**Hitachi Configuration Manager REST API**

**Log Analysis Guide**

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**Preface**

The Hitachi Configuration Manager REST API Log Analysis Guide describes instructions for field and support engineers that will enable them to check failure status and to isolate the failure cause by using the data (log files, configuration files, etc.) collected when a failure occurs. It is our hope that using this guide in conjunction with the "Hitachi Configuration Manager REST API Troubleshooting Guide" and the "Error Message List" will help engineers take quick and effective support and troubleshooting measures.

**When reading the HP OEM version, see "Appendix C-1 For the HP OEM version, substitute the following terms as indicated" for the "Hitachi Command Suite Software Troubleshooting Guide".**

**Revision Level**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Version | Description | Date |
| 1 | 8.4.0-00 | Hitachi Command Suite REST API Log Analysis Guide | January 12, 2016 |
| 2 | 8.4.1-00 | Hitachi Command Suite REST API Log Analysis Guide | April 15, 2016 |
| 3 | 8.5.0-00 | Hitachi Command Suite REST API Log Analysis Guide | September 14, 2016 |
| 4 | 8.5.1-00 | Hitachi Configuration Manager REST API Log Analysis Guide | January 11,2017 |
| 5 | 8.5.3-00 | Hitachi Configuration Manager REST API Log Analysis Guide | September 8,2017 |
| 6 | 8.5.4-00 | Hitachi Configuration Manager REST API Log Analysis Guide | November 10,2017 |
| 7 | 8.6.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | March 19,2018 |
| 8 | 8.6.1-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | May 22,2018 |
| 9 | 8.6.2-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | September 22,2018 |
| 10 | 8.6.3-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | December 18,2018 |
| 11 | 8.6.4-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | March 20,2018 |
| 12 | 8.6.5-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | June 25,2018 |
| 13 | 10.0.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | September 17,2019 |
| 14 | 10.1.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | February 12,2020 |
| 15 | 10.2.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | April 17,2020 |
| 16 | 10.3.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | June 17,2020 |
| 17 | 10.3.1-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | July 17,2020 |
| 18 | 10.5.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | September 4,2020 |
| 19 | 10.5.1-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | November 30,2020 |
| 20 | 10.6.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | December ,2020 |
| 21 | 10.6.1-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | APRIL 21,2021 |
| 22 | 10.7.0-00 | Hitachi Configuration Manager REST API Troubleshooting Guide | June 4,2021 |
| 23 | 10.8.0-00 | Hitachi Configuration Manager REST API Log Analysis Guide | September 1, 2021 |
| 24 | 10.8.1-00 | Hitachi Configuration Manager REST API Log Analysis Guide | January 31, 2022 |
| 25 | 10.8.2-00 | Hitachi Configuration Manager REST API Log Analysis Guide | April 5, 2022 |
| 26 | 10.8.3-00 | Hitachi Configuration Manager REST API Log Analysis Guide | July 1, 2022 |
| 27 | 10.9.0-00 | Hitachi Configuration Manager REST API Log Analysis Guide | August 9, 2022 |
| 28 | 10.9.1-00 | Hitachi Configuration Manager REST API Log Analysis Guide | January 16, 2023 |
| 29 | 10.9.2-00 | Hitachi Configuration Manager REST API Log Analysis Guide | April 17, 2023 |
| 30 | 10.9.2-01 | Hitachi Configuration Manager REST API Log Analysis Guide | April 24, 2023 |
| 31 | 10.9.2-02 | Hitachi Configuration Manager REST API Log Analysis Guide | June 22, 2023 |
| 32 | 10.9.3-00 | Hitachi Configuration Manager REST API Log Analysis Guide | August 22, 2023 |
| 33 | 11.0.0-00 | Hitachi Configuration Manager REST API Log Analysis Guide | December 01, 2023 |
| 34 | 11.0.1-00 | Hitachi Configuration Manager REST API Log Analysis Guide | February 19, 2024 |
| 35 | 11.0.2-00 | Hitachi Configuration Manager REST API Log Analysis Guide | May 9, 2024 |
| 36 | 11.0.2-01 | Hitachi Configuration Manager REST API Log Analysis Guide | July 30, 2024 |
| 37 | 11.0.3-00 | Hitachi Configuration Manager REST API Log Analysis Guide | October 08, 2024 |
| 38 | 11.0.4-00 | Hitachi Configuration Manager REST API Log Analysis Guide | March 6, 2025 |

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# Overview

This guide explains the log output system, the log message format, and the log details needed to analyze the logs from the REST API. Please use this guide to isolate the failure cause and check component status when a failure occurs in the system.

