HITACHI

# *Hitachi File Services Manager*

## - Troubleshooting Guide -

6.2.0-00

Hitachi, Ltd.

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# - Preface -

This manual has been prepared to enable administrators and technical support personnel to understand the nature and investigate the cause of errors in the Hitachi File Services Manager (hereafter, HFSM). We hope that this manual will reduce your workload and allow you to quickly respond to and resolve any problems in your system.

In the HFSM version 6.2.0 or later, HFSM and Hitachi Command Suite Common Component support 64-bit OS only.

In this document, the term HDI and HNAS F mean equal.
Unless otherwise described, they can be read as other term each other.

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# 1 Overview

This manual has been prepared to enable administrators and technical support personnel to understand the nature and investigate the cause of errors in HFSM. We hope that this manual will reduce your workload and allow you to quickly respond to and resolve any problems in your system.

## 1.1 Scope of application

(HDS) (ITPD)

## 1.2 Terms used in this manual

For an explanation of the terms used in this manual, see the manual *Hitachi Data Ingestor Installation and Configuration Guide* or *Hitachi Data Ingestor User's Guide*.

The main abbreviations and symbols used in this manual are as follows.

Table 1.2 List of abbreviations and symbols

| Abbreviation | Full name or meaning |
|---|---|
| HFSM | Hitachi File Services Manager |
| API | Application Program Interface |
| CLI | Command Line Interface |
| Device Manager | Hitachi Device Manager |
| Device Manager-Agent | Hitachi Device Manager - Agent |
| HDI | Hitachi Data Ingestor |
| HNAS F | Hitachi NAS Platform F1000 Series |
| HDvM | Hitachi Device Manager |
| HiRDB | Highly Scalable Relational DataBase |
| HTML | Hyper Text Markup Language |
| GUI | Graphical User Interface |
| SSL | Secure Socket Layer |
| <Suite Install-dir> | Hitachi Command Suite  common component install directory |

## 1.3 Prerequisite knowledge

- Knowledge about HFSM
- Knowledge about HDI or HNAS F
- Knowledge about Device Manager when using HFSM linking with HDvM.
- Knowledge about Hitachi Command Suite Common Component
- Knowledge about Windows
- Knowledge about Linux
- Knowledge about file systems
- Knowledge about browsers (Internet Explorer or Firefox)
- Knowledge about storage Disk Array Systems

## 1.4 Related documents

Related documents required by HFSM are as follows. Refer to the latest edition of each manual when analyzing a problem.

For Disk Array System-specific errors, see the *Hitachi Data Ingestor Maintenance Manual* for the Disk Array System concerned.

Table 1.4.1 Hitachi Data Ingestor related English manuals

| Document name | Remarks |
|---|---|
| Hitachi Data Ingestor Maintenance Manual | |
| Hitachi Data Ingestor Installation and Configuration Guide | |
| Hitachi Data Ingestor Cluster Getting Started Guide | |
| Hitachi Data Ingestor Cluster Administrator's Guide | |
| Hitachi Data Ingestor Cluster Trouble Shooting Guide | |
| Hitachi Data Ingestor CLI Administrator's Guide | |
| Hitachi Data Ingestor API References | |
| Hitachi Data Ingestor Error Codes | |
| Hitachi Data Ingestor File System Protocols(CIFS/NFS) Administrator's Guide | |
| Hitachi Data Ingestor Backup Restore Features Supplement for Hitachi Data Protection Suite | |
| Hitachi Data Ingestor Backup Restore Features Supplement for IBM(R) Tivoli(R) Storage Manager | |
| Hitachi Data Ingestor Backup Restore Features Supplement for Symantec NetBackup | |
| Hitachi Data Ingestor Array Features Administrator's Guide | |
| Hitachi Data Ingestor Array Features Administrator's Guide for Hitachi AMS2000/HUS100 series | |

Note: 1) When referring these manuals in this document, "Hitachi Data Ingestor" part of the manual name would be omitted like the followings:

<Example> Manual Name; *Hitachi Data Ingestor Installation and Configuration Guide*

Simplified Name: *Installation and Configuration Guide*

Table 1.4.2 Hitachi NAS Platform F1000 Series related English manuals

| Document name | Remarks |
|---|---|
| Hitachi NAS Platform F1000 Series Maintenance Manual | |
| Hitachi NAS Platform F1000 Series Installation and Configuration Guide | |
| Hitachi NAS Platform F1000 Series Cluster Getting Started Guide | |
| Hitachi NAS Platform F1000 Series Cluster Getting Started Guide for Virtual NAS | |
| Hitachi NAS Platform F1000 Series Cluster Administrator's Guide | |
| Hitachi NAS Platform F1000 Series Cluster Trouble Shooting Guide | |
| Hitachi NAS Platform F1000 Series CLI Administrator's Guide | |
| Hitachi NAS Platform F1000 Series API References | |
| Hitachi NAS Platform F1000 Series Error Codes | |
| Hitachi NAS Platform F1000 Series File System Protocols(CIFS/NFS) Administrator's Guide | |
| Hitachi NAS Platform F1000 Series Backup Restore Features Supplement for Hitachi Data Protection Suite | |
| Hitachi NAS Platform F1000 Series Backup Restore Features Supplement for IBM(R) Tivoli(R) Storage Manager | |
| Hitachi NAS Platform F1000 Series Backup Restore Features Supplement for Symantec NetBackup | |
| Hitachi NAS Platform F1000 Series Modular Array Features Administrator's Guide | |
| Hitachi NAS Platform F1000 Series Application Protector for vSphere Administrator's Guide | |

Note: 1) When referring these manuals in this document, "Hitachi NAS Platform F1000 Series" part of the manual name would be omitted like the followings:

<Example> Manual Name; *Hitachi NAS Platform F1000 Series Installation and Configuration Guide*

Simplified Name: *Installation and Configuration Guide*

Table 1.4.3 HDvM English manuals

| Document name | Remarks |
|---|---|
| Hitachi Command Suite User Guide | |
| Hitachi Command Suite CLI Reference Guide | |
| Hitachi Command Suite Messages | |
| Hitachi Command Suite Installation and Configuration Guide | |
| Hitachi Command Suite Administrator Guide | |

Table 1.4.4 Other related documents

| Document name | Remarks |
|---|---|
| Hitachi File Services Manager Log Analysis Guide | |
| Hitachi File Services Manager Release Notes[#1] | |
| Hitachi Device Manager Software Troubleshooting Guide | |
| Hitachi Device Manager Software Log Analysis Guide | |
| Hitachi Data Ingestor Software Maintenance Manual | |
| Hitachi Storage Navigator Modular 2 Command Line Interface (CLI) User's Guide | |
| Hitachi Storage Navigator Modular 2 Graphical User Interface (GUI) User's Guide | |

#1: Use the *Release Notes* for the HFSM version you are using, rather than the latest edition.

## 1.5 Applicable Storage Sub Systems

- Hitachi Adaptable Modular Storage 2010
- Hitachi Adaptable Modular Storage 2100
- Hitachi Adaptable Modular Storage 2300
- Hitachi Adaptable Modular Storage 2500
- Hitachi Virtual Storage Platform
- Hitachi Virtual Storage Platform G Series (G100/G200/G400/G800/G1000/G1500)
- Hitachi Virtual Storage Platform F Series (F400/F600/F800/F1500)
- Hitachi Universal Storage Platform V
- Hitachi Universal Storage Platform VM
- Hitachi Unified Storage
- Hitachi Unified Storage VM

# 2 Troubleshooting Procedures

## 2.1 Error classification

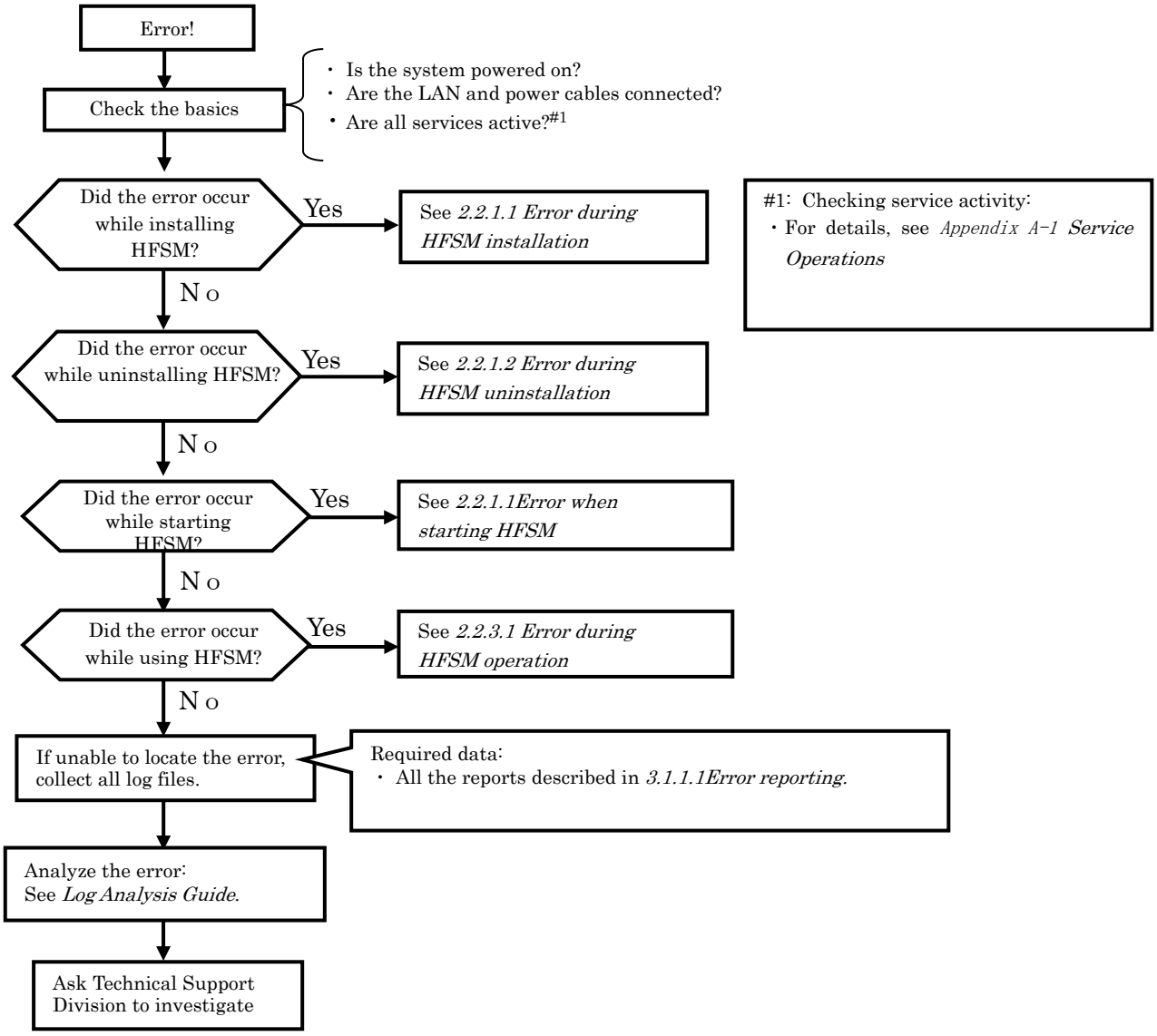



Figure 2.1.1 Flow of response to an error

## 2.2 Troubleshooting procedures

### 2.2.1 Installation errors

#### 2.2.1.1 Error during HFSM installation

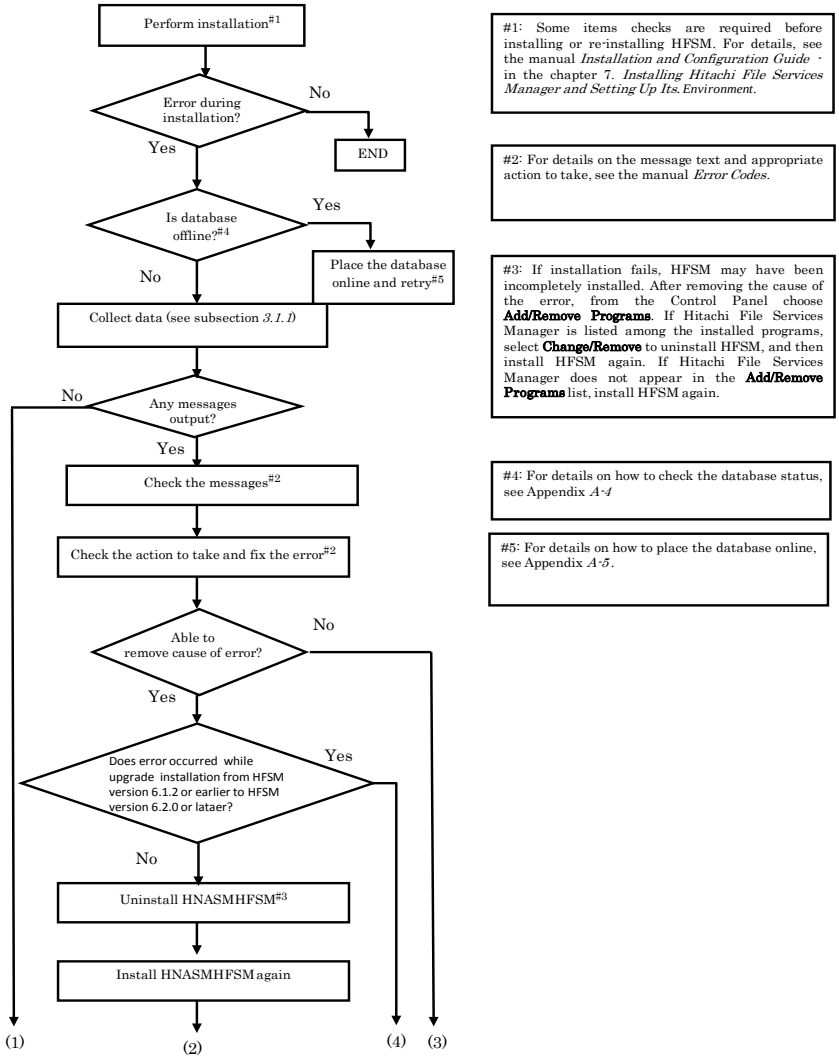



Figure 2.2.1 Flow of response to an error during installation (1/3)

