

# **HA Monitor Cluster Software Messages**

3000-9-203-40(E)

#### **Notices**

#### ■ Relevant program products

For the Red Hat(R) Enterprise Linux(R) server 6(x86), Red Hat(R) Enterprise Linux(R) server 6(x86\_64), Red Hat(R) Enterprise Linux(R) server 7(x86\_64), Red Hat(R) Enterprise Linux(R) server 8(x86\_64), Oracle Linux 7(x86\_64), Oracle Linux 7(x86\_64), Oracle Linux 8(x86\_64), Oracle Linux 8(x86\_64

P-852C-E112 HA Monitor 01-74

For the Red Hat(R) Enterprise Linux(R) AS 3(x86), Red Hat(R) Enterprise Linux(R) AS 4(x86), Red Hat(R) Enterprise Linux(R) ES 3(x86), Red Hat(R) Enterprise Linux(R) ES 4(x86), Red Hat(R) Enterprise Linux(R) AS 3(AMD64 & Intel EM64T), Red Hat(R) Enterprise Linux(R) AS 4(AMD64 & Intel EM64T), Red Hat(R) Enterprise Linux(R) ES 4(AMD64 & Intel EM64T), Red Hat(R) Enterprise Linux(R) 5(x86), Red Hat(R) Enterprise Linux(R) 5(AMD/Intel 64), Red Hat(R) Enterprise Linux(R) 5 Advanced Platform(x86), Red Hat(R) Enterprise Linux(R) 5 Advanced Platform(AMD/Intel 64) operating systems:

P-9S2C-E211 HA Monitor Extension 01-00

This manual can be used for products other than the product shown above. For details, see the *Release Notes*.

#

This product is supported only in an Oracle Cloud Infrastructure (OCI) environment.

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## **■** Copyright

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#### **Preface**

This manual describes the messages output by HA Monitor. After reading this manual, the reader can expect to be able to understand the meanings of the messages output by HA Monitor and, if necessary, take the appropriate corrective action.

#### ■ Intended readers

This manual is intended for system administrators, operators, and programmers. The manual assumes that system administrators will perform system installation, design, and configuration; that operators will perform the day-to-day operations on a configured system; and that programmers will create user programs.

Readers of this manual must have:

- A basic knowledge of the applicable hardware
- A basic knowledge of the applicable operating system
- A basic knowledge of a program for setting up system switchover configurations
- A basic knowledge of C-language syntax for coding user programs

If you use OpenTP1 or HiRDB to set up your system switchover configuration, we recommend that you first read the relevant OpenTP1 or HiRDB manuals.

## ■ Conventions: Fonts and symbols

The following table explains the fonts used in this manual:

Font	Convention
Bold	<ul> <li>Bold type indicates text on a window, other than the window title. Such text includes menus, menu options, buttons, radio box options, or explanatory labels. For example:</li> <li>From the File menu, choose Open.</li> <li>Click the Cancel button.</li> <li>In the Enter name entry box, type your name.</li> </ul>
Italics	<ul> <li>Italics are used to indicate a placeholder for some actual text to be provided by the user or system. For example:</li> <li>Write the command as follows:     <ul> <li>copy source-file target-file</li> </ul> </li> <li>The following message appears:     A file was not found. (file = file-name)</li> <li>Italics are also used for emphasis. For example:</li> <li>Do not delete the configuration file.</li> </ul>
Code font	A code font indicates text that the user enters without change, or text (such as messages) output by the system. For example:  • At the prompt, enter dir.  • Use the send command to send mail.  • The following message is displayed:  The password is incorrect.

The following table explains the symbols used in this manual:

Symbol	Convention
I	In syntax explanations, a vertical bar separates multiple items, and has the meaning of OR. For example:  A B C means A, or B, or C.
	A   B   C Incans A, or B, or C.
{ }	In syntax explanations, curly brackets indicate that only one of the enclosed items is to be selected. For example:
	$\{A \mid B \mid C\}$ means only one of A, or B, or C.
[ ]	In syntax explanations, square brackets indicate that the enclosed item or items are optional. For example:
	[A] means that you can specify A or nothing.
	[B C] means that you can specify B, or C, or nothing.
	In coding, an ellipsis () indicates that one or more lines of coding are not shown for purposes of brevity.
	In syntax explanations, an ellipsis indicates that the immediately preceding item can be repeated as many times as necessary. For example:
	A, B, B, means that, after you specify A, B, you can specify B as many times as necessary.

#### **■** Conventions: Version numbers

The version numbers of Hitachi program products are usually written as two sets of two digits each, separated by a hyphen. For example:

- Version 1.00 (or 1.0) is written as 01-00.
- Version 2.05 is written as 02-05.
- Version 2.50 (or 2.5) is written as 02-50.
- Version 12.25 is written as 12-25.

The version number might be shown on the spine of a manual as Ver. 2.00, but the same version number would be written in the program as 02-00.

# ■ Important notes on this manual

The following functions are explained but are not supported:

- HA Booster
- · hab\_discnt\_atend
- hab\_gid
- TP1/EE
- Linux Tough Dump
- OS panic
- Control group
- HABST
- server\_type
- HA Monitor Power Off AlertTransfer

• RV3000

# Contents

Notices	2	
Preface	4	
<b>1</b> 1.1	Overview of Messages 8 Message format 9	
1.1.1	Message output format 9	
1.1.2	Message statement format 9	
1.2	Setting the message language 11	
2	Messages from KAMN000 to KAMN999 12	2
2.1	Messages from KAMN000 to KAMN099 13	
2.2	Messages from KAMN100 to KAMN199 22	
2.3	Messages from KAMN200 to KAMN299 48	
2.4	Messages from KAMN300 to KAMN399 82	
2.5	Messages from KAMN400 to KAMN499 115	
2.6	Messages from KAMN500 to KAMN599 139	
2.7	Messages from KAMN600 to KAMN699 157	
2.8	Messages from KAMN700 to KAMN799 180	
2.9	Messages from KAMN900 to KAMN999 201	
Appen	dix 215	
Α	Reference Material for This Manual 216	
A.1	Related publications 216	
A.2	Conventions: Abbreviations for product names 216	
A.3	Conventions: Acronyms 217	
A.4	Conventions: KB, MB, GB, and TB 218	
Glossa	arv 219	

Index 225

# 1

# **Overview of Messages**

This chapter describes, in general terms, the HA Monitor messages.

# 1.1 Message format

The section describes the message format.

# 1.1.1 Message output format

Messages are output in the following format.

KAMNnnn-i xx....xx

- KAMN*nnn*-i: Message ID
- xx....xx: Message text

# 1.1.2 Message statement format

# (1) Statement format

Messages in this manual are presented using the format shown below.

#### KAMNnnn-i(X)

#### Message text

The message's meaning is described in this section.

aa...aa: What the variable refers to is explained on this line.

S:

Indicates what processing the system performs after it outputs the message.

O:

Indicates what the operator is to do after checking the message.

#### Action:

Indicates the corrective action that the system administrator is to take when checking the message.

If this manual advises the operator or system administrator to contact maintenance personnel, they are recommended to contact the Hitachi representative noted in the purchase agreement.

# (2) Explanation of Message ID Symbols

Message ID symbols are explained below.

KAMN:

Indicates that this is an HA Monitor message.

nnn:

Indicates the serialized message identification number.

1. Overview of Messages

i:

Indicates the type of message.

E:

- Indicates that an error is preventing library, command, or server functions from being performed.
- Indicates that the attempted operation cannot be executed because an invalid definition or an invalid operand was specified for the command.

W:

- Indicates a warning about memory usage by libraries, commands, or servers.
- Indicates that a definition was invalid, or an invalid operand was specified for a command, but operation continued by using a default value.

D:

• Indicates that an error occurred that prevents library, command, or server functions from functioning correctly, and the operation is pending. Some kind of action must be taken for the operation to continue.

I:

• These are informational messages not categorized as E, W, or D that simply indicate the status of an operation.

(X):

Indicates the destination to which the message is output.

(E): Standard error

(S): Standard output

(L): Message log file (syslog)

If a single message is output to multiple destinations, the output destinations are concatenated using plus signs (+). If the message is output only to the message log file (syslog), the output destination is omitted and this area is left blank.

# 1.2 Setting the message language

HA Monitor can output messages in English or Japanese. The language that was specified for the OS is used for message output. For details about setting or switching the language in which messages are output, see the following manual:

• HA Monitor Cluster Software Guide (for Linux(R) (x86) systems)

# 2

# Messages from KAMN000 to KAMN999

This chapter describes messages from KAMN000 to KAMN999.

# 2.1 Messages from KAMN000 to KAMN099

#### KAMN001-I (S+L)

HAmonitor (*vv-rr-ss*) is started.

HA Monitor startup has begun.

vv: Version number

rr: Revision number

ss: Sequence code

S:

Continues processing.

#### KAMN002-I (S+L)

HAmonitor was completed. Processing is started.

HA Monitor started normally.

S:

Continues processing.

#### KAMN003-E (E+L)

HAmonitor cannot be started.

HA Monitor cannot start because an error was detected in HA Monitor startup processing. A message indicating the error detail is output prior to this message.

S:

Terminates processing.

O:

Take the corrective action described for the message that indicated the error detail.

If all of the following conditions are satisfied, carefully review the specifications for socket buffer size, which is a kernel parameter.

- Message KAMN601-W indicates the error detail.
- The detail code indicated in KAMN601-W is 233, and the name of the function that generated the error is ipc setsockopt.
- The maximum number of servers that can run simultaneously on a single system is specified using the servmax operand in the HA Monitor environment settings.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN004-E (E+L)

Because not super user, command cannot be executed.

The HA Monitor command that the user attempted to execute cannot be executed because the user is not currently logged in as a superuser.

S:

Stops command processing.

O:

Login again as a superuser and re-execute the command.

#### KAMN005-E (E+L)

HAmonitor does not install correctly.

HA Monitor cannot start because it was not installed correctly.

S:

Terminates processing.

O:

Check that all files are correctly installed under /opt/hitachi/HAmon. If they are, contact a system administrator.

#### Action:

Eliminate the cause of the system call error as indicated by KAMN601-W, which is output before this message.

Do not specify the /etc/fstab file or specify the nosuid option with the mount command for the file systems on which HA Monitor is installed.

#### KAMN006-E (E+L)

HAmonitor is already processing.

HA Monitor could not start because it was already running.

S:

Terminates processing.

O:

Terminate the instance of HA Monitor that is running, and then restart HA Monitor.

#### KAMN007-E (E+L)

The control file of HAmonitor cannot be opened.

HA Monitor cannot start because the HA Monitor control file (/opt/hitachi/HAmon/etc/.CTLFILE) cannot be opened.

S:

Terminates processing.

O:

Check whether the control file exists. If it does, delete it, and then restart HA Monitor. If the control file does not exist, contact a system administrator.

#### Action:

Eliminate the cause of the system call error as indicated by KAMN650-E, which is output before this message.

#### KAMN008-E (E+L)

Shared memory cannot be gotten.

Cause code: aa....aa Memory size: bb....bb

HA Monitor cannot start because a shared memory area cannot be allocated. For details about cause codes, see the documentation for the applicable OS.

*aa...aa*: Cause code (errno returned by the system call when an attempt was made to allocate shared memory, 1 to 3 digits)

bb....bb: Size of memory you attempted to allocate (bytes)

S:

Terminates processing.

O:

Check the amount of memory currently available in the system. If the amount of available system memory is less than the value shown by *bb....bb*, change the system value, and then restart HA Monitor. If the value is larger, report the amount of memory allocated and the cause code to a system administrator.

#### Action:

Eliminate the cause of the system call error as indicated by KAMN650-E, which is output before this message.

### KAMN009-E (E+L)

It cannot be written in the control file of HAmonitor.

Cause code:aa...aa

The HA Monitor control file (/opt/hitachi/HAmon/etc/.CTLFILE) is write-protected. For details about cause codes, see the documentation for the applicable OS.

aa...aa: Cause code (return code when an attempt is made to write to the control file, 1 or 2 digits)

S:

Terminates processing.

O:

Report the cause code to a system administrator.

#### Action:

Eliminate the cause of the system call error as indicated by KAMN650-E, which is output before this message.

#### KAMN010-W (E+L)

The control file of HAmonitor cannot be closed.

HA Monitor control processing cannot close the HA Monitor control file (/opt/hitachi/HAmon/etc/.CTLFILE).

S:

Continues processing.

O:

Delete the control file.

#### KAMN011-E (E+L)

A memory that is necessary to execute HAmonitor runs short. Memory size: aa....aa

HA Monitor cannot start because the data space is smaller than the memory required to run HA Monitor.

aa...aa: Size of shared memory allocated (bytes)

S:

Terminates processing.

O:

Check the size of the shared memory being allocated and the size of the data space required to run HA Monitor, and then restart HA Monitor. If this message is output, even though the required amount of data space has been allocated, contact a system administrator.

#### Action:

If checking reveals that there is not enough system memory, increase the amount of memory. If there is enough system memory, determine what is consuming memory, and then take corrective action accordingly.

#### KAMN012-E (E+L)

Processing of HAmonitor cannot be started.

The process management daemon of HA Monitor cannot start. A message indicating the error detail is output prior to this message

S:

Terminates processing.

O:

Take the corrective action described for the message that indicated the error detail.

#### KAMN013-E (E)

Abnormality occurred in File:aa...aa. Error details:bb....bb.

An error occurred in the file indicated by aa...aa.

aa...aa: File name

bb....bb: Detail code (errno of system call)

S:

Terminates processing.

O:

Eliminate the cause of the system call error as indicated by message KAMN601-W, which is output before this message. If no KAMN601-W message is output before this message, the error occurred while the file was being read. Use the detail code to eliminate the cause of the error, and then execute the HA Monitor environment setup command (monsetup).

#### KAMN014-E (E+L)

The startup of HAmonitor will be stopped, because reset path is not defined.

The startup of HA Monitor was stopped, because the reset path has not been set up by the HA Monitor environment setup command (monsetup).

S:

Terminates processing.

O:

Set up the reset path by using the HA Monitor environment setup command (monsetup), and then restart HA Monitor.

You can specify the following for the environment setup command (monsetup):

- monsetup-rp
- monsetup-tty
- monsetup -norpstart

### KAMN015-E (E+L)

The startup of HA Monitor cannot be confirmed.

The results of HA Monitor startup cannot be confirmed.

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Continues processing.

O:

Use the syslog to confirm the results of HA Monitor startup.

#### KAMN021-E (E)

There are syntax errors in command(aa...aa).

The syntax of an HA Monitor command is incorrect.

aa...aa: Command name

S:

Stops command processing.

O:

Execute the command using the correct syntax.

#### KAMN050-I (S+L)

HAmonitor is terminated.

HA Monitor was terminated normally by the HA Monitor termination command (monstop).

S:

Continues processing.

#### KAMN051-E (E+L)

HAmonitor is not processing.

An HA Monitor command cannot be executed for the following reason.

- The HA Monitor process is not running.
- There is an error in the control file (/opt/hitachi/HAmon/etc/.CTLFILE).
- There is an error in shared memory.

S:

Stops command processing.

O:

If this message is output while HA Monitor is running, forcibly stop HA Monitor with the kill command, and then restart it.

#### KAMN052-W (E+L)

Shared memory cannot be freed, because command (monstop) cannot have access to shared memory. HAmonitor does not install correctly.

HA Monitor cannot terminate because the HA Monitor's group ID and the HA Monitor termination command's (monstop) group ID do not match. HA Monitor was installed incorrectly.

S:

Continues processing.

O:

Reinstall using the correct procedure.

#### KAMN053-W (E+L)

Shared memory cannot be freed.

An error occurred in a system call to free shared memory allocated for HA Monitor.

S:

Continues processing.

O:

Contact a system administrator.

Action:

Eliminate the cause of the system call error.

#### KAMN054-E (E+L)

Errors occurred in command(monstop). HAmonitor cannot be terminated.

HA Monitor did not terminate because an error occurred in inter-process communications.

S:

Stops command processing.

O:

Re-execute the HA Monitor termination command (monstop).

#### KAMN055-E (E+L)

Online server or Standby server exists. HAmonitor cannot be terminated.

An HA Monitor termination request was not accepted because there is still an active server or standby server.

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Terminates processing.

O:

Check the server status using the server and host status display command (monshow).

If there is an active server, stop the server using the termination method for that server, and then execute the HA Monitor termination command (monstop).

If there is a standby server, stop all standby servers using the standby server termination command (monsbystp), and then execute the HA Monitor termination command (monstop).

#### KAMN056-I (S+L)

HAmonitor is terminated.

HA Monitor has terminated normally.

S:

Continues processing.

#### KAMN058-W

The group operand of server:(aa...aa) is invalid.

The server indicated by the server alias name is specified as one of the servers to be grouped by the group operand of the server environment definition (servers), but that operand is invalid for one of the following reasons:

- 1. The number of servers specified in the group exceeds the system limit.
- 2. Servers were added or servers were changed in a group that is running.

aa...aa: Server alias name

S:

Continues processing.

O:

For cause 1, revise the server environment definition (servers) so that the number of servers specified in the group does not exceed the system limit.

For cause 2, stop all servers in the group, and then revise the server environment definition.

#### KAMN066-E

The HAmonitor process stopped abnormally. An operating system panic occurred. (details code:aa...aa)

An OS panic occurred because the HA Monitor process terminated abnormally.

aa....aa: Detail code

<sup>2.</sup> Messages from KAMN000 to KAMN999

Detail code	Meaning
PRCMAIN	The promain process terminated abnormally.
HAIOD	The haiod process terminated abnormally.
HCMREAD	The hcmread process terminated abnormally.

S:

Terminates processing.

O:

Restart the host.

Action:

Contact maintenance personnel.

# 2.2 Messages from KAMN100 to KAMN199

#### KAMN100-I (S)

A check of a definition file is started.

A definition check command (moncheck) was received, and a check of the environment settings definition file has started.

S:

Continues processing.

#### KAMN101-I (S)

A check of a definition file was completed perfectly.

No errors were found in the environment settings definition file, and the check terminated normally.

S:

Continues processing.

#### KAMN102-E (E)

A check of a definition file was stopped abnormally.

An error was found in the environment settings definition file.

S:

Terminates processing.

O:

Correct the environment settings definition file.

#### KAMN105-I (S)

Definition file: aa....aa, bb....bb [cc....cc]

This is the header part for the device information that is output by the definition check command (moncheck).

aa...aa: Definition file name

bb....bb: 'Host Name' or 'Alias'

cc....cc: Host name, server alias name, or program alias name

S:

Continues processing.

#### KAMN106-E (E)

It was started the command of [bb....bb] to check [aa....aa].

But abnormality occurred in the command processing.

An error occurred when a device check was run with the definition check command (moncheck). Either a device that is not in the system was defined, or a device driver has not been installed.

aa...aa: Name of operand that was to be checked

bb....bb: Name of command that was to be executed

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Correct the device definition or install the device driver.

#### KAMN107-I (S)

Reservation release processing for server:aa...aa will now start.

**Device Status** 

*bb....bb cc....cc* 

Reservation release processing will start for the shared disks used by the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Device name of the server

cc....cc: Device status

S:

Continues processing.

#### KAMN108-I (S)

Reservation release processing for server:aa...aa is complete. Details:bb....bb

Reservation release processing is complete for all shared disks used by the server indicated by the server alias name.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Server alias name

#### bb....bb: Detail code

Detail code	Meaning
SUCCESS	Reservation release processing was successful for the shared disks used by server aaaa.
FAILURE	Reservation release processing failed for at least one of the shared disks used by server aaaa.

S:

Terminates processing.

#### Action:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action
SUCCESS	No action is needed, because reservation release processing was successful for all shared disks.
FAILURE	Take the corrective action described for the error detail indicated in the message that was output prior to this message.

## KAMN109-I (S)

#### Definition file:aa....aa

This message is the header part of the device information output by the definition check command (moncheck command).

aa...aa: Definition file name

S:

Continues processing.

#### KAMN112-E (E+L)

This environment cannot specify hab gid.

The hab\_gid operand, a server environment definition, cannot be specified under the current software configuration.

S:

Terminates processing.

O:

Check whether HA Booster has been correctly installed.

## KAMN113-E (E)

The setting of specified value bb....bb of the aa....aa operand is wrong. Detailed code:cc....cc.

An invalid value was set for an operand specified in the definition file.

aa...aa: Operand name

bb....bb: Operand specification

cc....cc: Detail code

Detail code	Meaning
CTLGRP	The disk device in the volume group specified for the disk operand in the server environment definition has been registered in the control group of HA Booster.
PATH	One of the following errors has occurred:
	The specified symbolic link or logical device does not exist.
	• A relative path was specified instead of an absolute path.
	In addition, one of the following errors might have occurred.
	If the operand name is scsi_device and HDLM is being used as the multipath software:
	• HDLM is not installed.
	HDLM service has stopped.
	If the operand name is dmmp_device and DMMP is being used as the multipath software:
	DMMP is not installed.
	DMMP service has stopped.
DEVICE_TYPE	One of the following errors has occurred.
	When the operand name is scsi_device:
	• If HDLM is being used as the multipath software:
	The specified device is not a logical device for HDLM.
	HDLM is not installed.
	The HDLM service has stopped.
	• If a virtual environment based on VMware ESXi is being used:
	The device in the specified symbolic link does not support SCSI reservation.
	The specified symbolic link is for a logical device (such as an LVM logical volume or a logical device for multipath software).
	• In all other cases:
	Possible errors are the same as when a virtual environment based on VMware ESXi is being used.
	When the operand name is dmmp_device and DMMP is being used as the multipath software:
	The specified device is not a logical device for DMMP.
	DMMP is not installed.
	The DMMP service has stopped.

S:

Continues processing.

O:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action
CTLGRP	The volume group that contains the disk device registered in the control group cannot be used for the disk operand in the server environment definition. Change the settings so that the disk device in the volume group specified for the disk operand in the server environment definition is not registered in the control group of HA Booster.

<sup>2.</sup> Messages from KAMN000 to KAMN999

Detail code	Corrective action
PATH	Check the shared disk symbolic links or the logical device name for HDLM or DMMP, and then correct the operand specifications as necessary.
DEVICE_TYPE	Check the shared disk symbolic links or the logical device name for HDLM or DMMP, and then correct the operand specifications as necessary.  If the operand name is scsi_device and HDLM is being used as the multipath software, and if the specified logical device is correct, check the operating status of the HDLM service.  If the operand name is dmmp_device and the specified logical device is correct, check the operating status of the DMMP service.

#### KAMN115-E (E)

In this system, aa...aa cannot be specified.

A definition is invalid.

aa....aa: Operand name

S:

Suspends processing.

O:

Check the HA Monitor environment settings or the server environment definition. Correct the definition as needed, and then restart HA Monitor.

#### KAMN116-W (E)

The same shared resource is defined for two or more servers. operand name: aa...aa, specified operand value: bb....bb

A single shared resource is defined for multiple servers in a server environment definition.

aa....aa: Operand name

bb....bb: Operand specification

S:

Continues processing.

O:

Check the operand specifications in the server environment definition and correct them as necessary.

#### KAMN117-E (E)

The *aa...aa* of the multicast\_lan operand of definition file:sysdef does not exist in the /etc/hosts file, or is not class D multicast address.

The value specified for the multicast\_lan operand in the HA Monitor environment settings is not in the /etc/hosts file. Or, the value specified in the /etc/hosts file is not a class D multicast address.

aa....aa: Host name corresponding to the multicast group ID (TCP/IP LAN)

S:

Terminates processing.

O:

Carefully review the following specifications, and correct them as necessary.

- Value specified for the multicast lan operand in the HA Monitor environment settings
- Multicast group ID specified in the /etc/hosts file

#### KAMN118-W (E)

The same value is specified for the same operand of two or more programs. operand name:aa....aa specified operand value:bb....bb

The same value is specified for the same operand in multiple program definition statements in the monitor-mode program environment definition.

aa....aa: Operand name

bb....bb: Operand specification

S:

Terminates processing.

O:

Check the values specified for operands of monitor-mode program environment definition, and correct them as necessary.

#### KAMN119-W (E)

Definition file:programs exists, but does not specify to use the function of program.

A value of 1 or more is specified for the pgmmax operand in the HA Monitor environment settings, and a monitor-mode program environment definition file exists, but it has not been set to allow use of the monitor-mode program management function.

S:

Continues processing.

O:

Check the following items:

• Is a value of 1 or more specified for the pgmmax operand in the HA Monitor environment settings, even though the monitor-mode program management function will not be used?

• Is nouse specified for the program operand in the server environment definition even though the monitormode program management function will be used? In addition, check whether definition of the program operand has been omitted.

#### KAMN120-E (E)

Definition file :aa...aa, There is not dd...dd in cc...cc operand of the bb...bb definition sentence.

A search was performed for the relevant server definition based on the program name or server alias name when the program started, but no match was found.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

O:

Check the content of the server environment definition.

#### KAMN130-E (E)

Definition file:aa...aa, Because the file does not exist or the file does not consist for reading, it cannot open.

A definition file in the environment settings cannot be opened.

aa...aa: Definition file name

S:

Terminates processing.

O:

Check whether the environment settings definition file exists, and whether the read attribute is set, and then correct the definition file as necessary.

If the definition file is programs, check the following:

- Is a value of 1 or more is specified for the pgmmax operand in the HA Monitor environment settings even though the monitor-mode program management function will not be used?
- Is use specified for the program operand in the server environment definition even though the monitor-mode program management function will not be used?

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN140-E (E)

Definition file:aa...aa, The number of characters of the bb...bb line is too much.

The length of a character string specified in the definition file for the environment settings exceeds 1,024 characters.

aa....aa: Definition file name

bb....bb: Relative line number where the character string is located

S:

Terminates processing.

O:

Check the character string on the line in the definition file that generated the error.

#### KAMN142-E (E)

Definition file:aa...aa, The method of a definition of the value of the dd...dd operand of the cc...cc definition sentence of the bb...bb line is incorrect.

The value of an operand in a definition file is specified incorrectly.

aa...aa: Definition file name

bb....bb: Relative line number where the value is specified

cc....cc: Definition statement name

dd....dd: Operand name

S:

Terminates processing.

O:

Check the specification on the line that generated the error in the environment settings definition file, and correct it as necessary.

#### KAMN144-E (E)

Definition file:aa...aa, The method of a definition of the cc....cc definition sentence of the bb....bb line is incorrect.

A definition statement in the definition file is defined incorrectly.

aa...aa: Definition file name

bb....bb: Relative line number where the definition statement is located

cc....cc: Definition statement name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Terminates processing.

O:

Check the definition statement in the line that generated the error in the environment settings definition file.

#### KAMN146-E (E)

Definition file:aa...aa, The method of a definition of the dd...dd operand of the cc...cc definition sentence of the bb...bb line is incorrect.

An operand in an environment settings definition file is defined incorrectly.

aa...aa: Definition file name

bb....bb: Relative line number where operand is located

cc....cc: Definition statement name

dd....dd: Operand name

S:

Terminates processing.

O:

Check the operand in the line that generated the error in the environment settings definition file, and correct it as necessary.

#### KAMN148-W (E+L)

Definition file: aa....aa, Unnecessary end symbol (ff....ff) is defined in the ee....ee of the dd....dd operand of the cc....cc definition sentence of the bb....bb line. An end symbol is ignored.

An unnecessary delimiter symbol was found for an operand in an environment settings definition file. The delimiter was ignored.

aa...aa: Definition file name

bb....bb: Relative line number where operand is located

cc....cc: Definition statement name

dd....dd: Operand name

ee...ee: Operand specification

ff....ff: Delimiter symbol

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Check the operand in the line that generated the error in the definition file of the server environment definition, and correct it as necessary.

#### KAMN150-E (E)

Definition file: aa....aa, Specification of dd....dd of the cc....cc operand of the bb....bb definition sentence is incorrect.

The value specified for an operand in an environment settings definition file is invalid.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

O:

Check the specification in the line that generated the error in the environment settings definition file, and correct it as necessary.

#### KAMN151-E (E)

Definition file: aa....aa, The number of the values of the cc....cc operand of the bb....bb definition sentence has exceeded a maximum value.

The number of operands in the environment settings definition file exceeds the maximum.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

S:

Terminates processing.

O:

Reduce the number of operands in the environment settings definition file.

#### KAMN152-E (E)

Definition file: aa...aa, Length of a character string in dd...dd of the cc...cc operand of the bb...bb definition sentence is incorrect.

The length of a character string specified for an operand in an environment settings definition file is outside the permitted range.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

O:

Correct the character string length of the specification of the operand in the environment settings definition file.

#### KAMN153-E (E)

Definition file:aa...aa, The cc...cc operand cannot be defined to the bb...bb definition sentence.

A disallowed operand was specified in a definition statement in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

S:

Terminates processing.

O:

Delete the disallowed operand in the definition statement in the environment settings definition file.

#### KAMN154-E (E)

Definition file:aa...aa, The cc...cc operand of the bb...bb definition sentence does not have a value.

No value was specified for an operand in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Terminates processing.

O:

Specify a value for the operand in the environment settings definition file.

#### KAMN155-W (E+L)

Definition file:aa...aa, The dd...dd is defined in several to the cc...cc operand of the bb...bb definition sentence. A value after the second is ignored.

The same value was specified for an operand multiple times in an environment settings definition file. The second and all subsequent values were ignored.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand specification

S:

Continues processing.

O:

Delete the redundant specifications for the operand in the environment settings definition file.

#### KAMN156-W (E+L)

Definition file: aa....aa, The cc....cc operand is defined in several to the bb....bb definition sentence. An operand after the second is ignored.

A single operand was defined multiple times in the definition statements of an environment settings definition file. The second and all subsequent operands were ignored.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

S:

Continues processing.

O:

Delete the redundant operands in the definition statement in the environment settings definition file.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN157-E (E)

Definition file:aa...aa, The bb....bb definition sentence cannot be defined.

A disallowed definition statement was specified in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

S:

Terminates processing.

O:

Delete all content in the environment settings definition file other than HA Monitor definition statements.

#### KAMN158-E (E)

Definition file:aa...aa, The bb...bb definition sentence is defined in several.

A single definition statement was specified multiple times in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

S:

Terminates processing.

O:

Delete the redundant definition statements in the environment settings definition file.

#### KAMN159-E (E)

Definition file:aa...aa, There is not a cc....cc operand of the bb...bb definition sentence.

A required operand was not specified in a definition statement of an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

S:

Terminates processing.

O:

Add the required operand to the definition statement in the environment settings definition file.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN160-E (E)

Definition file:aa...aa, A memory necessary in the definition analysis ran short.

An error occurred while allocating the work area for definition analysis.

aa...aa: Definition file name

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Remove unnecessary processes, and then retry the operation.

#### KAMN161-E (E)

Definition file: aa...aa, There is not a bb...bb definition sentence.

A required definition statement was not specified in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Definition statement name

S:

Terminates processing.

O:

Add the required definition statement to the environment settings definition file.

#### KAMN162-E (E)

Definition file:aa...aa, The dd...dd of the cc...cc operand of the bb...bb definition sentence is outside a range.

The specification of an operand in an environment settings definition file is outside the permitted range.

aa....aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Check the operand specification in the environment settings definition file, and correct it as necessary.

#### KAMN163-E (E)

Definition file:aa...aa, There is a mistake in contents specified as the cc...cc operand of the bb...bb definition sentence.

The specification of an operand in an environment settings definition file is incorrect.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

S:

Stops processing.

O:

Check the specification of the operand in the environment settings definition file that generated the error, and correct it as necessary.

#### KAMN164-E

The servers: (aa...aa, aa...aa) are specified as a server group with the group name: cc...cc in the definition file: bb...bb, but the specified value of the dd...dd operand is not in agreement.

A server group definition was specified in the definition file indicated by the definition file name, but the value specified in the operand indicated by the operand name does not match.

aa...aa: Server alias name or resource server alias name

bb....bb: Definition file name

cc....cc: Group name

dd....dd: Operand name

S:

Terminates processing.