## Scope of this manual

Digital Engineering Business Division

(HSSC)

(CTSC/ESC/APSC)

(HV)

Hewlett-Packard Enterprise Company

## Glossary

For details on terms, see the Hitachi Command Suite User Guide and Hitachi Configuration Manager REST API Reference Guide.

Acronyms and abbreviations used in this manual are shown below.

|  |  |
| --- | --- |
| Acronyms and Abbreviations | Formal Nomenclature |
| API | Application Program Interface |
| Device Manager | Hitachi Device Manager Software |
| DUMP | FD Dump Tool |
| JDK | Java Development Kit |
| OS | Operating System |
| RAID | Redundant Arrays of Inexpensive Disks |
| REST | Representational State Transfer |
| SSL | Secure Socket Layer |
| SVP | Service Processor |
| TLS | Transport Layer Security |
| <System-drive> | OS install drive |
| <Install-dir> | Hitachi Ops Center install directory |
| <REST Install-dir> | REST API Server install directory \*1 |
| <SVP Install-dir> | SVP install directory \*1 |

\*1: <Install-dir>/ConfManager

## Prerequisite knowledge

* Knowledge of the OS (Windows, Linux)
* Knowledge of storage
* Knowledge of REST API

## Related documentation

Please use the guide whose version corresponds to that of the REST API in which a failure occurs.

Table 1‑1 Hitachi Command Suite Related Manuals

|  |  |
| --- | --- |
| Manual | Note |
| Hitachi Command Suite Installation and Configuration Guide |  |
| Hitachi Command Suite Administrator Guide |  |
| Hitachi Command Suite User Guide |  |
| Hitachi Command Suite Messages |  |
| Hitachi Configuration Manager REST API Reference Guide |  |

Table 1‑2 Hitachi Command Suite Related Manuals (HP OEM version)

|  |  |
| --- | --- |
| Manual | Note |
| HPE XP Command View Advanced Edition Installation and Configuration Guide |  |
| HPE XP Command View Advanced Edition Administrator Guide |  |
| HPE XP Command View Advanced Edition User Guide |  |
| HPE XP8 Storage REST API Reference Guide |  |

Table 1‑3 Hitachi Ops Center Related Manuals

|  |  |
| --- | --- |
| Manual | Note |
| Hitachi Ops Center Installation and Configuration Guide |  |
| Hitachi Ops Center Administrator User Guide |  |
| Hitachi Ops Center API Configuration Manager REST API Reference Guide |  |

Table 1‑4 Other Related Manuals

|  |  |
| --- | --- |
| Manual | Note |
| Hitachi Configuration Manager REST API Log Analysis Guide\*1 |  |
| Engineer Change Notice\*1 |  |
| Hitachi Command Suite Software Troubleshooting Guide\*1 |  |
| Hitachi Device Manager Software Troubleshooting Guide\*1 |  |
| Hitachi Device Manager Software Log Analysis Guide\*1 |  |

\*1: Please use the manual corresponding to the version of REST API you are using.

# Log Output System

User operation history, actions initiated by each component, and outside interaction are recorded as trace logs.

**JAVA**

**ConfManagerAPIServer(jetty)**

ConfManagerAPIServer log

REST API log

Other log

HTTP Client

**ConfManagerWebServer(apache)**

ConfManagerWebServer log

**RAID Manager**

RAID Manager log

<REST API Server Machine>

**ConfManagerMessageQueueServer**

**(rabbitMQ)**

ConfManagerMessageQueueServer log

Fig. 2‑1 REST API Server component

## Log Classifications

The following table outlines log classifications.

Table 2‑1 ConfManagerWebServer Log File List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | access\_\*.log | Output Location A | A | A | HTTP Access Log (\* is timestamp.) |
| 2 | ssl\_request\_\*.log | Output Location A | A | A | HTTP Access Log (SSL) (\* is timestamp.) |
| 3 | Error\_\*.log | Output Location A | A | A | Error Data (\* is timestamp.) |
| 4 | Logarchive***n***.zip(***n***=0-9) | Output Location A | A | A | Archive files of old log files. |

A : Available N/A : Not Available

Output Location A: [Windows/Linux] <REST Install-dir>/oss/apache/logs

Table 2‑2 ConfManagerAPIServer Log File List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | Commons-daemon.\*.log | Output Location A | A | N/A | Logs related to registration, startup, and stopping of Windows services  (\* is a timestamp.) |
| 2 | confmanagerapiserver-std.\*.log | Output Location A | A | A | Standard output logs of a Web application server  (\* is a timestamp.) |
| 3 | confmanagerapiserver-stdout.\*.log | Output Location A | A | N/A | Standard output logs for startup of a Web application server  (\* is a timestamp.) |
| 4 | confmanagerapiserver-stderr.\*.log | Output Location A | A | N/A | Standard error output logs for startup of a Web application server  (\* is a timestamp.) |
| 5 | webserver-stdout\_\*.log | Output Location A | A | A | Application server log  (\* is a timestamp.) |
| 6 | Logarchive***n***.zip(***n***=0-9) | Output Location A | A | A | Archive files of old log files. |