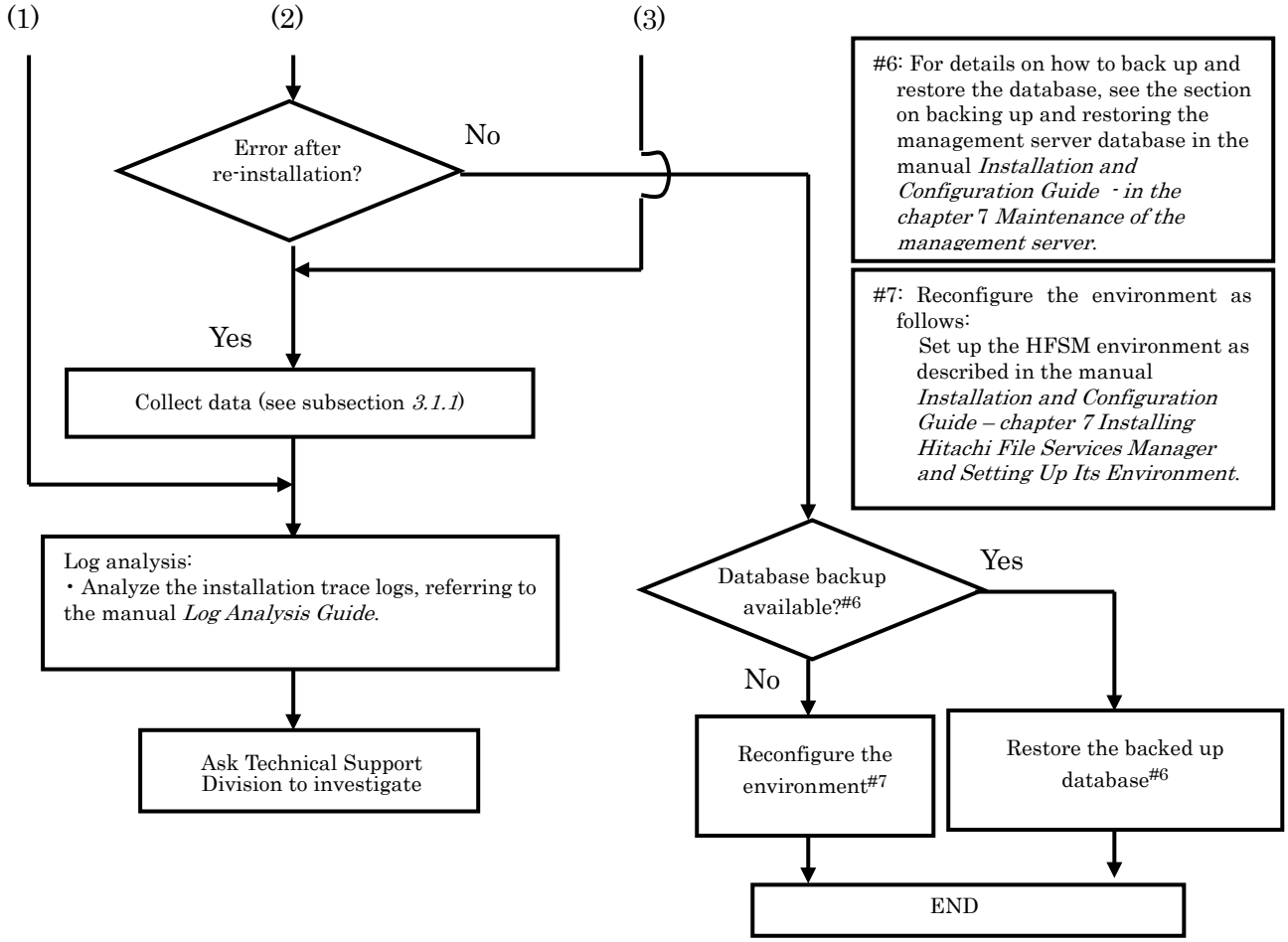



Figure 2.1.1 Flow of response to an error during installation (2/3)

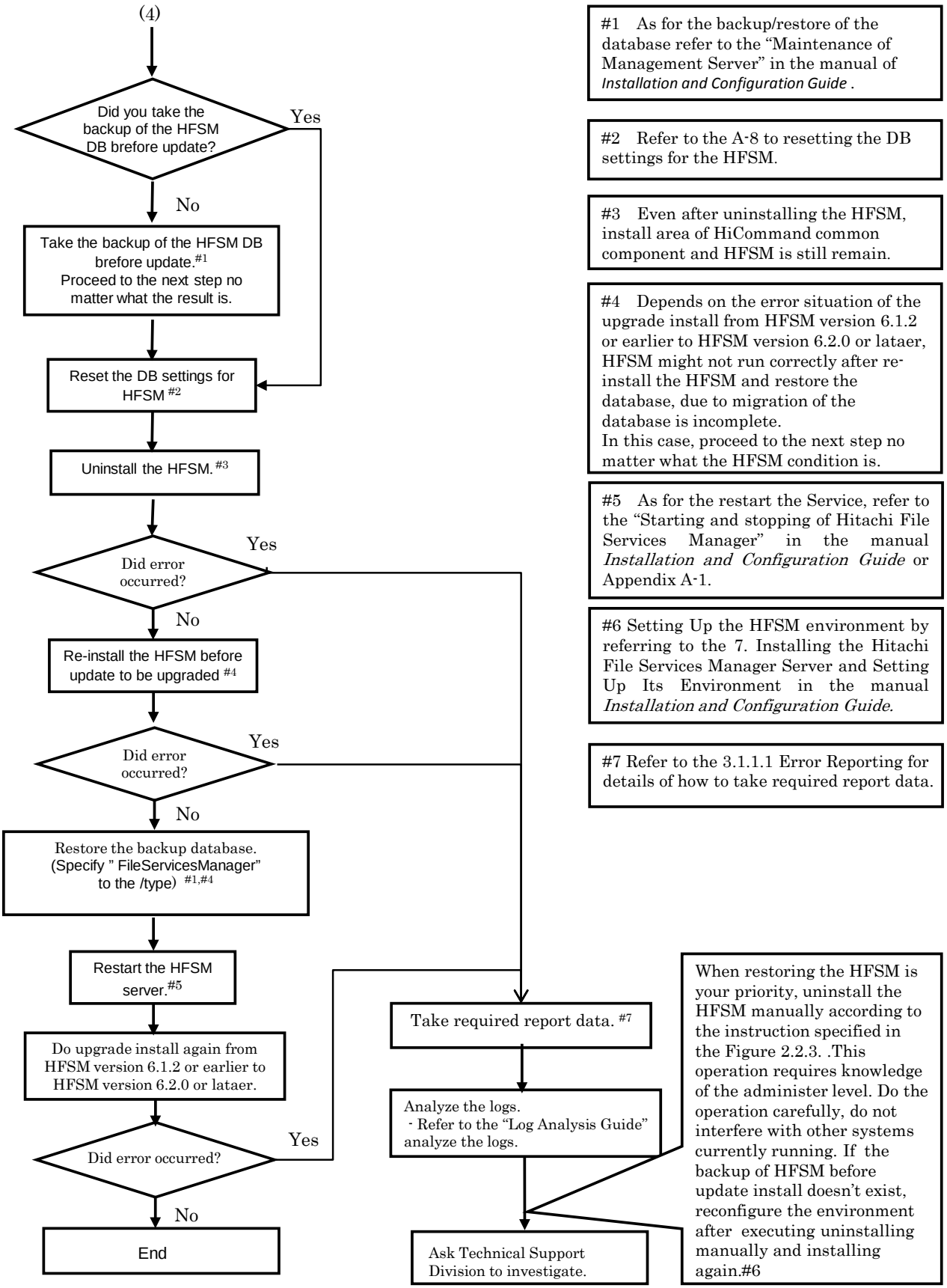
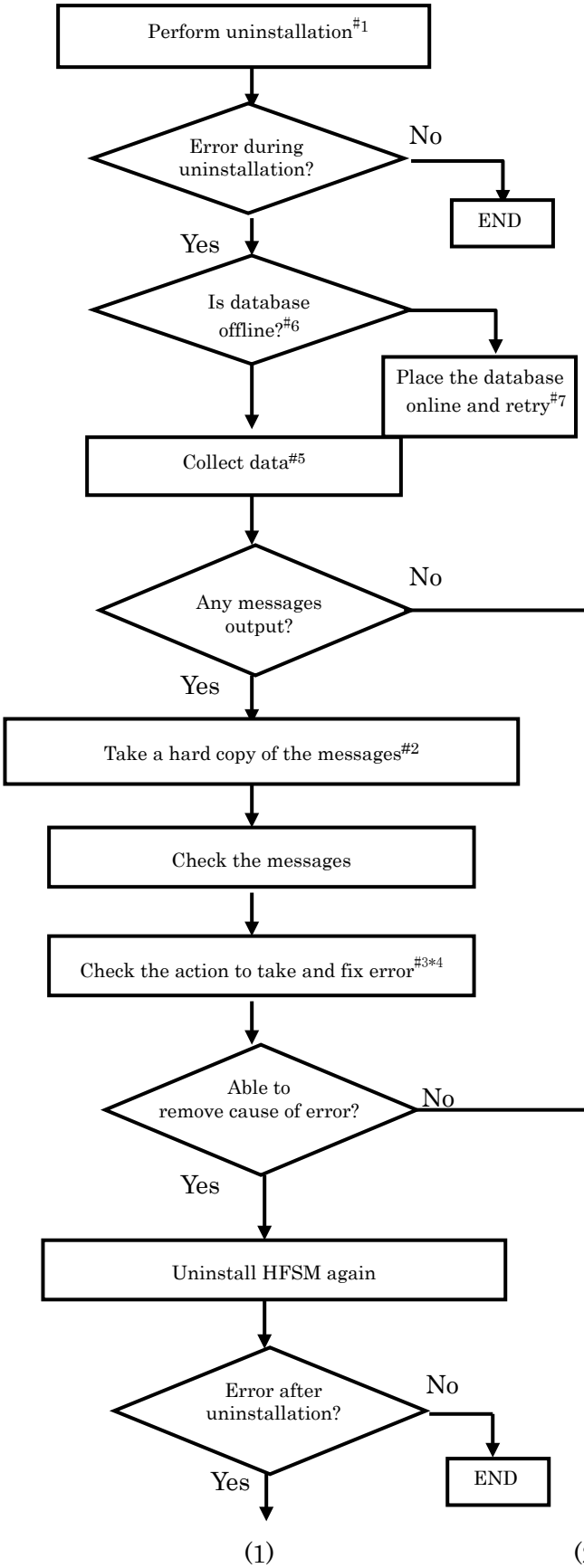



Figure 2.2.1 Flow of response to an error during installation (3/3)

2.2.1.2 Error during HFSM uninstallation




#1: Some items of checks are required before uninstalling HFSM. For details, see the manual *Installation and Configuration Guide* - in the chapter 7 *Uninstalling the File Services Manager*.

#2: Depending on the uninstallation status, the uninstaller log may have been deleted, making it impossible to check messages. Take a hard copy of the output messages in case this happens.

#3: For details on the message text and appropriate action to take, see the manual Error Codes

#4: If uninstallation fails, HFSM may not have been uninstalled correctly. After removing the cause of the error, from the Control Panel choose **Add/Remove Programs**. If Hitachi File Services Manager is listed among the installed programs, select **Change/Remove** to uninstall HFSM. If Hitachi File Services Manager does not appear in the **Add/Remove Programs** list, install HFSM and then uninstall it.

#5: For details on the required data, see subsection *.3.1.1.1 Error reporting.*

#6: For details on how to check the database status, see Appendix *A-4. Checking the status of the RD area*.