O:

Change the operand indicated by the operand name in the definition file indicated by the definition file name, so that the server groups are consistent.

## KAMN165-E (E)

Definition file: aa....aa, The number of the specification values of the cc....cc operand and the dd....dd operand of the bb....bb definition sentence does not agree.

The numbers of values specified for two operands in the environment settings definition file do not match.

aa...aa: Definition file name

bb....bb: Definition statement name

cc....cc: Operand name

dd....dd: Operand name

S:

Terminates processing.

O:

Correct the values specified for the two operands that caused the error in the environment settings definition file, so that the numbers match.

## KAMN166-W (S+L)

Definition file:aa...aa, Because cc....cc operand is not specified in the bb....bb definition sentence, the dd....dd operand is ignored.

A required operand was not specified in the HA Monitor definition, so the *dd....dd* operand specification was ignored.

aa...aa: Definition file name

bb....bb: Definition sentence name

cc....cc: Operand name

dd....dd: Operand name

S:

Continues processing.

O:

Add the required operand to the definition file in the environment settings, and restart HA Monitor if needed.

### KAMN169-E (E)

Definition file:sysdef, There is a mistake in contents specified as the pathpatrol\_retry operand of the function definition sentence. The product of retry interval and retry times has exceeded the health check interval.

The specification for the pathpatrol\_retry operand in the HA Monitor environment settings is incorrect. The product of the retry interval and retry times specified in the pathpatrol\_retry operand exceeds the health check interval for monitoring paths specified in the pathpatrol operand.

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Terminates processing.

O:

Correct the specifications of the pathpatrol and pathpatrol\_retry operands in the HA Monitor environment settings.

### KAMN170-W (E)

There are errors of contents: bb....bb for the aa....aa line of definition file: connection.

The connection configuration file contains an error.

aa...aa: Relative line number that generated the error

bb....bb: Description of error

S:

Ignores all information from the erroneous information to the next semicolon (;), and then resumes processing.

O:

Correct the error in the connection configuration file. In addition, execute the server and host status display command (monshow) with the -c option to check the connection, since the host specified in the erroneous information might not be connected. If it is not connected, execute the HA Monitors manual connection command (monlink) and manually connect the missing host.

## KAMN172-W (E)

The aa....aa of the lan operand of definition file:sysdef is not exist in the /etc/hosts file.

A value specified in the lan operand of the HA Monitor environment settings is not found in the /etc/hosts file. Another possibility is that the value specified in the lan operand was entered incorrectly.

aa....aa: Host name of monitoring path (TCP/IP LAN)

S:

Continues processing. Note that the incorrect monitoring path cannot be used.

O:

Correct the error in the HA Monitor environment settings, and then restart HA Monitor.

#### KAMN173-W (E)

The aa...aa of the lanport operand of definition file:sysdef is not exist in the /etc/services file.

A value specified in the lanport operand of the HA Monitor environment settings is not in the /etc/services file. Another possibility is that the value specified in the lanport operand was entered incorrectly.

aa...aa: Service name of monitoring path (TCP/IP LAN)

S:

Continues processing. Note that the incorrect monitoring path cannot be used.

O:

Correct the error in the HA Monitor environment settings, and then restart HA Monitor.

## KAMN174-W (E+L)

The aa...aa of the lan operand of definition file:sysdef cannot use as the Patrol Path.

The monitoring path for the TCP/IP host name specified in the lan operand of the HA Monitor environment settings cannot be used. The possible causes are as follows:

- The network interface has not been started.
- The network being used cannot broadcast.
- The IP address of the monitoring path for HA Monitor specified in the /etc/hosts file is incorrect.

aa...aa: Host name of monitoring path (TCP/IP LAN)

S:

Ignores the specification and continues processing. Note that the incorrect monitoring path cannot be used.

O:

If the network interface has not been started, start it, and then restart HA Monitor. If the network being used cannot broadcast, use another network. Carefully review the IP address specified in the /etc/hosts file. If there is an error, correct it, and then restart HA Monitor.

### KAMN175-I

Definition file:connection is updated.

Host information has been added to the connection configuration file because the connected host was not specified in the connection configuration file.

S:

Updates the connection configuration file, and then continues processing.

## KAMN176-E

It could not be connected with host:aa...aa specified as definition file:connection.

The host specified in the connection configuration file could not be connected to, despite connection processing reaching its limit. The possible causes are as follows:

• The host is not running.

<sup>2.</sup> Messages from KAMN000 to KAMN999

- The connection configuration file contains an error.
- The attempt to communicate failed because the monitoring path contained an error.

aa...aa: Host name

S:

Ignores the host that cannot be connected, and continues processing.

O:

If the host is running when this message is received, check the connection configuration file. If a TCP/IP LAN is being used for the monitoring path, check the contents of the HA Monitor environment settings, the /etc/hosts file, and the /etc/services file. If there is an error in a file, correct the error, and then connect to the HA Monitor using the HA Monitors manual connection command (monlink). If there is no error, there might be an error in communications with the host.

If you cannot connect despite executing the monlink command several times, eliminate any monitoring path errors, and then restart HA Monitor.

#### KAMN177-E

Because it is already used, Port Number bb....bb of Service Name:aa....aa of TCP/IP cannot be used as a Patrol Path of the HAmonitor.

The port number specified in the service indicated by the service name in the /etc/services file is being used by another process. It cannot be used as the monitoring path of the HA Monitor.

aa...aa: Service name of monitoring path (TCP/IP LAN)

bb....bb: Port number of monitoring path (TCP/IP LAN)

S:

Continues processing. Note that the incorrect monitoring path cannot be used.

O:

Terminate the other process that is using the specified port number in the monitoring path of HA Monitor. Alternatively, change the port number and restart HA Monitor.

#### KAMN178-W

Value: cc....cc of host: bb....bb specified for the aa....aa line of definition file: connection is wrong.

The host address or IP address specified in the connection configuration file does not match the value for that host.

aa...aa: Relative line number in the connection configuration file

bb....bb: Host name

cc....cc: Host or IP address

S:

Ignores the error and continues processing.

O:

Correct the error in the connection configuration file.

#### KAMN179-E

The TCP/IP host name for the IP address cannot be acquired. IP address:aa....aa

An attempt to acquire the TCP/IP host name failed for the following reason.

• An attempt to generate a process failed.

Note that the TCP/IP host name is not displayed when the monitoring path status display command (monpath) is executed with the -i option.

aa....aa: IP address

S:

Continues processing.

O:

If an attempt to generate a process fails, check the reason given in message KAMN601-W, which is output before this message, and eliminate the cause of the error.

### KAMN184-E (E)

Definition file:aa...aa line bb...bb, The number of the values of the cc...cc operand is too much.

The number of operand values specified in the environment settings definition file exceeds the maximum.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Reduce the number of operands in the environment settings definition file.

## KAMN185-E (E)

Definition file:aa...aa line bb....bb, The number of the values of the cc...cc operand is not enough.

The number of operand values specified in the environment settings definition file is smaller than the minimum.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Increase the number of operands in the environment settings definition file.

## KAMN186-E (E)

Definition file:aa...aa line bb....bb, There is a mistake in contents:dd....dd as the cc....cc operand.

The value specified for an operand in an environment settings definition file is invalid.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

O:

Correct the operand specification in the environment settings definition file.

## KAMN187-E (E+L)

Definition file: aa...aa line bb....bb, The number of the values of the cc....cc operand is too much.

The number of operand values specified in the environment settings definition file exceeds the maximum.

aa...aa: Definition file name

bb...bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Reduce the number of operands in the environment settings definition file.

### KAMN188-E (E+L)

Definition file:aa...aa line bb....bb, The number of the values of the cc...cc operand is not enough.

The number of operand values specified in the environment settings definition file is smaller than the minimum.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Increase the number of operands in the environment settings definition file.

## KAMN189-E (E+L)

Definition file:aa...aa line bb....bb, There is a mistake in contents:dd....dd as the cc....cc operand.

The value specified for an operand in an environment settings definition file is invalid.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

dd....dd: Operand specification

S:

Terminates processing.

O:

Correct the operand specification in the environment settings definition file.

# KAMN190-E (E+L)

There is not a LAN status setting file:aa....aa.

The status settings file indicated by the LAN status settings file name does not exist.

aa....aa: LAN status settings file name

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Create the status settings file indicated by the LAN status settings file name, and then restart HA Monitor or the server.

## KAMN191-E (E+L)

The LAN status cannot be set the LAN status setting file:aa...aa. Error details:bb....bb.

The LAN status cannot be set using the status settings file indicated by the LAN status settings file name.

aa...aa: LAN status setting files name

bb....bb: Detail code (sets errno of system call)

S:

Terminates processing.

O:

Check whether the status settings file indicated by the LAN status settings file name has permission to set the status. If it does not have permission, run the operating system's chmod command to give it permission, and then restart the HA Monitor or server. If the file does have permission to set the status, contact a system administrator. For details about the operating system's chmod command, see the documentation for the applicable OS.

#### Action:

Eliminate the cause of the system call error that is indicated by the detail code.

#### KAMN192-E

There is not a LAN status setting file:aa....aa.

The status settings file indicated by the LAN status settings file name does not exist.

aa...aa: LAN status settings file name

S:

Continues processing.

O:

Create the status settings file indicated by the LAN status settings file name, and then set the LAN status, if necessary.

### KAMN193-E

The LAN status cannot be set the LAN status setting file:aa...aa. Error details:bb....bb.

The LAN status cannot be set using the status settings file indicated by the LAN status settings file name.

aa...aa: LAN status settings file name

bb....bb: Detail code (sets errno of system call)

2. Messages from KAMN000 to KAMN999

S:

Continues processing.

O:

Check whether the status settings file indicated by the LAN status settings file name has permission to set the status. If it does not have permission, run the operating system's chmod command to give it permission, and then restart the HA Monitor or server. If the file does have permission to set the status, contact a system administrator. For details about the operating system's chmod command, see the documentation for the applicable OS.

#### Action:

Eliminate the cause of the system call error that is indicated by the detail code.

# KAMN194-W (E)

The servers:(aa...aa, aa...aa, ...) invalidate specification of exclusive\_servers operand of a definition file:servers\_opt between the servers so that there is specification as bb....bb group server in the definition file:servers.

The servers indicated by the server alias names have been specified as one of the servers grouped in the server environment definition. Servers specified in the same group cannot be made into exclusive servers. Specification of the exclusive\_servers operand in the exclusive server environment definition (servers\_opt) is not valid for those servers.

aa...aa: Server alias name

bb....bb: Group name

S:

Continues processing.

Action:

Correct the definition so that servers within the same group do not become locked servers.

### KAMN195-E (E)

Definition file:aa...aa, line bb....bb, The cc....cc operand cannot be defined.

An invalid operand was specified in a definition statement in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Delete the invalid operand in the definition statement in the environment settings definition file.

<sup>2.</sup> Messages from KAMN000 to KAMN999

### KAMN196-E (E)

Definition file:aa...aa line bb....bb, The method of a definition of the cc...cc operand is incorrect.

An operand in an environment settings definition file is specified incorrectly.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Correct the operand specification in the environment settings definition file.

## KAMN197-E (E+L)

Definition file:aa...aa, line bb....bb, The cc....cc operand cannot be defined.

An invalid operand was specified in a definition statement in an environment settings definition file.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

O:

Delete the invalid operand in the definition statement in the environment settings definition file.

### KAMN198-E (E+L)

Definition file:aa...aa line bb...bb, The method of a definition of the cc...cc operand is incorrect.

An operand in an environment settings definition file is specified incorrectly.

aa...aa: Definition file name

bb....bb: Relative line number in definition file

cc....cc: Operand name

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Correct the operand specification in the environment settings definition file.

## KAMN199-E (E)

Although server:(aa...aa, aa...aa, ...) has specification in definition file:servers as a server group by group name:bb...bb, the specification value of a standbypri operand is not in agreement.

A server group definition was specified in the server environment definition, but the value specified in the standbypri operand does not match.

aa...aa: Server alias name, or resource server alias name

bb....bb: Group name

S:

Terminates processing.

O:

Change the standbypri operand in the server environment definition so that the server groups are consistent.

# 2.3 Messages from KAMN200 to KAMN299

#### KAMN201-I

It connected with HAmonitor of host:aa...aa.

A connection was made to HA Monitor on the host indicated by the host name.

aa...aa: Host name

S:

Continues processing.

#### KAMN202-E

A communication error with host:aa...aa occurred. Start answer cannot be sent.

An error occurred when transmitting a start response to HA Monitor on the system indicated by the host name.

aa....aa: Host name

S:

Ignores start messages from the host indicated by the host name.

O:

Contact a system administrator.

#### Action:

Eliminate the cause of the communication error, and then restart HA Monitor on the host indicated by the host name.

#### KAMN203-E

A communication error with host:aa...aa occurred. Start impossibility answer cannot be sent.

An error occurred when transmitting a cannot-start response to HA Monitor on the system indicated by the host name.

aa...aa: Host name

S:

Ignores start messages from the host indicated by the host name.

O:

Contact a system administrator.

#### Action:

Eliminate the cause of the communication error, and then correct the name and address operands of the environment settings of HA Monitor on the host indicated by the host name so that their values do not duplicate values in other systems. Then restart HA Monitor.

If there are no errors in the HA Monitor environment settings, wait a short while, and then restart HA Monitor.

#### KAMN204-E

Obstacle processing of own host is being done on host:aa...aa. HAmonitor is terminated.

HA Monitor terminates because the host indicated by the host name is processing a system failure. After this message is output, the host indicated by the host name will reset itself.

aa....aa: Host name

S:

Terminates processing.

O:

After the host finishes processing the system failure, restart HA Monitor.

#### KAMN205-E

Host name and host address are duplicated with the processing host's. HAmonitor is terminated.

The host name and host address in the HA Monitor environment settings are the same as those of another host that is currently running.

S:

Terminates processing.

O:

Correct the name and address operands in the HA Monitor environment settings so that their values are not the same as any other systems, and then restart HA Monitor.

### KAMN206-E (E)

An error occurred in command(aa...aa). Command cannot be executed.

A communication error occurred between a command (shell) and HA Monitor.

aa....aa: Command name

S:

Stops command processing.

O:

Re-execute the command. If the communication error occurs again, contact a system administrator. If the command name that is output is monswap, the server (TP1 or HiRDB) might terminate abnormally during system switchover and this message might be output. If the system switchover was successful, ignore this message.

#### Action:

Determine the cause of the error based on the error message that was output before this message.

### KAMN207-E

The number of connected hosts exceeded upper limit. HAmonitor is terminated.

A start message was sent to HA Monitor on another system, but the start request could not be accepted because startup of the current system would have caused the number of running hosts to exceed the maximum.

S:

Terminates HA Monitor in the current system.

O:

Re-evaluate the system configuration.

#### KAMN208-E

Host name is duplicated with the processing host's. HAmonitor is terminated.

A start message was sent to HA Monitor on another system, but the start request could not be accepted because the recipient host has the same name as the transmitting host.

S:

Terminates HA Monitor in the current system.

O:

Check the HA Monitor environment settings, and then give the host a name that is unique within the system.

#### KAMN209-E

Host address is duplicated with host:aa...aa's. HAmonitor is terminated.

A start message was sent to HA Monitor on another system, but the start request could not be accepted because the recipient host has the same address as the transmitting host.

aa....aa: Host name

S:

Terminates the HA Monitor in the current system.

O:

Check the HA Monitor environment settings, and then give the host an address that is unique within the system.

#### KAMN210-I

HAmonitor of host: aa...aa is terminated.

A connection to HA Monitor on the host indicated by the host name has been terminated.

aa...aa: Host name

S:

Continues processing.

## KAMN211-I (S)

Standby server: aa....aa was terminated normally.

The standby server indicated by the server alias name terminated normally.

aa...aa: Server alias name

S:

Continues processing.

# KAMN212-E (E)

Online server: aa....aa was stopped by plan. Because an error occurs in communication with host(bb....bb), Hotstandby cannot be done.

An attempt was made to perform a planned termination of the active server by using the server hot-standby switchover command (monswap), but the system could not perform a hot-standby switchover because of a communication failure with the host indicated by the host name. If HA Monitor and a standby server are running normally on the host indicated by the host name, a system reset will now be executed on that host.

aa...aa: Server alias name

bb....bb: Host name

S:

Terminates processing.

O:

If HA Monitor and standby servers are running, first terminate the standby server normally, and then restart the active server on the paired host. Alternatively, wait for the paired host to detect the communication failure with the current system's host and perform a hot standby.

If HA Monitor is not running on the host indicated by the host name, restart the active server on the current system's host. In addition, contact a system administrator.

#### Action:

Determine the cause of the communication failure.

## KAMN213-I (S)

Own host name : aa....aa
Own servers Pair servers
Alias Status Status Host name
bb....bb cc....cc dd....dd ee....ee

This is the server status list that is output by the server and host status display command (monshow).

aa...aa: Name of local system host

bb....bb: Server alias name

cc....cc: Status of local system server

dd....dd: Status of paired system server

ee....ee: Host name of paired system

S:

Continues processing.

## KAMN213-I (S)

Own host name : aa....aaGroup name : bb....bb

Alias: cc....cc Status: dd....dd

This is the server status list that is output when the status of a server group is displayed.

aa...aa: Name of local system host

bb....bb: Group name of server group

cc....cc: Server alias name

dd....dd: Server status

S:

Continues processing.

## KAMN213-I (S)

Own host name: aa...aa

Server: bb....bb

\*\*\* DISK information \*\*\*

-NAME-----

*cc....cc* 

<sup>2.</sup> Messages from KAMN000 to KAMN999

```
      dd....dd

      on_opt="ee....ee"

      *** File system information ***

      -NAME------

      ff....ff

      mount dir=gg....gg

      mount opt=hh....hh
```

This is the server status list that is output when shared resource information is displayed.

aa...aa: Name of local system host

bb....bb: Server alias name

cc....cc: Special file name of volume group

dd....dd: Indicates whether to use the function that stops server startup when a connection to a shared resource is lost.

- neck: Use the function that stops server startup when a connection to a shared resource is lost.
- No display: Do not use the function that stops server startup when a connection to a shared resource is lost.

ee...ee: Option when a volume group goes online

ff...ff: Special file name of file system

gg....gg: Name of directory at mounting destination

hh....hh: Option used with the OS's mount command

S:

Continues processing.

## KAMN213-I (S)

```
Own host name: aa....aa
Own servers Pair servers
Alias Status pri Status pri Host name
bb....bb cc....cc dd....dd ee....ee ff....ff gg....gg
```

This is the server status list that is output when the multi-standby function is being used and the server priority is displayed.

aa...aa: Name of local system host

bb....bb: Server alias name

cc....cc: Status of local system server

dd...dd: Priority of local system server (from 1 to 4 digits)

<sup>2.</sup> Messages from KAMN000 to KAMN999

ee....ee: Status of paired system server

ff...ff: Priority of the paired system server (from 1 to 4 digits)

gg....gg: Host name of paired system

S:

Continues processing.

## KAMN213-I (S)

Own host name: aa....aa

Alias Patrol time bb....bb cc....cc

This is the server status list that is output when server failure monitoring time is displayed.

aa...aa: Name of local system host

bb....bb: Server alias name

cc....cc: Server failure monitoring time (from 1 to 3 digits)

S:

Continues processing.

# KAMN213-I (S)

Own host name : aa....aaHost name Function Status bb....bb cc....cc dd....dd

This message indicates a monitoring status list that is output when the system disk monitoring status is displayed.

aa...aa: Host name of the local host

bb....bb: Host name of the local host

cc....cc: Function (operand)

dd...dd: Monitoring status

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

## KAMN213-I (S)

```
Own host name : aa....aa
Alias Function Status
bb....bb cc....cc dd....dd
```

This message shows a monitoring status list that is output when the monitoring status of the monitor-mode server and disks for business use is displayed.

```
aa...aa: Host name of the local host
```

bb....bb: Server alias name

cc....cc: Function (operand)

dd....dd: Monitoring status

S:

Continues processing.

## KAMN214-I (S)

```
Usage:monswap alias
monswap -g group
monswap -f alias
monswap -f -g group
```

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the server hot-standby switchover command (monswap) is incorrect.

S:

Continues processing.

### KAMN215-E (E)

Online server: aa....aa is not processing. Command(bb....bb) cannot be executed.

A command was executed, but the specified server is not an active server or its startup processing is not complete.

aa....aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Check the server alias name and active server status, and then re-execute the command.

<sup>2.</sup> Messages from KAMN000 to KAMN999

### KAMN216-E (E)

Standby server: aa....aa that Hotstandby can be able does not exist.

Command(monswap) cannot be executed.

The server hot-standby switchover command (monswap) was used to execute a planned hot-standby switchover, but no standby server exists that is able to perform a hot-standby switchover for the specified server. Another possibility is that no standby server is in standby-complete status.

aa...aa: Server alias name

S:

Stops command processing.

O:

Check the server alias name and the standby server status, and then re-execute the command.

## KAMN217-I (S)

Online server: aa....aa was stopped by plan.

Standby server is done into Hotstandby.

The planned termination of an active server by using the server hot-standby switchover command (monswap) is complete. A hot standby to a standby server will now be performed.

aa...aa: Server alias name

S:

Continues processing.

## KAMN219-I (S)

Usage:monact alias

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the wait-state server start command (monact) is incorrect.

S:

Continues processing.

### KAMN220-E

Definition file:aa...aa, The definition of server that the name operand and the alias operand shows does not correspond with the definition of the server of host(bb...bb).

Either the server alias name or program name does not match. The server terminates with an error.

2. Messages from KAMN000 to KAMN999

aa...aa: Definition file name

bb....bb: Host name

S:

Terminates server startup processing.

O:

Correct the environment settings definition file, and then restart the server.

# KAMN221-E (E)

Server: aa...aa is Online server.

Command(bb....bb) cannot be executed.

An attempt was made to execute a command, but the command cannot be executed because the specified server is active.

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Check the server alias name and the active server's startup type and status, and then re-execute the command.

#### KAMN222-I

Online server: aa....aa is already started.

The server indicated by the server alias name is already running.

aa....aa: Server alias name

S:

Terminates processing.

O:

Correct the server environment definition, and then restart the server.

#### KAMN225-I

Server:aa...aa is started as Online server.

The server indicated by the server alias name has been started as the active server.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Continues processing.

### KAMN226-I

Server: aa....aa is started as Standby server.

Online server is on host(bb....bb).

The server indicated by the server alias name has been started as the standby server. The active server for this standby server is on the host indicated by the host name.

aa....aa: Server alias name

bb...bb: Host name

S:

Continues processing.

## KAMN227-E (E)

Standby server: aa....aa is not starting wait state.

Command(monact) cannot be executed.

The wait-state server start command (monact) has been executed, but the server indicated by the server alias name is either starting up or in stand-by status.

aa...aa: Server alias name

S:

Stops command processing.

O:

Check the server alias name and standby server startup type and status, and then re-execute the command.

### KAMN229-E

Definition file: aa....aa, The server specified the alias operand (bb....bb) stops an activation, because it already exists.

A server exists with a server alias name that is the same as the server alias name defined in the server environment definition.

aa...aa: Definition file name

bb....bb: Server alias name

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Correct the environment settings definition file, and then restart server.

### KAMN230-E

bb....bb of server:aa....aa cannot be made ONLINE.

The device of the server indicated by the server alias name cannot be placed online.

aa...aa: Server alias name

bb....bb: Device name

S:

Continues processing.

O:

Place the device online as needed.

### KAMN232-E

bb....bb of server:aa....aa cannot be made STANDBY.

The device of the server indicated by the server alias name cannot be placed in standby state.

aa...aa: Server alias name

bb....bb: Device name

S:

Continues processing.

O:

Place the device in standby state if needed.

### KAMN233-E

bb....bb of server:aa....aa cannot be connected.

A device on the server indicated by the server alias name cannot be connected. Processing continues without connecting.

aa....aa: Server alias name

bb....bb: Device name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Connect the device, if necessary.

#### Action:

Determine the cause of the error. If the device name is a file system name, consult the switching log acquired in the /opt/hitachi/HAmon/spool/server-ID-name.fslog file to determine the cause of the error.

#### KAMN234-E

bb...bb of server:aa...aa cannot be disconnected.

A device on the server indicated by the server alias name cannot be disconnected. Processing continues with the device connected. If the replication software (DRBD) is being used, this message might be output depending on the timing for starting the standby server. In this case, there is no problem and no action is required.

aa...aa: Server alias name

bb....bb: Device name

S:

Continues processing.

O:

Disconnect the device, if necessary. It is possible that resources have been corrupted, particularly if a file system is being used; be sure to disconnect the device if a file system is being used.

#### Action:

Determine the cause of the error. If the device name is a file system name, check the switching log acquired in the /opt/hitachi/HAmon/spool/server-ID-name.fslog file. If the device name is a volume group name, check the connection log acquired in the /opt/hitachi/HAmon/spool/volume-group-name.vglog file.

#### KAMN235-I

The state of Server: aa....aa changed to the Hotstandby wait state.

The standby server indicated by the server alias name was placed in hot-standby wait-state in order to check the status of the LAN interface if a failure is detected in the active system.

aa....aa: Server alias name

S:

Continues processing.

## KAMN236-I (S)

Standby server: aa....aa of starting wait state is started as Online server.

Forced-start processing of the standby server indicated by the server alias name has finished.

aa...aa: Server alias name

S:

Continues processing.

### KAMN237-E

The processing about the server under aa...aa is stopped.

An error occurred in the processing of the server definition analysis. Processing will not be performed for the server indicated by the program name.

aa....aa: Program name

S:

Terminates processing.

O:

If message KAMN601-W is output before this message, eliminate the cause of the system call error as indicated by that message, and then restart the server. If message KAMN601-W is not output, execute the definition check command (moncheck), check the error, correct the server environment definition, and then restart the server.

#### KAMN238-D

Standby server: aa...aa is starting wait state.

The active server has not started, so the standby server indicated by the server alias name becomes the active server in a startup wait-state.

This message is output at set intervals to report status to the user.

aa...aa: Server alias name

S:

Continues processing.

O:

Perform either of the following operations:

- Start the active server.
- Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then execute the wait-state server startup command (monact).

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

#### KAMN239-I

The bb...bb command was processed cc...cc times by device processing of server:aa...aa.

In device processing of the server indicated by the server alias name, the command indicated by the command name was executed the number of times indicated by the execution count.

aa...aa: Server alias name

bb....bb: Command name

cc....cc: Execution count

S:

Continues processing.

#### Action:

If the command was not executed the required number of times, investigate the cause and place the device in the necessary state.

#### KAMN241-I

Server: aa....aa was completed as Standby server.

Startup of the standby server indicated by the server alias name has finished.

aa...aa: Server alias name

S:

Continues processing.

# KAMN242-D (E+L)

After stopping abnormally, HAmonitor of an own host: aa...aa is a restart. Online server: bb....bb has the possibility that is starting in other hosts. The initial state was changed to Standby server, and it was made a start wait state.

HA Monitor has restarted after terminating due to an error. Since the active server might have been started by a host on another system, the startup type of the server indicated by the server alias name has been changed to a standby server to place it in a wait-state.

aa....aa: Host name

bb....bb: Server alias name

S:

Continues processing.

O:

Determine the cause of HA Monitor's abnormal termination. Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then either use the wait-state server start command (monact) to make this server, currently in the startup wait-state, start as the active server, or terminate HA Monitor normally.

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

## KAMN243-D (E+L)

There is a fail of system reset or the Server who stops abnormally in the own host:aa...aa. Online server:bb....bb has the possibility that is starting in other hosts. The initial state was changed to Standby server, and it was made a start wait state.

The host of the current system cannot perform a system reset. Another possibility is that a server terminated abnormally. Since the active server might have been started by a host on another system, the startup type of the server indicated by the server alias name has been changed to a standby server to place it in an active server startup wait-state.

aa....aa: Host name

bb...bb: Server alias name

S:

Continues processing.

O:

Determine the cause of the server's abnormal termination. Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then either use the wait-state server start command (monact) to make this server, currently in the startup wait-state, start as the active server, or terminate HA Monitor normally.

#: If you execute the wait-state server startup command (monact) without sufficient verification, two active servers will be running, which might result in the corruption of shared resources.

### KAMN244-D (E+L)

Own host: aa....aa had abnormality in communication with other hosts. Online server: bb....bb has the possibility that is starting in other hosts. The initial state was changed to Standby server, and it was made a start wait state.

An error occurred during communication with a host on another system. Since the active server might have been started by a host on another system, the startup type of the server indicated by the server alias name has been changed to a standby server to place it in a wait-state.

aa....aa: Host name

bb....bb: Server alias name

S:

Continues processing.

O:

Determine the cause of the communication error, and either use the wait-state server start command (monact) to make this server, currently in the startup wait-state, start as the active server, or stop it with the wait-state server stop command (mondeact).

#### KAMN245-E

Standby server: aa....aa is started in several.

Multiple instances of the standby server indicated by the server alias name are running.

aa...aa: Server alias name

S:

Terminates processing.

O:

Correct the server environment definition, and then restart the server.

#### KAMN246-W

It connected with HAmonitor of host:aa...aa.

The version of HAmonitor of each host is different.

HA Monitor on the host indicated by the host name was connected to, but it is running a different version of HA Monitor than the host on the current system.

aa...aa: Host name

S:

Continues processing.

#### Action:

If you connected two different versions of HA Monitor, stop the HA Monitor of the wrong version, reinstall HA Monitor of the correct version, and then restart it. There is no problem if you intentionally connected two different versions of HA Monitor.

## KAMN249-E (E+L)

The version of HAmonitor of host:aa...aa and own host is different.

Processing is stopped.

The HA Monitor versions on the host indicated by the host name and the host on the current system are different.

aa....aa: Host name

S:

Stops processing.

O:

Check the HA Monitor version of each host.

### KAMN251-I

Server:aa...aa was completed as Online server.

Startup of the active server indicated by the server alias name has finished.

aa...aa: Server alias name

S:

Continues processing.

### KAMN252-I

Server: aa....aa, Hotstandby was enabled.

The server on the other system is now able to perform a hot standby.

aa...aa: Server alias name

S:

Continues processing.

# KAMN253-E (E+L)

Online server: aa...aa duplicates in host: bb...bb. Make an Online server end immediately so that there is a fear of breaking a resource used in the server.

The server indicated by the server alias name is running on a connected host. The resources the server is using might be corrupted. Shut down the active server as soon as possible, and then check the status of the resources.

aa...aa: Server alias name

bb....bb: Host name

S:

Outputs this message once every 30 seconds until the active server is shut down.

O:

Shut down the active server, and then contact a system administrator.

#### Action:

Investigate the status of the resources that were used by the active server, check the resources, and then restart the server.

#### KAMN254-I

Server: aa....aa restart completed as Online server.

The active server indicated by the server alias name has finished restarting.

aa...aa: Server alias name

S:

Continues processing.

#### KAMN255-D

Server:aa...aa was made a restart wait state.

The active server indicated by the server alias name has been placed in the restart wait-state.

aa...aa: Server alias name

S:

Continues processing.

O:

Start the active server. Alternatively, perform a planned hot-standby switchover of the active server currently in the restart wait-state by using the server hot-standby switchover command (monswap), or stop the server by using the wait-state server stop command (mondeact).

## KAMN256-I (S)

LAN adaptor status
Pair Interface Status
aa....aa bb....bb cc....cc
dd....dd ee....ee

This is the dual LAN adapter information that is output when the -1 option is specified for the server and host status display command (monshow).

aa...aa: Defined LAN adapter pair (lanX-lanY)

bb....bb: Name of LAN adapter to be used as the primary adapter

cc....cc: Operating status of the LAN adapter to be used as the primary adapter

dd....dd: Name of LAN adapter to be used as the secondary adapter

ee....ee: Operating status of the LAN adapter to be used as the secondary adapter

The operating status of the LAN adapter displays the following information:

- OK: The LAN adapter is normal.
- NG: The LAN adapter is abnormal.