A : Available N/A : Not Available

Output Location A: [Windows/Linux] <Install-dir>/ConfManager/logs/jetty

Table 2‑3 ConfManagerMessageQueueServer Log File List(windows)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | rabbit.log | Output Location A | A | N/A | Logs of rabbitMQ server used by notifications about changes |
| 2 | rabbit-sasl.log | Output Location A | A | N/A | SASL(System Application Support Libraries) logs of rabbitMQ server used by notifications about changes |
| 3 | Logarchive***n***.zip(***n***=0-9) | Output Location A | A | N/A | Archive files of old log files. |

A : Available N/A : Not Available

Output Location A: <Install-dir>/ConfManager/oss/rabbitmq/etc/rabbitmq/log

Table 2‑4 ConfManagerMessageQueueServer Log File List(Linux)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | rabbit@{host name}.log | Output Location A | N/A | A | Logs of rabbitMQ server used by notifications about changes |
| 2 | rabbit@{host name}-sasl.log | Output Location A | N/A | A | SASL(System Application Support Libraries) logs of rabbitMQ server used by notifications about changes |
| 3 | Logarchive***n***.zip(***n***=0-9) | Output Location A | N/A | A | Archive files of old log files. |

A : Available N/A : Not Available

Output Location A: <Install-dir>/ConfManager/oss/rabbitmq/var/log/rabbitmq

Table 2‑5 RESTAPI Log File List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | Restapi.log | Output Location A | A | A | REST API logs. |
| 2 | RestapiError.log | Output Location A | A | A | REST API error logs. |
| 3 | SN\_Log.log | Output Location A | A | A | Library logs (used for logging). |
| 4 | Subscriber.log | Output Location A | A | A | Receiving side logs of the change notification. |
| 5 | Publisher.log | Output Location B | A | A | Sending side logs of the change notification. |

A : Available N/A : Not Available

Output Location A: [Windows/Linux] <REST Install-dir>/logs/rest

Output Location B: [SVP]<SVP Install-dir >/wk/supervisor/restapi/logs/rest

Table 2‑6 RAID Manager Log File List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | Folder Name: “HORCM instance Number”  Example:1048 | Output Location A | A | A | Log archive folders of RAID Manager.  There is more than one. For details about the output information, see the RAID Manager manuals. |

A : Available N/A : Not Available

Output Location A: [Windows/Linux] <REST Install-dir>/logs/rm

Table 2‑7 Other Log File List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Log File Name | Output Location | Win | Lin | Output Data |
| 1 | confmanager\_inst\_\*.log | Output Location A | A | A | Installation logs for when a root user installed Configuration Manager in a Windows or a Linux environment. (\* is a consecutive number.) |
| 2 | confmanager\_inst\_<UID>\_\*.log | Output Location A | A | A | Installation logs for when a non-root user installed Configuration Manager in a Linux environment. (<UID> is the user ID of the installation user, and \* is a consecutive number.) |
| 3 | hcsrest\_inst\_yyyymmdd-HHMMSS.log | Output Location A | A | A | Installation logs (yyyymmdd-HHMMSS is the date and time.) |
| 4 | hcsrest\_launcher<PID>.log | Output Location A | A | N/A | Installation logs (<PID> is the process ID.) |
| 5 | confmanager\_service.log | Output Location A | A | A | Logs for startup of the REST API service |
| 6 | confmanager\_servicectrl.log | Output Location A | A | A | Setting logs for automatic starts of the REST API |
| 7 | confmanager\_inst\_\*.log | Output Location B | A | A | Installation logs for when a root user attempted to install Configuration Manager in a Windows or a Linux environment, and the installation failed. (\* is a consecutive number.) |
| 8 | confmanager\_inst\_<UID>\_\*.log | Output Location B | A | A | Installation logs for when a non-root user attempted to install Configuration Manager in a Windows or a Linux environment, and the installation failed. (<UID> is the user ID of the installation user, and \* is a consecutive number. |
| 9 | confmanager\_uninst.log | Output Location B | A | A | Uninstallation log for when a root user uninstalled Configuration Manager from a Windows or a Linux environment. |
| 10 | confmanager\_uninst\_<UID>.log | Output Location B | A | A | Uninstallation log for when a non-root user uninstalled Configuration Manager from a Linux environment. (<UID> is the user ID of the user who uninstalled the product.) |
| 11 | hcsrest\_uninst.log | Output Location B | A | A | Uninstallation logs |
| 12 | hcsrest\_launcher<PID>.log | Output Location C | A | N/A | Installation logs (<PID> is the process ID.) |
| 13 | hcsrest\_inst\_yyyymmdd-HHMMSS.log | Output Location C | A | A | Installation log for when an installation fails (yyyymmdd-HHMMSS is the date and time.) |
| 14 | Configure.log | Output Location D | A | A | Configuration change logs of the REST API. |
|  |  |  |  |  |  |