#7: For details on how to place the database online, see Appendix *A-5 Procedure for placing the RD area online and restoring*

Figure 2.2.2 Flow of response to an error during uninstallation(1/2)

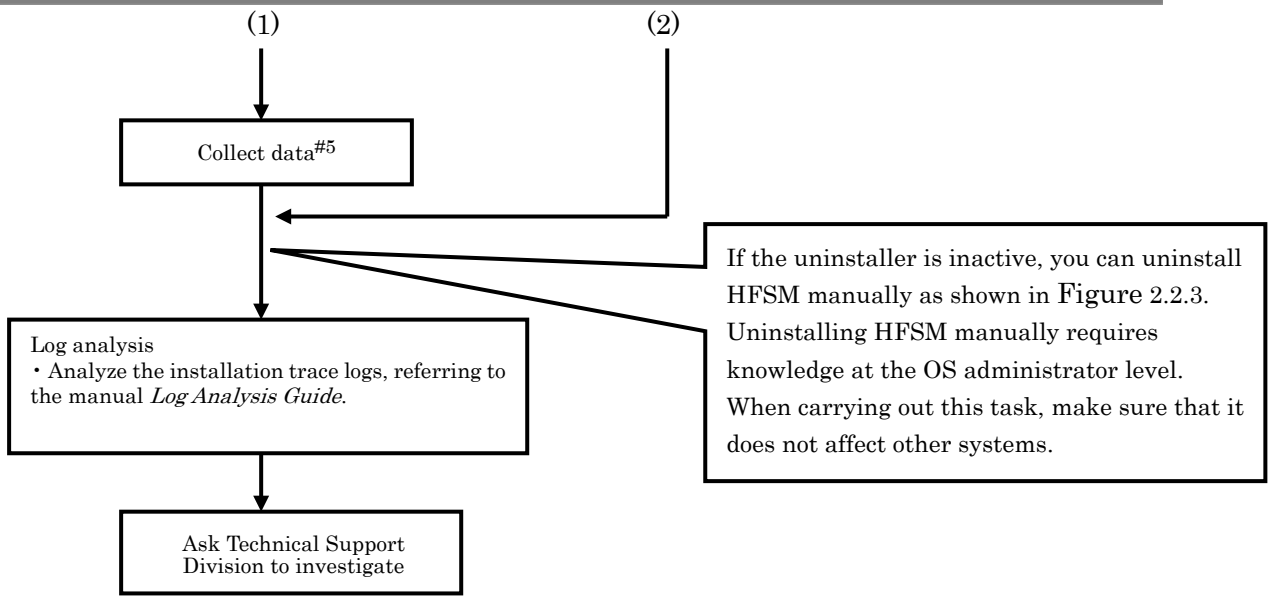



Figure 2.2.2 Flow of response to an error during uninstallation(2/2)

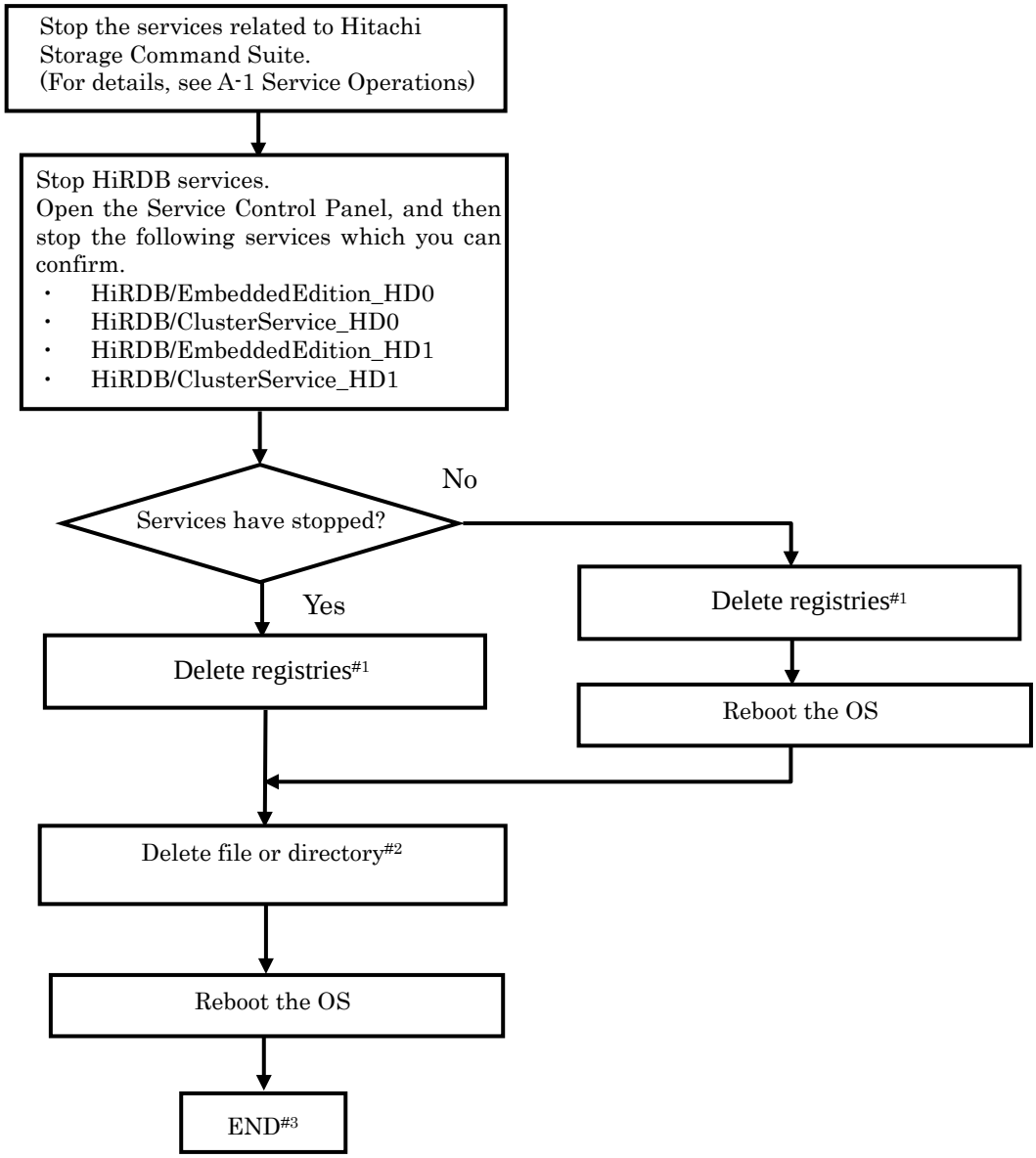



Figure 2.2.3 Procedure for uninstalling HFSM manually

#1: Deleting registries

From the Quick Access menu, click Run and then type regedit to open the Registry Editor. Delete the registries shown below. When the operating system that installed HFSM is 64 bit operating system, delete the Registry key under the "Wow6432Node" also.

As problems such as the OS not starting may occur if registry deletion fails, make sure that you back up the registry information before you delete it. To back up the registries, in the Registry Editor window, choose File and Export Registry File. To restore the backed up information, in the Registry Editor window, choose File and Import Registry File.

1. HFSM registries

The registry format used by the HFSM for HVFP, HDI and HNAS F differs upon the newly installed version of the HFSM or HNASM.

Table 2.2.1 HFSM registries (New format)

| Registry keys |
|---|
| \HKEY_LOCAL_MACHINE |
| \SOFTWARE |
| \HITACHI |
| |
| \Hitachi File Services Manager |
| \Microsoft |
| \Windows |
| \CurrentVersion |
| \Uninstall |
| \{89CF92A9-7FAE-467C-897B-875BA7DE3AA9} |
| \Wow6432Node |
| \HITACHI |
| \HiCommand NAS Manager |
| \Hitachi File Services Manager |
| \Microsoft |
| \Windows |
| \CurrentVersion |
| \CurrentVersion |
| \Uninstall |
| \{89CF92A9-7FAE-467C-897B-875BA7DE3AA9} |

2. Hitachi Command Suite Common Component registries

(Delete only when no other Hitachi Command Suite products are installed.)

Table 2.2.2 Hitachi Command Suite Common Component registries

| Registry keys |
|---|
| \HKEY_LOCAL_MACHINE |
| \SOFTWARE |
| \HITACHI |
| \HiCommand Base |
| \HiCommand Base 64 |
| \HiRDBEmbeddedEdition_HD0 |
| \HiRDBEmbeddedEdition_HD1 |
| \Microsoft |
| \Windows |
| \CurrentVersion |
| \Uninstall |
| \{1345FCD1-713E-4449-8F76-3F6503941040} |
| \Wow6432Node |
| \HITACHI |
| \HiCommand Base |
| \Microsoft |
| \Windows |
| \CurrentVersion |
| \Uninstall |
| \{1345FCD1-713E-4449-8F76-3F6503941040} |
| \SYSTEM |
| \CurrentControlSet |
| \Services |
| \Eventlog |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | \Application |
| | | | | | \HBase Storage Mgmt Log |
| | | | | | \HBase 64 Storage Mgmt Log |
| | | | | | \HiRDBEmbeddedEdition_HD0 |
| | | | | | \HiRDBEmbeddedEdition_HD1 |
| | | | | \HbaseStgMgmtComService | |
| | | | | \HBase64StgMgmtSSOService | |
| | | | | \HBaseStgMgmtWebService | |
| | | | | \HBase64StgMgmtWebService | |
| | | | | \HBaseStorageMgmtWebSSOService | |
| | | | | \HBase64StgMgmtWebSSOService | |
| | | | | \HiRDBClusterService_HD0 | |
| | | | | \HiRDBClusterService_HD1 | |
| | | | | \HiRDBEmbeddedEdition_HD0 | |
| | | | | \HiRDBEmbeddedEdition_HD1 | |

#2: Deleting files and folders

(If deleting files and folders failed due to they are not accessible, retry after rebooting the Operating system.)

1. HFSM files

- Delete the folders in which HFSM is installed, including all subfolders and files

For details on the folders and files to be deleted, see Table 2.2.4.

Table 2.2.3 HFSM folders and files to be deleted when uninstalling HFSM manually

| Folder | File | Description |
|---|---|---|
| < Hitachi Command Suite -installation-folder > | | [Example] C:\Program Files\HiCommand |
| File Services Manager | build, LICENSE | Build information file, etc. |
| bin | AddCert.bat, etc. | HFSM batch files |
| | getproductcode.wsf | Used by getlog command |
| conf | user.properties | User properties |
| system | sys.properties, etc. | System properties, etc. |
| cert | cacert.cer, etc. | Certificate used in SSL communication between HFSM and the Node |
| database | | Storage Destination for Database Files of HFSM |
| x64 | | |
| FileServicesManager | RD_HFSM | Database Files#<br>#When Storage Destination is default. |
| inst | HFSM_Install_*m-d-yyyy_hh-mm-ss*.log | Installer trace log file |
| | HFSM_Uninstall_*m-d-yyyy_hh-mm-ss*.log | |
| | HFSMdbsetup.bat, etc. | Setup commands |
| | CreateRepositoryHiend.xml, etc. | Setup parameter file |
| | Hdvmparam.propties | Property file to set parameter to HDvM |
| csv | RESOURCEGROUP | |
| icon | | |
| lib | lucreate.bat, etc. | HFSM libraries |
| | HFSMgetlogs.jar | Used by getlog command |
| HSNMAPI | Nasmgrlucreate.exe etc. | SNM linking commands |
| apilog | SNM APIlogs | Jsp files |
| svplog | SNM APIlogs | Compiled Jsp files |
| IPMIUTIL | ipmiutil.exe etc. | IPMItools |
| logs | HFSM_Message1.log | HFSM message log |
| | HFSM_Trace1.log | HFSM trace log |
| | HFSM_SNM_Trace1.log | SNMlinkingtrace logs |
| | Version | HFSM version file |
| manual | | |
| help | | Help file |
| en | - | English manual |
| ja | - | Japanese manual |

| | | |
|---|---|---|
| template | user.properties | User properties |
| | sys.properties | System properties |
| wabapps | | |
| HFSM | | Web application folder for HFSM |
| wabappdir | - | Jsp files |
| jspdir | - | Compiled Jsp files |

- Installation management files

<OS default applications folder (normally C:\Program Files (x86))>

\InstallShield Installation Information\{89CF92A9-7FAE-467C-897B-875BA7DE3AA9}

2. Hitachi Command Suite Common Component files

(Delete only if no other Hitachi Command Suite products are installed.)

- Delete the folder in which Hitachi Command Suite Common Component is installed, including all subfolders and files

For details on the folders and files to delete, see Table 2.2.5 Hitachi Command Suite Common Component folders and files to delete.