<sup>2.</sup> Messages from KAMN000 to KAMN999

• \*: The LAN adapter is currently running as the primary adapter. The other LAN adapter for which \* is not displayed is on standby.

S:

Continues processing.

#### KAMN257-I

The stop request of the server:aa...aa was accepted.

Termination processing of the server indicated by the server alias name has started. Termination processing of all corresponding standby servers has also started.

aa...aa: Server alias name

S:

Stops the active server and corresponding standby servers.

### KAMN258-D

Online server: aa....aa is restart wait state.

The active server indicated by the server alias name is in the restart wait-state.

This message is output at set intervals to report status to the user.

aa...aa: Server alias name

S:

Continues processing.

O:

Start the active server. Alternatively, perform a planned hot-standby switchover of the active server currently in the restart wait-state by using the server hot-standby switchover command (monswap), or stop the server by using the wait-state server stop command (mondeact).

## KAMN259-I

Server: aa...aa, Hotstandby was completed. Host: bb....bb

The server indicated by the server alias name has finished processing a hot standby of the host indicated by the host name.

aa...aa: Server alias name

bb....bb: Host name

S:

Continues processing.

#### KAMN260-I

Patrol of server:aa...aa is started.

HA Monitor has started failure monitoring of the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

#### KAMN261-I

Patrol of server:aa...aa is ended.

HA Monitor has terminated failure monitoring of the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

## KAMN262-E

Slowdown of program: aa...aa was detected. The program is made to stop abnormally. Process ID:bb...bb.

Operation reports stopped coming in while monitoring the program indicated by the program alias name. This was considered to be a slowdown and the program was terminated abnormally.

aa...aa: Program alias name

bb....bb: Process ID of program that stopped reporting.

S:

Restarts the program based on the settings. If the preset number of restarts is exceeded, the active server is switched if it is in a state that allows hot standbys.

O:

Contact a system administrator.

Action:

Eliminate the cause of the program slowdown.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN263-E

Program: aa....aa stopped abnormally. Process ID: bb....bb.

An error occurred in the program indicated by the program alias name.

aa...aa: Program alias name

bb....bb: Process ID of program that terminated with an error.

S:

Restarts the program based on the settings. If the preset number of restarts is exceeded, the active server is switched if it is in a state that allows hot standbys.

O:

Contact a system administrator.

Action:

Eliminate the cause of the error that caused the program to terminate.

#### KAMN264-I

Program: aa...aa is restarted.

The program indicated by the program alias name has restarted.

aa...aa: Program alias name

S:

Continues processing.

### KAMN265-W (E+L)

After stopping abnormally, HAmonitor of an own host:aa...aa is a restart.

HA Monitor has restarted on the current host after terminating in error.

aa...aa: Host name

S:

Continues processing.

O:

If the host does not automatically restart after HA Monitor terminates abnormally, manually restart the host. It is possible that resources have been corrupted, particularly if a file system is being used. Be sure to restart all devices if a file system is being used.

#### KAMN266-I

Server:aa....aa, Hotstandby is started. Because an error of program was detected.

A server hot standby was executed because an error was detected in the program managed by the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

#### KAMN267-W

Slowdown of program: *aa....aa* was detected. Patrol of Online server:*bb....bb* is continued, because there is not Standby server. Process ID:*cc....cc*.

Operation reports stopped coming in while monitoring the program indicated by the program alias name. This was considered to be a slowdown, but processing could not be switched to the standby server because the server indicated by the server alias name was not running, so the current server will continue status monitoring.

aa...aa: Program alias name

bb....bb: Server alias name

cc....cc: Process ID of program that slowed down.

S:

Continues status monitoring. Performs a hot standby after the standby server corresponding to the active server completes start-up processing.

O:

If the standby server corresponding to the active server is not running on the host of another system, start the standby server.

### Action:

After the active server finishes performing a hot standby, investigate the cause of the program slowdown.

## KAMN268-E

An error of program: aa...aa was detected, but server: bb....bb exchange of system will not start because Standby server is not ready. Process ID: cc....cc.

An error was detected in the program indicated by the program alias name, but the hot standby was stopped because the standby server, indicated by the server alias name, is not running.

aa...aa: Program alias name

bb....bb: Server alias name

cc....cc: Process ID of program that terminated with an error.

2. Messages from KAMN000 to KAMN999

S:

Continues processing.

O:

Start the standby server, and then manually perform a planned hot standby, if necessary. Alternatively, restart the active server or the program that failed.

## KAMN269-E (E)

Program:aa...aa does not exist in system.

The program specified by the command option is not running.

aa...aa: Program alias name

S:

Terminates processing.

O:

Check the program alias name, and then re-execute the command.

### KAMN270-W

Patrol command of server:aa...aa execution was failed. Patrol of server will not be executed.

For an active server, the server cannot be monitored because the server monitoring command specified in the patrolcommand operand or the ptrlcmd ex operand in the server environment definition did not execute.

For a standby server, the server cannot be monitored because the server monitoring command specified in the sby\_ptrlcmd\_ex operand in the server environment definition did not execute.

aa...aa: Server alias name

S:

Continues processing.

O:

Check whether the specified server monitoring command can be executed.

### KAMN271-I

Patrol command of server:aa...aa is started.

Startup processing of the monitor-mode server monitoring command terminated normally.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Continues processing.

#### KAMN272-E

An error of Online server:aa...aa was detected by patrol command. A planned exchange of system is started.

A planned hot standby is being executed because a server error was detected by the monitor-mode server monitoring command.

aa...aa: Server alias name

S:

Performs a hot standby to a standby server.

O:

Contact a system administrator.

#### Action:

Determine the cause of the server error, and then restart the server. If you are using the monitoring function of a monitor-mode server (by specifying the ptrlcmd\_ex operand for servers), determine the cause of the server error by referring to the execution logs of the monitoring commands that were recorded in the /opt/hitachi/HAmon/spool/ptrlcmd ex/server-alias-name ptrlcmdlog file.

If this error message is output and an error is detected immediately after starting the server, the settings might be incorrect. Verify that the settings are specified as follows:

- The newline code of the shell that is used from HA Monitor conforms to the OS.
- The syntax, path, and other settings related to the shell that is used from HA Monitor are correctly specified.

# KAMN273-E (E+L)

Server aa...aa is terminated with an error.

reason:bb....bb details:cc....cc

For an active server, if yes was specified in the waitserv\_exec operand of the server environment definition, either the monitor-mode server start command (monbegin) failed, or the server failed to restart after it terminated abnormally.

For a standby server, either the monitor-mode server start command (monbegin) failed, or the server failed to restart after it terminated abnormally.

aa...aa: Program name

bb....bb: Cause code (unique to HA Monitor, 1 or 2 digits)

Cause code	Meaning
1	System call error when the server start command is executed
2	Server start command error
3	System call error when the server stop command is executed

Cause code	Meaning
4	Server stop command error

## cc....cc: Detail code

Cause code	Detail code	Meaning
If 1 or 3	errno value	Displays the value of the system call errno.
If 2 or 4	126	Program file does not have permission to execute.
	127	The program itself does not exist.
	Other value	Displays the value returned by the server start command or server stop command.

S:

For an active server, depending on the environment settings and other circumstances, the active server undergoes hot-standby switchover, restarts, or stops.

For a standby server, depending on the environment settings and other circumstances, the standby server either stops or restarts.

O:

Contact a system administrator.

#### Action:

Take one of the actions listed below, as indicated by the cause code. Restart the active server or standby server as needed.

Cause code	Corrective action
1 or 3	Eliminate the cause of the error for the system call.
2 or 4	Check whether the server start command or server stop command can be executed. If it can, eliminate the cause of the error corresponding to the cause code that is output. If it cannot, correct the command.

## KAMN274-I

Server aa...aa is normally restarted.

The program restarted because a program error was detected and the server environment definition serveexec retry operand was specified.

Alternatively, the standby server restarted, because a standby system error was detected and the server environment definition <code>sby\_servexec\_retry</code> operand was specified.

aa....aa: Program name

S:

Continues processing.

## KAMN275-E

An error of Online server: aa....aa was detected by patrol command, Server is now restarting.

The program will restart because a program error was detected and the server environment definition serveexec retry operand was specified.

aa...aa: Server alias name

S:

Continues processing.

O:

Eliminate the cause of the server's abnormal termination.

#### Action:

Determine the cause of the server error. If you are using the monitoring function of a monitor-mode server (by specifying the ptrlcmd\_ex operand for servers), determine the cause of the server error by referring to the execution logs of the monitoring commands that were recorded in the /opt/hitachi/HAmon/spool/ptrlcmd ex/server-alias-name ptrlcmdlog file.

If this error message is output and an error is detected immediately after starting the server, the settings might be incorrect. Verify that the settings are specified as follows:

- The newline code of the shell that is used from HA Monitor conforms to the OS.
- The syntax, path, and other settings related to the shell that is used from HA Monitor are correctly specified.

#### KAMN276-F

An error of Online server:*aa...aa* was detected by patrol command, but exchange of system will not start because Standby server is not ready.

A hot standby was attempted due to the occurrence of one of the events described below, but hot standby was stopped because there was no standby server:

- A program error was detected when 0 was specified for the server environment definition servexec\_retry operand.
- A program error was detected when retry was specified for the server environment definition switch\_error operand.
- The program restart limit was reached when a value other than 0 was specified for the server environment definition servexec retry operand.

aa...aa: Server alias name

S:

Depending on the environment settings and other circumstances, the active server either restarts or stops.

O:

If the active server is not currently performing operations, start the standby server, and perform a planned hot standby manually, if necessary.

If the active server has not started, restart it.

#### Action:

Determine the cause of the server error. If you are using the monitoring function of a monitor-mode server (by specifying the ptrlcmd\_ex operand for servers), determine the cause of the server error by referring to the execution logs of the monitoring commands that were recorded in the /opt/hitachi/HAmon/spool/ptrlcmd ex/server-alias-name ptrlcmdlog file.

If this error message is output and an error is detected immediately after starting the server, the settings might be incorrect. Verify that the settings are specified as follows:

- The newline code of the shell that is used from HA Monitor conforms to the OS.
- The syntax, path, and other settings related to the shell that is used from HA Monitor are correctly specified.

### KAMN280-I

Online server: aa....aa was terminated normally.

The active server indicated by the server alias name terminated normally.

aa...aa: Server alias name

S:

Continues processing.

## KAMN281-I

Standby server: aa....aa was terminated normally.

The standby server indicated by the server alias name terminated normally.

aa...aa: Server alias name

S:

Continues processing.

## KAMN283-W

Program:aa...aa, the patrol method is not corresponding to the definition. Signal:bb...bb Process ID:cc....cc.

Operation reports will not be monitored because the UAP indicated by the program alias name does not define the monitoring method in the same way as the hamon\_patrolstart function for one of the following reasons:

- A nonzero value was specified as the signum argument for the hamon\_patrolstart function (which specifies monitoring of operation reports), but the patrol operand was not specified in the monitor-mode program environment definition.
- 0 was specified as the signum argument for the hamon\_patrolstart function (which specifies process monitoring), but the patrol operand was specified in the monitor-mode program environment definition.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Program alias name

bb....bb: signum value specified in the hamon patrolstart function

cc....cc: Process ID of the UAP that invoked the hamon patrolstart function

S:

Monitors the UAP process. Does not monitor UAP operation reports.

O:

Contact a system administrator.

## Action:

If monitoring of UAP operation reports is necessary, specify tan appropriate signum value in the hamon\_patrolstart function, and then restart the process. Alternatively, specify the patrol operand in the monitor-mode program environment definition, and then restart the UAP.

# KAMN284-I

Patrol of program: aa...aa is started. Signal: bb....bb Process ID: cc....cc.

HA Monitor will start monitoring the program indicated by the program alias name.

aa...aa: Program alias name

bb....bb: signum value specified in the hamon patrolstart function

cc...cc: Process ID of the program that HA Monitor will start monitoring

S:

Continues processing.

# KAMN285-E

Program: aa...aa is terminated with an error.

Reason:bb....bb Details:cc....cc

Start or restart of the program indicated by the program alias name has failed.

aa...aa: Program alias name

bb....bb: Cause code (unique to HA Monitor, 1 or 2 digits)

cc....cc: Detail code

The detail and cause codes are defined as follows:

Cause code	Detail code	Meaning
1	1	The program's restart command did not finish before the timeout period elapsed.

Cause code	Detail code	Meaning
	2	The UAP did not invoke the hamon_patrolstart function before the timeout period elapsed.
	3	The program's restart command did not finish before the timeout period elapsed, and the UAP did not invoke the hamon_patrolstart function.
2	126	The file specified in the restartcommand operand does not have permission to execute the command.
	127	The file specified in the restartcommand operand does not exist.
	256	A system call error occurred when the program's restart command was executed.
	Other value	Displays the value returned by the program's restart command.

S:

If the cause code is 1, stops execution of the server start command and begins execution a restarts according to the settings. If the preset number of restarts is exceeded, a hot standby is executed if the active server is in a state that allows hot standbys.

If the cause code is 2, stops processing.

O:

Contact a system administrator.

## Action:

Take one of the following actions, as indicated by the cause code.

Cause code	Corrective action
1	Determine the reason the program's restart command did not return a value or the reason the program did not invoke the hamon_patrolstart function, and then eliminate the cause. Manually perform a planned hot standby, if necessary. Alternatively, restart the active server or the program that failed.
2	Check whether the program restart command can be executed. If it can, eliminate the cause of the error for the cause code that is output. If it cannot, correct the command. Manually perform a planned hot standby, if necessary. Alternatively, restart the active server or the program that failed.

## KAMN286-I

Patrol of host:aa...aa is started.

Monitoring of the host indicated by the host name has started.

aa...aa: Host name

S:

Continues processing.

## KAMN287-I

Patrol of host:aa...aa is ended.

Monitoring of the host indicated by the host name has ended.

aa....aa: Host name

S:

Continues processing.

## KAMN288-W

The online server: aa...aa is not in a hot standby state.

A system switchover cannot occur because the active server indicated by the server alias name is not on hot standby. This message is intended as a status notification for the user and is output at a given interval.

aa...aa: Server alias name

S:

Continues processing.

O:

Start the standby server.

## KAMN290-I

Online server: aa....aa was stopped by plan.

The active server indicated by the server alias name stopped as planned.

aa...aa: Server alias name

S:

Continues processing.

## KAMN291-W

Disconnection of the volume group: bb....bb of the server: aa...aa was skipped.

Disconnection of the volume group of the server indicated by the server alias name was skipped. The system continues processing while maintaining the connection.

aa...aa: Server alias name

bb....bb: Volume group name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Disconnect the device if necessary.

#### Action:

Eliminate the cause of the error for the system call indicated in the message KAMN234-E, which is output before this message. If the device name is a file system name, consult the switching log acquired in the /opt/hitachi/HAmon/spool/server-ID-name.fslog file to determine the cause of the error. If the device name is a volume group name, consult the connection log acquired in the /opt/hitachi/HAmon/spool/volume-group-name.vglog file to determine the cause of the error.

## KAMN292-E

Processing of a start command of server:aa...aa carried out the timeout.

The start command on the server indicated by the server alias name has timed out.

For an active server, the server start command (name or actcommand) stopped and server startup failed.

For a standby server, the server start command (sby actcommand) stopped and server startup failed.

aa...aa: Server alias name

S:

Stops processing.

O:

Eliminate the reason the server's start command did not finish, and then restart the server.

## KAMN293-E

Processing of a end command of server:aa...aa carried out the timeout.

The stop command on the server indicated by the server alias name has timed out.

For an active server, the server stop command (name or termcommand) and the monitoring UAP stopped, and processing to terminate the server will continue.

For a standby server, the server stop command (sby\_termcommand) stopped, and processing to terminate the server will continue.

aa...aa: Server alias name

S:

Continues processing.

O:

Eliminate the reason the server's stop command did not finish.

## KAMN294-I

Patrol of program: aa...aa is ended. Process ID: bb...bb.

HA Monitor will stop monitoring the program indicated by the program alias name.

aa...aa: Program alias name

bb....bb: Process ID of the program that HA Monitor will stop monitoring

S:

Continues processing.

## KAMN295-I

Program: aa....aa is abnormally. Server: bb....bb is restarted.

An error was detected in the program indicated by the program alias name. The server indicated by the server alias name will now restart because the restartcommand operand of the monitor-mode program environment definition has not been specified.

aa....aa: Program alias name

bb....bb: Server alias name

S:

Continues processing.

## KAMN296-I

An attempt was made to start server: aa....aa as an online server, but startup was not successful and is now being retried. (details code: bb....bb)

Startup of the server indicated by the server alias name is being retried.

aa...aa: Server alias name

bb....bb: Detail code

Detail code	Meaning
RESOURCE	Startup of the server is being retried because an attempt to connect to a shared resource failed.
SERVER	Startup of the server is being retried because an attempt to start it failed.

S:

Continues processing.

# KAMN298-I

The processing to stop the server:*aa...aa* is complete.

The server indicated by the server alias name was successfully stopped.

aa...aa: Server alias name

S:

Continues processing.

# KAMN299-I

Contact of a halt was received from host:aa...aa. Details:bb....bb

A stop message was received from the host indicated by the host name. The stopped host will now be connected to and a hot standby performed to a server in the hot-standby wait-state.

aa...aa: Host name

bb...bb: Detail code indicating what caused the host to stop

Detail code	Meaning
29	Power was cut off (host power supply was cut off)
31	Dump processing occurred (host is processing a dump)

S:

Continues processing.

# 2.4 Messages from KAMN300 to KAMN399

## KAMN300-E

Online server: aa....aa stopped abnormally.

A failure has occurred in the active server indicated by the server alias name.

aa...aa: Server alias name

S:

Depending on the environment settings and other circumstances, the active server undergoes system switchover, restarts, or stops.

O:

Contact a system administrator.

#### Action:

Investigate the cause of the error and eliminate it. If the active server is stopped, restart it.

## KAMN301-E

Slowdown of Online server:aa...aa was detected.

The server is made to stop abnormally.

Operation reports stopped being received during status monitoring of the active server indicated by the server alias name. This was considered to be a slowdown and the server was forced to terminate, resulting in an error.

aa....aa: Server alias name

S:

Depending on the environment settings and other circumstances, the active server undergoes system switchover, restarts, or stops.

O:

Contact a system administrator.

#### Action:

Investigate the cause of server slowdown and eliminate it. If the active server is stopped, restart it.

# KAMN302-W

While server: aa....aa abnormal end processing, a device cannot be processed.

A device error occurred because the server indicated by the server alias name terminated abnormally.

aa....aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Continues processing.

#### Action:

If a system switchover has not occurred, see *Handling shared resource disconnection errors* in the manual *HA Monitor Cluster Software* (for Linux(R) (x86) systems), and take the corrective action described there.

## KAMN303-E

Following an abnormal end of an Online server:aa...aa, the HAmonitor is made to end abnormally.

HA Monitor was forcibly terminated because the server indicated by the server alias name terminated abnormally. This message is output by the host's pairdown function.

aa...aa: Server alias name

S:

HA Monitor is forcibly terminated, resulting in an error. The host executes a system reset from HA Monitor on another host. The message KAMN300-E or KAMN301-E is output before this message.

O:

Contact a system administrator.

#### Action:

Determine the reason the KAMN300-E or KAMN301-E message was output, and then restart the host.

## KAMN304-E

Online server: bb....bb of host(aa....aa) stopped abnormally.

An active server on the host indicated by the host name has terminated abnormally.

aa...aa: Host name

bb....bb: Server alias name

S:

If the active server is able to perform a hot standby, a hot standby to a standby server is performed. If the active host is unable to perform a hot standby, the standby server on the local host terminates abnormally (or fails to start).

O:

Determine why the active server on the host indicated by the host name terminated abnormally.

### KAMN305-E

Online server: aa....aa cannot start.

The active server indicated by the server alias name encountered an error during startup processing. Startup processing was terminated.

aa...aa: Server alias name

S:

Depending on the environment settings and other circumstances, the active server either restarts or stops.

O:

Contact a system administrator.

Action:

Investigate the cause of the error and eliminate it. If the active server is stopped, restart it.

## KAMN306-E

Standby server: aa...aa cannot start.

The standby server indicated by the server alias name encountered an error during startup processing. Startup processing was terminated.

aa...aa: Server alias name

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Determine the cause of the failure, and then restart the server.

## KAMN307-E

Standby server: aa....aa stopped abnormally.

The standby server indicated by the server alias name terminated abnormally.

aa...aa: Server alias name

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Determine the cause of the failure, and then restart the server.

## KAMN308-E

Standby server: bb...bb of host(aa...aa) stopped abnormally.

The standby server on the host indicated by the host name terminated abnormally.

aa...aa: Host name

bb....bb: Server alias name

S:

Terminates processing.

O:

Determine why the standby server on the host indicated by the host name terminated abnormally.

## KAMN309-W

Slowdown of Online server: aa....aa was detected. Patrol is continued according to the definition of the HAmonitor.

Operation reports stopped being received during status monitoring of the active server indicated by the server alias name. This was considered to be a slowdown and status monitoring was resumed because manual was specified in the switchtype operand of the server environment definition.

aa...aa: Server alias name

S:

Continues processing.

O:

Perform a planned hot-standby switchover by using the server hot-standby switchover command (monswap). Determine the cause of the slowdown after the planned hot standby, and then restart the server.

## KAMN310-I

Server: aa....aa, Hotstandby is started.

A hot standby of the server indicated by the server alias name has started.

aa...aa: Server alias name

S:

Continues processing.

## KAMN311-I

Server: aa...aa, Hotstandby was completed.

Processing of a hot standby of the server indicated by the server alias name finished successfully.

aa...aa: Server alias name

S:

Continues processing.

## KAMN312-E

Server: aa...aa, Hotstandby is failed.

A hot standby of the server indicated by the server alias name could not be performed.

aa...aa: Server alias name

S:

Depending on the environment settings and other circumstances, the active server either restarts or stops.

O:

Contact a system administrator.

Action:

Investigate the cause of the error and eliminate it. If the active server is stopped, restart it.

# KAMN313-E

Server: aa....aa, Hotstandby cannot be done, because Standby server does not exist.

A hot standby cannot be performed because the standby server corresponding to the server indicated by the server alias name does not exist.

aa...aa: Server alias name

S:

Terminates processing.

O:

Restart the active server.

## KAMN314-E

While Hotstandby processing of server: aa....aa, a device cannot be processed.

A device error occurred during hot standby processing for the server indicated by the server alias name. The hot standby could not be performed.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Continues processing.

O:

Contact a system administrator. After eliminating the failure, restart the server.

#### Action:

Eliminate the source of the system call error as indicated by message KAMN601-W, which is output before this message.

# KAMN315-E

Online server: aa....aa is the limit of a restart.

The restart limit was reached for an active server, indicated by the server alias name, in the restart wait state, or for a server for which startup is being retried.

aa...aa: Server alias name

S:

If the server is in the restart wait state, a hot standby to a standby server is performed. The message KAMN319-I is output before this message.

If startup is being retried for the server, the server is stopped. In this case, the message KAMN296-I is output before this message.

O:

Contact a system administrator. Eliminate the cause of the error, and then restart the server.

## Action:

Investigate the cause of the error based on one of the messages listed below, whichever is output before this message, and eliminate the cause of the error. If the server mode is being used to start the server, investigate the cause of the error on the server side.

Server status	Server startup method		
	Server mode	Monitor mode	
Restart wait state	KAMN300-E		
Startup being retried	KAMN300-E	<ul> <li>Connection to a shared resource failed.         KAMN498-E     </li> <li>Execution of the server startup command failed.         KAMN273-E     </li> <li>An error was detected by the server monitoring command.         KAMN276-E         KAMN300-E     </li> </ul>	

# Legend:

--: No message is output.

## KAMN316-E

Online server:bb...bb of host(aa...aa) is the limit of a restart. Standby server was made a start wait state.

The restart limit for the active server on the host indicated by the host name has been reached. The standby server was placed into the active server start wait-state because manual was specified in the switchtype operand of the server environment definition.

aa...aa: Host name

bb...bb: Server alias name

S:

Places the standby server into the active server start wait-state.

O:

Determine and eliminate the cause of the active server failure, and then restart the server. Alternatively, restart it as the active server using the wait-state server start command (monact), or stop it using the wait-state server stop command (mondeact).

## KAMN317-W

It is a memory shortage. Restart patrol of the Online server(aa...aa) cannot be done.

A memory shortage developed during restart monitoring of the active server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

O:

Determine the cause of the error based on the KAMN601-W message output before this message. If the active server has not restarted, restart it. Alternatively, perform a planned hot-standby switchover of the active server currently in the restart wait-state by using the server hot-standby switchover command (monswap), or stop the server by using the wait-state server stop command (mondeact).

### KAMN318-I

Online server: aa....aa of a restart wait state was stopped by force.

The active server in the restart wait-state, indicated by the server alias name, was forcibly stopped.

aa...aa: Server alias name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

# KAMN319-I

Online server:bb...bb of host(aa...aa) became a restart wait state.

The active server on the host indicated by the host name has been placed into the restart wait-state.

aa....aa: Host name

bb....bb: Server alias name

S:

Continues processing.

# KAMN320-E (E+L)

The number of executing process exceeded upper limit.

Command(aa...aa) cannot be executed.

Command processing cannot be executed because a new process cannot be initiated.

aa...aa: Command name

S:

Stops command processing.

O:

Wait until fewer processes are executing, and then re-execute the command.

## KAMN321-I

Standby server: aa...aa does not exist in system.

It is changed to abnormally termination processing of Standby server.

The standby server indicated by the server alias name does not exist. Abnormal termination processing is performed for the standby server.

aa...aa: Server alias name

S:

Continues processing.

O:

Determine the reason the standby server terminated.

<sup>2.</sup> Messages from KAMN000 to KAMN999

# KAMN322-E (E)

Server:aa...aa does not exist in system.

The server specified in the command option is not running.

aa...aa: Server alias name

S:

Terminates processing.

O:

Check the server alias name, and then re-execute the command.

# KAMN323-E (E)

Server: aa....aa, an error occurred on communication with it. Command (bb....bb) cannot be executed.

An error occurred during communication with the server that is processing the command indicated by the command name. Command processing was terminated.

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Re-execute the command. If you receive the message again, contact a system administrator.

Action:

Determine the cause of the error based on the error message that was output before this message.

# KAMN324-W (E)

Standby server: aa....aa does not exist in system. Command(bb....bb) processing is continued.

The standby server does not exist. Command processing continues.

aa....aa: Server alias name

bb....bb: Command name

S:

Continues command processing.

Action:

Investigate why the applicable standby server does not exist.

<sup>2.</sup> Messages from KAMN000 to KAMN999

# KAMN325-I (S)

```
Usage:monshow -c
monshow [alias]
monshow -d [alias]
monshow -g [group]
monshow -j
monshow -r
monshow -p [alias]
monshow -t [alias]
monshow -u [alias]
monshow -o -m
monshow -o -s [alias]
```

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the server and host status display command (monshow) is incorrect.

S:

Continues processing.

# KAMN326-I (S)

```
Usage:monsbystp alias
```

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the standby server termination command (monsbystp) is incorrect.

S:

Continues processing.

# KAMN327-E (E)

The option that cannot be specified in command(aa...aa) is specified.

An option was specified that cannot be specified in the command indicated by the command name.

aa...aa: Command name

S:

Stops command processing.

O:

Check the specified option, and then re-execute the HA Monitor command.

<sup>2.</sup> Messages from KAMN000 to KAMN999

## KAMN328-E (E)

Server: aa....aa is Standby server. Command(bb....bb) cannot be executed.

A command could not be accepted because the specified server is currently a standby server.

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

0:

Execute the HA Monitor command on an active server.

# KAMN329-E (E)

Standby server: aa....aa is not on standby. Command(bb....bb) cannot be executed.

A command could not be accepted because the standby server specified by the standby server termination command (monsbystp) is not in the standby complete state.

aa....aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Once the standby server is in the standby complete state, execute the standby server termination command (monsbystp).

## KAMN330-E (E)

Online server: aa....aa was stopped by plan. Because Standby server does not exist, Hotstandby cannot be done.

A hot standby cannot be performed after a planned stop of the server indicated by the server alias name was performed because the standby server does not exist.

If the multi-standby function is being used, this message is output even if the existence of the standby server could not be confirmed due to a communications error. In this case, if HA Monitor and a standby server on a remote host are operating normally, the system is reset from that host and a hot standby performed.

aa...aa: Server alias name

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Restart the active server. If the multi-standby function is being used and a communications failure caused this error, there is no need to restart the active server if the hot standby is successful.

#### Action:

Determine the cause.

## KAMN331-E

While processing server: aa...aa, system call(bb...bb) error occurred.

A system call error occurred while the server indicated by the server alias name was running.

aa...aa: Server alias name

bb....bb: System call name

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

Eliminate the source of the system call error as indicated by message KAMN601-W, which is output before this message.

## KAMN332-E

Communication with server:aa...aa cannot be done.

An error occurred during communication with the server indicated by the server alias name (transmission of a response message).

aa...aa: Server alias name

S:

Continues processing.

O:

Determine the cause of the communication error based on the message that was output before this message, and then eliminate that cause.

# KAMN333-E

Online server:aa...aa does not in system.

The server indicated by the server alias name does not exist in this system.

aa...aa: Server alias name

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Determine the reason the active server is not running.

## KAMN334-I

The server: aa....aa was forcibly canceled.

The wait-state server stop command (mondeact) was executed, and therefore the restarting of the active server indicated by the server alias name, for which startup was being retried, was forcibly canceled.

aa...aa: Server alias name

S:

Continues processing.

# KAMN335-I (S)

## Connected host information

```
Host name Host address Patrol time aa....aa\ bb....bb\ cc....cc
```

This is the header for the status list of connected hosts that is output by the server and host status display command (monshow). The first line displays information for the current system (local host), while subsequent lines display information for remote systems that HA Monitor is connected to (remote hosts).

aa...aa: Host name

bb....bb: Host address

cc....cc: System failure monitoring period

S:

Continues processing.

## KAMN336-I (S)

Standby server: aa....aa of starting wait state was stopped by force.

A standby server in the start wait-state, as indicated by the server alias name, was forcibly stopped.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Server alias name

S:

Continues processing.

# KAMN337-E (E)

Standby server: aa....aa is not starting wait state.

Command(bb....bb) cannot be executed.

An attempt was made to execute the command indicated by the command name, but the command could not be executed because the standby server indicated by the server alias name is not in the start wait-state.

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Execute the command on a standby server that is in the start wait-state.

To stop a server that is in the start wait-state of a resource server, start or stop the resource server. Once the resource server has finished startup or shutdown processing, re-execute the command.

# KAMN338-I (S)

Online server: aa....aa of Hotstandby wait state was stopped by force.

The active server indicated by the server alias name was forcibly stopped.

aa...aa: Server alias name

S:

Continues processing.

# KAMN339-E (E)

Online server: aa....aa is not Hotstandby wait state.

Command(bb....bb) cannot be executed.

An attempt was made to execute the HA Monitor command indicated by the command name, but the command could not be executed because the active server indicated by the server alias name is not in the hot-standby wait-state.

aa...aa: Server alias name

bb....bb: Command name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Stops command processing.

O:

Execute the command on an active server in the hot-standby wait-state.

## KAMN340-E

Host: aa....aa down was detected.

One of the following events occurred while HA Monitor was monitoring the status of the indicated host:

 HA Monitor judged that a failure occurred on the host because HA Monitor did not receive an alive message or response.

If an alive message is not received, the KAMN642-W message is output before this message.

• HA Monitor on the indicated host terminated abnormally due to a host pair shutdown or a failure to disconnect shared resources.

aa...aa: Host name

S:

Terminates host monitoring, and then executes host down processing. If an active server is running on the host indicated by the host name, resets the system, and then performs a host standby.

O:

Contact a system administrator.

Action:

Determine the cause of the host failure.

## KAMN341-W

Slowdown of Online server: aa....aa was detected.

Patrol is continued, because there is not Standby server.