A : Available N/A : Not Available

Output Location A: [Windows/Linux] <REST Install-dir>/logs

Output Location B: [Windows] %SystemDrive% [Linux] /tmp

Output Location C: [Windows] %APPDATA% [Linux] /tmp

Output Location D: [Windows/Linux] <REST Install-dir>/logs/rest

## Logging Output Level and Output Priority

The RESTAPI server defines five levels of log-output for the Table 2‑5 logs in accordance with the content of the log output events. See A-2 to change the setting.

Table 2‑8 Logging Output Level Priority

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Level | Value | Default  Settiing | Contents | Explanation |
| 1 | TRACE | 5000 | - | Detail information | Detailed debugging information  Large amounts of information are output with loop iterations, etc. |
| 2 | DEBUG | 10000 | - | Debug information | Debugging information.  Module internal information etc. |
| 3 | INFO | 20000 | Default | Execution information | - Settings information when the configuration file was loaded  - Status output at system startup and stopping  - I/O information of methods called from an external module. |
| 4 | WARN | 30000 | - | Warning information | Execution continued, but some small problem occurred. |
| 5 | ERROR | 40000 | - | Error information | Execution failed because an unknown error occurred. |

## Message output formats

" KART " prefix means REST API Framework.

# Detailed Log Data

## REST API Server Log File Detailed Information

1. **ConfManagerWebServer Log File**
2. **access.log**

This file contains remote access information.

Stored Location : <REST Install-dir>/oss/apache/logs

**Status Code**

**Accessed computer**

192.168.0.104 - - [25/Dec/2015:18:59:28 +0900] "GET /ConfigurationManager/configuration/version HTTP/1.1" 200 80 0

**Request**

**Date**

**Client ID**

**Execution Time**

**Contents length**

**User ID**

Fig. 3‑1 Format of Output to access.log

Table 3‑1 Explanation of Items in access.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Accessed computer | Shows the computer that made the access. |
| 2 | Client ID | Shows the client ID. |
| 3 | User ID | Shows the user ID sent from the client. |
| 4 | Date | Shows the access start date and the time gap from G.M.T. |
| 5 | Request | Shows the HTTP request content and HTTP version for the access. |
| 6 | Status code | Shows the HTTP status code for the session. |
| 7 | Contents length | Shows the length of the HTTP response content. |
| 8 | Execution Time | Shows the execution time of the HTTP request. |

1. **ssl\_request.log**

This file contains remote access information (SSL).

Stored Location : <REST Install-dir>/oss/apache/logs

[11/Jan/2016:23:14:31 -0800] 192.168.0.104 TLSv1.2 AES256-SHA256 "GET /ConfigurationManager/configuration/version HTTP/1.1" 83

**Access**

**Computer**

**Date**

**Request**

**SSLProtocol**

**SSL CHIPER**

**Content Length**

Fig. 3‑2 Format of Output to ssl\_request.log

Table 3‑2 Explanation of Items in ssl\_request.log

|  |  |  |
| --- | --- | --- |
| #. | Item | Explanation |
| 1 | Date | Shows the access start date and the time gap from G.M.T. |
| 2 | Accessed computer | Shows the computer that made the access. |
| 3 | SSL Protocol | Shows the SSL protocol name. |
| 4 | SSL CIPHER | Shows the SSL cipher suite. |
| 5 | Request | Shows the HTTPS request content and HTTP version for the access. |
| 6 | Contents length | Shows the length of the HTTP response content. |

1. **error.log**

This file contains information about the error information of ConfManagerWebServer (Apache).