If the database files were installed in a specified location other than the default folder, first check the value of the *initpath* property in:

<Suite Install-dir>\conf\hcmdsdbinit.ini

Table 2.2.4 Hitachi Command Suite Common Component folders and files to delete

| Folder | File | Description |
|---|---|---|
| < Hitachi Command Suite -installation-folder > | | [Example] C:\Program Files\HiCommand |
| Base64 | Third_Party_License_Files_Win.txt | |
| bin | cvxpaegetlogs.bat, etc. | Commands |
| sbin | hcmdsadminchk.exe | Commands |
| exec, etc. | | |
| common | File Services Manager.conf | Configuration definition files |
| | themeset.conf | |
| lic, etc. | | |
| conf | hcmdsservice.conf, etc. | |
| hirsa, etc. | | |
| database | | For storing database files |
| x64, etc. | | |
| | | |
| HDB | | Settings files used by HiRDB |
| .DBENV, etc. | | |
| lib | ChicLocale.jar, etc. | Library files |
| jsf, etc. | | |
| log | Hcmdsalias1.log, etc. | For storing log files |
| hirsa, etc. | | |
| sample | | Folder of read-only sample files |
| CC, etc. | | |
| uCPSB | | |
| c4web, etc. | | |
| tmp | HBuninst.exe | For storing temporary files |

- Installation management files

<OS default applications folder (normally C:\Program Files)>

\InstallShield Installation Information\{1345FCD1-713E-4449-8F76-3F6503941040}

- Temporary installation files
  - Delete the following folder located in the temporary work folder indicated by the `temp` environment variable of the user who performed the installation:
    {1345FCD1-713E-4449-8F76-3F6503941040}

  Delete the following folder in the root of the start drive:
    _HDBInstallerTemp
      Note that this folder exists only during HiRDB installation.

3. Hitachi Command Suite Common Component database files

(Delete only if no other Hitachi Command Suite products are installed. Delete only if the database files were installed in a specified location other than the default folder.)

Delete the directory in which the Hitachi Command Suite Common Component database files are installed, including all sub-directories and files.

The path of the database is stored as the value of the *initpath* property in
<Suite Install-dir>\conf\hcmdsdbinit.ini

#3: Reconfigure the environment before installing operation failure occurs

When executing the manual uninstallation in environment that other Hitachi Command Suite products are installed, the unnecessary resources of HFSM remains in it. In order to remove all those resources left behind, after the manual uninstallation has been done install again the HFSM that had installed before the installation failure occurs. Then, do again the troubleshooting procedures for the installation errors, such as uninstall.

### 2.2.2 Startup errors

#### 2.2.2.1 Error when starting HFSM

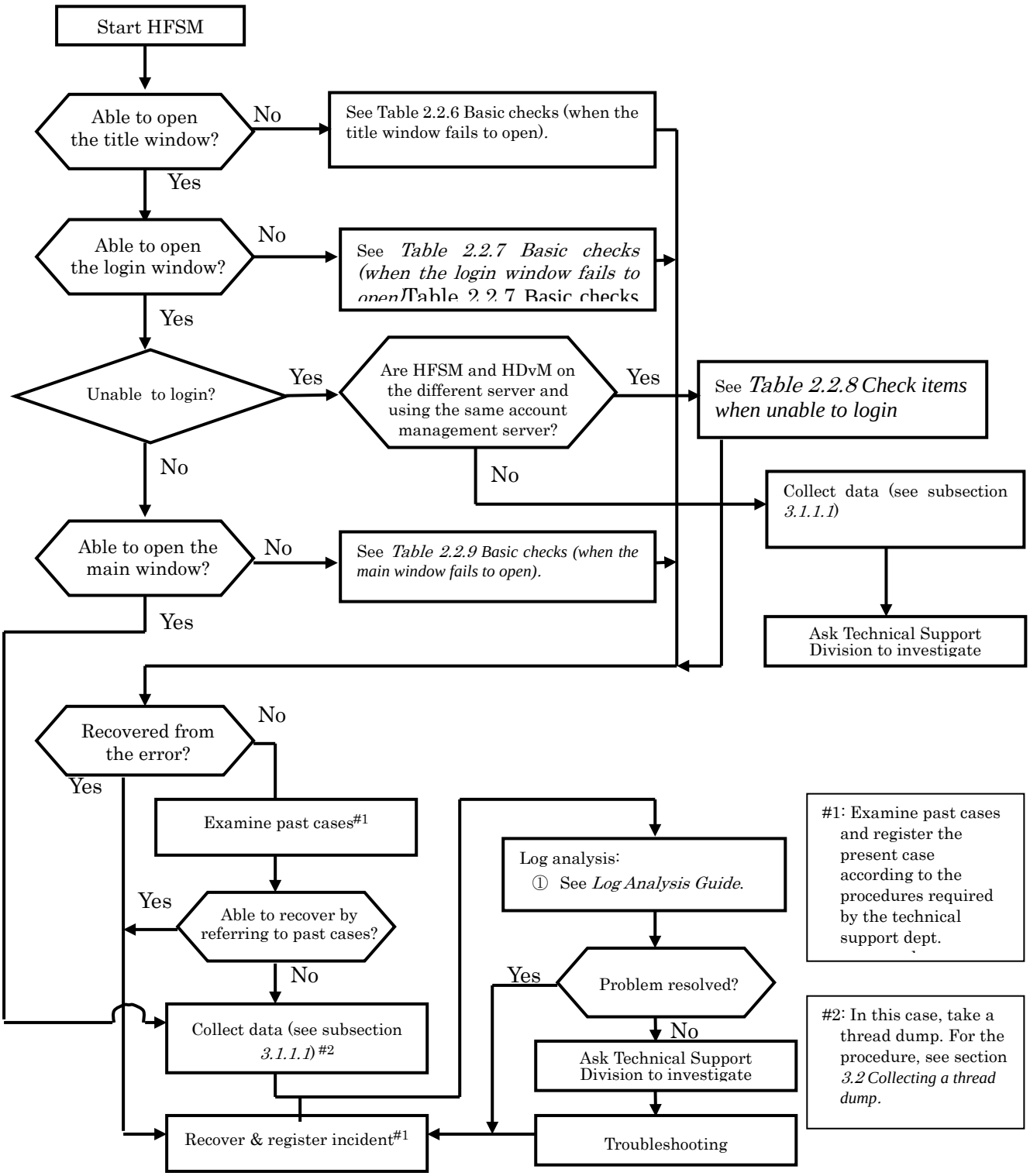



Figure 2.2.4 Main flow of response to an HFSM startup failure

Note: If you are using HFSM linking with HDvM, see the manual *Hitachi Device Manager Software Troubleshooting Guide*.

Table 2.2.5 Basic checks (when the title window fails to open)

| # | Item to check | Verification method (if the situation below applies, take the steps described in the Action column) | Action |
|---|---|---|---|
| 1 | Did HFSM start? | Check whether an error has been recorded in the message log. | If an error was recorded in the message log, see the manual *Error Codes* for the appropriate action to take. |
| 2 | Are services of HFSM and Hitachi Command Suite Common Component active? | From the Control Panel, open the Services window and check whether the status of the following one or more services are other than **Running**.<br>・ HFSM Web Service<br>・ HBase 64 Storage Mgmt SSO Service<br>・ HBase 64 Storage Mgmt Web SSO Service<br>・ HBase 64 Storage Mgmt Web Service<br>・ HiRDB/EmbeddedEdition_HD1 | Execute the `hcmdssrv /start` command to start the service. For details, see the chapter about starting the File Services Manager server in the manual *Installation and Configuration Guide* - in the chapter 7 *Starting Hitachi File Services Manager*. |
| 3 | Did you specify the correct URL? | A message such as *Cannot display the page*, *Page not found*, or *The requested URL could not be retrieved* appears in the window. | Check what the correct URL is. |
| 4 | Has a network error occurred? | | Remove the cause of the error. |
| 5 | Was HFSM installed successfully? | A message beginning with KAQM30 has been output to the HFSM installation trace log. | Take the appropriate action, referring to the manual *Error Codes*, and then re-install HFSM. |

Table 2.2.6 Basic checks (when the login window fails to open)

| # | Item to check | Verification method (if the situation below applies, take the steps described in the Action column) | Action |
|---|---|---|---|
| 1 | Are pop-up windows blocked? | The message **Pop-ups Blocked** appears in the title window. | Adjust your browser settings as described in the manual *Installation and Configuration Guide* - in the chapter 3 *Environment settings for a management console*. |
| 2 | Can Java Script be used in the current environment? | The Login window does not appear when you click the **Login** button. | Adjust your browser settings as described in the manual *Installation and Configuration Guide* – in the chapter 3 *Environment settings for a management console*. |

Table 2.2.7 Check items when unable to login

| # | Item to check | Verification method (if the situation below applies, take the steps described in the Action column) | Action |
|---|---|---|---|
| 1 | Does the HCS common component on HDvM side started? | Check the operation status of the HCS common component on HDvM side. | Starts the HCS common component on HDvM side. |
| 2 | Is there any network trouble? | Check the network connection status between HFSM and HDvM by using the tracert command. | Recover the network trouble by contacting to the network administrator. |

Table 2.2.8 Basic checks (when the main window fails to open)

| # | Item to check | Verification method (if the situation below applies, take the steps described in the Action column) | Action |
|---|---|---|---|
| 1 | Is the account locked? | Message KAQM19107-E has been output to the message log. | Unlock the account, referring to the *manual Installation and Configuration Guide* – in the chapter 7 *Managing the system administrator account.* |