Operation reports stopped being received during status monitoring of the active server *aa....aa*, so a slowdown is considered to have occurred. However, no standby server is running, so status monitoring resumes.

aa...aa: Server alias name

S:

Resumes status monitoring. Performs a hot standby after the standby server corresponding to the active server finishes starting up.

O:

If the standby server corresponding to the active server is not running on the host of a remote system, start the standby server.

#### Action:

Determine the cause of the slowdown after the active server hot standby finishes, and then restart the server.

#### KAMN342-W

Statistical information file cannot be opened.

The statistical information file cannot be opened.

S:

Continues processing. Statistical information will not be acquire.

## KAMN343-W

Statistical information file cannot be closed.

The statistical information file cannot be closed.

S:

Continues processing.

Action:

Investigate why the statistical information file cannot be closed.

## KAMN344-I

Host:aa...aa is system reset.

The host resets the system because an error was detected on the host indicated by the host name.

aa...aa: Host name

S:

The host resets the system, and then the system resumes processing.

# KAMN345-W

While processing Standby server: *aa....aa*, an error occurred on communication with host(*bb....bb*). When there is not Standby server, it judges, and it continues processing.

Communications with the host indicated by the host name was lost while the server indicated by the server alias name was processing. No standby server is considered to exist, so processing resumes.

aa...aa: Server alias name

bb....bb: Host name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Determine the reason communication ceased, and the server status.

## KAMN346-W

While processing Standby server: aa....aa, an error occurred on communication with host(bb....bb). When there is not Online server, it judges, and it continues processing.

Communications with the host indicated by the host name was lost while the server indicated by the server alias name was processing. No active server is considered to exist, so processing resumes.

aa...aa: Server alias name

bb....bb: Host name

S:

Continues processing.

O:

Determine the reason communication ceased, and the server status.

## KAMN347-E

Host:aa...aa, system reset is failed.

After an error was detected on the host indicated by the host name and a system reset was initiated, an error occurred during reset processing. If the public cloud environment is not used, the message KAMN621-E or KAMN624-E is output before this message.

aa...aa: Host name

S:

If the public cloud environment is not used, processing differs depending on the method used to protect data on a shared disk.

- For a host reset, the system stops hot-standby switchover processing.
- For a hot-standby switchover via hybrid fencing, the system continues hot-standby switchover processing and performs SCSI reservation processing.

If the public cloud environment is used, the system stops hot-standby switchover processing.

O:

Contact a system administrator.

## Action:

In any environment other than a public cloud environment:

Determine the reason the system could not reset based on the error details in the KAMN621-E or KAMN624-E message.

## In the AWS environment:

There is a possibility that the AWS CLI could not execute on AWS. Check whether communication to the endpoint is possible. If you cannot determine why the system cannot be reset, see /opt/hitachi/HAmon/spool/cloud/moncld fstop *forced-stop-target-instance-ID*.log and determine the cause of the error.

## In the Azure environment:

There is a possibility that the Azure CLI could not execute on Azure. Check whether communication to the endpoint is possible. If you cannot determine why the system cannot be reset, see <code>/opt/hitachi/HAmon/spool/cloud/moncld\_fstop\_forced-stop-target-VM-resource-ID.log</code> and determine the cause of the error.

#### In the OCI environment:

There is a possibility that the OCI CLI could not execute on OCI. Check whether communication to the endpoint is possible. If you cannot determine why the system cannot be reset, see /opt/hitachi/HAmon/spool/cloud/moncld fstop *forced-stop-target-instance-OCID*.log and determine the cause of the error.

#### KAMN348-I

A requirement of system reset was received from the HAmonitor of host:aa...aa.

A system reset request was received from the HA Monitor on the host indicated by the host name. This message is output when the pairdown function is used and a device connected to a server cannot be disconnected.

aa...aa: Host name

S:

Continues processing.

#### KAMN350-E

While processing server: aa...aa, system call(bb...bb) error occurred.

A system call error occurred while the server indicated by the server alias name was running.

aa...aa: Server alias name

bb....bb: System call name

S:

Terminates processing.

O:

Contact a system administrator.

## Action:

Eliminate the source of the system call error as indicated by KAMN601-W, which is output before this message.

## KAMN351-E

While processing Online server:aa...aa, an error occurred on communication with host(bb...bb).

A communications error occurred between a host on a remote system and the active server.

aa....aa: Server alias name

bb....bb: Host name

S:

Terminates processing.

O:

Determine the cause of the communications error and the status of the standby server, and then terminate the standby server, if necessary.

## KAMN352-E

Online server was terminated in the activating of Standby server:aa...aa.

An attempt was made to communicate with a server on a remote host, but the server was either shutting down or had already terminated.

aa...aa: Server alias name

S:

Terminates processing.

O:

Determine the server status, and then restart the server, if necessary.

#### KAMN353-W

While processing Online server: aa....aa, an error occurred on communication with host(bb....bb). When there is not Standby server, it judges, and it continues processing.

An error occurred while the server indicated by the server alias name was communicating with the host indicated by the host name. No standby server was considered to exist on the host, so processing resumes.

aa...aa: Server alias name

bb....bb: Host name

S:

Continues processing.

O:

Determine the cause of the communications error and the status of the standby server, and then terminate the standby server if one exists.

## KAMN354-E

Online server:bb...bb of host (aa...aa) was terminated normally.

The standby server cannot start because the active server has terminated.

aa....aa: Host name

bb....bb: Server alias name

S:

Terminates processing.

O:

Determine the server status, and then restart the server, if necessary.

## KAMN355-E

While processing server: aa...aa, a device cannot be processed.

An error occurred during an attempt to access a device that was connected to the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

O:

Disconnect the device.

## KAMN356-E

Standby server: aa....aa cannot be done Hotstandby, because it is not on standby.

A planned hot-standby switchover was executed by using the server hot-standby switchover command (monswap), but the standby server indicated by the server alias name was not in a state that allows a hot-standby switchover to be performed.

aa...aa: Server alias name

S:

Flags the standby server as a server that is not allowed to start.

O:

Start the active server.

# KAMN358-I

Standby server: bb....bb of host (aa....aa) was terminated normally.

Processing of the standby server indicated by the server alias name on the host indicated by the host name has terminated.

aa...aa: Host name

bb....bb: Server alias name

S:

Terminates processing.

## KAMN359-E

The state of Online server(bb....bb) of host(aa...aa) is abnormal.

The active server on the host indicated by the host name is in an abnormal status.

aa....aa: Host name

bb....bb: Server alias name

S:

Terminates processing.

O:

Restart the standby server, if necessary.

## KAMN360-I (S)

```
------Detailed Information------aa....aa bb....bb
```

This is the header for the detailed server information list that is output by the server and host status display command (monshow).

aa...aa: Message ID

bb....bb: Text of the message

S:

Continues processing.

# KAMN361-I (S)

Online server: aa....aa of Hotstandby wait state is started.

<sup>2.</sup> Messages from KAMN000 to KAMN999

The active server in a hot-standby wait-state, as indicated by the server alias name, has started.

aa...aa: Server alias name

S:

Continues processing.

## KAMN362-I

Standby server: aa...aa of starting wait state was stopped by force.

The standby server in a start wait-state, as indicated by the server alias name, was forcibly stopped.

aa...aa: Server alias name

S:

Continues processing.

## KAMN363-I

Online server:aa...aa of Hotstandby wait state was stopped by force.

The active server in a hot-standby wait-state, as indicated by the server alias name, was forcibly stopped.

aa...aa: Server alias name

S:

Continues processing.

# KAMN364-D (S+L)

Server:aa...aa is Hotstandby wait state, because system reset is failed.

The active server indicated by the server alias name cannot reset the system, so it is placed in the hot-standby wait-state.

aa...aa: Server alias name

S:

Continues processing.

O:

Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then start the server currently in the hot-standby switchover wait state as the active server by using the wait-state server start command (monact), or stop the server by using the wait-state server stop command (mondeact).

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

#### KAMN368-D

Online server: aa....aa is system switchover wait state.

The active server indicated by the server alias name is in the hot-standby wait-state.

This message is output at set intervals to report status to the user.

aa...aa: Server alias name

S:

Continues processing.

O:

Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then start the server currently in the hot-standby switchover wait state as the active server by using the wait-state server start command (monact), or stop the server by using the wait-state server stop command (mondeact).

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

## KAMN369-I

Host: aa....aa is abnormal. A contact was received from the HAmonitor of other host: bb....bb.

A message was received from a host on a remote system stating that it detected a failure in the host indicated by the host name.

aa...aa: Host name

bb....bb: Remote host name

S:

Continues processing. Corrective action for the host that experienced the failure is implemented by the remote host that detected the failure.

O:

If you are performing operations involving the host that experienced the failure, check the system status.

## KAMN370-E (E)

Online server: aa...aa is already started.

The active server indicated by the server alias name is already running.

aa...aa: Server alias name

S:

Stops command processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Correct the server environment definition, and then restart the server.

# KAMN371-I (S)

Server: aa....aa is started as Online server.

The server indicated by the server alias name has been started as the active server.

aa...aa: Server alias name

S:

Continues processing.

# KAMN372-E (E)

Server: aa....aa is Standby server.

Command(bb....bb) cannot be executed.

An attempt was made to execute the HA Monitor command indicated by the command name, but the specified server is a standby server; therefore, the command could not be executed.

aa...aa: Server alias name

bb....bb: Command name

S:

Terminates processing.

O:

Check the server alias name and the server's startup type and status, and then re-execute the command.

# KAMN373-I (S)

Online server: aa....aa was terminated normally.

HA Monitor has started shutdown processing of the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

# KAMN374-I (S)

Usage:aa...aa Alias

This message is output when a command's syntax is incorrect.

aa...aa: Command name

S:

Continues processing.

# KAMN375-E (E)

Definition file:servers, The method of a definition of the alias (aa...aa) is incorrect. Command processing is stopped.

An error occurred during analysis of the server environment definition. Processing on the server corresponding to the server alias name specified in the HA Monitor command has stopped.

aa...aa: Server alias name

S:

Terminates processing.

O:

Correct the server environment definition, and then restart the server.

# KAMN376-I (S)

Server: aa....aa is started.

Startup of the server indicated by the server alias name has begun.

aa...aa: Server alias name

S:

Continues processing.

## KAMN377-E (E+L)

Errors occurred in the activating or ending of server:aa...aa. Processing is stopped. Cause:bb...bb Details:cc....cc

An error occurred in startup or shutdown processing for the server indicated by the server alias name. Processing for the server has stopped. For more information about detail codes, see the documentation for the applicable OS.

aa...aa: Server alias name

bb....bb: Cause code (unique to HA Monitor, 1 or 2 digits)

<sup>2.</sup> Messages from KAMN000 to KAMN999

Cause code	Meaning
3	Server stop request The causes are as follows:
	Invalid definition
	If the one of the following messages is output before this message, see the description for that message. KAMN190-E, KAMN191-E, KAMN220-E, KAMN222-I, KAMN229-E, KAMN245-E, KAMN412-E,
	KAMN413-E, KAMN964-E, KAMN970-E
	If none of these messages have been output, one of the following applies:
	<ul> <li>Startup was stopped because the startup was attempted for multiple resource servers in the same group.</li> <li>Startup of a child server was stopped because a server in a different group was specified as its parent server.</li> </ul>
	• Startup of a child server was stopped because its parent server definition contains an error that stopped analysis.
	• Startup was stopped because, even though use is specified for the program operand in the server environment definition of the server indicated by the server alias name, none of the programs associated with the server whose server alias name is specified in the server_alias operand of the monitor-mode program environment definition are defined in the monitor-mode program environment definition.
	• Startup was stopped because one of the programs specified for the server whose server alias is specified in the server_alias operand is specified more than once in the name or alias operand.
	<ul> <li>Startup was stopped because the value specified in the name or alias operand for the program that specifies the server whose server alias name is specified in the server_alias operand is the same as a program that is already running.</li> </ul>
	Other causes
	If the one of the following messages is output before this message, see the description for that message.
	KAMN285-E, KAMN292-E, KAMN445-I, KAMN498-E, KAMN530-E, KAMN933-E, KAMN937-E
	If none of these messages has been output, one of the following applies:
	<ul> <li>The resource server startup was stopped because a child server terminated in error while the resource server was starting up.</li> </ul>
	<ul> <li>The startup of a server in the middle of a grouped system switchover was stopped because another server involved in the switchover terminated in error.</li> </ul>
	<ul> <li>Server startup was stopped because it was starting up during a grouped system switchover.</li> </ul>
	<ul> <li>Server startup was stopped because an attempt was made to start a server from the same group during a grouped system switchover.</li> </ul>
	• The active server of a remote system was stopped when an attempt was made to start it as a standby server.
4	Restart request
5	System call error

cc....cc: Detail code (sets errno of system call; when 0, there is no detail code)

S:

Terminates processing.

O:

Contact a system administrator.

# Action:

Take one of the following actions, as indicated by the cause code:

Cause code	Corrective action
3	For a definition error, carefully review the HA Monitor definition, and then restart the server, if necessary.  For other causes, check the server status, and then restart the server, if necessary.
4	Re-execute the command.
5	Eliminate the cause of the system call error, and then re-execute the command.

# KAMN378-I (S)

Server:aa....aa is started as Standby server.

The server indicated by the server alias name has been started as the standby server.

aa...aa: Server alias name

S:

Continues processing.

# KAMN379-E (E)

Server:aa...aa was not completed as Online server.

Termination processing cannot be performed because the server indicated by the server alias name has not completed startup.

aa...aa: Server alias name

S:

Terminates processing.

O:

Check the server status, and then re-execute the command.

# KAMN380-I (S)

Standby server: aa....aa is started as Online server.

The standby server indicated by the server alias name has been started as the active server.

aa...aa: Server alias name

S:

Continues processing.

# KAMN381-E (E+L)

Server *aa...aa* processing is stopped.

An attempt was made to start the server indicated by the program name by using the server start command (name, actcommand, or sby\_actcommand), but the server could not start.

aa...aa: Program name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates processing.

O:

Eliminate the reason why the server did not start.

# KAMN382-I (S)

Server:aa....aa was completed as Online server.

Startup of the active server indicated by the server alias name has finished normally.

aa...aa: Server alias name

S:

Continues processing.

### KAMN383-I (S)

Server: aa....aa was completed as Standby server.

Startup of the standby server indicated by the server alias name has finished normally.

aa...aa: Server alias name

S:

Continues processing.

#### KAMN384-E

Standby server cannot be started automatically.

Host:aa...aa, Server:bb....bb, Cause:cc....cc

The standby server did not automatically start.

aa....aa: Host name of the standby system on which the automatic start was attempted

bb....bb: Server alias name whose automatic start was attempted

cc....cc: Source code

Cause code	Meaning	
TIME-OUT	No response from standby system host	
MEMORY	Insufficient memory	
SEND	Communications failure	

Cause code	Meaning	
SIMULATED	Failure of automatic start in standby system host	

Stops processing.

O:

Execute the server and host status display command (monshow), and then check the standby server status. If the standby server is not in the startup state, execute the monitor-mode server start command (monbegin) from the standby system.

### KAMN385-W (E+L)

Server:aa...aa failed in starting. It is restarted.

An attempt to start the server indicated by the server alias name has failed. The server has been restarted.

aa...aa: Server alias name

S:

Continues processing.

O:

Check whether the server restarted normally.

### KAMN386-E (E)

Server: aa....aa is not a server start in the monbegin command. Command cannot be executed.

The command could not be executed because the server indicated by the server alias name is not the server started by the monitor-mode server start command (monbegin).

aa....aa: Server alias name

S:

Stops processing.

O:

Check the server name, and then re-execute the command.

### KAMN388-I (S)

Online server: aa...aa of a restart wait state was stopped by force.

The active server in the restart wait-state, as indicated by the server alias name, was forcibly stopped.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Continues processing.

# KAMN390-I (S)

Path status Display device name host name status *aa...aa bb....bb cc....cc* 

This is the header for the status list of monitoring paths that is output by the monitoring path status display command (monpath).

aa....aa: TCP/IP host name of the monitoring path

bb....bb: Error status of the remote host name or the monitoring path

cc....cc: Status of communication with the remote host

S:

Continues processing.

# KAMN390-I (S)

Path status Display device name host name host(IP\_address) status aa....aa bb....bb cc....cc(dd....dd) ee....ee

This is the header for the status list of monitoring paths that is output by the monitoring path status display command (monpath -i).

aa....aa: TCP/IP host name of the monitoring path

bb....bb: Error status of the remote host name or the monitoring path

cc...cc: TCP/IP host name of the remote system monitoring path (shown for normal monitoring paths)

dd...dd: IP address of the remote system monitoring path (shown for normal monitoring paths)

ee....ee: Status of communication with the remote host

S:

Continues processing.

### KAMN391-I (S)

Usage: monpath [-i] [check\_time]

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the monitoring path status display command (monpath) is incorrect.

S:

Continues processing.

# KAMN392-E (E)

Option value: bb....bb of the aa....aa command is improper.

The value specified for an option of a command is invalid.

aa...aa: Command name

bb....bb: Option value

S:

Stops command processing.

O:

Specify a valid option value, and then re-execute the command.

# KAMN393-E (E)

Because the HAmonitor is checking a Patrol Path, monpath command cannot be accepted.

The monitoring path status display command (monpath) cannot be executed because a monpath command is already executing or a monitoring path re-check is being executed with the pathpatrol retry operand specified.

S:

Stops command processing.

O:

Wait 30 to 60 seconds, and the re-execute the command.

#### KAMN394-I

Devices cannot be disconnected in host: aa...aa.

A server device cannot be disconnected by the host indicated by the host name. A KAMN348-I message is output following this message.

aa....aa: Host name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Determine the reason that the device cannot be disconnected by the host indicated by the host name, and then eliminate the cause of the failure.

# KAMN395-I (S)

aa....aa Status Display host name status bb....bb cc....cc

Indicates the reset path status list that is output by reset path status display command (monrp).

aa...aa: Hardware used for system resets

• Reset Path: Displayed when a reset path is specified for the system reset.

bb....bb: Host name

*cc....cc*: Status of the reset path (if the physical partition reset function is being used, displays whether a physical partition can be reset)

- OK: Normal
- NG: Abnormal
- OK (Partition): Physical partition can be reset.
- NG (Partition): Physical partition cannot be reset.

S:

Continues processing.

### KAMN396-I (S)

Usage: monrp [host name]

This message is output after message KAMN327-E or KAMN392-E when the syntax of the reset path status display command (monrp) is incorrect.

S:

Continues processing.

### KAMN397-E (E)

Host: aa...aa does not exist in system.

The host specified by the command is not running

2. Messages from KAMN000 to KAMN999

aa...aa: Host name

S:

Stops command processing.

O:

Check the host name, and then re-execute the command.

### KAMN398-E (E)

Because the HAmonitor is checking a Reset Path, monrp command cannot be accepted.

The reset path status display command (monrp) cannot be accepted either because a monrp command is already executing, or because HA Monitor is doing a health check of the reset path.

S:

Stops command processing.

O:

Wait 30 to 60 seconds, and the re-execute the command.

#### KAMN399-E

Abnormality occurred in Reset Path. Other host:aa...aa

An error occurred in the reset path of the host indicated by the host name.

aa...aa: Host name

S:

Continues processing.

Processing differs depending on the method used to protect data on a shared disk.

- For a system reset, if a system failure is detected while the reset path contains an error, the system reset fails, and the system is placed in the hot-standby switchover wait-state without the standby server being able to perform a system switchover to the active server. (Message KAMN364-D is output.)
- For a hot-standby switchover via hybrid fencing, if a system failure is detected while the reset path contains an error, the system reset fails, but the hot-standby switchover continues by using SCSI reservation on a shared disk.

O:

Eliminate the cause of the error, and then execute the reset path status display command (monrp).

<sup>2.</sup> Messages from KAMN000 to KAMN999

# 2.5 Messages from KAMN400 to KAMN499

#### KAMN400-E

While HAmonitor activated, an error had occurred. Activation is stopped.

An unavoidable error occurred during HA Monitor startup. Another message indicating the error detail is output prior to this message.

S:

Terminates processing.

O:

Take the corrective action described for the message that indicated the error details.

### KAMN402-E

There are errors in definition file:sysdef. Start again in the correct definition file.

HA Monitor cannot start because there is an error in the HA Monitor environment settings.

S:

Terminates processing.

O:

Correct the definition error in the HA Monitor environment settings, and then restart the system.

#### KAMN404-I

A notification of hostdown was received from host: aa...aa. Name of down host:bb...bb

The system indicated by the notifying host name sent a notification that a failure was detected in the system indicated by the failed host name.

aa...aa: Name of notifying host

bb....bb: Name of failed host

S:

Continues processing.

### KAMN407-I

A system reset will now be performed for the partition because an attempt to perform a system reset of the host: aa...aa has failed. Error details: bb....bb

A system reset will be performed on the physical partition because an attempt to perform a system reset on the host indicated by the host name (logical partition) failed.

aa...aa: Host name

bb....bb: Detail code

Detail code	Meaning	
RESET-ERR	A reset error occurred in the failure management processor.	
CTRLPTH-DOWN	A control line was severed on the reset path.	
LPAR-RSP-FAIL	An error occurred in a query to the affected host.	
SSH-ERR	A logical reset failed.	

S:

Continues processing.

#### KAMN408-E

The process which send alive message is stopped abnormally. Error details : aa....aa

The daemon that sends alive messages has terminated abnormally.

aa...aa: Internal error code

S:

Continues processing.

O:

Restart HA Monitor.

Action:

Contact maintenance personnel.

### KAMN409-I

Sending errors occurred in Patrol Path:aa...aa.

Host:bb....bb

A system call error occurred during an attempt to transmit a message to the host indicated by the host name.

aa...aa: Failed monitoring path name

bb....bb: Host name

<sup>2.</sup> Messages from KAMN000 to KAMN999

The host name is displayed as ---- if the error occurred during transmission of a message that is part of a multicast.

S:

Continues processing.

Action:

Eliminate the cause of the system call error as indicated by KAMN601-W, which is output before this message.

#### KAMN410-I

The specified number of suppress\_reset operand or more hosts are confirmed to be processing. Name of down host: aa....aa

The number of hosts currently active has been confirmed to meet or exceed the minimum number of active hosts.

aa...aa: Name of failed host

S:

Resets the system, and then performs a system switchover.

### KAMN411-I

A system reset to the host:aa...aa has not been required or has failed.

A reset of the system indicated by the host name is not required, or the system reset has failed.

aa...aa: Name of failed host

S:

Continues processing.

#### KAMN412-E

The number of connected server exceeded upper limit.

The number of operating servers, or the number of operating grouped servers, has reached the HA Monitor system limit. The startup request could not be completed.

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Rebuild the system so that the number of servers operating on the HA Monitor system does not exceed the limit.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN413-F

The number of connected program exceeded upper limit.

The number of executing programs has reached the HA Monitor system limit. The startup request could not be completed.

S:

Stops server startup processing. If a program was started manually, terminates the program.

O:

Contact a system administrator.

Action:

Rebuild the system so that the number of programs executing on the HA Monitor system does not exceed the limit.

### KAMN414-E

The host address is already in use by another HA monitor that shares the reset path. host address : aa....aa, IP address : bb....bb, details : cc....cc

The host address is the same as that of one of the following:

- HA Monitor indicated by the IP address
- HA Monitor that uses the failure management processor indicated by the IP address
- HA Monitor that uses the hot-standby feature indicated by the IP address

If there is duplication, the following phenomena occur and the database might be damaged by mounting of both hosts:

- When the error occurs in a host, an error also occurs in other unrelated hosts that have a hot standby configuration.
- When a host is restarted, an error also occurs in other unrelated hosts that have a hot standby configuration.

If the local system is running in a virtual environment based on VMware ESXi and the detail code is SVP/HRL, the host address indicates the machine address.

aa...aa: Host address

bb....bb: IP address

cc....cc: Detail code

Detail code	Meaning	
HA MONITOR	The host address is the same as that of the HA Monitor indicated by the IP address.	
SVP/HRL	The host address or the machine address is the same as that of one of the following:  HA Monitor that uses the failure management processor indicated by the IP address  HA Monitor that uses the hot-standby feature indicated by the IP address	

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Stop the local system or the HA Monitor indicated by the detail code, and then take one of the following steps:

- Separate the networks so that no messages are exchanged between hot-standby configurations.
- Assign different reset paths (including failure management processors) and port numbers used for monitoring paths to each hot-standby configuration so that messages are not transferred between different hot-standby configurations.
- Change the host addresses of all HA Monitors that share the network to unique values that are also unique within each hot standby configuration.

If you take the second or third step above, restart the HA Monitors whose settings were changed.

Do not restart the OS until you restart the HA Monitors.

#### KAMN415-W

The request of HAMON UAPNAME: aa....aa is not accepted.

Reason: bb....bb. Process ID: cc....cc.

An invalid request was received by the program name indicated by HAMON\_UAPNAME. The request is ignored. Note that the specification for the HAMON\_UAPNAME environment variable is a program name.

aa....aa: Program name

#### bb....bb: Cause code

Cause code	Meaning		
1	Invalid program name The causes are as follows:		
	Definition error		
	• The program name specified in the HAMON_UAPNAME environment variable is not specified in the name operand of the monitor-mode program environment definition.		
	• The server specified in the server_alias operand of the monitor-mode program environment definition is not running or is not defined in the server environment definition.		
	• nouse is specified in the program operand of the server environment definition of the server specified in the server_alias definition of the monitor-mode program environment definition.		
	Operation error		
	<ul> <li>After the server environment definition or monitor-mode program environment definition were corrected, a UAP was started manually without restarting the server.</li> </ul>		
	<ul> <li>A UAP was started manually without starting the server specified in the server_alias operand of the monitor-mode program environment definition.</li> </ul>		
2	Timing for invoking an API is invalid		
	An API was invoked at an invalid time, generally as a result of a UAP being operated manually.		
3	The hamon_patrolstart function was invoked multiple times		

cc....cc: Requesting process ID

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

Take one of the following actions, as indicated by the cause code:

Cause code	Corrective action		
1	For a definition error, carefully review the definition, and then restart the server.  If the server did not restart after the definition was corrected, restart the server.  If a UAP was manually started without starting the server, start the server. To continue without starting the server and without monitoring the UAP with HA Monitor, specify nouse as the HAMON_API_PATROL environment variable, and then start the UAP.		
2	Check the server and UAP status, and then start the UAP manually.		
3	Check whether the hamon_patrolstart function has been invoked multiple times, and then correct the UAP, if necessary.		

### KAMN420-I

Group: aa....aa of grouped exchange of systems are started.

A grouped system switchover involving the group indicated by the group name has started.

aa...aa: Name of group to which grouped system switchover is performed

S:

Continues processing.

#### KAMN421-I

Server: aa....aa became a state of which a grouped exchange of system is possible in group: bb....bb.

The server indicated by the server alias name is now able to perform a grouped system switchover with the group indicated by the group name.

aa...aa: Server alias name

bb....bb: Group name

S:

Continues processing.

### KAMN423-E (E+L)

Because it is being grouped, Standby server:aa....aa of an own host cannot be exchanged of system.

The active system server terminated abnormally, but, because it is grouped, a grouped system switchover cannot be performed.

aa...aa: Server alias name

S:

Waits in the standby server startup complete state.

O:

Either start the active server, or use the standby server termination command (monsbystp) to stop the standby server. Alternatively, perform a planned hot-standby switchover for all server groups that were grouped in a grouped-system switchover. When performing a planned hot-standby switchover, specify the -g option for the server hot-standby switchover command (monswap).

#### KAMN424-W

Slowdown of Online server: aa....aa was detected. Because it is grouped, hotstandby cannot be done. Patrol is continued.

A slowdown was detected while monitoring the status of the active server indicated by the server alias name, but, because it is grouped, a hot standby cannot be performed. Status monitoring continues.

aa...aa: Server alias name

S:

Continues server status monitoring. If a grouped system switchover of a server group has already been started, performs a hot standby of all servers together.

O:

Determine the reason the server slowdown occurred.

### KAMN426-E (E)

Group: aa....aa are not states that a grouped exchange of system can be done.

The group indicated by the group name is not in a state that allows grouped system switchover.

aa...aa: Group name

S:

Terminates processing.

O:

Execute the server and host status display command (monshow) with the -g option to check the group status, and then re-execute the command with the correct group name.

### KAMN427-I (S+L)

Standby server: aa....aa of a grouped exchange of systemwait state is started as Online server.

A hot standby of a server in the grouped system switchover wait-state has started.

aa...aa: Server alias name

S:

Continues processing.

# KAMN428-E (E)

Group: aa....aa does not exist in system.

The group indicated by the group name does not exist.

aa....aa: Group name

S:

Terminates processing.

O:

Check the group name, and then re-execute the command.

# KAMN429-I (S)

A planned exchange of system is done for a group: aa...aa.

A planned hot standby involving the group indicated by the group name has started.

aa....aa: Group name

S:

Continues processing.

### KAMN430-E

An error occurred in the processing of an exchange of system of group: aa...aa of the server: bb...bb. Confirm the state of the server.

An error occurred during hot standby processing for the group indicated by the group name.

aa....aa: Group name

bb....bb: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates processing.

O:

Check the server status using the server and host status display command (monshow). If the server is stopped, restart it, and then re-execute the monshow command.

### KAMN431-E (E+L)

Because it is grouped, a planned exchange of system cannot be done for the server:aa...aa.

A planned hot standby cannot be done for the server indicated by the server alias name because it is grouped.

aa...aa: Server alias name

S:

Terminates processing.

O:

Check the status of the server by using the command for displaying the status of servers and hosts (monshow), and then perform a planned hot-standby switchover again. When performing a planned hot-standby switchover, specify the -g option for the server hot-standby switchover command (monswap).

#### KAMN432-W

While processing Online server: aa....aa, an error occurred on communication with host (bb....bb).

An error occurred when the server indicated by the server alias name attempted to communicate with the host indicated by the host name.

aa...aa: Server alias name

bb....bb: Host name

S:

Continues processing.

O:

Determine the reason communications failed, and the server status.

### KAMN433-W

Server:aa...aa does not exist in system.

The server specified in the command option is not running.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates processing.

O:

Check the server alias name, and then re-execute the command.

#### KAMN434-W

Server:aa...aa is not a state that the bb...bb command can be executed. Command processing is stopped.

The server indicated by the server alias name is not in a state that allows the specified command to be executed. Command processing has stopped.

aa...aa: Server alias name

bb....bb: Command name

S:

Terminates command processing.

O:

Check the server status, wait for it to enter a state that allows the specified command to be executed, and then re-execute the command.

#### KAMN435-W

Server: aa...aa, The cc....cc is defined in the bb....bb.

The same value is already specified for the indicated operand in the server environment definition of the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Check whether the value that you were attempting to add was already defined in the server environment definition, and then re-execute the HA Monitor command.

#### KAMN436-W

Server: aa...aa, The cc....cc is not defined in the bb....bb.

The specified value was never defined for the indicated operand in the server environment definition of the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Check whether the value you were attempting to delete was defined in the server environment definition, and then re-execute the HA Monitor command.

#### KAMN437-W

When the *cc....cc* is defined to the *bb....bb* of Server:*aa....aa*, The number of the values has exceeded a maximum value.

An attempt to add the specified value to the corresponding operand in the server environment definition of the server indicated by the server alias name has caused the maximum number of values that can be specified to be exceeded.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Carefully review the resource configuration to ensure the number of values specified does not exceed the maximum limit.

### KAMN438-W

The value: aa...aa, The method of a definition of the value is incorrect.

The indicated value was not specified correctly.

aa...aa: Specified value

S:

Terminates command processing.

O:

Re-execute the HA Monitor command correctly.

#### KAMN439-W

Because server: aa...aa is during command processing, Command(bb...bb) cannot be executed.

The specified command could not be executed because the server indicated by the server alias name is already processing a command.

aa...aa: Server alias name

bb....bb: Command name

S:

Terminates command processing.