Stored Location : <REST Install-dir>/oss/apache/logs

[Sat Dec 26 01:10:58.967158 2015] [mpm\_event:notice] [pid 11045:tid 140058472023808] AH00491: caught SIGTERM, shutting down

**Date**

**Error Message**

**Process ID**

**Error Code**

**Error Level**

Fig. 3‑3 Format of Output to error.log

Table 3‑3 Explanation of Items in error.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Error Level | Shows the error level. |
| 3 | Process ID | Shows the process ID. |
| 4 | Error Code | Shows the error code. |
| 5 | Error Message | Shows the error information. |

1. **ConfManagerAPIServer Log File**
2. **Commons-daemon.log**

This file contains information related to registration, startup, and stopping of Windows services.

Stored Location : <REST Install-dir>/logs/jetty

[2016-01-12 00:52:52] [info] 　 [ 6344]　　 Commons Daemon procrun (1.0.15.0 64-bit) started

**Date**

**Message**

**Process ID**

**Message Level**

Fig. 3‑4 Format of Output to Commons-daemon.log

Table 3‑4 Explanation of Items in Commons-daemon.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message Level | Shows the message level. |
| 3 | Process ID | Shows the process ID. |
| 4 | Message | Shows the message content. |

1. **confmanagerapiserver-std.log**

This file contains the standard output logs of a Web application server.

Stored Location : <REST Install-dir>/logs/jetty

[2016/01/05 17:56:30.762] INFO o.e.j.w.StandardDescriptorProcessor NO JSP Support for /restapi

**Date**

**Message**

**Message Level**

Fig. 3‑5 Format of Output to confmanagerapiserver-std.log

Table 3‑5 Explanation of Items in confmanagerapiserver-std.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message Level | Shows the message level. |
| 3 | Message | Shows the message content. |

1. **confmanagerapiserver-stdout.log**

This file contains the standard output logs for startup of a Windows service.

Stored Location : <REST Install-dir>/logs/jetty

2016-01-05 17:56:09 Commons Daemon procrun stdout initialized

**Date**

**Message**

Fig. 3‑6 Format of Output to confmanagerapiserver-stdout.log

Table 3‑6 Explanation of Items in confmanagerapiserver-stdout.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message | Shows the message content. |

1. **confmanagerapiserver-stderr.log**

This file contains the standard error output logs for startup of a Windows service.

Stored Location : <REST Install-dir>/logs/jetty

2016-01-05 17:56:09 Commons Daemon procrun stdout initialized

**Date**

**Message**

Fig. 3‑7 Format of Output to confmanagerapiserver-stderr.log

Table 3‑7 Explanation of Items in confmanagerapiserver-stderr.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message | Shows the message content. |

1. **webserver-stdout.log**

This file contains the logs of an application server.

Stored Location : <REST Install-dir>/logs/jetty

Jan 05, 2016 5:56:32 PM com.mchange.v2.log.MLog <clinit>

INFO: MLog clients using java 1.4+ standard logging.

**Date**

**Source**

**Message**

**Message Level**

Fig. 3‑8 Format of Output to webserver-stdout.log

Table 3‑8 Explanation of Items in webserver-stdout.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Source | Shows the log source. |
| 3 | Message Level | Shows the message level. |
| 4 | Message | Shows the message content. |

1. **ConfManagerMessageQueueServer Log File**
   1. **rabbit.log**

This file contains the logs of rabbitMQ server used by notifications about changes.

Stored Location : <Install-dir>/ConfManager/oss/rabbitmq/etc/rabbitmq/log

=INFO REPORT==== 12-Sep-2016::11:09:25 ===

Server startup complete; 0 plugins started.

**Message Level**

**Date**

**Message**

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Message Level | Shows the message level. |
| 2 | Date | Shows the log collection date. |
| 3 | Message | Shows the message content. |

* 1. **rabbit-sasl.log**

This file contains the SASL(System Application Support Libraries) logs of rabbitMQ server used by notifications about changes.

Stored Location : <Install-dir>/ConfManager/oss/rabbitmq/etc/rabbitmq/log

=CRASH REPORT==== 12-Sep-2016::16:18:43 ===

crasher:

**Message Level**

**Date**

**Message**

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Message Level | Shows the message level. |
| 2 | Date | Shows the log collection date. |
| 3 | Message | Shows the message content. |

* 1. **rabbit@{host name}.log**

This file contains the logs of rabbitMQ server used by notifications about changes. The output format is the same as rabbit.log.

Stored Location : <Install-dir>/ConfManager/oss/rabbitmq/var/log/rabbitmq

* 1. **rabbit@{host name}-sasl.log**

This file contains the SASL(System Application Support Libraries) logs of rabbitMQ server used by notifications about changes.The output format is the same as rabbit-sasl.log.

Stored Location : <Install-dir>/ConfManager/oss/rabbitmq/var/log/rabbitmq

1. **RESTAPI Log File**
2. **Restapi.log**

This file contains the logs of an application server.