### 2.2.3 Operating errors

#### 2.2.3.1 Error during HFSM operation

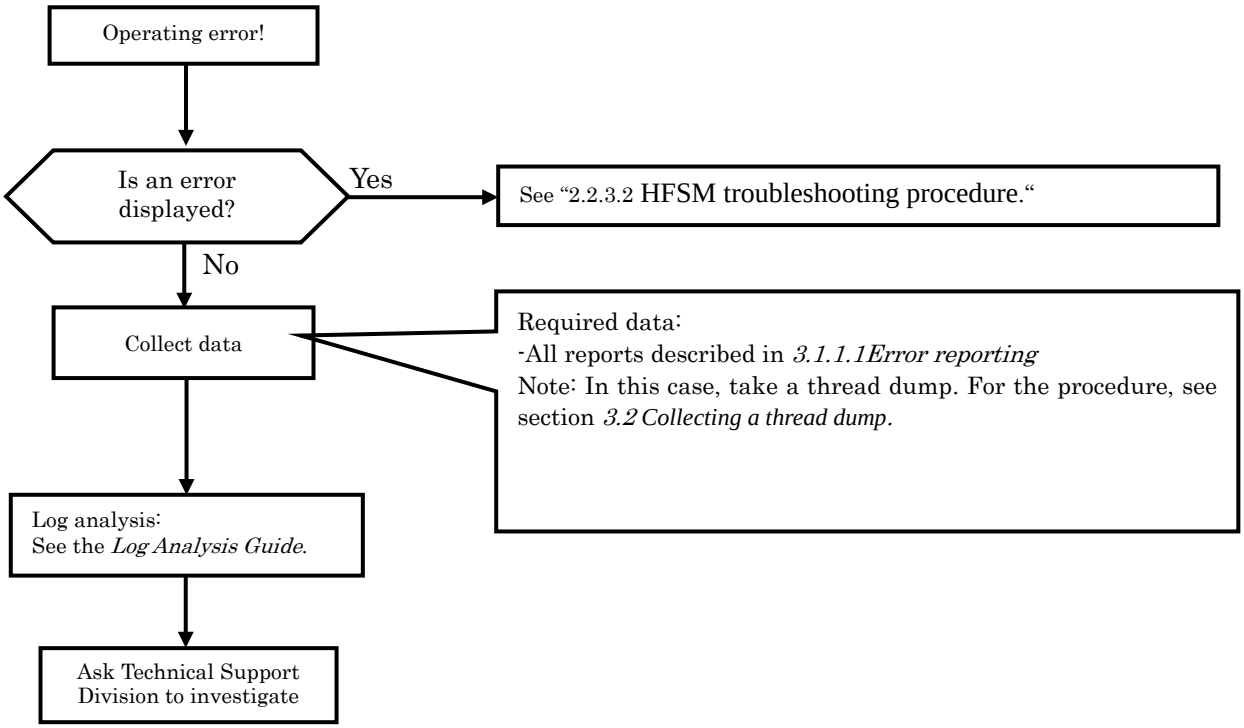



Figure 2.2.5 Flow for handling HFSM operating errors

2.2.3.2 HFSM troubleshooting procedure

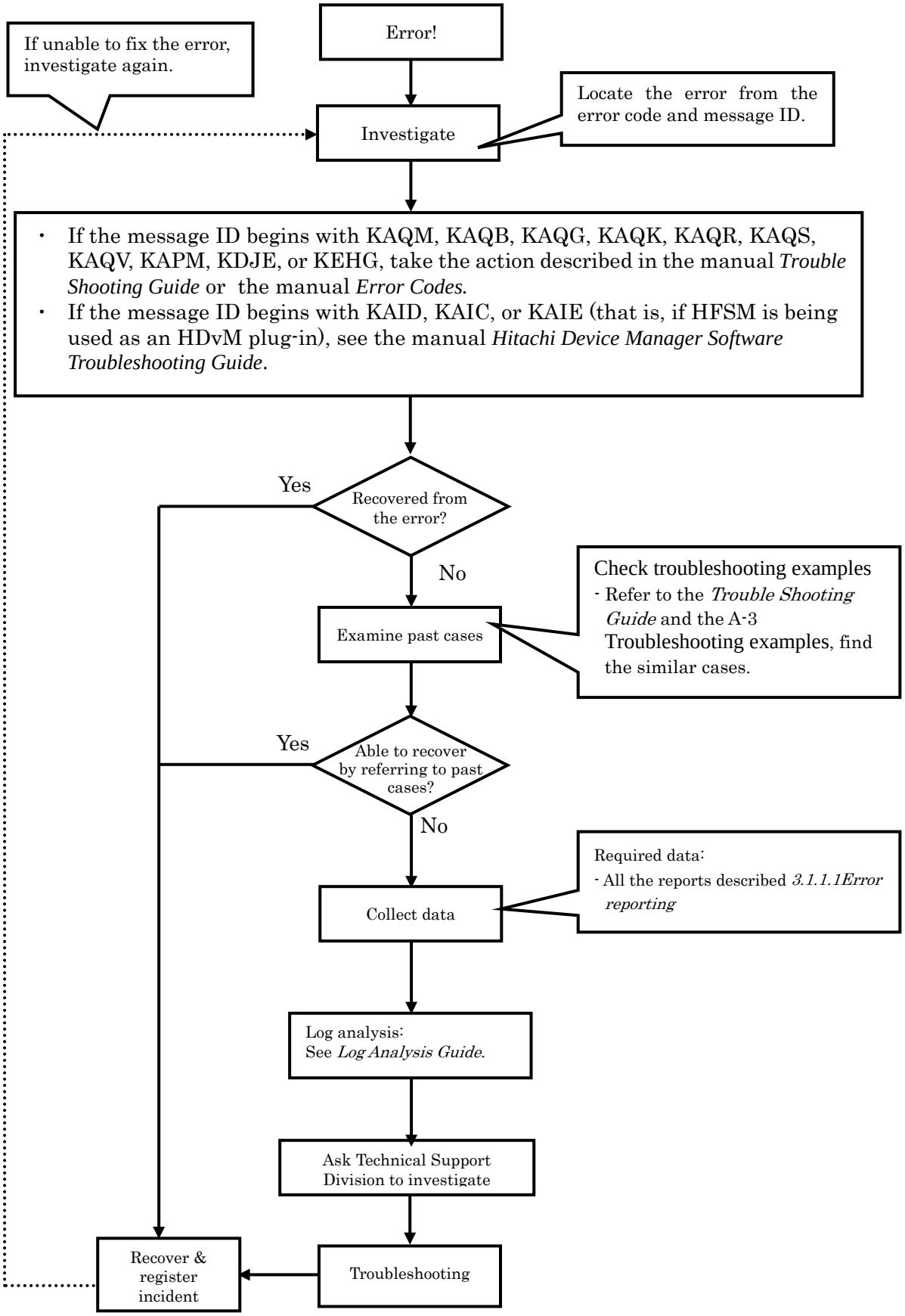



Figure 2.2.6 HFSM troubleshooting procedure

# 3 Required Troubleshooting Data

## 3.1 Data required for error investigation

### 3.1.1 Data related to HFSM operations and troubleshooting procedures

The following describes the information that you should collect when a problem occurs. For details on the various types of log files, see the *Log Analysis Guide*.

#### 3.1.1.1 Error reporting

To accurately report how the error occurred, report all the items listed under *Required data* below to the Technical Support Division. Also send them a screen dump of the HFSM window to show the nature of the operation being performed when the error occurred.

An example of an error report is given in Figure 3.1.1 Example error report.

**Required data:**

- Type of error
- Time at which the error occurred
- HFSM and HDI version numbers at the time of the error. Also the HDvM version if you are using HFSM linking with HDvM.

  You can check the version information as follows:

  (1) HFSM version number:

  If GUI operations can still be performed, choose **Help** and then **About** in the global tasks bar area of the sub window to check the version information of the product.

  If the GUI does not work, check the *CodeVersion* and *CodeBuild* information in the file <HFSM Install-folder>\build.

  (2) HDI version number:

  If GUI operations can still be performed, check the HDI version number on the System Software sub window, which opens from the Settings tab.

  [Settings] tab->[Basic] subtab->[Software Update]->[System Software] subwindow

  If the GUI does not work, check the version number from the Hitachi Data Ingestor's Release Note.
- System configuration diagrams (management server OS, Web Client OS, network configuration, etc.)
- Operation details (window transition, buttons clicked, etc.)
- Log information set

  Management server (HFSM) side:

  (1) If the error occurred during normal HFSM operation
    - Data collected using the log file collection command (see *3.1.2 Using the log file collection command (hcmds64getlogs) on the management server (HFSM)*)
    - Thread dump (for details on the collection procedure and conditions, see *3.2 Collecting a thread dump*)

  (2) If the error occurred while installing or uninstalling HFSM
    - HFSM installation trace log files (see the manual *Log Analysis Guide*)
    - Standard InstallShield log (see the manual *Log Analysis Guide*)

Node side (logs of the both node on the processing node that caused the error):

Log information set for the node, either **All log** or **OS log** (see the manual *Trouble Shooting Guide* - chapter *3. Collecting Data and Contacting Maintenance Personnel*, or the manual *Maintenance Manual - [Troubleshooting] Chapter 6 Acquiring Failure Information*.)

- Web browser type and version (including service packs)
- Screen dump of a window in which it can be verified that an error occurred#

#: If the screen display is unusual, also take a copy of the HTML source code for the window in which the error occurred from within your Web browser.

#Error: Unable to create a file system on the DF800.

Time of error: 2014/01/21 20:24 approx.
HFSM and HDI version numbers at time of error:
Hitachi File Services Manager: 6.2.0-00
Hitach Data Ingestor: 6.2.0-00
System configuration:
Management server OS: Windows Server 2012 R2
Management console OS: Windows 7 Professional SP1
Browser: IE11

#Operation

(1) DF800 (management IPs: node0: 10.208.15.131; node1: 10.208.15.132) already registered with HFSM
(2) Executed the *Create File System* operation (but an error occurred).
Attempted to create a file system on node0 from the HFSM GUI.
Message KAQMxxxx-E appeared.
Even though unable to create a file system using the HFSM, it is able to create by using CLI.

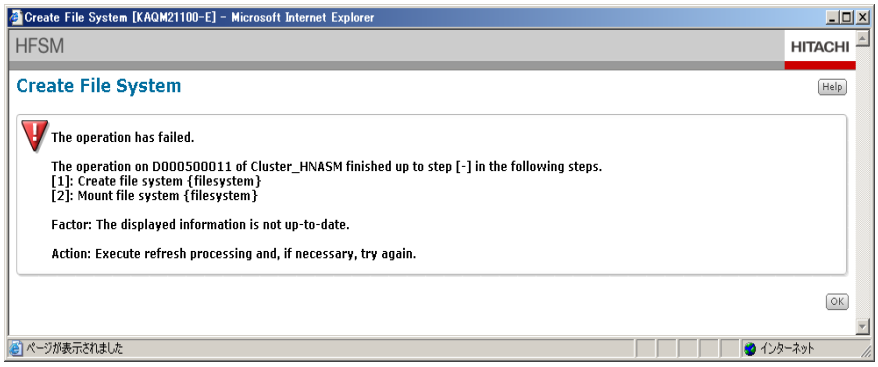



Figure 3.1.1 Example error report

### 3.1.2 Using the log file collection command (hcmds64getlogs) on the management server (HFSM)

#### 3.1.2.1 Overview

- Simply by executing the command shown in *3.1.2.4 Command usage*, you can collect from the HFSM operating environment all the log files and database files needed for analyzing an HFSM error.

Note 1: You can also collect just the HFSM log files by GUI operation. From the Start menu, choose Programs, Hitachi Command Suite , File Services Manager, and then Get Logs - HFSM. (If you are using Windows Server 2012, select Get Logs - HFSM from the application list in the Start screen.) This operation saves the log files to the directory <HFSM Install-folder>\log_archive. As only one generation can be collected, save the log file already in this folder to another location before you perform Get log information.

Note 2: If you are using HFSM linking with HDvM or using HSNM2 coordination function, use the hcmds64getlogs command.

#### 3.1.2.2 Purpose of the log file collection command

- By collecting all the log files, database files, and other data required for analyzing a problem in HFSM, the log file collection command assists Hitachi in providing effective customer support.

#### 3.1.2.3 Prerequisites

- The login user must have Administrator permission or equivalent privileges.
- Execute the command on the machine on which HFSM is installed.
- Java must be enabled in the environment. (Java can be used if HFSM was successfully installed.)

#### 3.1.2.4 Command usage

- For details on using this command, see the manual *Trouble Shooting Guide*- in the chapter 3 *Collecting management server log files*.

*Execution example:*

Execute the following command line at the command prompt on the management server:

<Suite Install-dir>\bin\hcmds64getlogs /dir

<folder-name> [/type File Services Manager] [/arc <archive-file-name>]

[Remarks]

- The data collected by the hcmdsgetlogs command is archived in the following four files:
  - (a) Log for error diagnostics (HiCommand_log_64.jar if the arc option is unspecified)
  - (b) HiRDB detailed log (HiCommand_log_64.hdb.jar if the arc option is unspecified)
  - (c) Database (HiCommand_log_64.db.jar if the arc option is unspecified)
  - (d) Table information and data (HiCommand_log_64.csv.jar if the arc option is unspecified)
- To extract the above four ".jar" files, use the jar command included in the Java 2 Software Development Kit (J2SDK).

As J2SDK is also provided in the Hitachi Command Suite Common Component, you can extract the files in a Windows environment with HFSM installed by executing the following command. Please move to the

directory you want to extract and execute the command.

"<Suite Install-dir>\uCPSB\hjdk\jdk\bin\jar.exe"

-xvf < jar file path>

Also, because *jar* files are archived in the same compression format as *zip* files, you can change the ".jar" extension to ".zip" and extract the files using general decompression software. (Note, however, that files are not always extracted properly.)

#### 3.1.2.5 Configuration of collected logs

(a) Log for error diagnostics

The extracted files are saved in a directory configured as shown below.

The extracted directories and files are organized as follows:

```
+-------- --base
+---------- META-INF
+---------- DeviceManager (When using HFSM linking with HDvM)
+---------- StorageNavigatorModular (When using HSNM2 coordination function)
+---------- File Services Manager
            +-- HFSM_information ------(1)
            +-- FileServicesManager ------(2)
                +--conf ------(3)
                +--inst -------(4)
                +--lib --------(5)
                +--logs ------(6)
                +--system ---(7)
```

Output contents:

# File Services Manager directory ---(1)
- Installation information
- Uninstallation information
- InstallShield log (Setup.ilg)

# File Services Manager directory ---(2)
- Build information file (build)

# conf directory ---(3)
- User properties (public) file (user.properties)

# inst directory---(4)
- Scripts used when running File Services Manager

# lib directory---(5)
- Scripts used when running File Services Manager

# logs directory---(6)
- Hitachi File Services Manager message log files
  HFSM_Messag*e*n.log (*n*: file number)
- Hitachi File Services Manager trace log file
  HFSM_Trac*e*n.log (*n*: file number)
- Hitachi File Services Manager SNM trace log file
  HFSM_SNM_Trac*e*n.log (*n*: file number)
- HFSM server environment information (version)

# system directory---(7)
- User properties (private) file (sys.properties)
- Rule definition files for Digester

(b) HiRDB detailed log

The extracted data is saved in *the current directory.*

The extracted data is the HiRDB detailed log.

(c) Database

The extracted data is saved in *the current directory.*

The extracted data is the contents of the HiRDB database (for database error diagnostics).

(d) Table information and data

The extracted data is saved in *the current directory.*The extracted data is the HiRDB table information and data (for restoring the database).

You can import this data by executing the following command line:

"<Suite Install-dir>\sbin\hcmdsdbmove" /import /datapath <data-directory> /type FileServicesManager

## 3.2 Collecting a thread dump

If any of the following events occurs on the management server, collect a Java VM thread dump to check the cause of the problem:

- The user login window does not open when you attempt to start HFSM.
- The main window does not open when you are logged in to HFSM.
- A process becomes unresponsive for a long time without timing out.

To collect a thread dump, follow these steps:

(1) Create a file named "dump" in the folder <Suite Install-dir>\uCPSB\CC\server\public\ejb\FileServicesManager.

(2) In Windows, open the Services window.

(3) Stop **HFSM Web Service**.

(4) The file javacore*xxx*.*xxxx*.txt will be output to the following folder:
<Suite Install-dir>\uCPSB\CC\server\public\ejb\FileServicesManager

(5) From the Services window, start **HFSM Web Service**.

## 3.3 Collecting a JavaScript log

In case the HFSM screens are not displayed correctly, there might be some problems in the JavaScript which runs on client PC. In order to solve the problem, screen shot of the script error screen is required. The script error screen can be taken by the following procedure:

(1) Enabling the "log output setting for JavaScript error" on Web browser settings.