O:

After the currently executing command finishes processing, re-execute the command.

# KAMN444-E

Online server: aa....aa is already started. Server: bb....bb cannot start.

The server indicated by the server alias name cannot start because the server indicated by the active server alias name is already running. Start processing is terminated.

aa...aa: Active server alias name

bb....bb: Server alias name

S:

Terminates processing.

O:

Either stop the active server, or perform a planned hot standby and restart the server, as necessary.

#### KAMN445-I

Server:bb...bb is terminated, because online server:aa...aa is started.

The server indicated by the server alias name was shut down because the active server indicated by the active server alias name is starting.

aa...aa: Active server alias name

bb...bb: Server alias name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

### KAMN446-E (E)

Online server is already started. Server:aa...aa cannot start.

The server indicated by the server alias name could not start because an active server is already running. Startup processing is terminated.

aa...aa: Server alias name

S:

Terminates processing.

O:

Either stop the active server, or perform a planned hot standby and restart the server, as necessary.

#### KAMN447-W

The number of operating hosts is the number specified for the suppress\_reset operand or fewer. (number of operating hosts:aa....aa, number specified for the suppress\_reset operand:bb....bb)

Because the number of active hosts is equal to or smaller than the minimum number of active hosts, the host indicated by the host name is suppressing a reset to another system. If an error occurs in the active system, the active system might be prevented from being reset and might be placed in the hot-standby wait-state.

aa...aa: Number of active hosts

bb....bb: Minimum number of active hosts

S:

Continues processing.

O:

If you do not want the active system to be placed in the hot-standby wait-state, increase the number of active hosts to at least the minimum number of active hosts.

### KAMN448-W (E+L)

Definition file:servers, Abnormalities occurred during processing of a aa...aa operand. Details:bb...bb

An error occurred during processing of the aa....aa operand of the server environment definition.

aa....aa: Operand name

bb....bb: Detail code (1 or 2 digits)

Detail code	Meaning	
1	No value specified for operand.	
2	Operand is missing.	

Continues processing.

O:

Check the content of the operand specified in the server environment definition, and correct it, if necessary.

#### KAMN449-I

Server aa...aa, The specification value corresponding to cc...cc of a bb...bb operand was changed.

The value specified for the indicated operand in the server environment definition of the server indicated by the server alias name has been changed.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Resource name

S:

Continues processing.

# KAMN450-I (S)

Usage: mondevice -Q

mondevice alias -a device-type resource-name

mondevice alias -d device-type resource-name

mondevice alias -c device-type resource-name change-type attribute

This message is output after message KAMN021-E when the syntax of the command for dynamically changing a server's shared resources (mondevice) is incorrect.

S:

Continues processing.

### KAMN451-E (E)

Server:aa....aa is not a state that the bb....bb command can be executed. Command processing is stopped.

Command processing was terminated because the server indicated by the server alias name is not is a state that allows this command to be executed.

aa...aa: Server alias name

bb....bb: Command name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates command processing.

O:

Check the server status, wait for it to enter a state that allows this command to be executed, and then re-execute the command.

# KAMN452-E (E)

Server: aa...aa, The cc....cc is defined in the bb....bb.

The same value is already specified for the indicated operand in the server environment definition of the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Check whether the value you are attempting to add was already defined in the server environment definition, and then re-execute the HA Monitor command.

### KAMN453-E (E)

Server:aa...aa, The cc....cc is not defined in the bb...bb.

The value specified for the indicated operand in the server environment definition of the server indicated by the server alias name could not be found.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Check whether the value you are attempting to delete was defined in the server environment definition, and then re-execute the HA Monitor command.

# KAMN454-E (E)

When the *cc....cc* is defined to the *bb....bb* of Server:*aa....aa*, The number of the values has exceeded a maximum value.

Specifying another value for the indicated operand in the server environment definition of the server indicated by the server alias name has caused the maximum number of values that can be specified to be exceeded.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Specified value

S:

Terminates command processing.

O:

Carefully review the resource configuration to ensure that the number of values specified does not exceed the limit.

### KAMN455-E (E)

The value: aa...aa, The method of a definition of the value is incorrect.

The indicated value was not specified correctly.

aa...aa: Specified value

S:

Stops command processing.

O:

Re-execute the HA Monitor command correctly.

### KAMN456-E (E)

An error occurred in command(aa....aa). Command cannot be executed.

An error occurred during processing of the HA Monitor command indicated by the command name. Command processing is terminated.

aa....aa: Command name

S:

Terminates command processing.

O:

Contact a system administrator.

Action:

Determine the cause of the error based on the error message that was output before this message.

<sup>2.</sup> Messages from KAMN000 to KAMN999

If this message is displayed after executing the command for dynamically changing a server's shared resources (mondevice), an error message might have been output by a remote system; therefore, you must also consult error messages output on remote systems to determine the cause.

### KAMN457-I

Server:aa...aa, The cc....cc was added to bb....bb.

A resource name has been added to the indicated operand in the server environment definition of the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Resource name

S:

Continues processing.

#### KAMN458-I

Server: aa...aa, The cc....cc was deleted from bb....bb.

A resource name has been deleted from the indicated operand in the server environment definition of the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Operand name

cc....cc: Resource name

S:

Continues processing.

### KAMN459-I (S)

Command: aa....aa was terminated.

Processing of the HA Monitor command indicated by the command name has terminated.

aa....aa: Command name

S:

Terminates command processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

### KAMN460-E (E+L)

An error occurred in command(aa...aa). Command cannot be executed.

An error occurred during processing of the HA Monitor command indicated by the command name. Command processing is terminated.

aa...aa: Command name

S:

Terminates command processing.

O:

Contact a system administrator.

#### Action:

Determine the cause of the error based on the error message that was output before this message.

If this message was output after the command for dynamically changing a server's shared resources (mondevice) was executed, execute the server and host status display command (monshow) with the -d option to check whether the device status and the content of the server environment definition are correct. If they are not correct, change the definition, and then re-execute the command for dynamically changing a server's shared resources (mondevice).

#### KAMN461-W

Server: aa....aa of other host occurred abnormally during device processing. The server of own host continues device processing for Online server.

An error has occurred during device processing by a server on the specified remote host. The local server is the active server, so device processing continues.

aa....aa: Server alias name

S:

Continues processing.

O:

Check the statuses of devices on the active server and the standby server. If the device statuses differ, forcibly terminate the standby server, change its definition, and then restart it.

### KAMN462-E

Server: aa....aa of other host occurred abnormally during device processing. The server of own host stopped device processing for Standby server.

An error has occurred during device processing by a server on the specified remote host. The local server is the standby server, so device processing is terminated.

aa....aa: Server alias name

Terminates processing.

O:

Check the statuses of devices on the active server and the standby server. If the device statuses differ, forcibly terminate the standby server, change its definition, and then restart it.

#### KAMN463-W

Abnormality had occurred in changing definition file:servers. Confirm the contents of the definition file.

An error occurred while the contents of the server environment definition were being changed by the execution of the command for dynamically changing a server's shared resources (mondevice).

S:

Continues processing.

O:

Check whether the contents of the server environment definition were changed correctly. If they were not, correct the server environment definition.

### KAMN464-I

Processing of the command to stop a server failed on a host:aa....aa.

The server stop command failed on the host indicated by the host name. Message KAMN348-I is output after this message.

aa....aa: Host name

S:

Continues processing.

O:

Determine the cause of the failure of the server stop command on the host indicated by the host name, and then eliminate the cause of the failure.

# KAMN465-E (E)

Because server: aa...aa is during command processing, Command(bb...bb) cannot be executed.

The indicated command cannot be executed because the server indicated by the server alias name is processing another command.

aa...aa: Server alias name

bb....bb: Command name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates command processing.

O:

After the currently executing command finishes processing, re-execute the command.

### KAMN466-E (E)

Because HAmonitor is during Command(aa...aa) processing, Command(bb...bb) cannot be executed.

The indicated command cannot be executed because HA monitor is processing another command.

aa...aa: Name of the command currently processing

bb....bb: Name of the command whose execution was attempted

S:

Processing of the command whose execution was attempted stops.

O:

After the currently executing command finishes processing, re-execute the command whose execution was attempted.

#### KAMN474-E

The control group of server:aa...aa cannot be disconnected. ID:bb...bb code:cc...cc

The control group of the server indicated by the server alias name could not be disconnected. Processing continues with the control group connected.

aa...aa: Server alias name

bb....bb: Control group ID

cc....cc: Detail code

S:

Continues processing.

O:

Manually disconnect the device, if necessary.

### KAMN475-E

The control group of server:aa...aa cannot be connected. ID:bb...bb code:cc....cc

The control group of the server indicated by the server alias name could not be connected. Processing continues with the control group disconnected.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Server alias name

bb....bb: Control group ID

cc....cc: Detail code

S:

Continues processing.

O:

Manually connect the device, if necessary.

### KAMN477-W

Server: bb....bb of other host: aa....aa occurred abnormally during device processing. The server of own host continues device processing.

An error occurred during device processing on a server of the specified remote host. The local server continues device processing.

aa...aa: Host name

bb....bb: Server alias name

S:

Continues processing.

O:

Check the statuses of devices on the local server and the remote server. If the device statuses differ, forcibly terminate the remote server, change its definition, and then restart it.

### KAMN478-E (E +L)

The specified function cannot be used in this system. Function:aa....aa

The specified function cannot be used in the current environment.

aa....aa: Function

• CPUDOWN-SYSTEM: Shorten the hot standby period in a mutual hot-standby configuration

S:

Suspends processing.

O:

Contact a system administrator.

Action:

Take the following action, depending on the function.

<sup>2.</sup> Messages from KAMN000 to KAMN999

Function	Corrective action
CPUDOWN-SYSTEM	Check the cpudown operand of the HA Monitor environment settings, and the settings pertaining to the cluster management function of the Switch & Management Module. Correct definitions and the settings of the Switch & Management Module as necessary.

#### KAMN494-E

Abnormalities occurred in execution of the LAN status setting file:aa...aa. Cause code:bb....bb.

An error occurred during processing of the LAN's status settings file.

aa...aa: LAN status settings file name

bb....bb: Cause code (termination code of the LAN's status settings file)

S:

Continues processing.

O:

Eliminate the cause of the error.

### KAMN495-E

Abnormalities occurred during execution of a usercommand. Cause code: aa....aa

An error occurred during execution of a user command.

aa...aa: Cause code (termination code of user command)

S:

Continues processing.

O:

Eliminate the cause of the error.

#### KAMN496-I

The group conversion for the group: aa....aa is complete.

Grouped-system switchover of the group indicated by the group name is complete.

aa....aa: Name of the group for which grouped-system switchover is complete

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN497-F

An abnormality occurred during the processing of the command to stop a server:aa...aa, cause code:bb....bb

An error occurred during execution of the server stop command.

aa...aa: Server alias name

bb....bb: Cause code

Cause code	Meaning	
0	The server stop command ended without reaching exit.	
Other than 0 This is the termination code of the server stop command.		

S:

Continues processing.

O:

Eliminate the cause of the error.

#### KAMN498-E

Starting of a server: *aa...aa* is stopped.

This message is displayed in the following situations:

- When the same LAN adapter is specified more than once in the lan\_neck operand of the server environment definition and both the current and spare LAN adapters are in the failure state.
- When use is specified in the ip\_neck operand of the server environment definition and the LAN status settings file exited with a value other than 0.
- When a resource that specifies use in the vg\_neck or fs\_neck operand of the server environment definition fails to connect.
- When use is specified in the uoc\_neck operand of the server environment definition and the user command exited with a value other than 0.
- When use was specified in the fence\_scsi operand of the HA Monitor environment settings, and a SCSI Reserve failed for a device that was specified in the server environment definition's scsi\_device operand or scsi\_dmmp operand.

aa...aa: Server alias name

S:

Continues processing.

O:

Eliminate the cause of the error, and then restart the server.

### KAMN499-E

Processing of a shared resource carried out the timeout.

Processing of a shared resource did not complete within the timeout period specified in the definition.

S:

Continues processing.

O:

Check the status of the shared resource, and then restart the server, if necessary.

<sup>2.</sup> Messages from KAMN000 to KAMN999

# 2.6 Messages from KAMN500 to KAMN599

### KAMN511-E

The specified LAN interface: aa....aa cannot be used with this system.

The LAN interface specified in the switchbyfail operand of the server environment definition cannot be used in this system.

aa....aa: LAN interface name

S:

Suspends processing.

O:

Contact a system administrator.

#### Action:

Check the switchbyfail operand specification in the server environment definition. Correct the definition if needed, and then restart HA Monitor.

### KAMN512-E (E)

LAN monitor definition file corresponding to LAN interface:aa...aa cannot be used. Details:bb....bb

Either the LAN monitoring definition file corresponding to the specified LAN interface cannot be used, or the LAN interface specified in the LAN monitoring definition file cannot be used.

aa...aa: LAN interface name

bb....bb: Detail code

Detail code	Meaning		
0x0000001	The name of the LAN interface to be monitored, as specified in the LAN monitoring definition file, exceeds 32 bytes.		
0x00000002	The LAN to be monitored, as specified in the LAN monitoring definition file, does not exist in the system.		
0x00000003	The LAN monitoring definition file cannot be read.		
0x0000004	A directory was specified for the LAN monitoring definition file.		
0x0000007	The IP address or IP label specified in the LAN monitoring definition file has not been specified in the /etc/hosts file.		
0x00000008	The same IP address or IP label was specified in the LAN monitoring definition file more than once.		
0x00000009	A LAN monitoring definition file statement is invalid.		
A0000000x0	When monitoring hbonding, the number of IP addresses or IP labels specified in the LAN monitoring definition file is invalid. The invalid value depends on each specification of the lancheck_mode operand as follows.		

Detail code	Meaning		
	If the operand is omitted or if packet is specified:		
	The following values are invalid:		
	• 0 or between 2 to 1,024		
	If route is specified:		
	The following values are invalid:		
	• 0 or between 1 to 1,024		
	When monitoring ethernet or bonding, the number of IP addresses or IP labels specified in the LAN monitoring definition file is either of the following for each specification of the lancheck_mode operand.		
	If the operand is omitted or if packet is specified:		
	The value is not between 2 and 1,024.		
	If route is specified:		
	The value is not between 1 and 1,024.		

Continues processing.

O:

Contact a system administrator.

Action:

Check the LAN monitoring definition file. Correct the definition, as needed, and then restart HA Monitor.

# KAMN513-E (E+L)

Abnormality occurred by internal processing of LAN monitor processing. Details:aa....aa LAN interface: bb....bb

An error has occurred while checking the environment for LAN monitor processing.

aa....aa: Detail code

bb....bb: LAN interface name

S:

Suspends processing.

O:

Contact a system administrator.

Action

Eliminate the cause of the error based on the message that was output before this message.

# KAMN514-E(E)

There are contradiction in a specified value of the bb....bb operand of definition file:aa....aa and a specified value of the dd....dd operand of definition file:cc....cc.

There is a contradiction in the way corresponding definitions were specified.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Definition file name

bb....bb: Operand name

cc....cc: Definition file name

dd....dd: Operand name

S:

Suspends processing.

O:

Contact a system administrator.

### Action:

Take the corrective action described for the applicable displayed item combination in the table below. If you correct the HA Monitor environment settings, restart HA Monitor.

Displayed item combination		Corrective action
cpudown of sysdef	vmware_env of sysdef	If you are giving reset priority to the active system or standby system:  Specify online or standby for cpudown of sysdef, or do not define any value.
		If you are not determining reset priority:  If you are switching systems in a virtual environment based on VMware ESXi:
		Specify online or standby for cpudown of sysdef, or do not define any value.
		<ul> <li>If you are not switching systems in a virtual environment based on VMware ESXi:</li> </ul>
		Specify nouse for vmware_env of sysdef, or do not define any value.
fence_reset of sysdef	fence_scsi ofsysdef	If you are resetting the system as a method of protecting data on a shared disk:  • Specify use for fence_reset of sysdef, or do not define any value.
		<ul> <li>Specify nouse for fence_scsi of sysdef, or do not define any value.</li> </ul>
		If you are using SCSI reservation of a shared disk to protect data on a shared disk:
		• Specify use for fence_scsi of sysdef.
		• Specify nouse for fence_reset of sysdef.
		If you are using hot-standby switchover via hybrid fencing to protect data on a shared disk:
		<ul><li>Specify use for fence_reset of sysdef, or do not define any value.</li><li>Specify use for fence_scsi of sysdef.</li></ul>
switch_error of servers	switch_retry of servers	If you are using the function for retrying startup during a hot standby:  Specify retry for switch_error of servers.
		If you are not using the function for retrying startup during a hot standby:  Do not define switch_retry of servers.
fence_lan of sysdef	lanfailswitch of sysdef	If you are using LAN communication enabling/disabling for controlling server switching:
		Specify use for lanfailswitch of sysdef.
		If you are not using LAN communication enabling/disabling for controlling server switching:
		Specify nouse for fence_lan of sysdef.

<sup>2.</sup> Messages from KAMN000 to KAMN999

Displayed item combination		Corrective action
dev_timelimit of servers	dev_onlimit of servers	If the same time is specified for the timeout values for the processing to release shared resources and the connection processing when performing a hot-standby switchover:  Do not define the dev_onlimit operand of servers.  If separate times are specified for the timeout values for the processing to release shared resources and the connection processing when performing a hot-standby switchover:  Do not define the dev_timelimit operand of servers.
dev_timelimit of servers	dev_offlimit of servers	If the same time is specified for the timeout values for the processing to release shared resources and the connection processing when performing a hot-standby switchover:  Do not define the dev_offlimit operand of servers.  If separate times are specified for the timeout values for the processing to release shared resources and the connection processing when performing a hot-standby switchover:  Do not define the dev_timelimit operand of servers.
ptrlcmd_ex of servers	patrolcommand of servers	If you are using the monitoring function of a monitor-mode server (by specifying the ptrlcmd_ex operand for servers):  Specify the ptrlcmd_ex operand of servers, and do not specify the patrolcommand operand.  If you are using the monitoring function of a monitor-mode server (by specifying the patrolcommand operand for servers):  Specify the patrolcommand operand of servers, and do not specify the ptrlcmd_ex operand.
ptrlcmd_ex of servers	program of servers	If you are using the monitoring function of a monitor-mode server (by specifying the ptrlcmd_ex operand for servers):  Specify the ptrlcmd_ex operand of servers, and do not specify the program operand.  If you are using program management functions:  Specify the program operand of servers, and do not specify the ptrlcmd_ex operand.

### KAMN515-E (E)

The LAN monitoring script:aa....aa does not exist or execution of this script is not permitted.

Either no LAN monitoring script exists, or execution of this script is not permitted.

aa...aa: File name of LAN monitoring script

S:

Suspends processing.

O:

Check whether the LAN monitoring script has been set up and whether its execution is permitted, and then restart HA Monitor.

# KAMN516-E (E)

The value specified (specified value:cc....cc) for the bb....bb operand of the aa....aa definition file is invalid. Details code:dd....dd

The operand specified in the definition file is invalid.

aa...aa: Definition file name

bb....bb: Operand name

cc....cc: Operand specification value

dd...dd: Detail code

Detail code	Meaning
NOT HBONDING	Because the specified LAN interface is not hbonding, the status of hbonding cannot be monitored using the LAN monitoring function.
NOT 802.3AD LACP	Because the operating mode of the specified LAN interface is not 802.3AD, errors might not be detected if the LAN monitoring function is used to monitor the status of hbonding.
NOT FOUND LANMONDEF	Because there is no LAN monitor definition file for the specified LAN interface, the LAN monitoring function cannot be used.
NOT FOUND DISKMONDEF	Although the settings for using disk monitoring are defined, disk monitoring cannot be used because there is no disk monitoring definition file.

S:

Continues processing.

O:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action
NOT HBONDING	Make sure that the specified LAN interface is hbonding, and then specify hbonding.
NOT 802.3AD LACP	Make sure that the operating mode of the specified LAN interface is 802.3AD, and then specify hbonding with operating mode 802.3AD.
NOT FOUND LANMONDEF	Make sure that there is a LAN monitor definition file that corresponds to the specified LAN interface, and then define the settings for using the LAN monitoring function.
NOT FOUND DISKMONDEF	Create a disk monitoring definition file.

#### KAMN517-E

An error of Online server: aa....aa was detected by patrol command. The HAmonitor is made to end abnormally.

HA Monitor terminated abnormally, because an error in the server indicated by the server alias name was detected by the monitor-mode server monitoring command. This message is output by the host's pairdown function.

aa...aa: Server alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

Terminates HA Monitor abnormally. A system reset is executed for the host from HA Monitor on another host.

O:

Contact a system administrator.

#### Action:

Determine the cause of the server error, and then restart the host. Determine the cause of the server error by referring to the execution logs of the monitoring commands that were recorded in the /opt/hitachi/HAmon/spool/ptrlcmd\_ex/server-alias-name\_ptrlcmdlog file.

#### KAMN519-E

An error of server:aa....aa was detected by patrol command in the standby system.

An error occurred in the server indicated by the server alias name in the monitoring command on the standby system (sby\_ptrlcmd\_ex in the server environment definition).

aa....aa: Server alias name

S:

Performs one of the following operations according to the value specified for the sby\_servexec\_retry operand in the server environment definition:

- If the sby\_servexec\_retry operand is not specified in the server environment definition or if 0 is specified for the operand, the system stops the server.
- If a value other than 0 is specified for the sby\_servexec\_retry operand in the server environment definition, the system restarts the server. If, however, the program's restart limit has been reached, the system stops the server.

O:

Contact a system administrator.

#### Action:

Use the monitoring commands to determine the cause of the error detection. Determine the cause of the error by referring to the execution logs of the monitoring commands that were recorded in the /opt/hitachi/HAmon/spool/ptrlcmd ex/server-alias-name ptrlcmdlog file.

#### KAMN521-W

Monitoring is paused for a server. Server: aa...aa. Function: bb....bb.

Monitoring with the indicated function is paused for the server indicated by the server alias name. This message is output at set intervals to report the status to the user.

aa...aa: Server alias name

bb....bb: Function (operand)

Function	Meaning
ptrlcmd_ex	Indicates monitoring of the active server by using ptrlcmd_ex.
sby_ptrlcmd_ex	Indicates monitoring of the standby system.
disk_ptrl	Indicates monitoring of the disk for business use.

S:

Continues processing.

O:

If necessary, restart monitoring with the indicated function (operand).

## KAMN523-E

Abnormality was detected LAN interface: aa...aa. server:bb...bb

An error has occurred in the LAN being monitored.

aa...aa: LAN interface name

bb....bb: Server alias name

S:

Continues processing. If the active server that uses the LAN is in a state able to perform a hot standby, performs a hot standby.

O:

Check for errors in the LAN monitoring definition file or the LAN monitoring script. If the LAN interface was specified in the hbond\_lacp operand of the HA Monitor environment settings, check whether a channel group has been set up in the network switch connected to hbonding. If there are no errors, determine the cause of the failure in the LAN, and then eliminate the cause of the failure.

### KAMN524-I

LAN interface: aa...aa was restored. server: bb....bb

The LAN being monitored is ready to be used.

aa...aa: LAN interface name

bb....bb: Server alias name

S:

### KAMN525-E

Server:bb....bb, Hotstandby is started, because it detected abnormality in LAN interface:(aa...aa).

A hot standby is being performed on an active server capable of hot standby because an error was detected in the LAN.

aa....aa: LAN interface name

bb....bb: Server alias name

S:

Continues processing.

## KAMN526-W

LAN interface: aa...aa, abnormality occurred in the monitoring process. The monitoring process is restarted.

The monitoring process was restarted because an error occurred that prevented LAN monitoring from continuing.

aa...aa: LAN interface name

S:

Continues processing.

### KAMN528-I

The state of LAN interface: aa...aa will be checked.

The state of the LAN interface specified in the switch\_judge operand is being checked so that, if its state is normal, this interface can be used for the active system in the event that an error is detected in the remote system. After this message, message KAMN529-I or KAMN530-E is output.

This message is output for each LAN interface in each host in which an error occurred.

aa....aa: LAN interface name

S:

Continues processing.

### KAMN529-I

The state of LAN interface: aa...aa is normal.

The state of the LAN interface specified in the switch\_judge operand was checked, and it was determined that the monitored LAN is normal.

The server on which the switch\_judge operand is specified, and other servers in the same server group as that server, behave as follows:

2. Messages from KAMN000 to KAMN999

• If a server is in hot-standby wait state, hot standby starts.

This message is output for each LAN interface.

aa....aa: LAN interface name

S:

Continues processing.

## KAMN530-E

An abnormal state of LAN interface: aa...aa was detected.

The state of the LAN interface specified in the switch\_judge operand was checked, and it was determined that the monitored LAN is abnormal.

The server in which the switch\_judge operand is specified stops, together with other servers in the same server group as that server.

This message is output for each LAN interface.

aa...aa: LAN interface name

S:

Stops the servers.

O:

Contact a system administrator.

Action:

Investigate the cause of the LAN error, eliminate the cause of the error, and then start the servers as needed.

# KAMN531-I

Disk monitoring will now start. Type: aa...aa. Server: bb....bb.

Monitoring of the disk indicated by the type will now start.

aa...aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb....bb: Server alias name (displayed as ---- if the type is SYSTEM).

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

## KAMN532-E

Disk monitoring will not start. Type: aa...aa. Server: bb....bb.

Monitoring of the disk indicated by the type cannot start.

aa...aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb....bb: Server alias name (displayed as ---- if the type is SYSTEM).

S:

Continues processing.

O:

Take one of the following actions according to the type.

Туре	Meaning
SYSTEM	Based on the cause of the error shown in the KAMN533- $\mathbb{W}$ message (output before this message), revise the contents of the monitoring definition file for the system disk.
SERVER	Based on the cause of the error shown in the KAMN533-W message (output before this message), revise the contents of the monitoring definition file for the disk for business use of the server indicated by the server alias name.

## KAMN533-W

There is an error in the monitoring definition file for the disk. Type: *aa....aa*. Server: *bb....bb*. Cause code: *cc....cc*. Monitored file: *dd....dd*.

Monitoring of the disk indicated by the type is specified incorrectly.

aa....aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb...bb: Server alias name (displayed as ---- if the type is SYSTEM).

cc....cc: Cause code

Cause code	Meaning
DEFINITION NOT READ	The disk monitoring definition file could not be read because it does not exist or nothing is specified in it. If this cause code is output, disk monitoring is not performed.

Cause code	Meaning
PATH NOT FOUND	The file to be monitored (specified in the disk monitoring definition file) does not exist.  If this cause code is output, the specified file will not be monitored.
TYPE NOT FILE	The file to be monitored (specified in the disk monitoring definition file) is not an ordinary file.  A path to one of the following might be specified as the monitoring target:  Socket  Symbolic link Block device Directory  Character device FIFO  If this cause code is output, the specified file will not be monitored.
DUPLICATE PATH	The same file path to be monitored is specified multiple times in the monitoring definition file for one disk. Alternatively, the same file path to be monitored is specified in monitoring definition files for multiple disks.
PATH TOO LONG	The file path to be monitored (specified in the disk monitoring definition file) exceeds 247 bytes. If this cause code is output, the specified file will not be monitored.
TOO MUCH FILES	The file path to be monitored (specified in the disk monitoring definition file) exceeds 128 lines. The number of lines does not include the line that contains only the end of the file.  If this cause code is output, the system operation varies depending on the type.  • If the type is SYSTEM, system disk monitoring is not performed.  • If the type is SERVER, monitoring of the disk for business use of the server indicated by the server alias name is not performed.
SYNTAX ERR	The disk monitoring definition file contains tabs or spaces.
INTERNAL ERR	An error occurred in internal processing.

dd...dd: Path specified in the disk monitoring definition file (displayed as ---- if the cause code is DEFINITION NOT READ or TOO MUCH FILES).

S:

Continues processing.

O:

Take one of the following actions according to the cause code:

Cause code	Meaning
DEFINITION NOT READ	Create a disk monitoring definition file, and then specify at least one absolute path of the file to be monitored.
PATH NOT FOUND	Specify the path of an existing file to be monitored.
TYPE NOT FILE	Specify the path of an ordinary file to be monitored.
DUPLICATE PATH	Make sure that the same file path to be monitored is not specified more than once in the monitoring definition file for one disk. Also make sure that the same file path to be monitored is not specified more than once in monitoring definition files for multiple disks.
PATH TOO LONG	In the disk monitoring definition file, specify the file path to be monitored, using no more than 247 bytes.
TOO MUCH FILES	In the disk monitoring definition file, specify the file path to be monitored, using no more than 128 lines.
SYNTAX ERR	Remove the tabs and spaces from the disk monitoring definition file.
INTERNAL ERR	See the message output before this message, and then eliminate the cause of the error.

# KAMN534-E

Disk monitoring detected an abnormality. Type: aa...aa. Server: bb....bb. Monitored file: cc....cc.

The file to be monitored could not be accessed during disk monitoring.

aa....aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb....bb: Server alias name (displayed as ---- if the type is SYSTEM).

cc....cc: Path to the file to be monitored

S:

Continues processing. The processing to be performed depends on the type as follows.

Туре	Meaning
SYSTEM	Terminates HA Monitor abnormally if there is a server that is able to perform a hot-standby switchover. If no server is able to perform a hot-standby switchover, the system continues monitoring of the system disk.
SERVER	If the indicated active server is able to perform a hot-standby switchover, the active server using the indicated disk performs operation according to the specification of the disk_ptrl_act operand. If the indicated active server is unable to perform a hot-standby switchover, the system continues monitoring of the disk for business use.

O:

Eliminate the cause of the system call error indicated by message KAMN 601-W, which is output before this message.

### KAMN535-E

The HA monitor will end abnormally because disk monitoring detected an abnormality.

HA Monitor will terminate abnormally because an error was detected during disk monitoring. This message is output if an error was detected during monitoring of the system disk or during monitoring of the disk for business use with pairdown specified for the disk ptrl act operand.

S:

Terminates HA Monitor abnormally.

O:

If the host has not restarted, restart it.

## KAMN536-E

An abnormal termination notice was received from a host. Host: aa...aa. Detail code: bb...bb.

An abnormal termination notice was received from a host that terminated abnormally. The host that terminated abnormally is processed as a host failure.

aa...aa: Name of the host that terminated abnormally

### bb....bb: Detail code

Detail code	Meaning
DISK_PATROL	An error was detected during disk monitoring.

S:

Continues processing. The system performs a hot-standby switchover if the active server exists on the host that terminated abnormally.

# KAMN537-I

Disk monitoring detected the recovery of the disk. Type: aa...aa. Server: bb....bb. Monitored file: cc....cc.

The file to be monitored can now be accessed during disk monitoring.

aa....aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb....bb: Server alias name (displayed as ---- if the type is SYSTEM).

cc....cc: Path to the file to be monitored

S:

Continues processing.

### KAMN538-I

A hot standby operation will now start because disk monitoring detected an abnormality. Server: aa...aa.

A hot-standby switchover will be performed for the server indicated by the server alias name because an error was detected during disk monitoring.

aa...aa: Server alias name

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

## KAMN539-E

Disk monitoring detected a timeout. Type: aa...aa. Server: bb....bb. Monitored file: cc....cc.

Monitoring of the target file has timed out during disk monitoring.

aa...aa: Type

Туре	Meaning
SYSTEM	Indicates monitoring of the system disk.
SERVER	Indicates monitoring of the disk for business use of the server indicated by the server alias name.

bb....bb: Server alias name (displayed as ---- if the type is SYSTEM).

cc....cc: Path to the file to be monitored

S:

Continues processing. The processing to be performed depends on the type as follows.

Туре	Meaning
SYSTEM	Terminates HA Monitor abnormally if there is a server that is able to perform a hot-standby switchover. If no server is able to perform a hot-standby switchover, the system continues monitoring of the system disk.
SERVER	If the indicated active server is able to perform a hot-standby switchover, the active server using the indicated disk performs operation according to the specification of the disk_ptrl_act operand. If the indicated active server is unable to perform a hot-standby switchover, the system continues monitoring of the disk for business use.