Stored Location : <REST Install-dir>/logs/rest

**Message**

**Execution Thread**

**Log Level**

**Date**

**User**

**Source**

**Message ID**

[16/01/05 17:56:31.186][INFO ][main][1308@WIN-TCNHKLBMHNI][System][][KART80007-I][InitServlet#initImpl][Initializing. target = Service ][17440KB/25468KB/506816KB]

**Request ID**

**Process Information**

Fig. 3‑9 Format of Output to Restapi.log

**Environment Information**

Table 3‑9 Explanation of Items in Restapi.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Log Level | Shows the log level. |
| 3 | Execution Thread | Shows the execution thread name. |
| 4 | Process Information | Shows the process information. |
| 5 | User | Shows the execution user name:  -REST API system log: “System”  -Logs of user operations: “{*user-name*}:{*session-ID* \*1}” |
| 6 | Request ID | Shows the request ID.\*2  If the log is a REST API system log, this item is empty. |
| 7 | Message ID | Shows the message ID. |
| 8 | Source | Shows the log source. “{*class-name*}#(*method-name*)” |
| 9 | Message | Shows the message. |
| 10 | Environmental Information | Shows memory information. “{*used*}/{*allowed*}/{*maximum*}” |

\*1: The session ID is a unique ID for each login.

\*2: The request ID is a unique ID for each request.

1. **SN\_Log.log**

This file contains the library logs (used for logging). The output format is the same as Restapi.log.

Stored Location : <REST Install-dir>/logs/rest

1. **Subscriver.log**

This file contains the logs about the information that was received notifications about changes. The output format is the same as Restapi.log.

Stored Location : <REST Install-dir>/logs/rest

1. **Publisher.log**

This file contains the logs about the information that was sent notifications about changes. The output format is the same as Restapi.log.

Stored Location : <SVP Install-dir >/wk/supervisor/restapi/logs/rest

1. **RAID Manager Log File**

Log archive folders of RAID Manager. For details about the output information, see the RAID Manager manuals.

Stored Location : <REST Install-dir>/logs/rm

Folder Name: ”HORCM instance Number”

Example:1048

1. **Other Log File**
2. **confmanager\_inst\_\*.log or confmanager\_inst\_<UID>\_\*.log**

This output file contains log data relating to REST API installation.

Stored Location : <REST Install-dir>/logs/

INFO Tue 01/05/2016 17:49:15.93 The Configuration Manager is installed successfully.

**Date**

**Message**

**Message Level**

Fig. 3‑11 Format of Output to confmanager\_inst\_\*.log or confmanager\_inst\_<UID>\_\*.log

Table 3‑11 Explanation of Items in confmanager\_inst\_\*.log or confmanager\_inst\_<UID>\_\*.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Message Level | Shows the message level. |
| 2 | Date | Shows the log collection date. |
| 3 | Message | Shows the message content. |

1. **hcsrest\_inst\_yyyymmdd-HHMMSS.log**

This output file contains log data relating to REST API installation.

Stored Location : <REST Install-dir>/logs/

2016/03/29 02:42:23 INFO hinGvLogPutMsg HPR\_N\_SETUP\_TYPE=1

**Date**

**Message**

**Message Level**

**Supplementary information**

(Windows)

2016/03/25 03:54:31 : (I) [LibCom]:getOSArch:hardware name:x86\_64

**Message**

**Supplementary information**

**Date**

**Message Level**

(Linux)

Fig. 3‑12 Format of Output to hcsrest\_inst\_yyyymmdd-HHMMSS.log

Table 3‑12 Explanation of Items in hcsrest\_inst\_yyyymmdd-HHMMSS.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message Level | Shows the message level. |
| 3 | Supplementary information | Supplementary information of the log messages such as function names. (Some messages are not output.) |
| 4 | Message | Shows the message content. |

1. **hcsrest\_launcher<PID>.log**

This output file contains log data relating to REST API installation.

Stored Location : <REST Install-dir>/logs/

2016/03/29 02:42:16 PathFileExistsW(ret=1) [C:\PKG\Win\_HDS\\_rest\_.exe]

**Date**

**Message**

Fig. 3‑13 Format of Output to hcsrest\_launcher<PID>.log

Table 3‑13 Explanation of Items in hcsrest\_launcher<PID>.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message | Shows the message content. |

1. **confmanager\_uninst.log or confmanager\_uninst\_<UID>.log**

This file contains log data relating to uninstallation of REST API Server. The output format is the same as confmanager\_inst.log.

