDU034E       113         HHCDS002I       99       HHCDU035E       114         HHCDS004E       99       HHCDU036E       114         HHCDS005E       100       HHCDU037E       114	HHCDL118I	95		
HHCDL121E       96       HHCDU024E       111         HHCDL122E       96       HHCDU025I       111         HHCDL123E       96       HHCDU026E       112         HHCDL124E       97       HHCDU027E       112         HHCDL125E       97       HHCDU028E       112         HHCDL126E       97       HHCDU029E       112         HHCDL127E       97       HHCDU030E       113         HHCDL128E       98       HHCDU031E       113         HHCDS001E       99       HHCDU032E       113         HHCDS002I       99       HHCDU034E       113         HHCDS003E       99       HHCDU035E       114         HHCDS004E       99       HHCDU036E       114         HHCDS005E       100       HHCDU037E       114	HHCDL119I	95	HHCDU022I	111
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