O:

Eliminate the cause that prevented completion of synchronous writes to the monitoring target.

# KAMN540-W

Monitoring is paused for a host. Host: aa...aa. Function: bb....bb.

Monitoring with the indicated function is paused for the host indicated by the host name. This message is output at set intervals to report status to the user.

aa....aa: Host name

bb....bb: Function (operand)

Function	Meaning
disk_ptrl	Indicates monitoring of the system disk.

S:

Continues processing.

O:

If necessary, restart monitoring with the indicated function (operand).

# KAMN541-I

An abnormality was detected during monitoring of the file path in line cc....cc in the disk monitoring definition file bb....bb of the host aa....aa. System call: dd....dd. Error details: ee....ee. Functional name: ff....ff.

A disk error was detected on the host indicated by the host name during disk monitoring. This message shows detailed information for determining the cause of the error.

aa...aa: Host name

bb....bb: Monitoring definition file name

cc....cc: Line number

dd....dd: Invoked system call

ee....ee: Detail code (1 or 3 digits)

ff...ff: Name of the function that generated the error

S:

Continues processing.

O:

Determine the cause based on the detail code of the invoked system call, and then eliminate the cause of the error.

### KAMN542-I

A timeout was detected during monitoring of the file path in line *cc....cc* in the disk monitoring definition file *bb....bb* of the host *aa....aa*.

A disk error was detected on the host indicated by the host name during disk monitoring. This messages shows detailed information for determining the cause of the error.

aa...aa: Host name

bb....bb: Monitoring definition file name

cc....cc: Line number

S:

Continues processing.

O:

Eliminate the cause that prevented completion of synchronous writes to the monitoring target.

## KAMN543-I

Server:aa...aa will now start as the standby server in online serverless mode.

The server indicated by the server alias name will start as a standby server.

aa...aa: Server alias name

S:

Continues processing.

# KAMN544-I (S)

Server:aa....aa will now start as the standby server in online serverless mode.

The server indicated by the server alias name will start as a standby server.

aa...aa: Server alias name

S:

Continues processing.

## KAMN545-I

The system was set to online serverless mode.

The system was set to the online serverless mode.

S:

Continues processing.

### KAMN546-I

The system was released from online serverless mode.

The system was released from the online serverless mode.

S:

Continues processing.

## KAMN547-E

The system cannot be set to online serverless mode.

The system cannot be set to the online serverless mode.

S:

Terminates processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

Check the status as follows:

- Verify that all servers have terminated.
   If any server is running, terminate it. Stop all servers, and then re-execute the monchange command to set the online serverless mode.
- Check whether the multi-standby function is used.

  If the multi-standby function is used, the system cannot be set to the online serverless mode. Omit the multi-standby operand or set this operand to nouse, and then restart HA Monitor. After that, stop all servers, and then re-execute the monchange command to set the online serverless mode.

# KAMN548-E

The system cannot be released from online serverless mode.

The system cannot be released from the online serverless mode.

S:

Terminates processing.

O:

Check the status as follows:

- Verify that all servers have terminated.
   If any server is running, terminate it. Stop all servers, and then re-execute the monchange command to release the online serverless mode.
- Verify that the active server has finished startup and is ready for hot-standby switchover (server status: ONL). Set the server status to ONL, and then re-execute the monchange command to release the online serverless mode.
- Verify that the standby server is ready for hot-standby switchover (server status: SBY).
   Set the server status to SBY, and then re-execute the monchange command to release the online serverless mode.

#### KAMN549-W

The system is running in online serverless mode.

The system is running in the online serverless mode.

S:

Continues processing.

O:

If necessary, execute the monchange command to release the online serverless mode.

# KAMN550-I (S)

Standby server: aa....aa in online serverless mode will now start as the online server.

Forced-start processing of the standby server indicated by the server alias name in the online serverless mode has finished.

aa...aa: Server alias name

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

# 2.7 Messages from KAMN600 to KAMN699

# KAMN601-W (E+L)

An error occurred in the aa...aa system call. Error details:bb...bb Functional name:cc....cc

An error occurred in a system call invoked by an HA Monitor function. For more information about detail codes, see the documentation for the applicable OS.

aa....aa: Invoked system call

bb....bb: Detail code (1 or 3 digits)

cc....cc: Name of function that generated the error

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

Determine the cause based on the detail code.

Note that, if the OS is Red Hat Enterprise Linux Server 7 or later, the following message might be output at HA Monitor startup:

```
KAMN601-W An error occurred in the sched_setscheduler system call. Error details: 1 Functional name:osl_fixprio_linux
```

If this message is output, check whether a cgroup other than the root cgroup exists in the CPU subsystem (CPU resource controller).#

#:

Other than being created manually, a cgroup in the CPU subsystem other than the root cgroup is created automatically in situations such as the following:

- When a Docker container is started.
- When a service that uses a value specified for CPUShares in the Unit settings file is started.

If a cgroup other than the root cgroup exists in the CPU subsystem, overwrite the value specified for ExecStart in the /usr/lib/systemd/system/HAmon-powercontrol.service file as follows. Overwriting the value causes the HA Monitor process to operate by using the root cgroup explicitly.

• Before overwriting the value:

```
:
ExecStart=/bin/sh -c '/opt/hitachi/HAmon/bin/HApwon >/dev/null 2>&1'
:
```

• After overwriting the value:

```
:
ExecStart=/bin/cgexec -g cpu:./ --sticky /bin/sh -c '/opt/hitachi/HAmon/bin/HApw on >/dev/null 2>&1'
:
```

#### KAMN607-F

Patrol Path cannot be opened. Patrol Path name:aa....aa Error details:bb....bb

An attempt to open a monitoring path failed.

A message indicating the error detail is output prior to this message.

aa...aa: Failed monitoring path name

bb....bb: Detail code (1 or 2 digits)

S:

Continues processing.

O:

Determine the cause as indicated by the message output before this message, and then restart HA Monitor.

#### KAMN608-W

It cannot be sent to host:aa...aa.

Communications with the host indicated by the host name failed. Data could not be transmitted normally.

aa...aa: Host name

S:

Continues processing.

O:

Execute the monitoring path status display command (monpath), and then determine the status of the monitoring path that was used. If an error occurred in the monitoring path, eliminate the cause of the error. If NO RESPONSE is displayed, check the network's connection, and then determine whether equipment has failed.

### KAMN609-W

Receiving errors occurred in the Patrol Path. Patrol Path name:aa...aa.

Communication was attempted with a remote host using the monitoring path indicated by the failed monitoring path name. Data could not be received normally.

aa....aa: Failed monitoring path name

S:

Continues processing.

O:

Execute the monitoring path status display command (monpath), and then check the monitoring path status.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### Action:

Determine the cause as indicated by the message output before this message.

## KAMN610-W

The following language(s) are not available: LANG=aa...aa

Continuing processing using the language "C".

The value of the message environment variable LANG is incorrect. Processing continues with LANG set to its default value of C.

aa...aa: Value of LANG environment variable

S:

Continues processing.

O:

Correct the value of the message environment variable LANG.

### KAMN611-W

Cannot read "aa....aa" message catalog; proceeding in default language.

The message catalog file specified in the message environment variable cannot be read, so processing resumes using the HA Monitor default file.

aa....aa: Value of LANG environment variable

S:

Continues processing.

O:

Check whether the value of the LANG environment variable is valid for HA Monitor.

# KAMN612-E (E+L)

It errs in the message environment. Message number:aa....aa

A message cannot be output because the message environment is specified incorrectly.

aa...aa: Number of the message that cannot be output

S:

Continues processing.

O:

Eliminate the cause of the message environment error.

2. Messages from KAMN000 to KAMN999

# KAMN613-E (E+L)

There is not message. Message number:aa...aa

A message cannot be output because the message indicated by the message number does not exist in the message catalog file.

aa...aa: Number of the message that cannot be output

S:

Continues processing.

O:

Check whether the HA Monitor message catalog file is correctly installed. If it is not, add it to the correct directory. If the file is correctly installed, contact a system administrator.

#### Action:

If an error message is output before this message, determine the cause based on that error message.

# KAMN614-E (E)

aa....aa: bb....bb

An error occurred in a message catalog file.

For details about error information, see the documentation for the applicable OS.

aa...aa: Message catalog file name

Message catalog file name	Meaning
/usr/share/locale/C/HAmon.cat	English language messages
/usr/share/locale/ja_JP.eucJP/HAmon.cat	Japanese language messages (EUC)
/opt/hitachi/HAmon/nls/ja_JP.UTF-8/HAmon.cat	Japanese language messages (UTF-8)

## bb....bb: Error information

S:

Continues processing.

O:

Eliminate the cause of the error in the HA Monitor's message catalog file.

# KAMN615-E (E)

It errs in the message environment. Command is stopped.

There is an error in the message environment.

S:

Stops command processing.

O:

Eliminate the cause of the message KAMN614-E, and then re-execute the command.

# KAMN616-E (E+L)

Command(aa...aa) of HAmonitor stopped abnormally.

An error occurred in a command invoked as a child process. Either the specified command does not exist or a signal was received during processing.

aa...aa: Command name

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Determine the cause of the error based on the error message that was output before this message.

## KAMN617-E

HAmonitor stopped abnormally. abort-id:aa....aa

HA Monitor terminated abnormally because an unrecoverable error occurred within HA Monitor.

aa....aa: Abort ID

Abort ID	Meaning
213	Abort when an attempt to add a host management table failed (due to the address operand in the HA Monitor environment settings being duplicated in a remote system)
250	Abort when a server failure was detected or a device failed to disconnect (due to a server failure while using the pairdown function or when a shared resource failed to disconnect during a hot standby)
260	Abort when local system failure is detected or a reset completion is received (due to the address operand in the HA Monitor environment settings being duplicated in a remote system)

S:

Terminates processing.

O:

Restart the host. It is possible that resources have been corrupted, particularly if a file system is being used; be sure to restart the file system if one is being used.

#### Action:

Eliminate the cause of the error based on the abort ID that is output. If the abort ID output is not listed above, contact maintenance personnel.

### KAMN619-E

File:aa....aa cannot be opened. Cause code:bb....bb

A message cannot be output to a file because the file indicated by the file name cannot be opened. For details about cause codes, see the documentation for the applicable OS.

aa...aa: File name (/dev/console or /dev/null)

bb....bb: Cause code (errno of system call when file is opened)

S:

Continues processing. The message is sent to standard output or standard error.

O:

Contact a system administrator.

Action:

Determine the cause based on the cause code.

### KAMN620-E

Slowdown of HAmonitor in the own host was detected. Standby server: aa....aa is started again.

A slowdown was detected in the local system's HA Monitor. The standby server indicated by the server alias name was restarted and the connection is restored.

aa...aa: Server alias name

S:

Continues processing.

O:

Determine the reason the local HA Monitor slowed down, and then restart HA Monitor, if necessary.

### KAMN621-E

Abnormality occurred in Reset Path. Error details:aa....aa

An error occurred in a reset path of a remote host linked by a reset path.

aa...aa: Detail code

<sup>2.</sup> Messages from KAMN000 to KAMN999

Detail code	Meaning
SEND	A communication failure occurred.
NORSTD	A reset path initialization failure occurred.

S:

Continues processing.

O:

Eliminate the cause of the system call error as indicated by message KAMN601-w, which is output before this message, or the cause of the reset path error as indicated by message KAMN624-E, and then execute the reset path status display command (monrp).

# KAMN624-E

The state of Reset Path of Host: aa...aa is abnormal.

Error details : bb....bbReset Path : cc....cc

An error occurred in the reset path.

aa....aa: Host name

bb....bb: Detail code

Detail code	Meaning
SEND	A communications failure occurred.
NO SET ADDRESS	Information specified during initial setup for the failure management processor by HA Monitor on the host indicated by the host name was erased. One possible cause is that the failure management processor was restarted.
SVP-TIMEOUT	A timeout of the indicated reset path was detected.
RESET-ERR	The failure management processor failed to reset.
LPAR-RSP-FAIL	An error occurred in a query to the indicated host.
SYSNAME-ERR	The managing system name is invalid.
PARTITION-ERR	The partition name is invalid.
HOST-OVER	The number of hosts has exceeded the number that can be controlled.
POWER-FAILURE	A power failure occurred on the indicated host.
CTRLPTH-DOWN	A reset path connection failed.
REQ-TIMEOUT	If the public cloud environment is not used, a request sent to the failure management processor timed out. Possible causes of the failure are as follows:
	<ul> <li>A problem related to incorrect settings specified for the reset path</li> </ul>
	A problem related to the configuration
	A problem in the host on which HA Monitor is running
	A problem in the failure management processor
	Each of these possible causes will be explained in detail.

Detail code	Meaning
	A problem related to incorrect settings specified for the reset path (reset path settings for HA Monitor)
	A request sent to the failure management processor timed out, because one of the following settings was specified incorrectly:
	- The IP address of the reset path
	- The port number of the reset path
	- The IP address of the failure management processor
	- The port number of the failure management processor
	A problem related to incorrect settings specified for the reset path (HA Monitor settings of the failure management processor)
	A request sent to the failure management processor timed out, because one of the following settings was specified incorrectly:
	- Settings related to communication with HA Monitor, such as the IP address or port number
	- If you are using the N+M cold standby linkage function, N+M cold standby settings (settings for all Switch & Management Modules that belong to the same network as HA Monitor's reset path, as well as whether the management system name is duplicated)
	- If system is specified for the cpudown operand in the HA Monitor environment settings, whether settings pertaining to the cluster management function of the Switch & Management Module are specified
	A problem related to the configuration
	A request sent to the failure management processor timed out for one of the following reasons:
	<ul> <li>The reset path and the failure management processor are not physically connected (including hardware failures).</li> </ul>
	- The reset path and the failure management processor are not on the same network.
	- The reset path and the failure management processor are unable to communicate, because of a firewall or another reason.
	A problem in the host on which HA Monitor is running
	A request sent to the failure management processor timed out for one of the following reasons:  - The IP address of the reset path is in a state where it is unusable (for example, it is deactivated)
	- The port number of the reset path is in a state where it is unusable (for example, it is being used by something other than HA Monitor)
	A problem in the failure management processor
	A request sent to the failure management processor timed out for one of the following reasons:
	- A hardware-related failure or operational error
	<ul> <li>A firmware-related failure or operational error</li> <li>HA Monitor Connector is not running, or a failure or operational error related to HA Monitor</li> </ul>
	Connector occurred (for HA8000xN and later models).
	If the public cloud environment is used, a request sent to the public cloud environment for the host indicated by the host name timed out. A possible cause of the failure is a failure in the public could environment.
IMPOSSIBLE	Resetting on the remote host is not possible.
SSH-ERR	Communication with the VMWare ESXi of the host indicated by the host name failed.
SSH-TIMEOUT	The response from the VMWare ESXi of the host indicated by the host name timed out.
VMNAME-ERR	The virtual machine name is invalid.
VMNAME-DBL	The virtual machine name was specified more than once.
NOLRSTD	Reset path initialization failed.

# cc....cc: Failed reset path

Primary: Primary reset path

ESXi: Reset path for connecting VMware ESXi

---: No reset path (when the public cloud environment is used)

S:

Terminates processing.

O:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action
SEND	Eliminate the cause of the system call error as indicated by message KAMN601-w, which is output before this message, and then execute the reset path status display command (monrp).
NO SET ADDRESS	Perform the following procedure to recover the reset path:  1. On the host indicated by the host name, execute the reset path status display command (monrp). The reset path is initialized.  2. On all hosts, execute the reset path status display command (monrp), and then verify that the status of the reset path is normal.
• RESET-ERR • LPAR-RSP-FAIL • POWER-FAILURE • CTRLPTH-DOWN	These are generally caused by a hardware failure. Eliminate the cause of the error, and then execute the reset path status display command (monrp).
SVP-TIMEOUT	If system is specified for the cpudown operand of the HA Monitor environment settings, carefully review the settings and configuration pertaining to the cluster management function of the Switch & Management Module. Correct any errors you find in the settings or configurations. If you do not find any errors, a hardware failure might be at fault. Eliminate the cause of the error, and then execute the reset path status display command (monrp).
PARTITION-ERR	These are generally caused by reset path setting and configuration errors.  Carefully review the reset path settings and configurations, correct them, and then restart HA Monitor.  For RV3000, possible causes are as follows:  • If vSphere with the high reliability function added is used, the virtual machine name specified in the reset path settings of HA Monitor is invalid.  • Either of the following contradictions exists between the reset path settings of HA Monitor and the virtual server settings of HA Monitor Connector:  • vSphere with the high reliability function added is disabled in the reset path settings of HA Monitor, but the vmware parameter is set to Enable in the virtual server settings of HA Monitor Connector.  • vSphere with the high reliability function added is enabled in the reset path settings of HA Monitor, but the vmware parameter is set to Disable in the virtual server settings of HA Monitor, but the vmware parameter is set to Disable in the virtual server settings of HA Monitor Connector.
• SYSNAME-ERR • HOST-OVER	These are generally caused by reset path setting and configuration errors. Carefully review the reset path settings and configurations, and then restart HA Monitor.
IMPOSSIBLE	These are generally caused by reset path setting and configuration errors. Carefully review the reset path settings and configurations, and then restart HA Monitor.  In the public cloud environment, the message KAMN766-E is output before this message. See the message KAMN766-E and take corrective actions.
REQ-TIMEOUT	Eliminate the cause of the failure, and then perform one of the following operations.  • If this message was output at HA Monitor startup or while HA Monitor was running:  If the reset path settings or configuration contained any errors, restart. In other cases, execute the reset path status display command (monrp), and then verify that the status of the reset path is normal.

Detail code	Corrective action
	• If this message was output when the command for setting the reset path was executed (when the -resetpath option was specified for the mosnetup command):  Re-execute the command for setting the reset path.
	In the public cloud environment, the message KAMN347-E is output after this message. See the message KAMN347-E and take corrective actions.
SSH-ERR	Carefully review the following:  • IP address of VMWare ESXi set in HA Monitor  • Port number for SSH connection to VMWare ESXi set in HA Monitor  • IP address set in VMWare ESXi  • Port number for SSH connection set in VMWare ESXi  Correct any errors you find in the HA Monitor settings, and then restart HA Monitor. If you find any errors in the VMWare ESXi settings, correct them, and then execute the reset path status display command (monrp).  If you do not find any errors in any of these settings, a hardware failure or an error in VMWare ESXi might be at fault. Eliminate the cause of the error, and then execute the reset path status display command (monrp).
SSH-TIMEOUT	Carefully review the following:  IP address of VMWare ESXi set in HA Monitor  Port number for SSH connection to VMWare ESXi set in HA Monitor  IP address set in VMWare ESXi  Port number for SSH connection set in VMWare ESXi  VMware ESXi settings pertaining to SSH connections#  Password of the root user set in VMware ESXi#  #: For more information about VMware ESXi settings pertaining to SSH connections and the password of the root user set in VMware ESXi, see "Specifying the settings needed for establishing SSH connection with VMware ESXi" in the manual HA Monitor Cluster Software (for Linux(R) (x86) systems).
	If this message was output at HA Monitor startup or while HA Monitor was running:  Correct any errors you find in the HA Monitor settings, and then restart HA Monitor. If you find any errors in the VMWare ESXi settings, correct them, and then execute the reset path status display command (monrp).  If you do not find any errors in any of these settings, a hardware failure or an error in VMWare
	ESXi might be at fault. Eliminate the cause of the error, and then execute the reset path status display command (monrp).  If this still does not resolve the problem, the process might have temporarily slowed down due to reset processing. Wait a while, and then execute the reset path status display command (monrp).
	If this message was output when the command for setting the reset path was executed (when the -resetpath option was specified for the mosnetup command):
	Correct any errors in the HA Monitor settings or the VMware ESXi settings. If you do not find any errors in these settings, a hardware failure or an error in VMWare ESXi might be the cause. Eliminate the cause of the error, and then execute the command for setting the reset path (by specifying the -resetpath option for the mosnetup command).
	If normal status is not restored, contact a system administrator.
VMNAME-ERR	Carefully review the following:  • IP address of VMWare ESXi set in HA Monitor  • Virtual machine name set in HA Monitor  • IP address set in VMWare ESXi  • Name of logical partition in which the local system runs, set in VMWare ESXi

Detail code	Corrective action
	If this message was output at HA Monitor startup or while HA Monitor was running:  Correct any errors you find in the HA Monitor settings, and then restart HA Monitor. If you find any errors in the VMWare ESXi settings, correct them, and then execute the reset path status display command (monrp).
	If this message was output when the command for setting the reset path was executed (when the -resetpath option was specified for the mosnetup command):
	Correct any errors in the HA Monitor settings. In other cases, execute the command for setting the reset path (by specifying the -resetpath option for the mosnetup command).
VMNAME-DBL	Correct the VMWare ESXi and HA Monitor settings so that no virtual machine names are duplicated, and then restart HA Monitor.
NOLRSTD	If this message was output at HA Monitor startup or while HA Monitor was running:  If message KAMN601-W is output before this message, eliminate the cause of the system call error as indicated by KAMN601-W, and then execute the reset path status display command (monrp).
	If message KAMN601-W is not output before this message, carefully review the following:
	- IP address of VMware ESXi set in HA Monitor
	- Port number for SSH connections to VMware ESXi set in HA Monitor
	- IP address set in VMware ESXi
	- Port number for SSH connections set in VMware ESXi
	- VMware ESXi settings pertaining to SSH connections#
	- Password of the root user set in VMware ESXi#
	#: For more information about VMware ESXi settings pertaining to SSH connections and the password of the root user set in VMware ESXi, see "Specifying the settings needed for establishing SSH connection with VMware ESXi" in the manual HA Monitor Cluster Software (for Linux(R) (x86) systems).
	Correct any errors you find in the HA Monitor settings, and then restart HA Monitor. If you find any errors in the VMWare ESXi settings, correct them, and then execute the reset path status display command (monrp).
	If this message is output after message KAMN751-I, execute the reset path status display command (monrp).
	If this message was output when the command for setting the reset path was executed (when the -resetpath option was specified for the mosnetup command):
	If message KAMN601-W is output before this message, eliminate the cause of the system call error as indicated by KAMN601-W, and then execute the command for setting the reset path (by specifying the -resetpath for the mosnetup command).
	If message KAMN601-W is not output before this message, carefully review the following:
	- IP address of VMWare ESXi set in HA Monitor
	- Port number for SSH connections to VMware ESXi set in HA Monitor
	- IP address set in VMware ESXi
	- Port number for SSH connections set in VMware ESXi
	- VMware ESXi settings pertaining to SSH connections
	- Password of the root user set in VMware ESXi
	Correct any errors in the HA Monitor settings or the VMware ESXi settings.

# KAMN625-W

The definition of Reset Path was changed.

The reset path setting was changed. Possible causes are as follows:

2. Messages from KAMN000 to KAMN999

- 1. After the value specified for the address operand in the HA Monitor environment settings was changed, HA Monitor was restarted. This is not a problem.
- 2. One of the following settings is incorrect. A reset during a hot-standby switchover might fail.
  - The value specified for the address operand in the HA Monitor environment settings is duplicated across multiple hosts.
  - The system partition names and LPAR names specified by the environment settings command for the reset path of HA Monitor (monsetup) are duplicated across multiple hosts.#
  - #: For duplicated hosts, if a different hot-standby switchover configuration shares a reset path, the hosts of that hot-standby switchover configuration are also included.

S:

Continues processing.

O:

For cause 1, no action is required.

For cause 2, perform the following procedure:

- 1. Stop all instances of HA monitor in a hot-standby switchover configuration that includes hosts for which settings are incorrect.
- 2. Correct the settings on all hosts for the instances of HA Monitor that were stopped in step 1, and then restart HA Monitor.
- 3. Execute the monrp on all hosts, including hosts other than those for which HA Monitor was stopped in step 1, and then verify that the status of the reset path is normal.

# KAMN626-E (E+L)

Command(aa...aa) of HAmonitor stopped abnormally. Error details:bb...bb

An error occurred in a command invoked as a child process. The specified command received a signal during processing.

aa....aa: Command name

bb....bh: Detail code

S:

Terminates processing.

O:

Contact a system administrator.

Action:

Restart HA Monitor.

#### KAMN635-E

The system call for a Patrol Path: aa....aa ended abnormally. Return code: bb....bb. Error details: cc....cc. System call name: dd....dd.

<sup>2.</sup> Messages from KAMN000 to KAMN999

A system call error occurred while a monitoring path was in use. For more information about detail codes, see the documentation for the applicable OS.

aa...aa: Failed monitoring path name

bb....bb: Return code

cc....cc: Detail code

dd....dd: System call name

S:

Continues processing.

O:

Execute the monitoring path status display command (monpath), and then check the monitoring path status.

#### KAMN639-W

The system name set to Switch and Management Modules overlaps each other. IP address of the Switch and Management Module: aa...aa:bb....bb system name: cc....cc

Managing system names, set in Switch & Management Modules, are duplicated. A conflict might have been created because of an error in the reset path setting.

aa...aa: IP address of Switch & Management Module

bb....bb: IP address of Switch & Management Module

cc....cc: Managing system name

S:

Continues processing.

O:

Check all Switch & Management Modules on the same network as the reset path to determine if managing system names duplicate each other. After errors have been eliminated, restart HA Monitor on all systems.

### KAMN640-E

Abnormality occurred in Patrol Path:aa...aa. Details:bb...bb.

An error occurred in the monitoring path.

aa...aa: Failed monitoring path name

hh...hh: Detail code

Detail code	Meaning
4	LAN line failure

S:

Continues processing.

O:

Execute the monitoring path status display command (monpath), and then check the monitoring path status again. If no problem is found, the situation might be due to a high machine load or a temporary failure of a monitoring path, which means you can ignore it. If a problem is found, contact a system administrator.

#### Action:

Determine the cause of the error, and then eliminate it.

#### KAMN641-W

The answer of the state inquiry message of Patrol Path is not sent from host:aa...aa. Patrol Path name:bb....bb.

A monitoring path status query message was sent via the monitoring path to the host indicated by the host name, but no response message was received.

aa....aa: Host name

bb....bb: Failed monitoring path name

S:

Continues processing.

O:

Execute the monitoring path status display command (monpath), and then check the monitoring path status again. If no problem is found, the situation might be due to a high machine load or a temporary failure of a monitoring path, which means you can ignore it. If a problem is found, contact a system administrator.

#### Action:

Determine the cause of the error, and then eliminate it.

### KAMN642-W

Alive message is not sent from host:aa...aa.

No alive message has been received during status monitoring of the host indicated by the host name, even though approximately 70% of the monitoring period has elapsed.

aa...aa: Host name

S:

Continues host monitoring. If a preferred monitoring path has been specified in the lan operand of the HA Monitor environment settings, HA Monitor switches to that monitoring path. If the reason no alive message has been received is due to the host rather than the monitoring path, HA Monitor outputs a KAMN340-E message after it outputs this message once the remaining 30% of the monitoring period elapses, and then performs timeout failure processing.

Execute the monitoring path status display command (monpath), and then check the monitoring path status again. If no problem is found, the situation might be due to a high machine load or a temporary failure of a monitoring path, which means you can ignore it. If a problem is found, contact a system administrator.

#### Action:

Determine the cause of the error, and then eliminate it.

### KAMN643-W

The answer of the inquiry message is not sent from host:aa...aa.

A query message was sent to the host indicated by the host name, but no response has been received, even though approximately 70% of the monitoring period has elapsed.

aa...aa: Host name

S:

Continues host monitoring.

If a preferred monitoring path has been specified in the lan operand of the HA Monitor environment settings, HA Monitor switches to that monitoring path. If the reason no response message has been received is due to the host rather than the monitoring path, HA Monitor outputs a KAMN340-E message after it outputs this message once the remaining 30% of the monitoring period elapses, and then performs timeout failure processing.

O:

Execute the monitoring path status display command (monpath), and then check the monitoring path status again. If no problem is found, the situation might be due to a high machine load or a temporary failure of a monitoring path, which means you can ignore it. If a problem is found, contact a system administrator.

### Action:

Determine the cause of the error, and then eliminate it.

### KAMN644-W

An error occurred in the reset path of the host:aa...aa. (details code:bb...bb, reset path:cc....cc)

An error occurred in the reset path of the host indicated by the host name. The active system might be prevented from being reset, and might be placed in the hot-standby wait-state. This message is intended as a status notification for the user and is output at a given interval.

aa...aa: Host name

bb....bb: See the detailed code tables for KAMN621-E and KAMN624-E.

cc....cc: If the detail code is NORSTD, four single-byte hyphens (----) are displayed. If the detail code is not NORSTD, see the reset path that caused the error indicated by KAMN 624-E.

S:

See the table under O: in KAMN 624-E.

### KAMN646-I

The reset path of host: aa...aa was recovered. (Reset Path: bb...bb)

The reset path of the host indicated by the host name was recovered. Note that, if the reset path of the local host was recovered, OWN HOST is displayed for the host name.

aa....aa: Host name

bb....bb: Recovered reset path

• Primary: Reset path

• ESXi: Reset path for connecting to VMware ESXi

S:

Continues processing.

### KAMN647-I

The shared disk will now be reserved, because a system reset of the host:aa...aa failed.

The shared disk will be reserved, because an attempt to perform a system reset on the host indicated by the host name failed.

aa...aa: Host name

S:

Continues processing.

### KAMN648-D

The server: aa...aa changed to the Hotstandby wait state, because a system reset cannot be performed and the shared disk cannot be reserved.

The active server indicated by the server alias name changed to the hot-standby switchover wait state, because a system reset failed and a SCSI reservation failed due to an I/O error in the device specified by the scsi\_device operand or dmmp device operand in the server environment definition.

aa...aa: Server alias name

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

Thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then start the server currently in the hot-standby switchover wait state as the active server by using the wait-state server start command (monact), or stop the server by using the wait-state server stop command (mondeact).

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

### KAMN649-E

The shared disk of server: aa...aa was reserved.

The shared disk of the server indicated by the server alias name was reserved. The server was stopped. This message is output if you are using hot-standby switchover via hybrid fencing to protect a shared disk.

The reservation is due to one of the following reasons:

- A hot-standby switchover was triggered by a local system slowdown or monitoring path failure, so a remote system reserved the disk.
- The shared disk used by the server was illegally reserved by another program or operation.

aa...aa: Server alias name

S:

Continues processing.

O:

Contact a system administrator.

Action:

Eliminate the cause of the failure, and then start the server, if necessary.

# KAMN650-E (E)

```
aa...aa system call error (bb...bb): cc....cc
```

An error occurred in a system call invoked by an HA Monitor function. For more information about detail codes, see the documentation for the applicable OS.

aa...aa: System call invoked

bb....bb: Detail code

cc....cc: Message of detail code

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

Contact a system administrator.

Action:

Determine the cause based on the detail code.

# KAMN651-E (E+L)

The environment check or termination process of the HA monitor was failed.

Error details:aa...aa:bb...bb:cc...cc.

A check of the HA Monitor environment settings or termination processing failed.

aa....aa: Detail code (1 digit)

Detail code	Meaning
4	Linux Tough Dump service could not be used.

bb....bb: Internal error code

cc....cc: errno of system call (from 1 to 3 digits)

• If detail code is 4: 0

S:

Terminates processing.

O:

Take one of the following actions, as indicated by the internal error code:

Internal error code	Corrective action
SYSTEM_CALL	Eliminate the cause of the system call error as indicated by message KAMN601-W, which is output before this message, and then restart HA Monitor.
LTD_STOP	Restart the Linux Tough Dump service and HA Monitor.
LTD_ERROR	Restart the Linux Tough Dump service and HA Monitor.  If a message from the Linux Tough Dump service was output before this message, eliminate the cause of the error sa indicated by that message, and then restart the Linux Tough Dump service and HA Monitor.

# KAMN660-E

Usercommand: aa....aa cannot start.