For the Internet Explorer:

[Tool]->[Internet Option]->[Advanced]

Check [Display a notification about every script error].

(2) Reproduce the screen in question, then display the script error screen.

(3) Take screen shot of the Script error screen.

When the script error screen is displayed with scroll bar, take 2 or more screen shot with scrolling the screen to get all information to look into the problem.

The following information is mandatory:

(a) Line

(b) Character

(c) Error message

(d) Error code

(e) URL

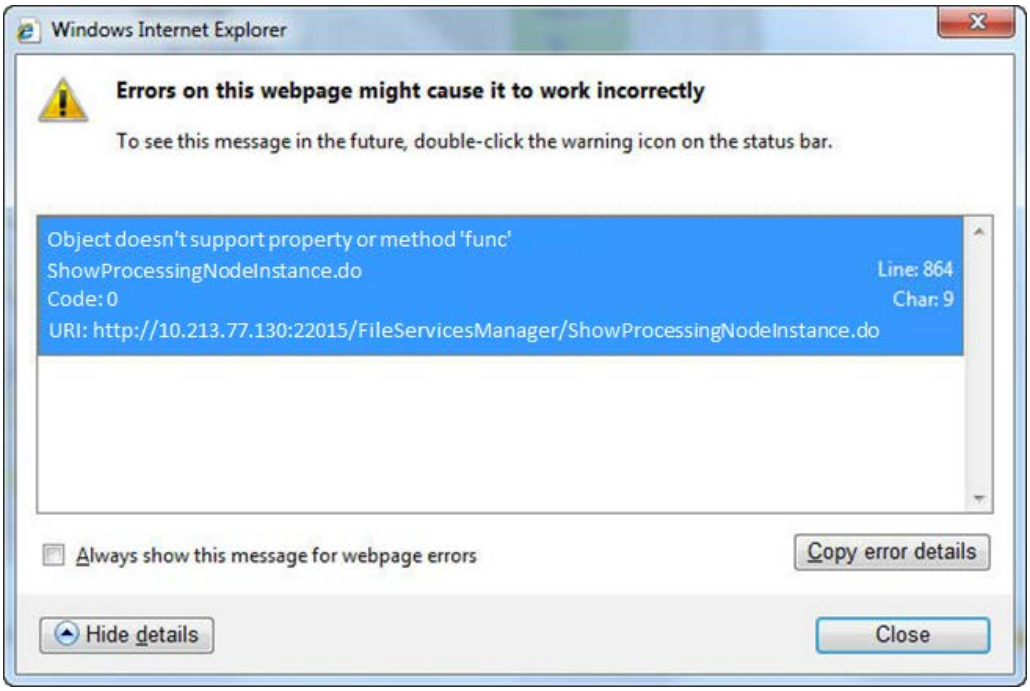



Figure 3.3.1 Script error information screen

# Appendixes

## A-1 Service Operations

This appendix describes service operations. The services listed in Table A-1-1 should always be started and stopped by using commands or from the **Start** menu. Do not start or stop them from the Service Settings window.

Table A-1-1 Services to start or stop

| # | Service name |
|---|---|
| 1 | HBase 64 Storage Mgmt Web Service |
| 2 | HBase 64 Storage Mgmt Web SSO Service |
| 3 | HBase 64 Storage Mgmt SSO Service |
| 4 | HFSM Web Service |

In this appendix, the installation folder of the Hitachi Command Suite Common Component is written as <Suite Install-dir>.

### A-1-1 Service operations in Windows

The following describes service operations in Windows. Always start and stop services by command. Do not start or stop them from the Service Settings window. If you are using HFSM linking with HDvM, you will also need to perform HiCommandServer operations to run the HFSM services.

(1) Checking the service status

You can check whether a service is active from the **Services** list. The service is running if **Started** appears in the **Status** column.

You can also check the status of the services by executing the following command:

<Suite Install-dir>\bin\hcmds64srv /statusall

- HBase 64 Storage Mgmt Web Service
- HBase 64 Storage Mgmt SSO Service
- HBase 64 Storage Mgmt Web SSO Service
- HiRDB service
- HFSM Web Service

Alternatively, you can check the service status by either of the following way:

- Start, Programs, Hitachi Command Suite, FileServicesManager, and Status - HFSM[*1]
- Select Status - HFSM from the application list in the Start screen.

(2) Starting services

<Suite Install-dir>\bin\hcmds64srv /start

- HBase 64 Storage Mgmt Web Service
- HBase 64 Storage Mgmt SSO Service
- HBase 64 Storage Mgmt Web SSO Service
- HiRDB service
- HFSM Web Service

Alternatively, you can check the service status by either of the following way:

- Start, Programs, Hitachi Command Suite, FileServicesManager, and Start - HFSM*1
- Select Start - HFSM from the application list in the Start screen.

(3) Stopping services

<Suite Install-dir>\bin\hcmds64srv /stop

- HBase 64 Storage Mgmt Web Service
- HBase 64 Storage Mgmt SSO Service
- HBase 64 Storage Mgmt Web SSO Service
- HiRDB service
- HFSM Web Service

Alternatively, you can check the service status by either of the following way:

- Start, Programs, Hitachi Command Suite, FileServicesManager, and Stop - HFSM*1
- Select Stop - HFSM from the application list in the Start screen.

Note *1: If you are using Windows Server 2012, select each program from the application list in the Start screen.

### A-1-2 Service operations without an existing installation folder for the Hitachi Command Suite Common Component

When an installation folder for the Hitachi Command Suite Common Component (<Suite Install-dir>) does not exist, start and stop the services from the Service Settings window.

Table A-1-2 Services to start or stop

| # | Service name |
|---|---|
| 1 | HiRDB/EmbeddedEdition _HD1 |
| 2 | HiRDB/ClusterService _HD1 |

## A-2 Collecting Web browser information

### A-2-1 Taking screen shots of Internet Explorer settings (in Windows)

(1) Internet Explorer version

**Help** -> **About Internet Explorer,** and take a screen shot.

Figure A-2-1.1 Internet Explorer version

(2) Internet Explorer settings

Note: The figure is Internet Explorer 11.

1) Internet options

**Tools** -> **Internet Options** -> **Advanced** page

Scroll to take a screen shot of all the information in the window below.

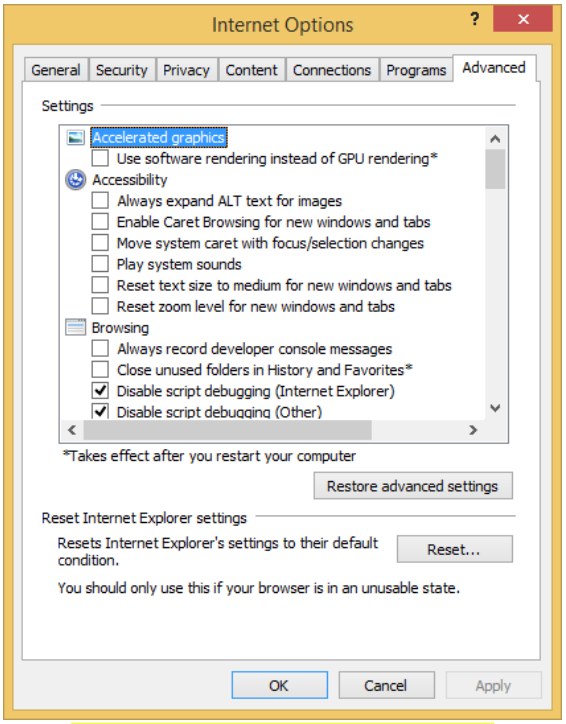



Figure A-2-1.2 Internet options settings

2) Local area network (LAN) settings

**Tools** -> **Internet Options** -> **Connections** page -> **LAN Settings**

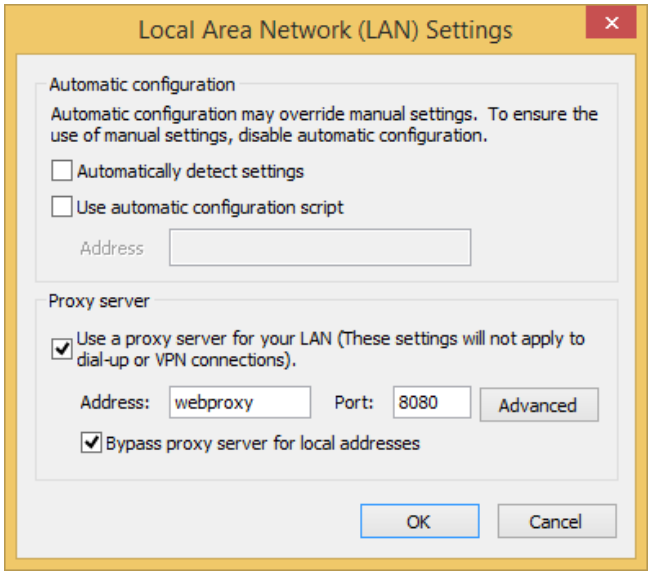



Figure A-2-1.3 LAN settings

3) Proxy settings

**Tools** -> **Internet Options** -> **Connections** page -> **LAN Settings** -> **Advanced**

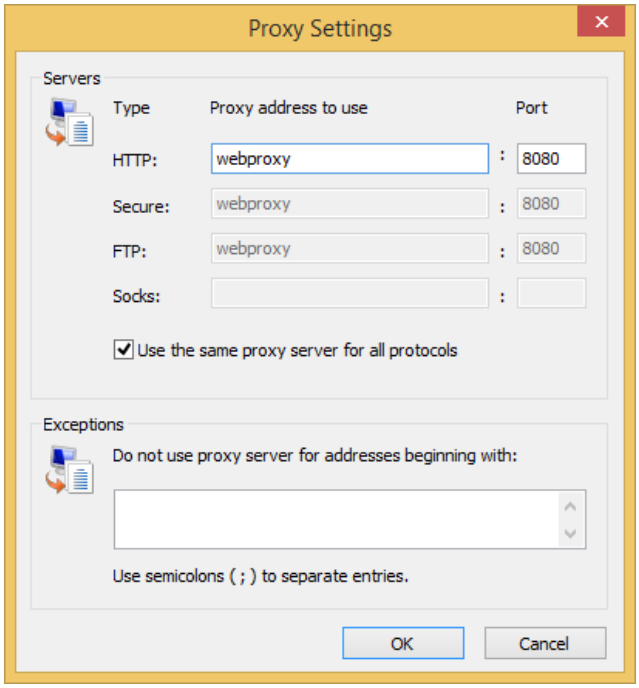



Figure A-2-1.4 Proxy settings

A-2-2 Taking screen shots of Firefox settings (in Linux)

(1) Firefox version

Take a screen shot of the following screen:

**Help -> About Firefox**

Figure A-2-2.1 Firefox version

(2) Firefox settings

Note: The figure is Firefox ESR 45.

1) Firefox advance settings

**Open the Menu -> Options -> Advanced tab.**

Take the screen shots of the sub tabs "General", "Data Choices", "Network", "Update" and "Certificates".

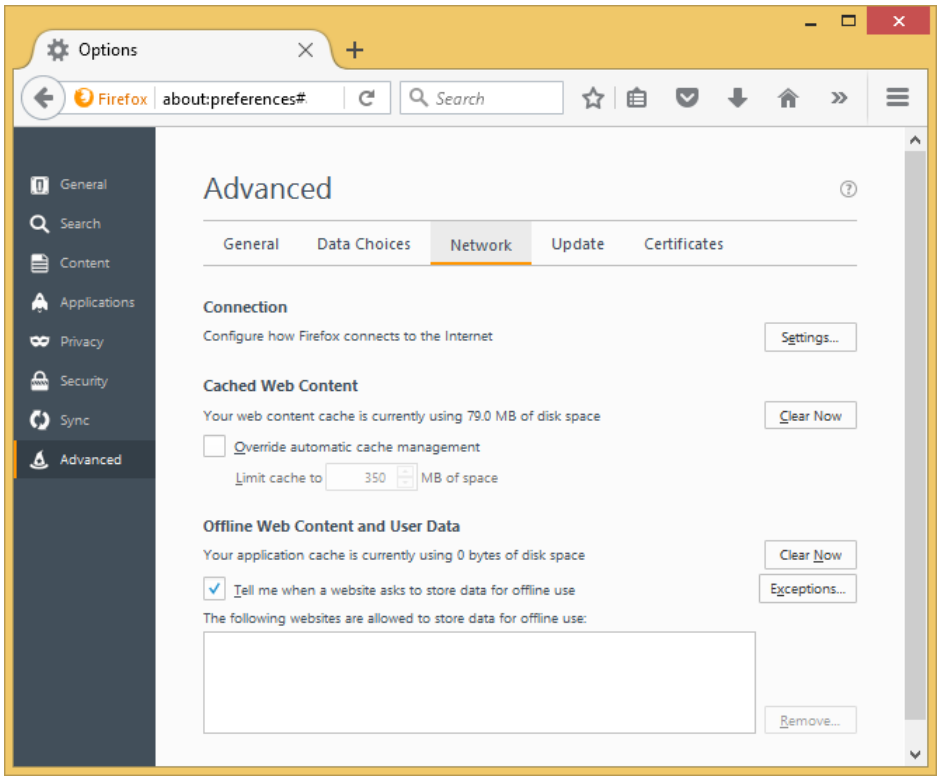



Figure A-2-2.2 Firefox advanced settings

2) Proxy settings

Take a screen shot of the following screen:

**Open the Menu -> Options -> Advanced tab.**

**Select the Network sub tab.**

**Click the Settings button.**

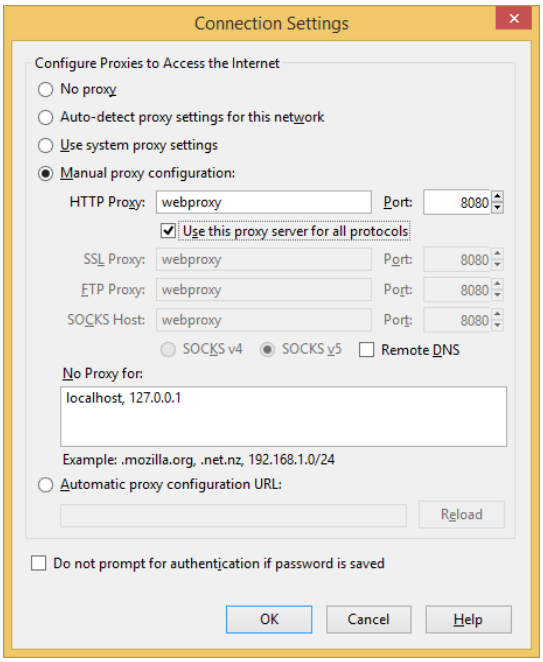



Figure A-2-2.3 Firefox proxy settings

3) About config settings

Enter “about config” into the address bar.