Stored Location: [Windows] <system-drive>

[Linux] /tmp

1. **hcsrest\_uninst.log**

This file contains log data relating to uninstallation of REST API server.

Stored Location: [Windows] <system-drive> [Linux] /tmp

2016/03/31 22:59:06 INFO restUninstall The REST API removal completed successfully.

2016/03/29 05:54:20 : (I) [checkContinueUninstall] bundle mode(installed) =1

**Date**

**Message**

**Message Level**

**Message**

**Date**

**Message Level**

(Linux)

(Windows)

**Supplementary information**

**Supplementary information**

Fig. 3‑14 Format of Output to hcsrest\_uninst.log

Table 3‑14 Explanation of Items in hcsrest\_uninst.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message Level | Shows the message level. |
| 3 | Supplementary information | Supplementary information of the log messages such as function names. (Some messages are not output.) |
| 4 | Message | Shows the message content. |

1. **confmanager\_service.log**

This file contains log data relating to startup of the REST API service.

Stored Location : <REST Install-dir>/logs/

Tue 01/05/2016 18:11:11.59 [I] Call start.bat

**Date**

**Message Level**

**Message**

Fig. 3‑15 Format of Output to confmanager\_service.log

Table 3‑15 Explanation of Items in confmanager\_service.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Date | Shows the log collection date. |
| 2 | Message Level | Shows the message level. |
| 3 | Message | Shows the message content. |

1. **confmanager\_servicectrl.log**

This output file contains the setting logs for automatic starts of the REST API server.

Stored Location : <REST Install-dir>/logs/

INFO 2016/03/24 16:05:08.94 -------- Beginning regtask.bat information. ----------

**Date**

**Message Level**

2016/03/29 05:58:21 [I] /bin/cp -f /tmp/ConfManagerCtrl /etc/init.d/ConfManagerCtrl

**Date**

**Message Level**

**Message**

(Windows)

**Message**

(Linux)

Fig. 3‑16 Format of Output to confmanager\_servicectrl.log

Table 3‑16 Explanation of Items in confmanager\_servicectrl.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Message Level | Shows the message level. |
| 2 | Date | Shows the log collection date. |
| 3 | Message | Shows the message content. |

1. **configure.log**

This file contains the configuration change logs**.**

Stored Location : <REST Install-dir>/logs/rest

INFO Tue 01/12/2016 3:40:35.10 parameter1="", parameter2=""

**Date**

**Message**

**Message Level**

Fig. 3‑10 Format of Output to configure.log

Table 3‑10 Explanation of Items in configure.log

|  |  |  |
| --- | --- | --- |
| # | Item | Explanation |
| 1 | Message Level | Shows the message level. |
| 2 | Date | Shows the log collection date. |
| 3 | Message | Shows the message content. |