A user command could not be executed.

aa....aa: Command name

S:

<sup>2.</sup> Messages from KAMN000 to KAMN999

Check the usrcommand operand of the HA Monitor environment settings, and then eliminate the cause of the error in the indicated user command.

# KAMN661-I (S)

Usage: moninfo alias -p inheritable information moninfo alias -g

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the command for specifying and displaying server inheritance information (moninfo) is incorrect.

S:

Continues processing.

# KAMN662-E (E)

The inheritable information of aa...aa command is improper.

The information that the server inherits from the specified command has exceeded a limit or includes an invalid character.

aa...aa: Command name

S:

Stops command processing.

O:

Specify the information that the server inherits using the correct syntax.

## KAMN663-I (S)

Inheritable information was set at server:aa...aa.

The inheritable information, specified by the command for specifying and displaying server inheritance information (moninfo), was set in the server indicated by the server alias name.

aa...aa: Server alias name

S:

Continues processing.

### KAMN666-E

Removal of a shared disk reserve for the server aa...aa was detected.

The reserve status could no longer be detected for the shared disk of the server indicated by the server alias name. The server was stopped. This message is output only when a hot-standby switchover via SCSI reservation of a shared disk is selected as the method used to perform a hot-standby switchover.

Reserve status might have become undetectable for the following reasons:

- A hot standby was triggered by a local system slowdown or monitoring path failure, so a remote system reserved the disk.
- The shared disk used by the server was illegally reserved by another program or operation.

aa...aa: Server alias name

S:

Resumes processing.

O:

Eliminate the cause of the failure, and then restart the server, if necessary.

# KAMN667-I (S)

No reset path is being used.

The reset path status display command (monrp) cannot be used because no reset path is being use.

S:

Resumes processing.

### KAMN684-E

Abnormality of HAmonitor in the own host was detected. Own host cannot be system reset.

Error details:aa...aa

The local system cannot perform a reset, nor can it be reset from a remote system, because an error has been detected on the local HA Monitor, as indicated by the cause code.

aa...aa: Cause code

Cause code	Meaning
ATTACH	A daemon failed to start.
PIPE	A pipe system call error occurred.
FORK	A fork system call error occurred.
CONNECT	A communication error occurred.
NOEXIST	A daemon terminated abnormally.

S:

The action to take differs depending on whether the cause code is PIPE or something else.

If the cause code is PIPE, perform the following actions:

- The reset path might not have been set by the HA Monitor environment setup command (monsetup). Check the setting of the reset path. If the path has not been set, force HA monitor to terminate normally, set the reset path with monsetup, and then restart HA Monitor.
  - If the KAMN601-W message was output before this message was output and the issued system call is bind, the cause is one of the following:
  - The port number specified for the reset path port number in the reset path settings is the same as the port number being used by the monitoring path or is already being used by another program. Specify a number that is not being used. Review the reset path settings and configuration, and then execute the reset path status display command (monrp).
  - HA Monitor was started during execution of the command for setting the reset path (when the -resetpath option was specified for the monsetup command). Do not start HA Monitor during setup of the reset path. End the specification of settings for the reset path, and then execute the reset path status display command (monrp).

If the cause code is something other than PIPE, perform the following actions:

- If message KAMN601-W is output before this message, eliminate the cause of the system call error as indicated by that message, and then execute the reset path status display command (monrp).
- If message KAMN624-E is output before this message, eliminate the cause of the detail code error as indicated by that message, and then execute the reset path status display command (monrp).

#### KAMN685-W

The definition of host(aa...aa)'s Reset Path is different from own host's definition.

The host indicated by the host name was connected. However, a system reset could not be performed on that host because its reset path configuration is different from that of the local system. If the Switch & Management Module is used for the reset path, a reset path might not have been set up using the HA Monitor environment setup command (monsetup).

aa...aa: Host name

S:

Continues processing.

O:

Check the reset path setting and correct it if necessary, and then restart HA Monitor.

### KAMN686-W

The function of Switch and Management Module cannot be used. Details: aa....aa

A local Switch & Management module sent a notification that an invalid function was attempted.

aa...aa: Detail code

Detail code	Meaning
CLUSTER-MANAGER	The cluster management function of the Switch & Management Module is in an invalid state.

S:

Continues processing.

O:

Take the following action, as indicated by the detail code:

Detail code	Corrective action
CLUSTER-MANAGER	Carefully review the cluster management function settings and configuration of the local Switch & Management Module. If an error is found, correct it.

### KAMN690-W

An error occurred in the aa...aa command.

Command output details: 'bb....bb'

An error occurred in an OS command issued in an HA Monitor function. For details about the output message, see the documentation for the applicable OS.

aa...aa: Issued command

bb....bb: Message issued by the command (might be blank in some cases)

S:

Continues processing.

#### Action:

Investigate the cause of the error based on the output message, and eliminate the cause of the failure.

### KAMN695-I

The function that detects Operating System panic of other systems was enabled.

The function that detects OS panics in other systems has been enabled. HA Monitor operates using the function that detects OS panics in other systems.

S:

Continues processing.

### KAMN696-W

The function that detects Operating System panic of other systems was not enabled. Cause code:aa....aa

HA Monitor will operate without using the function that detects OS panics in other systems.

<sup>2.</sup> Messages from KAMN000 to KAMN999

### aa...aa: Cause code

Cause code	Meaning
SYSTEM_CALL	System call error
LTD_STOP	Linux Tough Dump service has not started.
LTD_ERROR	Linux Tough Dump service error.

S:

Continues processing.

O:

Contact a system administrator.

### Action:

Take one of the following actions, as indicated by the cause code:

Cause code	Corrective action
SYSTEM_CALL	Eliminate the source of the system call error as indicated by message KAMN601-W, which is output before this message, and then restart HA Monitor.
LTD_STOP	Restart the Linux Tough Dump service and HA Monitor.
LTD_ERROR	Determine the cause of the error based on the OS failure notification function message that was output before this message. After eliminating the cause of the error, restart the Linux Tough Dump service and HA Monitor.  For details about the OS failure notification function messages, see the documentation for the Linux Tough Dump service.

# KAMN699-I

The function that Linux Tough Dump Service is used.

The Linux Tough Dump service will be used. A system dump will be generated if a system failure occurs.

If the function that detects OS panics in other systems is available, HA Monitor operates using the function that detects OS panics in other systems.

S:

# 2.8 Messages from KAMN700 to KAMN799

### KAMN701-I

Because it is already published, the trb\_mtb\_malloc function rejects.

The module trace buffer allocation function (trb\_mtb\_malloc) has already been invoked, and a buffer has been allocated. Re-invoking this function is not allowed.

S:

Continues processing.

### KAMN702-W

Because a module trace buffer cannot be gotten, module trace information stops.

Due to a memory shortage, the work area required to acquire module trace information could not be allocated. Module trace information will not be collected.

S:

Continues processing.

O:

Contact a system administrator.

Action:

Determine the cause of the error based on the error message that was output before this message.

# KAMN703-I (S+L)

Performing a forced stop on host:aa...aa.

The host indicated by the host name is forcibly stopped.

aa...aa: Host name

S:

Continues processing.

## KAMN705-W (E+L)

The HAmonitor on host:aa...aa does not support the functions shown in the detailed code. Detailed code:bb...bb.

The function indicated by the detail code cannot be used by HA Monitor on the host indicated by the host name.

aa....aa: Host name

#### bb....bb: Detail code

Detail code	Function name
FORCIBLY_STOP	Forced hot-standby switchover

S:

Takes action as follows depending on the detail code:

Detail code	Corrective action
FORCIBLY_STOP	Starts hot-standby switchover processing upon host failure.

O:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action	
FORCIBLY_STOP	If you are using a host reset:  No action is required.	
	If you are using SCSI reservation of a shared disk:  If the OS is running on the hot-standby switchover source, stop the OS.	
	If you are controlling hot-standby switchover by regulating LAN communications:  If the OS is running on the hot-standby switchover source, stop the OS.	
	If you are using hybrid fencing:  If the OS is running on the hot-standby switchover source, stop the OS.	

## KAMN706-E (E+L)

Forced system switchover cannot be performed in the current state, because there are online servers running on more than one host in group: aa...aa.

The group indicated by the group name is not in a state where forced hot-standby switchover is possible, because multiple hosts are running as the active server.

aa....aa: Group name

S:

Stops command processing.

O:

From among the servers in the group indicated by the group name, specify the server on which you want operations to continue during a hot-standby switchover, and then re-execute the command.

## KAMN707-E (E+L)

The server paired with server: aa...aa does not exist. The bb...bb command cannot be executed.

The command indicated by the command name cannot be executed, because no server is paired with the server indicated by the server alias name.

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

O:

Specify a server alias name to serve as the pair, and then re-execute the command.

#### KAMN708-I

A request was received for forced system switchover of host:aa...aa.

A request was received for forced hot-standby switchover of the host indicated by the host name. This message is output for a forced hot-standby switchover.

aa....aa: Host name

S:

Continues processing.

#### KAMN717-E

Failed to JP1 event notification. Event-ID=aa...aa Message-ID=bb...bb Function-name=cc...cc Status=dd...dd

An attempt to report a JP1 event has failed. The JP1 event has not been reported.

aa...aa: ID of event that was attemping to post a notification

bb....bb: ID of the HA Monitor message corresponding to the event that was attempting to post a notification

cc....cc: Name of the function that generated the error

dd....dd: Status code

Status code	Meaning	
NO_LIBRARY	Library not found.	
CONNECT_ERROR	Cannot connect to JP1/Base.	
MAXOPEN	The number of open files has exceeded the limit.	
NO_MEMORY	Insufficient memory	

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Contact a system administrator.

#### Action:

Eliminate the failure, based on the avoidance strategies in the table below. If the status codes is not found in this table, collect information as necessary.

Status code	Corrective action	
NO_LIBRARY	JP1/Base might not have been installed. Install it, and then restart HA Monitor.	
CONNECT_ERROR	JP1/Base might not have been started. Start JP1/Base.	
MAXOPEN	Carefully review the kernel parameters, and then restart HA Monitor.	
NO_MEMORY	Carefully review whether sufficient memory has been allocated to the system.	

#### KAMN723-E

The data protection method setting for the shared disk is invalid.

Although both the scsi\_device and dmmp\_device operands have been specified in the server environment definition, use is not specified in the fence scsi operand of the HA Monitor environment settings.

S:

Suspends startup processing.

O:

Contact a system administrator.

#### Action:

Correct the definition, and then restart HA Monitor.

#### KAMN724-E

0 cannot be set for the address operand of the function statement in the sysdef definition file.

0 cannot be specified in the address operand because use was specified in the fence\_scsi operand of the HA Monitor environment settings.

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

Specify 1 or more for the address operand in the HA Monitor environment settings.

## KAMN725-W (E+L)

Execution of the SCSI command on the device *aa....aa* ended abnormally. (details code: *bb....bb*, server: *cc....cc*, host address: *dd....dd* (0x*ee....ee*))

A SCSI command execution error has occurred for device aa...aa. If bb....bb is OPEN or IOCTL, message KAMN 601-W is output before this message.

aa...aa: Name of the device specified in the server environment definition operand in which the error occurred

For details about the device name, see the following table:

Operand name	Environment	Device name
scsi_device	Multipath software is HDLM.	HDLM logical device name
	Virtual environment based on VMware ESXi	Symbolic link name
	All other cases	
dmmp_device	Multipath software is DMMP.	DMMP logical device name $(/\text{dev}/xxx)$ is output after the DMMP logical device name, where $xxx$ indicates the name of the path where the error occurred.

#### bb....bb: Detail code

Detail code	Meaning	
OPEN	An attempt to open aaaa failed. aaaa does not exist.	
IOCTL	aaaa does not support SCSI reservations.	
ALREADY-RESERVATION	<i>aaaa</i> is already reserved. Another possibility is that it was reserved by a remote system in a hot standby.	
IO-ERR	An I/O error has occurred on aaaa.	

cc...cc: Server alias name of the server that is using a shared disk on aa...aa.

dd....dd: The following are displayed, listed by detail code.

Detail code	Text displayed	
OPEN	*	
IOCTL		
ALREADY-RESERVATION	Host address of the system that has reserved the disk	
IO-ERR	Local system host address (Note: When this message is output by the monscsiclr command, this value is always 99999999).	

ee...ee: The following are displayed, listed by detail code.

Detail code	Text displayed
OPEN	*
IOCTL	

Detail code	Text displayed
ALREADY-RESERVATION	Displays, in hexadecimal, the content displayed in dddd. This is the specification key of
IO-ERR	the sg_persist command that is executed during corrective actions.

S:

Resumes processing.

O:

Contact a system administrator.

#### Action:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action	
OPEN	Specify a symbolic link or HDLM logical device name for the scsi_device operand. Alternatively, specify the logical device of the multipath software (DMMP) in the dmmp_device operand.	
IOCTL	Specify a symbolic link of a shared disk supporting SCSI Reserve or an HDLM logical device name for the scsi_device operand. Alternatively, specify the logical device of the multipath software (DMMP) in the dmmp_device operand.	
ALREADY-RESERVATION	If the active server is started after any of the operations or events listed below, this detail code is output and the processing to start the active server fails. In such a case, either execute the reservation release command (monscsiclr command) or release the reservation by following the procedure described in the section on handling a server that does not release a reservation in the manual <i>HA Monitor Cluster Software</i> (for Linux(R) (x86) systems), and then restart the active server.	
	• When the active server was stopped, the reservation could not be released, for example, because of an I/O error (the KAMN726-E message is displayed).	
	• A host failure occurred on the active system while hot standby processing was not possible (for example, because the standby server was inactive).	
	• The OS was shut down while the active server was running.	
	• When hot standby processing was performed as a result of a host failure, the active server terminated before the failed host and the standby server were started.	
	If none of the above applies, see the sections on handling device failures on a shared disk in the manual <i>HA Monitor Cluster Software</i> (for Linux(R) (x86) systems), and take the corrective action described there.	
IO-ERR	See the section on handling shared disk device failures in the manual <i>HA Monitor Cluster Software</i> (for Linux(R) (x86) systems), and take the corrective action described there.	

## KAMN726-E (E+L)

Errors occurred on all the paths to the device aa...aa.

Errors have occurred on all paths corresponding to device aa....aa. The KAMN725-W message is output before this message.

*aa...aa*: Name of the device specified in the server environment definition operand, in which the error occurred For details about the device name, see the following table:

Operand name	Environment	Device name
scsi_device	Multipath software is HDLM.	HDLM logical device name
	Virtual environment based on VMware ESXi	Symbolic link name
	All other cases	
dmmp_device	Multipath software is DMMP.	DMMP logical device name (/dev/xxx) is output after the DMMP logical device name, where xxx indicates the name of the path where the error occurred. Out of the physical paths corresponding to the DMMP logical device, the path name displayed in the message KAMN725-W, which is output before the message KAMN726-E, is output.

S:

Resumes processing.

O:

Contact a system administrator.

#### Action:

See message KAMN725-W, which was output before this message, and then eliminate the cause of the error.

## KAMN727-I

Recovery of the device aa....aa was detected. (details code: bb....bb, server: cc....cc)

The device aa...aa that failed when the SCSI command was executed has been recovered.

aa...aa: Name of the device specified in the server environment definition operand in which the error occurred

For details about the device name, see the following table:

Operand name	Environment	Device name
scsi_device	Multipath software is HDLM.	HDLM logical device name
	Virtual environment based on VMware ESXi	Symbolic link name
	All other cases	
dmmp_device	Multipath software is DMMP.	DMMP logical device name (/dev/xxx) is output at the end of the DMMP logical device name. xxx is the path for which the failure occurred.

## bb....bb: Detail code

Detail code	Meaning
STANDBY_CHECK	The processing to check the path status of the shared disk, which is executed periodically by the standby server, detected that the device had been recovered.

Detail code	Meaning
ONLINE_CHECK	The processing to check for shared disk reservations, which is executed periodically while the active server is running, detected that the device had been recovered.
ONLINE_CHECK(NO_KEY)	The processing to check for shared disk reservations, which is executed periodically while the active server is running, detected that the device had been recovered, but the restored path is in a state that is unable to update the disk.

cc....cc: Server alias name of the server that is using the shared disk of aa...aa.

S:

Resumes processing.

O:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action	
STANDBY_CHECK	For a multipath configuration, check the path status by executing an HDLM, a DMMP,	
ONLINE_CHECK	or an HFC-PCM command. If it has not been restored to the online status (failback), use an HDLM, a DMMP, or an HFC-PCM command to restore the online status (failback). No action is required if a multipath configuration is not used.	
ONLINE_CHECK(NO_KEY)	As indicated by the content of message KAMN725-W, which is output before this message, see the section on handling shared disk device failures in the manual <i>HA Monitor Cluster Software</i> (for Linux(R) (x86) systems), and take the corrective action described there.	

#### KAMN728-W

A shared disk reserve for the server aa...aa is not released.

Data on the shared disk might be corrupted, because the status of a remote system cannot be verified. For this reason, the reservation will not be released.

aa...aa: Server alias name

S:

Continues processing.

O:

See the recommended corrective actions to take in response to a server that has not released its reservation to a shared disk in the manual *HA Monitor Cluster Software* (for Linux(R) (x86) systems).

If, however, either of the following conditions is met, the preceding actions are not required. In this case, ignore the message.

- An active server with the server alias name is running on a remote system when the multi-standby function is used.
- You are using hybrid fencing and the release of a reservation is already being performed.

#### KAMN729-W

Execution of a SCSI command on the device: aa....aa ended abnormally. (details code: bb....bb, server: cc....cc, host address: dd....dd (0xee....ee)).

A SCSI command execution error occurred on the standby server indicated by the server alias name. If the active system fails, an attempt to start the switching-destination standby server might fail. This message is intended as a status notification for the user and is output at a given interval.

aa....aa: Name of the device specified in the server environment definition operand in which the error occurred

For details about device names, see the table under aa...aa in KAMN725-W.

bb....bb: See the detail codes in KAMN725-W.

cc...cc: Server alias name of the server that uses the shared disk indicated by aa...aa

dd....dd: See the table under dd....dd in KAMN725-W.

ee...ee: See the table under ee...ee in KAMN725-W.

S:

Continues processing.

O:

Contact a system administrator.

Action:

See the message KAMN725-W, which is output before this message, and eliminate the cause of the error.

## KAMN730-E (E)

In the function definition statement in the definition file:sysdef, the ph log size operand is not specified.

The ph\_threshold operand is specified in the HA Monitor environment settings, but the ph\_log\_size operand is not.

S:

Terminates processing.

O:

Contact a system administrator.

Action:

To generate a monitoring log, specify the ph log size operand in the HA Monitor environment settings.

## KAMN731-E (E)

In the function definition statement in the definition file:sysdef, the value specified in the ph\_threshold operand is the same as or more than the value specified in the patrol operand.

<sup>2.</sup> Messages from KAMN000 to KAMN999

A value equal to or greater than the value specified for the patrol operand has been specified in the ph\_threshold operand in the HA Monitor environment settings.

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

Correct the HA Monitor environment settings so that the value specified for the ph\_threshold operand is less than the value specified in the patrol operand.

## KAMN732-E (E)

For server aa....aa, in the definition file:servers the value specified in the ph\_threshold operand is the same as or more than the value specified in the patrol operand.

A value equal to or greater than the value specified for the patrol operand has been specified in the ph\_threshold operand in the server environment definition.

aa...aa: Server alias name

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

Correct the server environment definition so that the value specified for the ph\_threshold operand is less than the value specified in the patrol operand.

#### KAMN733-E (E)

For server *aa....aa*, the ph\_threshold operand is specified in the definition file:servers, but in the function definition statement in the definition file:sysdef, the ph\_log\_size operand is not specified.

The server indicated in the server alias name specifies the ph\_threshold operand in the server environment definition, but does not specify the ph\_log\_size operand in the HA Monitor environment settings.

aa...aa: Server alias name

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

To generate a monitoring log, add the ph\_log\_size operand to the HA Monitor environment settings.

To not generate a monitoring log, delete the ph threshold operand from the server environment definition.

#### KAMN740-I

The patrol history file has been backed up.

The monitoring log file has been backed up. Create a backup of (/opt/hitachi/HAmon/history/patrol\_history\_old), if necessary.

S:

Continues processing.

#### KAMN741-E

The patrol history could not be acquired.

Cause:aa....aa

An attempt to access the monitoring log has failed. Access to the monitoring log is denied.

#### aa...aa: Cause code

Cause code	Meaning
OPEN	The monitoring log file failed to open.
WRITE	Writing to the monitoring log file failed.
BACKUP	Backup of the monitoring log file failed.

S:

Continues processing.

O:

Contact a system administrator.

#### Action

Eliminate the source of the system call error as indicated by message KAMN601-W, which is output before this message.

After eliminating the cause of the error, restart HA Monitor.

#### KAMN750-W

HAmonitor in host:aa...aa cannot system reset to own host.

The version of HA Monitor on the host indicated by the host name is old, so a local system running a newer virtual environment could not be reset.

2. Messages from KAMN000 to KAMN999

aa...aa: Host name

S:

Continues processing.

O:

Upgrade the version of HA Monitor on the host indicated by the host name to one that supports the virtual environment in which the local system is running. Alternatively, operate it in a different hot standby configuration from that of the host indicated by the host name.

#### KAMN751-I

Initialization of performing a system reset of a virtual machine was completed.

The virtual machine has been reset.

S:

Continues processing.

## KAMN752-E

There is a contradiction in the definition of Reset Path between host: aa....aa and own host. system name of own host: bb....bb machine address of own host: cc....cc system name of host: aa....aa: dd....dd machine address of host: aa....aa: ee....ee

There is a conflict between the host indicated by the host name and the reset path of the local system. This message is displayed in either of the following circumstances:

- If the managing system names of the remote and local system are different, but the machine addresses are the same.
- If the managing system names of the remote and local system are the same, but the machine addresses are different.

aa....aa: Host name

bb....bb: Local managing system name

cc....cc: Local machine address

dd...dd: Managing system name of the host indicated by the host name

ee...ee: Machine address of the host indicated by the host name

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

Carefully review the host indicated by the host name and the settings of the local system reset path. After correcting the managing system name or the machine address settings, restart the HA Monitor of the corrected system.

#### KAMN755-I

HAmonitor connected to the VMware ESXi via Secure Shell. IP address of the VMware ESXi:aa...aa

HA Monitor is connected to VMWare ESXi via SSH.

aa...aa: IP address

S:

Continues processing.

#### KAMN757-W

The virtual machine name set to host:aa...aa overlaps each other. Virtual machine name:bb....bb

The virtual machine name specified in the host indicated by the host name is the same as the local system settings. The reset path settings are not correct, so the local or remote system might have been reset incorrectly.

aa....aa: Host name

bb....bb: Virtual machine name

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

Check whether the virtual machine name of the local and remote systems are duplicated for all VMWare ESXi that HA Monitor can connect to. If you change a virtual machine name, restart HA Monitor.

#### KAMN758-W

There is a contradiction in the combination of HA monitor option, between Host: aa....aa and own host.

The HA Monitor options of HA8000 for a local system and a remote system cannot be used in combination.

aa....aa: Host name

S:

Continues processing.

O:

Review the reset path configuration.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN761-E

The function of HAmonitor Extension cannot be set. Error details:aa...aa

An error occurred when the HA Monitor Extension function was being initiated, so the function could not be set up.

aa...aa: Detail code (1 digit)

Detail code	Meaning
1	HA Monitor Extension is not installed.
2	HA Monitor is already running.

S:

Suspends processing.

O:

After eliminating the cause of the error based on the detail code, reinitiate the HA Monitor Extension function.

#### KAMN762-E

HA monitor Extension is not set. The function to specify cannot be used. Definition file: aa....aa bb....bb operand

The specified function cannot be used because the HA Monitor Extension function has not been set up.

aa...aa: Definition file name

bb....bb: Operand name

S:

Suspends processing.

O:

Carefully review the definition and set up the HA Monitor Extension function.

## KAMN763-E

HAmonitor Extension is not installed, can not execute the command.

The command cannot be executed because HA Monitor Extension is not installed.

S:

Suspends processing.

O:

Install HA Monitor Extension.

<sup>2.</sup> Messages from KAMN000 to KAMN999

#### KAMN764-E

A script group:aa....aa is not set.

The script group indicated by aa...aa is not set.

S:

Terminates processing.

O:

Contact a system administrator.

#### Action:

Take the following action for the script group indicated by *aa...aa*. After taking the action, run the definition check command (moncheck) to make sure that no error is displayed.

Script group	Action
public_cloud	In the AWS environment:
	Expand /opt/hitachi/HAmon/lib/cloud/aws_script.tar.gz.
	In the Azure environment:
	Expand /opt/hitachi/HAmon/lib/cloud/azure_script.tar.gz.
	In the OCI environment:
	Expand /opt/hitachi/HAmon/lib/cloud/oci_script.tar.gz.
	For details about how to expand the preceding files, see the following section in the For Public Cloud Systems HA Monitor Cluster Software Guide: "[AWS] Expanding the shell script group for AWS", "[Azure] Expanding the shell script group for Azure", or [OCI] Expanding the shell script group for OCI.
rep_device	Expand /opt/hitachi/HAmon/lib/rep/drbd_script.tar.gz. For details about how to expand the preceding file, see the following section in the <i>For Public Cloud Systems HA Monitor Cluster Software Guide</i> : "[AWS] Expanding the shell script group for AWS" or "[Azure] Expanding the shell script group for Azure".

## KAMN765-I

The acquisition of information about the public cloud environment is complete.

## In the AWS environment:

The acquisition of information (instance ID) required for a remote host to reset the local host is complete. The remote host is able to reset the local host.

#### In the Azure environment:

The acquisition of information (virtual machine ID) required for a remote host to reset the local host is complete. The remote host is able to reset the local host.

## In the OCI environment:

The information (instance OCID) required for a remote host to reset the local host was acquired. The remote host is able to reset the local host.

S:

Continues processing.

#### KAMN766-F

An error occurred during the acquisition of information about the public cloud environment.

#### In the AWS environment:

An attempt to acquire information (instance ID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

#### In the Azure environment:

An attempt to acquire information (virtual machine ID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

#### In the OCI environment:

An attempt to acquire the information (instance OCID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

#### In the AWS environment:

An attempt to acquire the instance ID of the local host has failed. The remote host is not able to reset the local host. Immediately ask the AWS support for investigation based on the execution log (/opt/hitachi/HAmon/spool/cloud/moncld getinf.log err), and then take appropriate actions.

After an error is detected, HA Monitor attempts to acquire the instance ID of the local host at 60-second intervals. Eliminate the cause of the error, and then make sure that the message KAMN 765-I is output.

#### In the Azure environment:

An attempt to acquire the virtual machine ID has failed. The remote host is not able to reset the local host. Immediately ask Azure support for investigation based on the execution log (/opt/hitachi/HAmon/spool/cloud/moncld\_getinf.log\_err), and then take appropriate action.

After an error is detected, HA Monitor attempts to acquire the virtual machine ID at 60-second intervals. Eliminate the cause of the error, and then make sure that the message KAMN765-I is output.

#### In the OCI environment:

An attempt to acquire the instance OCID has failed. The remote host is not able to reset the local host. Immediately ask the OCI support for investigation based on the execution log(/opt/hitachi/HAmon/spool/cloud/moncld getinf.log err), and then take appropriate actions.

After an error is detected, HA Monitor attempts to acquire the instance OCID at 60-second intervals. Eliminate the cause of the error, and then make sure that the message KAMN765-I is output.

#### KAMN767-W

An error has occurred during the acquisition of information about the public cloud environment.

#### In the AWS environment:

An attempt to acquire information (instance ID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

#### In the Azure environment:

An attempt to acquire information (virtual machine ID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

#### In the OCI environment:

An attempt to acquire the information (instance OCID) required for a remote host to reset the local host failed. The remote host is not able to reset the local host.

This message is output at set intervals to report the status to the user.

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

See the message KAMN766-E and take corrective actions.

#### KAMN768-E

An abnormality was detected during the monitoring of the public cloud environment.

An abnormality was detected during the CLI availability check.

S:

Continues processing.

O:

Contact a system administrator.

## Action:

If this message was output when HA Monitor started, the settings for running the CLI in the public cloud are not specified, or the settings are invalid. Revise the settings to correct errors by referring to the following section in the For Public Cloud Systems HA Monitor Cluster Software Guide: "[AWS] Configuring AWS", "[Azure] Configuring Azure", or "[OCI] Configuring OCI".

If this message is output while HA Monitor is running, an attempt to run the CLI has failed. Check whether communication to the endpoint is possible. If you cannot determine the cause of the CLI failure, HA Monitor will no longer be able to perform hot-standby switchover. In this case, obtain the CLI execution log (/opt/hitachi/HAmon/spool/cloud/moncld\_polling.log), ask customer support of the public cloud environment (AWS, Azure, or OCI) to investigate, and take appropriate action.

#### KAMN769-W

An abnormality has been detected during the monitoring of the public cloud environment.

An abnormality has been detected during the CLI availability check. This message is output at set intervals to report the status to the user.

S:

Continues processing.

O:

Contact a system administrator.

Action:

See the message KAMN768-E and take corrective actions.

#### KAMN770-I

Recovery was detected during the monitoring of the public cloud environment.

Recovery was detected during the CLI availability check.

S:

Continues processing.

#### KAMN771-E

The processing of a replication device:aa....aa failed. Server:bb....bb. Cause code:cc....cc.

A failure or an event occurred during processing indicated by cause code cc....cc in replication device aa....aa.

aa...aa: Name of the replication device (specified in the server environment definition operand) in which the processing failed or an event occurred

bb...bb: Server alias name of the server that is using the replication device aa...aa

cc....cc: Cause code

The following shows the meanings of cause codes.

Cause code	Meaning
1	An attempt to configure primary suppression failed. Alternatively, an error occurred in the replication path in a multi-standby configuration.
2	An attempt to configure primary suppression on the remote host failed.

S:

Performs the following processing for the cause code.

Cause code	Processing
1	Stops the standby server.
2	Makes disk I/O of the active server remain stopped.

O:

Contact a system administrator.

#### Action:

Take one of the following actions, as indicated by the cause code.

Cause code	Action
1	Because the replication path has a failure, recover the replication path. After recovery, restart the standby server.
	Investigate the cause of the processing failure based on the execution log (/opt/hitachi/HAmon/spool/rep/monrep_ctl_replication-device-name.log).
2	If reset is performed by the standby system after this message is output, no action is required.  If reset is not performed by the standby system, take actions in the following order.  1. Do not perform hot-standby switchover by, for example, manually stopping the standby system.  2. Recover the monitoring path and replication path from failure.  3. Resume disk I/O by using the drbdadm resume-io command.

#### KAMN772-W

A path error occurred in a replication device:aa....aa. Server:bb....bb.

The active system of the replication path for the replication device indicated by *aa....aa* sends information indicating that the disk in the standby system will not be updated.

*aa...aa*: Name of the replication device (specified in the server environment definition operand) in which a path error occurred

bb...bb: Server alias name of the server that is using the replication device aa...aa

S:

Continues processing. In order to prevent access to a disk that is not updated, the system sets the disk status to outdated to prevent the disk from becoming primary.

O:

Immediately recover the replication path. When the replication path is recovered, the primary suppression status of the disk is canceled.

#### KAMN773-E

The format of the definition file:aa...aa is invalid. Details code:bb...bb.

The definition file indicated by aa....aa is incorrectly formatted.

aa...aa: Definition file name

bb....bb: Detail code

<sup>2.</sup> Messages from KAMN000 to KAMN999

Detail code	Meaning
TGW	In the definition file indicated by <i>aaaa</i> , the transit gateway information is incorrectly formatted.
RTB	In the definition file indicated by <i>aaaa</i> , the route table information is incorrectly formatted.
HOST	In the definition file indicated by <i>aaaa</i> , the host information is incorrectly formatted.
UNKNOWN (xxx)#	The information in the definition file indicated by <i>aaaa</i> is incorrectly formatted. In the file, <i>xxx</i> cannot be specified.