Scroll to take a screen shot of all the information in the window below.

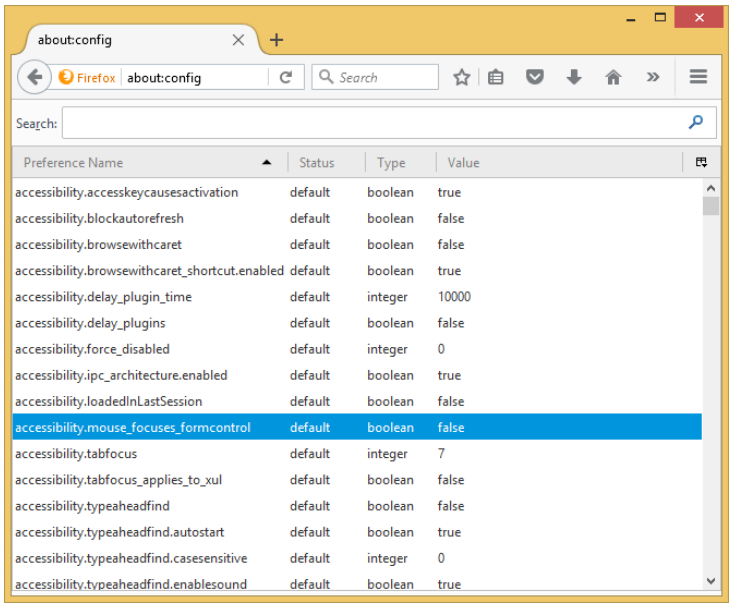



Figure A-2-2.4 Firefox about config settings

## A-3 Troubleshooting examples

Table A-3-1 Troubleshooting examples

| No. | Location of problem | Category | Type of problem | Cause | Action | Message | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | Non-specific | Installation-related problems | Installation failed after HFSM was uninstalled. | Installation of Hitachi Command Suite Common Component has failed. | Uninstall HFSM manually, and then retry the installation. | - | |
| 2 | Login window | Problem on login | The error KAQM19107-E occurs always and Unable to login. | When the management server has been running for more than 497 days, the internal connection might be failed. This is the problem of the network control program in the Windows system and not the problem of the HFSM. | Reboot the management server and try again login. | KAQM19107-E | |
| 3 | Non-specific | Problems on Database | Operation fails with the error message KAQM23302-E. | Database connection may fail. | According to the "Hitachi File Services Manager - Log analysis Guide -", check for the HFSM trace log. When error message KFPA11724-E is output just after error message KAQM23302-E, collect the Database logs according to the "A-10 Collection of the SQL trace file of HiRDB" in this document, and ask the support section for an investigation. | KAQM23302-E<br>KFPA11724-E | |

Note: About the trouble examples other than these, refer the following sections in the manual "Cluster Troubleshooting Guide":

Troubleshooting Examples

GUI-related troubleshooting examples

HCP linkage troubleshooting examples

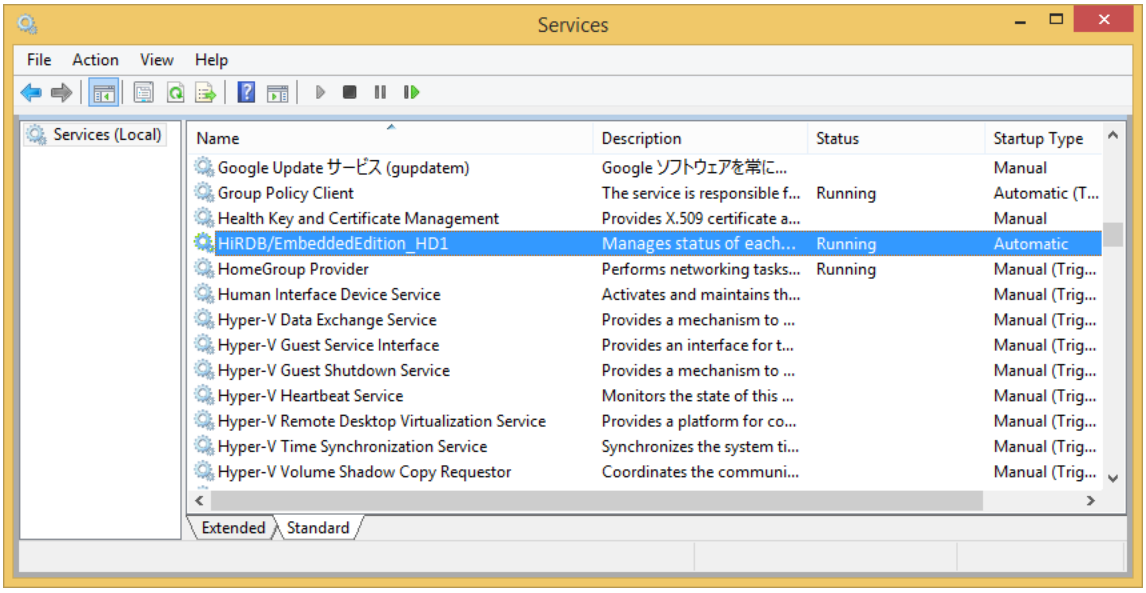
## A-4 Checking the status of the RD area

HFSM cannot be installed or uninstalled if the HiRDB RD area is offline. If installation or uninstallation fails, check the status of the RD area, following the procedure below.

In this procedure, the installation folder of the Hitachi Command Suite Common Component is written as <Suite Install-dir>.

### Procedure:

1. Click the Windows Services applet, and make sure that the status of the **HiRDB/EmbeddedEdition_HD1** service is **Running**.




If the status of the **HiRDB/EmbeddedEdition_HD1** service is not **Running**:

In the Services window, select **HiRDB/EmbeddedEdition_HD1**, and then choose **Action** and **Start** to start the service.

After this action, make sure that the service status has changed to **Running**.

2. Open a command prompt.

Note: Perform all of the following steps from this command prompt.

3. Move the current directory to the bin directory of the Hitachi Command Suite Common Component installation folder:

```
cd /d <Suite Install-dir>\bin
```

4. Execute the following command to start the database:

```
hcmds64dbsrv /start
```

If the database fails to start:

Perform step 1 again, and then repeat this step. If this step still fails, stop this procedure, collect logs and contact Customer Support.

5. Move the current directory to the bin directory in the installation directory of the Hitachi Command Suite Common Component database:

```
cd /d <Suite Install-dir>\HDB\BIN
```

6. Execute the following command. (This command sets the environment variables needed to execute HiRDB commands. Execute this command from the same command prompt as at step 7.)

```
pdntcmd
```

After executing the `pdntcmd` command, perform steps a) to d) below, and make sure that the environment variables are set correctly.

a) Execute the `set PATH` command. Make sure that the following two paths appear in the execution result:

<Suite Install-dir>\HDB\BIN

<Suite Install-dir>\HDB\CLIENT\UTL

If these two paths have not been added:

Manually execute the following command to add the paths. Then execute the `set PATH` command, and check that the paths have been added.

```
set PATH=<Suite Install-dir>\HDB\BIN;<Suite Install-dir>\HDB\CLIENT\UTL;%PATH%
```

b) Execute the `set PDDIR` command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB

If the above character string is not defined in the `PDDIR` environment variable:

Manually execute the following command to define PDDIR. Then execute the `set PDDIR` command, and check that the environment variable has been defined correctly:

```
set PDDIR=<Suite Install-dir>\HDB
```

c) Execute the `set PDCONFPATH` command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB\CONF

If the above character string is not defined in the `PDCONFPATH` environment variable:

Manually execute the following command to define `PDCONFPATH`. Then execute the `set PDCONFPATH` command, and check that the environment variable has been defined correctly:

```
set PDCONFPATH=<Suite Install-dir>\HDB\CONF
```

d) Execute the `set PDUXPLDIR` command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB\UXPLDIR

If the above character string is not defined in the `PDUXPLDIR` environment variable:

Manually execute the following command to define `PDUXPLDIR`. Then execute the `set PDUXPLDIR` command, and check that the environment variable has been defined correctly:

```
set PDUXPLDIR=<Suite Install-dir>\HDB\UXPLDIR
```

7. Check the status of the RD area.

Execute the following commands from the same command prompt that you used when executing `pdntcmd` at step 6.

Move the current directory to the bin directory in the installation directory of the Hitachi Command Suite Common Component database:

```
cd /d <Suite Install-dir>\HDB\BIN
```

Execute the following command to check the status of the RD area:

```
pddbls -r HFSM_RD -l
```

If the STATUS column is other than "OPEN", the RD area may be offline.

Place the RD area online, following the description in *A-5 Procedure for placing the RD area online and restoring HFSM*.

## A-5 Procedure for placing the RD area online and restoring HFSM

Prerequisites:

In situation the described below, the procedure is as follows:

An error occurred while installing or uninstalling HFSM.#

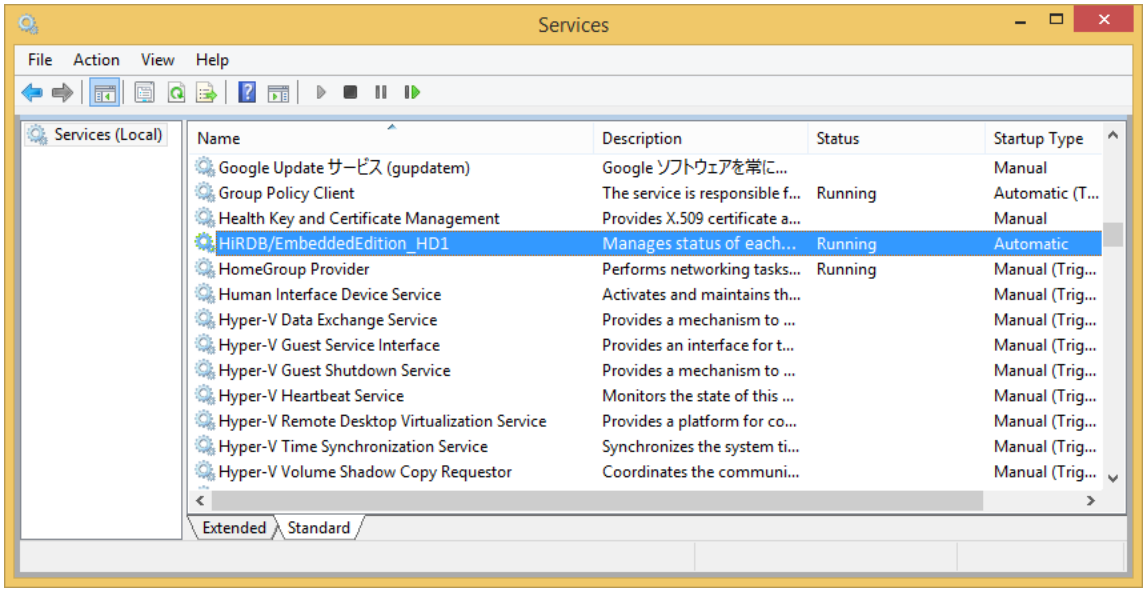
The services of other Hitachi Command Suite products are stopped.

#: If the error occurred while you were using HFSM, not during installation or uninstallation, stop the operation being performed, collect logs and contact Customer Support.

In this procedure, the installation folder of the Hitachi Command Suite Common Component is written as <Suite Install-dir>, and the HFSM installation folder is written as <HFSM Install-dir>.