Appendix

## About the capacity requirements for log files and related properties

The following table shows the capacity requirements for each log file (file quantity and size limits) and related properties.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Component | File Name | Output Location | Capacity Requirements (\*1) | Related Property | Remark |
| REST | access\_\*.log | <REST Install-dir>/oss/apache/logs | File quantity limit: 10  File size limit: 10MB | - | Old file is archived to Logsrchive*n*.tgz. |
| ssl\_request\_\*.log | File quantity limit: 10  File size limit: 10MB |
| Error\_\*.log | File quantity limit: 10  File size limit: 10MB |
| Logarchive***n***.zip(***n***=0-9) | File quantity limit: 10  File size limit: none | - |
| Commons-daemon.\*.log | <REST Install-dir>/logs/jetty | File quantity limit: none  File size limit: none | - | Old file is archived to Logsrchive*n*.tgz. |
| confmanagerapiserver-std.\*.log | File quantity limit: none  File size limit: none | - |
| confmanagerapiserver-stdout.\*.log | File quantity limit: none  File size limit: none | - |
| confmanagerapiserver-stderr.\*.log | File quantity limit: none  File size limit: none | - |
| Logarchiven.zip(n=0-9) | File quantity limit: 10  File size limit: none | - | - |
| jetty.log | File quantity limit: 1  File size limit: 50MB | - | Old file is archived to jetty.*n*.log.zip. |
| jetty.*n*.log.zip | File quantity limit: 16  File size limit: - | - | These files are zip-compressed jetty.log. It is about a few MB in size. |
| Restapi.log | <REST Install-dir>/logs/rest | File quantity limit: 13  File size limit: 200MB | See A-3 | - |
| RestapiError.log | File quantity limit: 13  File size limit: 200MB | - | - |
| SN\_Log.log | File quantity limit: 10  File size limit: 10MB | - | - |
| Configure.log | File quantity limit: 1  File size limit: none | - | - |
| Subscriber.log | File quantity limit: 13  File size limit: 200MB | - | - |
| Publisher.log | File quantity limit: 13  File size limit: 10MB | - | - |
| {“HORCM instance Number” named folders} | <REST Install-dir>/logs/rm | File quantity limit: 1  File size limit: none | - | Folders of HORCM instance number are created. |
| confmanager\_inst\_\*.log | <REST Install-dir>/logs | File quantity limit: 5  File size limit: none | - | - |
| confmanager\_inst\_<UID>\_\*.log | File quantity limit: 5  File size limit: none | - | - |
| hcsrest\_inst\_yyyymmdd-HHMMSS.log | File quantity limit: none  File size limit: none | - | - |
| hcsrest\_launcher<PID>.log | File quantity limit: none  File size limit: none | - | - |
| Confmanager\_service.log | File quantity limit: 1  File size limit: none | - | When system is starting up, 0.1Kb log is output in this file. |
| confmanager\_servicectrl.log | (Windows)  File quantity limit: 1  File size limit: none  (Linux)  File quantity limit: 2  File size limit: 50KB | - | - |
| confmanager\_uninst.log | File quantity limit: 1  File size limit: none | - | - |
| confmanager\_uninst\_<UID>.log | [Windows] <System Drive>  [Linux] /tmp  <Install-dir>/ConfManager/oss/rabbitmq/etc/rabbitmq/log | File quantity limit: 1  File size limit: none | - | - |
|  | hcsrest\_uninst.log | File quantity limit: 1  File size limit: none | - | - |
| rabbit.log | File quantity limit: 1  File size limit: none | - | Old file is archived to Logsrchive*n*.tgz. |
| rabbit-sasl.log | <Install-dir>/ConfManager/oss/rabbitmq/etc/rabbitmq/log  <Install-dir>/ConfManager/oss/rabbitmq/var/log/rabbitmq | File quantity limit: 1  File size limit: none | - | Old file is archived to Logsrchive*n*.tgz. |
| rabbit@{host name}.log | - |
| rabbit@{host name}.log | <Install-dir>/ConfManager/oss/rabbitmq/var/log/rabbitmq | - |
|  |  |

## Setting up REST API server log files

REST API server defines five log-output levels in accordance with the content of the log output events. Log data of the set level and of levels above the set level is output.

1. **Settings file of the log output option**

Change the following Configuration Manager’s properties file. If the properties file does not exist, please create it.

Stored Location : <REST Install-dir>/data/properties/

File Name : StartupV.properties

Format: <Properties Name> = <Setting value>

**Properties Name**

SN\_Log\_Level = 20000

**Setting Value**

Fig. A-3-1 format of setting file

Table. A-3-1 Setting value of log output option

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Properties Name | Minimum value | Maximum value | Default value | Description |
| 1 | SN\_Log\_Size\_Custom | 1 | 200 | 200 | Size of log files (MB). |
| 2 | SN\_Log\_Count\_Custom | 1 | 12 | 12 | Number of log files. |
| 3 | SN\_Log\_Level | 0 | 40000 | 20000 | Log level  Log data of the set level and levels above that set level are displayed. |

Table A-3-2 Logging Output Level Priority

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Level | Value | Default | Contents | Explanation |
| 1 | TRACE | 5000 | - | Detail information | Detailed debugging information  Large amounts of information are output with loop iterations, etc. |
| 2 | DEBUG | 10000 | - | Debug information | Debugging information.  Module internal information etc. |
| 3 | INFO | 20000 | Default | Execution information | - Settings information when the configuration file was loaded  - Status output at system startup and stopping  - I/O information of methods called from an external module. |
| 4 | WARN | 30000 | - | Warning information | Execution continued, but some small problem occurred. |
| 5 | ERROR | 40000 | - | Error information | Execution failed because an unknown error occurred. |

Warning:

If the log level is TRACE or DEBUG, a lot of log data is output to log files. Normally, set the log level to INFO.

Reference:

The following sizes of output log data are when storage registration is performed, the API to obtain the LDEV is executed, and there is no operation for 10 minutes.

[INFO]

- When storage registration is performed and the API to obtain the LDEV is executed: About 48KB

- There is no operation for 10 minutes: About 36KB

[DEBUG]

- When storage registration is performed and the API to obtain the LDEV is executed: About 63KB

- There is no operation for 10 minutes: About 55KB

[TRACE]

- When storage registration is performed and the API to obtain the LDEV is executed: About 63KB

- There is no operation for 10 minutes: About 55KB

1. **Output Location of Log files**

Stored Location : <REST Install-dir>/logs/rest

File Name : Restapi.log