#:

For example, if the vip\_tgw\_def file contains the string rtd (which cannot be specified), the detail code will be UNKNOWN (rtd).

S:

Continues processing.

O:

Contact a system administrator.

#### Action:

Take one of the following actions, as indicated by the detail code:

Detail code	Corrective action
TGW	Check the descriptive rules for transit gateway information and revise as necessary.
RTB	Check the descriptive rules for route table information and revise as necessary.
HOST	Check the descriptive rules for host information and revise as necessary.
UNKNOWN (xxx)	Perform either of the following operations:  • Delete the string xxx.  • Add a hash mark (#) at the beginning of the relevant entry to comment it out.

For details about the descriptive rules, see Format of the  $vip\_tgw\_deffile$  in the manual For Public Cloud Systems HA Monitor Cluster Software Guide.

#### KAMN774-W

An error occurred in the VIP processing of the public cloud environment. Server:aa...aa.

In a configuration in which a hot-standby switchover occurs between regions or VPCs, an error occurred in the handling of a VIP during execution of the LAN status setup file (*server-alias-name.up* file).

Some or all clients might be unable to use VIP for business communications.

aa....aa: Server alias name

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:	
	Eliminate the cause of the error, and then re-execute the LAN status setup file (server-alias-name.up file).
2. N	Messages from KAMN000 to KAMN999

## 2.9 Messages from KAMN900 to KAMN999

## KAMN931-I (S+L)

A server is the waiting for a premise server stop. server:aa...aa premise server:bb...bb group name :cc....cc

The server cannot stop because it is part of a group of servers that are being stopped in a specific sequence, and a server that must stop earlier in the sequence has not stopped. The server is forced to wait for this parent server to stop.

aa....aa: Server alias name of the server forced to wait before it can be stopped

bb...bb: Server alias name of the server that must be stopped earlier

cc....cc: Server group name

S:

Forces the server to wait for the parent server to stop, and then restarts termination processing of the pending server after termination of the parent server completes.

## KAMN932-I (S+L)

A server is the waiting for premise server starting. server:aa...aa premise server:bb...bb group name:cc...cc

The server cannot start because it is part of a group of servers that are being started in a specific sequence, and a server that must start earlier in the sequence has not started. The server is forced to wait for this parent server to start.

aa...aa: Server alias name of the server forced to wait before it can be started

bb....bb: Server alias name of the server that must be started earlier

cc....cc: Server group name

S:

Forces the server to wait for the parent server to start, and then restarts startup processing of the pending server after startup of the parent server completes.

#### KAMN933-E

All of servers which are waiting for start are stopped, because premise server: aa...aa stopped abnormally.

All servers in the server start wait state are stopped because the parent server has terminated abnormally.

aa...aa: Server alias name of the server that terminated abnormally and must be restarted

S:

Continues processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Determine the reason the parent server terminated abnormally.

#### KAMN934-W

Server: *aa...aa* would start according to order control although premise server: *bb....bb* does not meet the condition of order control.

Server startup processing continues regardless of the status of the server's parent server, because the parent server is not running.

aa...aa: Server alias name of server

bb....bb: Server alias name of the parent server that must be started earlier

S:

Continues processing.

O:

Start the parent server, if necessary.

## KAMN936-I (S)

resource server has not started. server is made the waiting for start. server:*aa....aa* premise server:*bb....bb* group name:*cc....cc* 

A resource server has not started before the server to start, so the server must wait for the resource server to start.

aa...aa: Server alias name of the server waiting for the resource server

bb....bb: Server alias name of resource server

cc....cc: Server group name

S:

Forces the server to wait for the resource server to start, and then restarts server startup processing after the resource server starts.

#### KAMN937-E

An error occurred in group resource process, server activation is stopped. server:aa...aa group name:bb....bb

A server could not start because processing of the resources being used by the group has failed.

aa...aa: Server alias name of the server that terminated startup processing

bb....bb: Server group name

<sup>2.</sup> Messages from KAMN000 to KAMN999

S:

Terminates server start processing.

O:

Eliminate the cause of the error, and then restart the server.

## KAMN944-E (E)

server: aa...aa is not grouped.

The server specified in the command option is not part of the group.

aa...aa: Server alias name

S:

Stops command processing.

O:

The executed command cannot be used on servers that are not part of the group. Check for errors in the command syntax or server alias name, and then re-execute the command.

## KAMN950-I (S)

**Order Information** 

group name: aa...aa

alias: bb....bb parent: cc....cc

This is the information that is displayed by the command for displaying the server order control status (monodrshw).

aa....aa: Group name

bb....bb: Server alias name

cc....cc: The server's parent server

- Server alias name: Displayed if a parent server has been specified.
- none: Displayed if no parent server has been specified.

S:

Continues processing.

## KAMN952-I (S)

Usage: monodrshw -s alias monodrshw -g group

This message is output after message KAMN021-E or message KAMN327-E when the syntax of the command for displaying the server order control status (monodrshw) is incorrect.

S:

Stops command processing.

## KAMN953-E (E)

server: aa...aa is a resource server. It cannot start in monbegin.

The command could not be executed because the server indicated by the server alias name is a resource server.

aa...aa: Server alias name

S:

Terminates command processing.

O:

Start the resource server using the resource server start command (monresbgn).

## KAMN954-E (E)

server:aa...aa is not a resource server. It cannot start in monresbgn.

The command could not be executed because the server indicated by the server alias name is not a resource server.

aa...aa: Server alias name

S:

Terminates command processing.

O:

Start the server using the monitor-mode server start command (monbegin).

## KAMN955-E (E)

server:aa....aa is a resource server. It cannot stop in monend.

The command could not be executed because the server indicated by the server alias name is a resource server.

aa....aa: Server alias name

S:

Terminates command processing.

O:

Use the active resource server termination command (monresend) to stop the server.

<sup>2.</sup> Messages from KAMN000 to KAMN999

## KAMN956-E (E)

server: aa....aa is not a resource server. It cannot stop in monresend.

The command could not be executed because the server indicated by the server alias name is not a resource server.

aa...aa: Server alias name

S:

Terminates command processing.

O:

Use the monitor-mode server termination command (monend) to stop the server.

## KAMN957-E (E)

server: aa....aa is a resource server. It cannot stop in monsbystp.

The command could not be executed because the server indicated by the server alias name is a resource server.

aa...aa: Server alias name

S:

Terminates command processing.

O:

Use the standby resource server termination command (monressbystp) to stop the server.

## KAMN958-E (E)

server: aa....aa is not a resource server. It cannot stop in monressbystp.

The command could not be executed because the server indicated by the server alias name is not a resource server.

aa...aa: Server alias name

S:

Terminates command processing.

O:

Use the standby server termination command (monsbystp) to stop the server.

#### KAMN959-E (E)

The resource server is already defined by the group: bb....bb of server: aa....aa.

A resource server is already defined in the group that includes the resource server indicated by the server alias name.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Server alias name

bb....bb: Server group name

S:

Terminates processing.

O:

Carefully review the server environment definition, and correct any errors as necessary.

## KAMN961-E (E)

Order control relation of server: aa...aa is incorrect.

There is an error in the sequencing relationship that includes the server indicated by the server alias name.

aa...aa: Server alias name

S:

Terminates processing.

O:

Carefully review the server environment definition, and correct any errors as necessary.

## KAMN963-E (E)

Since a server while using a resource is, server:aa...aa cannot be stopped.

Termination of the server indicated by the server alias name was stopped because a server that uses the resource is running.

aa...aa: Server alias name

S:

Terminates processing.

O:

Terminate the server that is using the resource, and then terminate the server indicated by the server alias name.

## KAMN964-E

The command: cc....cc specified as the bb....bb operand of program: aa....aa does not exist or execution of this command is not permitted.

The command specified in the operand indicated by the operand name of the program indicated by the program alias name either does not exist or does not have permission to execute. Another possibility is that a directory was specified.

aa...aa: Program alias name

<sup>2.</sup> Messages from KAMN000 to KAMN999

bb....bb: Operand name

cc....cc: Path name of command

S:

Terminates processing.

O:

Check the following items, and then restart the server:

- Has the command indicated by the command name been created?
- Does it have permission to execute?
- Has a directory been specified as the path name of the command?

## KAMN965-E (E)

The program defining statement to specify the server: aa....aa for server\_alias operand doesn't exist though the server: aa....aa uses the function of program.

The server indicated by the server alias name has specified use in the program operand in the server environment definition. However, there is no program definition statement that specifies the server indicated by the server alias name in the server alias operand of the monitor-mode program environment definition.

aa...aa: Server alias name

S:

Terminates processing.

O:

Carefully review the server environment definition and the monitor-mode program environment definition, and correct any errors as necessary.

#### KAMN966-I

For program: aa...aa, the server: bb....bb specified in the program operand is not defined in the server definition sentence or cannot use the function of program.

The specification of the server set to manage the program indicated by the program alias name has one of the following errors:

- The server definition statement of the server environment definition has not been defined.
- monitor has not been specified in the acttype operand of the server environment definition.
- The program operand of the server environment definition has not been specified.

aa...aa: Program alias name

bb....bb: Server alias name

S:

Continues processing.

O:

Check for errors in the program operand of the server environment definition or in the server\_alias operand of the monitor-mode program environment definition.

## KAMN967-E (E)

The number of program belong the server: aa....aa has exceeded the number of the pgmmax operand.

Processing was terminated, because the number of programs managed by the server indicated by the server alias name has exceeded the value of the pgmmax operand in the HA Monitor environment settings.

aa...aa: Server alias name

S:

Terminates processing.

O:

Check for errors in the pgmmax operand and the monitor-mode program environment definition.

## KAMN968-I (S)

The total number of program belong each servers in definition file:servers has exceeded the number of the pgmmax operand.

The total number of programs managed by all servers defined in the server environment definitions has exceeded the value of the pgmmax operand in the HA Monitor environment settings.

S:

Continues processing.

O:

Take the follow corrective action, and then restart HA Monitor or the servers:

- Carefully review the definition of the pgmmax operand in the HA Monitor environment definition to ensure the number of programs managed by servers does not exceed that specified in the pgmmax operand.
- Correct the monitor-mode program environment definition.

## KAMN969-E (E)

Definition file:programs, The method of a definition of the server:aa....aa is incorrect. Command processing is stopped.

An error occurred during analysis of the monitor-mode program environment definition. Processing for the server indicated by the server alias name specified in the HA Monitor command was terminated.

aa...aa: Server alias name

S:

Terminates processing.

O:

Correct the monitor-mode program environment definition, and then restart the server.

#### KAMN970-E

Since a server: aa....aa starting priority overlaps other systems, therefore starting of server is stopped.

The switchover priority of the server is the same as that of a remote system. Startup of the server indicated by the server alias name was terminated.

aa...aa: Server alias name

S:

Terminates processing.

O:

Correct the server environment definition, and then restart the server.

#### KAMN971-E

Server:aa...aa online server is executed by two or more of other systems, therefore starting of server is stopped.

It was determined at server startup that the active server is running on multiple systems. Startup of the server indicated by the server alias name was terminated.

aa....aa: Server alias name

S:

Terminates processing.

O:

Stop the active server on the remote system and contact a system administrator.

#### Action:

Determine the resources that were being used by the active server, confirm that the resources do not have any problems, and then restart the server.

## KAMN972-D (S+L)

Server:aa...aa non-connected host exists. it was made a start wait state.

An unconnected host was detected at server startup. The server indicated by the server alias name has been placed in the standby server startup wait-state.

<sup>2.</sup> Messages from KAMN000 to KAMN999

aa...aa: Server alias name

S:

Terminates processing.

O:

Check all the connections between systems of HA Monitor. Connections between systems can be checked with the server and host status display command (monshow) or the monitoring path status display command (monshow).

Check the status of the remote systems, and if no active servers are running on the remote systems<sup>#</sup>, you can execute the wait-state server startup command (monact) to make this server the active server. If active servers are running on remote systems, execute the wait-state server stop command (mondeact) to stop this server.

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

## KAMN973-D (S+L)

Server: aa....aa The host who failed in reset exists. server state is not able to be check. it was made a start wait state.

A host that failed to reset and is waiting to be started as an active server was detected at server startup. The server indicated by the server alias name has been placed in the standby server startup wait-state.

aa...aa: Server alias name

S:

Terminates processing.

O:

After checking the status of each system, thoroughly verify that no active servers are running on remote systems<sup>#</sup>, and then start the server currently in the startup wait-state as the active server by using the wait-state server start command (monact), or stop the server by using the wait-state server stop command (mondeact).

#: If you execute the wait-state server startup command (monact) without sufficient verification and an active server was running on a remote system, two active servers will be running, which might result in the corruption of shared resources.

#### KAMN974-E (E)

Online server: aa...aa is started in other systems. Command(bb...bb) cannot be executed.

If active servers are running on remote systems, you cannot execute the wait-state server startup command (monact).

aa...aa: Server alias name

bb....bb: Command name

S:

Stops command processing.

<sup>2.</sup> Messages from KAMN000 to KAMN999

O:

Check the server statuses of each system.

#### KAMN975-D

Server: aa...aa is made to stop normally, because system reset is failed.

The standby server indicated by the server alias name was forcibly terminated because a system reset failed to execute.

aa...aa: Server alias name

S:

Terminates processing.

O:

Check the status of the host on which the error occurred. If the standby server was terminated by the host on which the error occurred, the standby server can be started, if necessary. Restart the standby server, if necessary.

#### KAMN977-W

The definition of host:aa...aa is different. Detailed information:bb...bb

The settings for the HA Monitor on the local host differ from the settings for the HA Monitor of the host indicated by the host name.

aa....aa: Host name

bb....bb: Detailed information

- PATROL: The system failure monitoring period is different.
- MULTICAST: The multicast settings are different.
- PATROL TYPE: Monitor timing interval settings are different.
- FENCE\_TYPE: The methods set for protecting data on shared disks are different.

S:

Continues processing.

O:

Take one of the following actions, as indicated by the detailed information:

Detailed information	Corrective action
PATROL	Carefully review the definition file, correct definitions as needed, and then restart HA Monitor.  Alternatively, execute the monchange command to ensure that the same host failure monitoring time is set in both systems.
MULTICAST	Make the values specified for the hostmax, alive_multicast, and multicast_lan operands of the HA Monitor environment settings the same for both systems, and then restart HA Monitor.

Detailed information	Corrective action
PATROL_TYPE	Make the values specified for the patrol_type operand of the HA Monitor environment settings the same for both systems, and then restart HA Monitor.
FENCE_TYPE	Make the values specified for the fence_reset, fence_scsi, and fence_lan operands of the HA Monitor environment settings the same for both systems, and then restart HA Monitor.

## KAMN978-I (S)

```
Usage:monchange -m operand value

monchange -m operand {-stop_patrol | -start_patrol}

monchange -s alias operand value

monchange -s alias operand {-stop_patrol | -start_patrol}

monchange -p program alias operand value
```

This message is output after message KAMN021-E or KAMN392-E when the syntax of the monchange command is incorrect.

S:

Continues processing.

## KAMN978-I (S)

```
Usage:monchange -m operand value

monchange -m operand {-stop_patrol | -start_patrol}

monchange -m operand {-use | -nouse}

monchange -s alias operand value

monchange -s alias operand {-stop_patrol | -start_patrol}

monchange -p program alias operand value
```

This message is output after message KAMN021-E or KAMN392-E when the syntax of the monchange command is incorrect.

S:

Continues processing.

## KAMN980-W

```
HAMON UAPNAME: aa...aa An error occurred in the bb...bb system call. Error details:cc...cc dd...dd
```

An error occurred in a system call invoked within an API process. For more information about detail codes and detail messages, see the documentation for the applicable OS.

aa...aa: Program name (Specification for HAMON\_UAPNAME environment variable. If more than 32 characters are specified, only the final 32 are displayed.)

bb....bb: System call invoked

cc...cc: Detail code (errno of system call, 1 to 3 digits. If 0, the detail message is displayed)

dd....dd: Detail message

S:

Continues processing.

O:

Take one of the following actions, as indicated by the system call displayed:

System call	Corrective action	
dlopen	Stop the UAP and eliminate the cause of the error displayed in the detail message. If HA Monitor is not installed, or the installed HA Monitor is a version that cannot monitor UAPs, install and set up a version that supports such monitoring.	
connect	Stop the UAP and eliminate the cause of the error displayed in the detail code.	
	If the detail code is 2, HA Monitor is not running, or HA Monitor is a version that does not allow UAP monitoring. Restart the UAP, if necessary.	
write	Stop the UAP and eliminate the cause of the error displayed in the detail code.	
	If the detail code is 2, HA Monitor is not running. Restart the UAP, if necessary.	
read	Stop the UAP and eliminate the cause of the error displayed in the detail code.	
	If the detail code is 2, HA Monitor is not running. Restart the UAP, if necessary.	
Other	Stop the UAP and eliminate the cause of the error displayed in the detail code. Restart the UAP, if necessary.	

## KAMN981-E

While processing API an error occurred. Cause: aa....aa Details: bb....bb

An error occurred during API processing.

aa...aa: Cause code

Cause code	Meaning
1	One of the following was detected. NO UAP name is output in the detail information.
	• The HAMON_UAPNAME environment variable was not specified.
	No value was specified for the HAMON_UAPNAME environment variable.
	• The value specified for the HAMON_UAPNAME environment variable exceeds 1,000 characters in length.

bb....bb: Detailed information

S:

HA Monitor is deactivated.

Action:

Take the following action:

<sup>2.</sup> Messages from KAMN000 to KAMN999

Cause code	Corrective action	
1	Enter the program name specified in the name operand of the monitor-mode program environment definition in the HAMON_UAPNAME environment variable.	

# Appendix

## A. Reference Material for This Manual

This appendix provides reference information, including various conventions, for this manual.

## A.1 Related publications

This manual is part of a related set of manuals. The other manual in the set is listed below (with the manual number):

• HA Monitor Cluster Software Guide (3000-9-201(E)), for Linux(R) (x86) systems

Manuals other than HA Monitor manuals that are related to this manual are listed below (with the manual numbers). Refer to these manuals as necessary.

## If you are using OpenTP1

- OpenTP1 Version 7 Description (3000-3-D50(E))
- OpenTP1 Version 7 System Definition (3000-3-D52(E))
- OpenTP1 Version 7 Operation (3000-3-D53(E))
- OpenTP1 Version 7 Messages (3000-3-D56(E))
- OpenTP1 Version 7 TP1/Client User's Guide TP1/Client/W.P (3000-3-D58(E))
- OpenTP1 Version 7 TP1/Client User's Guide TP1/Client/J (3000-3-D59(E))

## If you are using HiRDB

- HiRDB Version 9 Description (3000-6-450(E)), for UNIX systems
- HiRDB Version 9 Installation and Design Guide (3000-6-452(E)), for UNIX systems
- HiRDB Version 9 System Definition (3000-6-453(E)), for UNIX systems
- HiRDB Version 9 System Operation Guide (3000-6-454(E)), for UNIX systems
- HiRDB Version 9 Command Reference (3000-6-455(E)), for UNIX systems
- *HiRDB Version 9 Messages* (3020-6-458(E))

## If you are automating system operation through event management

- JP1 Version 11 JP1/Base User's Guide (3021-3-A01(E))
- JP1 Version 11 JP1/Base Messages (3021-3-A02(E))
- JP1 Version 12 JP1/Base User's Guide (3021-3-D65(E))
- JP1 Version 12 JP1/Base Messages (3021-3-D66(E))

## For disk path redundancy

• Hitachi Dynamic Link Manager Software User's Guide (3000-3-F04(E)), for Linux(R) systems

## A.2 Conventions: Abbreviations for product names

This manual uses the following abbreviations for product names:

Abbreviation		Full name or meaning
AWS		Amazon Web Services
Azure		Microsoft Azure
EMPD		ETERNUS Multipath Drive
HCSM		Hitachi Compute Systems Manager
HDLM		Hitachi Dynamic Link Manager Software
HFC-PCM		Hitachi Fiber Channel - Path Control Manager
HiRDB		HiRDB Accelerator Version 9
		HiRDB Advanced High Availability Version 9
		HiRDB Server Version 9
		HiRDB Server with Additional Function Version 9
JP1/ServerConducte	or	JP1/ServerConductor/Advanced Agent
		JP1/ServerConductor/Agent
		JP1/ServerConductor/Blade Server Manager
		JP1/ServerConductor/Blade Server Manager Plus
		JP1/ServerConductor/Server Manager
Linux		Linux(R)
Linux	Linux (x86)	Oracle Linux 7(x86_64)
		Oracle Linux 8(x86_64)
		Red Hat(R) Enterprise Linux(R) Server 6 (x86)
		Red Hat(R) Enterprise Linux(R) Server 6 (x86_64)
		Red Hat(R) Enterprise Linux(R) Server7(x86_64)
	RHEL7	Red Hat(R) Enterprise Linux(R) Server7(x86_64)
	RHEL8	Red Hat(R) Enterprise Linux(R) Server8(x86_64)
UNIX		UNIX(R)
VMware ESXi		VMware ESXi
		VMware vSphere(R) ESXi(TM)

# A.3 Conventions: Acronyms

This manual also uses the following acronyms:

Acronym	Full name or meaning
API	Application Programming Interface
AWS	Amazon Web Services
Azure	Microsoft Azure
СРИ	Central Processing Unit

Acronym	Full name or meaning
DB	Database
DMMP	Device Mapper Multipath
EUC	Extended UNIX Code
НА	High Availability
HRA	Health-check and Reset Adaptor
IPF	Itanium(R) Processor Family
LA	Line Adaptor
LAN	Local Area Network
LPAR	Logical Partitioning
LVM	Logical Volume Manager
NLS	National Language Support
OA	Onboard Administrator
OCI	Oracle Cloud Infrastructure
OS	Operating System
OSI	Open Systems Interconnection
PA-RISC	Precision Architecture - Reduced Instruction Set Computer
PV	Physical Volume
SCSI	Small Computer System Interface
SP	Service Processor
SSH	Secure Shell
SVP	Service Processor
TCP/IP	Transmission Control Protocol/Internet Protocol
UTF-8	8-bit UCS Transformation Format
XNF	Extended Hitachi Network Architecture Based Communication Networking Facility

# A.4 Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1, 024 bytes.
- 1 MB (megabyte) is 1, 024<sup>2</sup> bytes.
- 1 GB (gigabyte) is 1, 024<sup>3</sup> bytes.
- 1 TB (terabyte) is 1, 024<sup>4</sup> bytes.

## **Glossary**

## Α

#### abort code

Cause code for abnormal termination of a UNIX system.

#### active server

The server that is currently performing job processing.

#### active server start wait state

When a standby server is to be started, it might not always be possible for some reason to confirm that the active server has started on the remote host. In such a case, HA Monitor places the startup processing on the standby server in the wait state until the status of the active server can be confirmed. Such a standby server is called being in the active server start wait state. A standby server in the start wait state waits for a user intervention. When the active server startup processing is confirmed to have started, HA Monitor then starts the standby server.

#### active system

The system (host) that is performing job processing by running an active server.

#### alias IP address function

A function that enables multiple IP addresses to be assigned to a single LAN adapter so that the LAN adapter can be shared through the use of different IP addresses.

## alive message

A message that is issued between hosts at a specified interval to determine whether the target host is running normally.

## C

#### chassis

A rack that houses a computer and its peripheral equipment. When the system being used is BladeSymphony, this rack is called a *chassis*. Multiple systems can be configured in one chassis.

#### child server

A server whose startup processing begins after its parent server has started. This corresponds to a child in the parent-child relationship in server groups.

#### client

A machine (node) that uses various services provided by programs.

#### cluster configuration

A system configuration that is larger than one server system. Multiple server systems are connected via high-speed LANs and processing is distributed among different server systems. A client can perform processing by treating these server systems as a single server system.

## core file

An OS-specific file in which memory information (module trace information) for a process is stored in the event the program terminates abnormally. Core files might not always be created. If an error occurs in a user-created program and its core file is available, the user can use OS commands to debug the program.

D

## dual server system

A system that improves reliability and availability of the entire system by providing two sets of machines, programs, and resources for the system on which a server is run (or by sharing dual resources).

E

#### event ID

A number assigned to each event in order to individually manage the events that occur in a UNIX system.

G

## grouped-system switchover

A function that groups multiple servers together in advance, allowing operations to be switched over to a standby server for that group if a failure occurs on any of the active servers in the group (server group). HA Monitor enables the user to specify hot standby processing for each server within the server group.

## grouped-system switchover wait state

If a server failure occurs on an active server for which no\_exchange is specified for the group operand of the server environment definition, HA Monitor delays hot standby processing on the standby server in the standby system. This status for a standby server is called the grouped-system switchover wait state. A standby server in the grouped-system switchover wait state waits for a user intervention. However, if a server failure occurs on an active server for which exchange is specified in the group, grouped-system switchover is also performed on the standby server in the grouped-system switchover wait state.

Н

#### **HA Monitor Extension**

An HA Monitor optional product. When HA Monitor Extension is installed, hot standby control in a large system configuration can be supported. HA Monitor Extension can be used when the OS is Linux (x86).

host

A unit for a system in which one server is run per CPU. The hardware making up a system and the programs that are run on the system are referred to collectively as a *host*.

#### host slowdown

An event in which the execution time on the entire host becomes longer than usual. Its causes include concurrent execution of too many programs or a failure in communication between programs.

#### hot standby

A function for switching jobs to a standby system (host) or server if a failure occurs on the primary system (host) or server.

#### hot-standby wait-state

If the standby system fails to reset the active system after a failure on the active system, and the active server is started on the standby system while the status of the active server cannot be verified, two active servers might result. To avoid this, HA Monitor delays startup of the active server on the standby system. This status at the active server is called the hot-standby wait-state. A server in the hot-standby wait-state cannot be started as an active server without user intervention.

П

#### IP address

An address used with the IP protocol. The IP protocol corresponds to the network layer in the OSI basic reference model. The network layer manages addresses used to establish data transfer paths and to determine paths.

K

#### kernel

The core program of an OS. Its roles include management of tasks, memory, and I/O operations.

П

#### LAN adapter

Data conversion hardware used to connect a computer and a LAN.

lock

A control to prevent concurrent updating and deadlock on system resources when multiple requests for the same system resources result in contention. In HA Monitor, a function that prevents shared disks from being updated concurrently from both the active server and a standby server is called the *lock function*.

## locked server

If multiple standby servers provide separate services to the standby system, the user can prevent multiple active servers from being run concurrently after hot standby processing.

When a standby server operates as an active server, HA Monitor stops all other standby servers running on the same host. Such a standby server that is terminated by HA Monitor is called a locked server.

LVM

Abbreviation for Logical Volume Manager, which is a kernel functions. LVM enables the user to group several physical disk devices together as a volume group and assign to them any number and size of logical volumes.

M

#### message log

An OS function that stores issued messages in a specific file (message log file).

#### module trace information

A flow of module processing in HA Monitor that is collected in a module trace buffer (core file). The module trace information is first transferred to a portable medium and then is analyzed.

#### monitor mode

One of the server operation modes. A server in the monitor mode cannot use some of the HA Monitor functions, such as starting a server on the standby server beforehand or monitoring for server failures. However, the monitor-mode program management function makes some of those unavailable HA Monitor functions available.

## multi-standby function

A function for providing multiple standby servers for one active server.

This function can protect against a system failure while the primary system is recovering from a failure, in contrast to when only one standby server is provided per active server.

N

## N+M cold standby configuration

A system configuration for BladeSymphony in which JP1/ServerConductor or HCSM is used to switch from the primary server module to a standby server module when a hardware failure occurs on the primary server module that was performing job operations. Because one or more standby server modules are provided, reliability is improved for handling failures.

0

## operation report

Information that is sent from a server to HA Monitor at specific intervals. HA Monitor monitors the server based on this information.

## OS panic

An OS kernel panic.

P

#### parent server

A server that must be active so that another server can be started or hot standby processing can be started. This corresponds to the parent in the parent-child relationship in server groups, and it is specified in the server environment definition.

## partition

A function that divides a server machine into multiple sections and runs each section as a virtual server is called *partitioning*. Each such section is called a partition.

In BladeSymphony, which enables multiple processors to be installed in a single chassis, each processor is sometimes called a partition.

Hitachi server virtualization enables logical partitions (LPARs) to be configured within a processor.

## portable medium

A storage medium, such as DAT, that enables programs and data to be recorded and transported.

#### primary system

The system (host) that performs job processing when it is started.

## program

The program (application) that actually executes jobs. HA Monitor improves system reliability by employing hot-standby configurations to achieve dual programs.

Programs can be classified into two types, programs with an HA Monitor interface and programs without an HA Monitor interface.

## program with an HA Monitor interface

A program that has a dedicated HA Monitor interface. When a program with an HA Monitor interface is run in the server mode, HA Monitor monitors both host failures and server failures.

HA Monitor monitors a program with an HA Monitor interface and performs hot standby processing in the event of a failure that cannot be detected by the program.

## program without an HA Monitor interface

A program that does not have a dedicated HA Monitor interface. Some of the HA Monitor functions are not available, including the function for starting programs on the standby system in advance and the function for monitoring server failures.

There is no difference in functional limitations between using programs without an HA Monitor interface and running programs with an HA Monitor interface in the monitor mode.

R

#### resource server

A server used only for sharing resources among multiple servers. A resource server does not provide server functions.

Shared resources are controlled for each server when no resource server is used, while shared resources are controlled for each server group when a resource server is used.

#### restart wait state

If a server failure occurs on an active server for which restart or manual is specified in the switchtype operand in the server environment definition, HA Monitor waits until the active server is restarted without terminating it. Such a status for an active server is called the restart wait state.

S

## secondary system

A system (host) that is placed on standby mode when it is started.

#### server

A service that processes jobs in accordance with requests. In this manual, a program as a unit of hot standby processing is called a *server*.

Servers are classified roughly as server-mode servers and monitor-mode servers.

#### server inheritance information

Information that is inherited from an active server to a standby server when pairing is established between the active server and the standby server. If information needs to be transmitted between servers within a

user command, HA Monitor's moninfo-p command (command for specifying and displaying server inheritance information) is used to specify the information beforehand, and then the moninfo-g command is used to reference and display the information.

#### server mode

A server operation mode that can be selected when the program has an interface with HA Monitor. When a server is run in the server mode, HA Monitor monitors both host failures and server failures.

#### server slowdown

An event where the server execution time becomes longer than usual. Its causes include program looping and resource contention.

#### shared resource

A resource, such as shared disks and LANs, that can be shared between the active and a standby system. The shared resources controlled by HA Monitor include shared disks, file systems, LANs, and communication lines. HA Monitor controls shared resources for each server.

A resource server can also be used to share resources among server groups.

## standby server

A server currently on standby in the event of a failure on the active server.

## standby system

A system (host) that is running a standby server that is on standby ready to take over in the event of a failure.

## system dump

An OS function for storing on a portable medium error information that cannot be narrowed down to a specific program. Memory information, information about swap area (virtual memory), and processor-specific information can be collected in a system dump. In general, a system dump is used when the cause of an error in the system cannot be identified.

## Т

#### TCP/IP

A standard communication protocol used for connection between UNIX computers. TCP/IP supports both the TCP protocol and the IP protocol.

#### U

## **UAP**

A user's job created as a program. UAPs can be used as programs on a server in the monitor mode. HA Monitor can monitor UAPs by having the UAPs issue APIs.

#### user command

A command created by a user. A user command that has been registered into HA Monitor in advance can be issued automatically when HA Monitor processing is triggered by a change in the server status. User commands enable the user to use as shared resources various resources that are not controlled by HA Monitor.

## Index

```
Α
abbreviations for products 216
acronyms 217
C
conventions
 abbreviations for products 216
 acronyms 217
 fonts and symbols 4
 KB, MB, GB, and TB 218
 version numbers 5
F
font conventions 4
G
GB meaning 218
K
KB meaning 218
M
MB meaning 218
S
symbol conventions 4
Т
TB meaning 218
٧
version number conventions 5
```