Procedure:

1. Click the Windows Services applet, and make sure that the status of the **HiRDB/EmbeddedEdition_HD1** service is **Running**.




If the status of the **HiRDB/EmbeddedEdition_HD1** service is not **Running**:

In the Services window, select **HiRDB/EmbeddedEdition_HD1**, and then choose **Action** and **Start** to start the service.

After this action, make sure that the service status has changed to **Running**.

2. Open a command prompt.

Note: Perform all of the following steps from this command prompt.

3. Move the current directory to the bin directory of the Hitachi Command Suite Common Component installation

folder:

```
cd /d <Suite Install-dir>\bin
```

4. Execute the following command to start the database:

```
hcmds64dbsrv /start
```

If the database fails to start:

Perform step 1 again, and then repeat this step. If this step still fails, stop this procedure, collect logs and contact Customer Support.

5. Move the current directory to the bin directory in the installation directory of the Hitachi Command Suite Common Component database:

```
cd /d <Suite Install-dir>\HDB\BIN
```

6. Execute the following command. (This command sets the environment variables needed to execute HiRDB commands. Execute this command from the same command prompt as at steps 9 to 15.)

```
pdntcmd
```

After executing the `pdntcmd` command, perform steps a) to d) below, and make sure that the environment variables are set correctly.

a) Execute the `set PATH` command. Make sure that the following two paths appear in the execution result:

<Suite Install-dir>\HDB\BIN

<Suite Install-dir>\HDB\CLIENT\UTL

If these two paths have not been added:

Manually execute the following command to add the paths. Then execute the `set PATH` command, and check that the paths have been added

```
set PATH=<Suite Install-dir>\HDB\BIN;<Suite Install-dir>\HDB\CLIENT\UTL;%PATH%;
```

b) Execute the `set PDDIR` command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB

If the above character string is not defined in the `PDDIR` environment variable:

Manually execute the following command to define `PDDIR`. Then execute the `set PDDIR` command, and check that the environment variable has been defined correctly:

```
set PDDIR=<Suite Install-dir>\HDB
```

c) Execute the `set PDCONFPATH` command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB\CONF

If the above character string is not defined in the PDCONFPATH environment variable:

Manually execute the following command to define PDCONFPATH. Then execute the set PDCONFPATH command, and check that the environment variable has been defined correctly:

```
set PDCONFPATH=<Suite Install-dir>\HDB\CONF
```

d) Execute the set PDUXPLDIR command, and make sure that the execution result is as follows:

<Suite Install-dir>\HDB\UXPLDIR

If the above character string is not defined in the PDUXPLDIR environment variable:

Manually execute the following command to define PDUXPLDIR. Then execute the set PDUXPLDIR command, and check that the environment variable has been defined correctly:

```
set PDUXPLDIR=<Suite Install-dir>\HDB\UXPLDIR
```

7. Move the current directory to the bin directory of the Hitachi Command Suite Common Component installation folder:

```
Cd /d <Suite Install-dir>\bin
```

8. Execute the following command to stop the database:

```
hcmds64dbsrv /stop
```

9. Create the HiRDB files.

The following describes how to create a directory of RDAREA, and then create the HiRDB file system area using the pdfmkfs command.

Execute the following commands from the same command prompt that you used when executing pdntcmd at step 6.

```
mkdir "<HFSM Install-dir>\database\x64\FileServicesManager"
```

Move the current directory to the bin directory in the installation directory of the Hitachi Command Suite Common Component database:

```
cd /d <Suite Install-dir>\HDB\BIN
```

Create the HiRDB file system area as follows. Then execute the echo %errorlevel% command, and check that 0 was returned by the pdfmkfs command:

```
pdfmkfs -r -n 2047 -l 1 -k DB -e 23 "<HFSM Install-dir>\database\x64\FileServicesManager\RD_HFSM"
echo %errorlevel%
```

10. Move the current directory to the bin directory of the Hitachi Command Suite Common Component installation folder:

```
cd /d <Suite Install-dir>\bin
```

11. Execute the following command to start the database:

```
hcmds64dbsrv /start
```

12. Move the current directory to the bin directory in the installation directory of the Hitachi Command Suite Common Component database:

```
cd /d <Suite Install-dir>\HDB\BIN
```

13. Place the RD area offline again:

```
pdhold -c -r HFSM_RD
```

This command may result in an error, but you can safely continue to the next step.

14. Initialize the RD area again.

a) Using Notepad or an editor of your choice, creates the following file in any location other than a network drive. Create the file with this file name.

File name: pdmod_ctrl.txt

File contents:

```
initialize rdarea HFSM_RD;
```

b) Execute the command below.

Execute this command with <Suite Install-dir>\HDB\BIN as the current directory:

Note: Execute the following command from the same command prompt as you used at step 6 when setting the environment variables by the `pdntcmd` command. If you need to perform this step from a different command prompt, first repeat step 6 from the new command prompt.

```
pdmod -a pdmod_ctrl.txt (absolute path)
```

Make sure that return code=0 is shown in message KFPX24200-I.

15. Place the RD area online.

Execute the command below.

Note: Execute the following command from the same command prompt as you used at step 6 when setting the environment variables by the `pdntcmd` command. If you need to perform this step from a different command prompt, first repeat step 6 from the new command prompt.

```
pdrels -o -r HFSM_RD
```

Make sure that message KFPH00110-I have been output.

This step places the blocked HFSM RD area online.

16. Move the current directory to the bin directory of the Hitachi Command Suite Common Component installation

folder:

```
cd /d <Suite Install-dir>\bin
```

17. Execute the following command to stop the database:

```
hcmds64dbsrv /stop
```

18. Execute the following command and make sure that the Hitachi Command Suite Common Component is stopped:

```
hcmds64srv /status
```

19. If the result of step 18 indicates that the Hitachi Command Suite Common Component has not stopped, stop it by executing the following command:

```
hcmds64srv /stop
```

20. Uninstall HFSM, and then perform a new installation.

Uninstall HFSM if not already uninstalled.

Perform a new installation if the error occurred while installing HFSM.

As the installation folder, accept the displayed default location.

When the new installation is completed, this procedure is finished.

## A-6 HFSM processes

This appendix describes HFSM processes.

Do not attempt to monitor HFSM processes other than those indicated as monitoring targets in the following table.

Table A-6-1 List of processes activated by HFSM

| Component | Sub-component | Service name | Process name (Windows) | Monitoring | Remarks |
|---|---|---|---|---|---|
| Hitachi Command Suite Common Component | HiRDB(EmbeddedEdition) | HiRDB/EmbeddedEdition _HD1 | pdservice.exe | Do not monitor | |
| | | | pdprcd.exe | Do not monitor | |
| | | | pdrsvre.exe | Do not monitor | |
| | | | pdmlgd.exe | Do not monitor | |
| | | | pdrdmd.exe | Do not monitor | |
| | | | pdstsd.exe | Do not monitor | |
| | | | pdlogd.exe | Do not monitor | |
| | | | pdscdd.exe | Do not monitor | |
| | | | pdtrnd.exe | Do not monitor | |
| | | | pdtrnrvd.exe | Do not monitor | |
| | | | pd_buf_dfw.exe | Do not monitor | |
| | | | pdlogswd.exe | Do not monitor | |
| | | | pdsds.exe | Do not monitor | Multiple processes activated. |
| | | | pdndmd.exe | Do not monitor | |
| | | HiRDB/ClusterService _HD1 | pdsha.exe | Do not monitor | Activated only in a cluster configuration. |
| | Hitachi Network Objectplaza Trace | Hitachi Network Objectplaza Trace Monitor 2 | hntr2mon.exe | Target | Processes activated with 32-bit and 64-bit. |
| | | | hntr2srv.exe | Target | Processes activated with 32-bit and 64-bit. |
| | HBase 64 Storage Mgmt Web Service | HBase 64 Storage Mgmt Web Service | httpsd.exe | Target | Multiple processes activated. |
| | | | rotatelogs.exe | Do not monitor | Multiple processes activated. |
| | HBase 64 Storage Mgmt SSO Service | HBase 64 Storage Mgmt SSO Service | httpsd.exe | Target | |
| | | | hcmdssvctl.exe | Target | |
| | HBase 64 Storage Mgmt Web SSO Service | HBase 64 Storage Mgmt Web SSO Service | httpsd.exe | Target | |
| Hitachi File Services Manager | HFSM Web Service | HFSM Web Service | cjstartsv.exe | Target | |
| | | | hcmdssvctl.exe | Target | |

Note: Do not attempt to manually start or stop the HiRDB/EmbeddedEdition_HD1 service.

Note: Start and stop the Hitachi Command Suite Common Component services (HBase 64 Storage Mgmt Web Service and HBase 64 Storage Mgmt SSO Service and HBase 64 Storage Mgmt Web SSO Service) and HFSM service (HFSM Web Service) only by using the `hcmds64srv` command or from the **Start** menu.

Note: We do not recommend monitoring of HiRDB processes for the following reasons:

(i) Some processes start and end whenever a connection is established or terminated.

(ii) Some processes start and end under set conditions (after a set interval, for example).

(iii) Some processes are continuously active. Thus, their active state alone does not necessarily mean that HiRDB is available.

Note: You do not need to monitor rotatelogs.exe and rotatelogs of the HBase 64 Storage Mgmt Web Service because they are sub processes of httpsd.exe and httpsd.

## A-7 Re-executing operations

When an error occurs due to a GUI operation, such as an incorrect setting or operating mistake, correct the operation following the instructions in the error message displayed in the processing result window.

If message KAQM21100-E is output due to a GUI operation that results in the HFSM cache information not reflecting the true state of the node, click the **Refresh Processing Node** button and then retry the failed operation.

For operations such as **Create and Share File System** that involve executing a series of processes, processing may be suspended at an intermediate step when an error occurs. In this case, you can continue from the next step after removing the cause of the error. Check the steps that are not completed by referring the error message, and retry the required processes.

## A-8 Resetting the DB settings of the HFSM

1. Open a command prompt

   Do the following operations on the command prompt.

2. Change the current directory to the inst directory of the HFSM

```
cd /d <HFSM Install-dir>\inst
```

3. Reset the DB settings for the HNASM by executing the following command:

```
HNASMdbsetup.bat del
```

4. Confirm the result of the command.

```
echo %errorlevel%
```

   (a) Confirm the value of the errorlevel.

   (b) The value of the errorlevel is "0", then the DB settings are reset successfully.

   (c) The value of the errorlevel is not "0", wait for a while, then try again the step 3, because the command might be failed by the temporal reasons such as "system busy" or so.

   (d) Then check again the errorlevel by the step 4 command.

   In case you keep getting the errorlevel not "0", take the logs, then ask Technical support Division to investigate.

## A-9 Enabling the file snapshots management functionarity

In case of use file snapshots on HDI system and manage it from the Hitachi File Servicies Manager, enabling the file snapshots management functionarity of the Hitachi File Services Manager by the following procedure: About the way how to manage file snapshots from the Hitachi File Services Manager, refer to the older version's manual.

1, Open the property file (user.properties).

The property file is located in the following folder:

< HFSM Install-folder >\conf\

2, Change the value of the hnasm.syncImage.support property to "true".

The example of the description of the user.properties file is:

```
hnasm.syncImage.support=true
```

By changing the value of the hnasm.syncImage.support property to "false", the file snapshots management functionarity is disabled.

3, Stop and then restart Hitachi File Services Manager and Hitachi Command Suite Common Component.

For details on how to stop and start Hitachi File Services Manager and Hitachi Command Suite Common Component, refer to the manual *Installation and Configuration Guide* – in the chapter 7 *Starting and stopping Hitachi File Services Manager*.

## A-10 Collection of the SQL trace file of HiRDB

Activate the SQL trace function of HiRDB in the following procedure in order to collect SQL trace file of HiRDB.

1, Open the HiRDB.ini file.

The HiRDB.ini file is in the followng holder:

<Hitachi Command Suite common component install directory>\ HDB\CONF\emb

2, Specify the destination of the SQL trace file to PDCLTPATH.

To PDCLPATH, the following holder is specified by default. When you need to change the destination, change a value of PDCLPATH.

<Hitachi Command Suite common component install directory>\ log

3, Specify the size of the SQL trace file by a byte unit in PDSQLTRACE

The following is an example of the PDSQLTRACE in the HiRDB.ini file:

```
PDSQLTRACE= 3072000
```

The value can be specified to the PDSQLTRACE is 0 or 4,096-2,000,000,000 (bytes).

When specify 0, it becomes the maximum size of the SQL trace file, and the SQL trace is not output when trace information exceed maximum size.

When specify 4,096-2,000,000,000 (bytes), it becomes the size of the specified value, and a destination is switched when trace infomation exceed the size of the specified value.

Specify the value equal or grater than 3072000 (bytes) to the SQL trace file for HFSM.

4, Operate HFSM and output log to the SQL trace file.

The following trace files will be output under the holder specified to PDCLPATH.

pdsql1.trc

pdsql2.trc

5, After it became no longer needed to output log, delete the value specified to PDSQLTRACE.