

How to manage log rotation for Ranger services

Date published: 2019-08-22

Date modified: 2024-03-11

CLUSTERA

Legal Notice

© Cloudera Inc. 2024. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

Contents

Managing logging properties for Ranger services.....	4
How to manage logging properties for Ranger Admin.....	4
How to manage logging properties for Ranger Usersync.....	4
How to manage logging properties for Ranger Tagsync.....	5
How to manage logging properties for Ranger KMS.....	6
How to manage logging properties for Ranger RMS.....	6
How to manage logging properties for Ranger RAZ.....	7
Enabling selective debugging for Ranger Admin.....	8
Enabling selective debugging for RAZ.....	8

Managing logging properties for Ranger services

How to configure properties that control log file rotation in each Ranger service.

All the Ranger services write out separate log files on the node where they are installed and started. Cluster administrators can monitor and manage the disk space used by Ranger services roles log file and configure log rotation to prevent log files from consuming too much disk space.

How to manage logging properties for Ranger Admin

How to configure properties that control log file rotation in Ranger Admin.

About this task

Ranger Admin has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- ranger-admin-hostname.example.com.log
- ranger_admin_sql_db_patch.log
- ranger_db_patch.log

use the following properties to configure logging behavior.

Table 1: Ranger Admin Logging Properties

Property	Description	Default Value
Ranger Admin Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/admin
Ranger Admin Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger Admin Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger Admin Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger Admin role instance:

Procedure

1. Go to Ranger Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger Admin.

How to manage logging properties for Ranger Usersync

How to configure properties that control log file rotation for Ranger Usersync.

About this task

Ranger Usersync has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- ranger-usersync-hostname.example.com.log

use the following properties to configure logging behavior.

Table 2: Ranger Usersync Logging Properties

Property	Description	Default Value
Ranger Usersync Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/usersync
Ranger Usersync Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger Usersync Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger Usersync Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger Usersync role instance:

Procedure

1. Go to Ranger Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger Usersync.

How to manage logging properties for Ranger Tagsync

How to configure properties that control log file rotation for Ranger Tagsync.

About this task

Ranger Tagsync has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- tagsync.log

use the following properties to configure logging behavior.

Table 3: Ranger Tagsync Logging Properties

Property	Description	Default Value
Ranger Tagsync Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/tagsync
Ranger Tagsync Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger Tagsync Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger Tagsync Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger Tagsync role instance:

Procedure

1. Go to Ranger Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger Tagsync.

How to manage logging properties for Ranger KMS

How to configure properties that control log file rotation in Ranger KMS.

About this task

Ranger KMS has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- ranger-kms-hostname.example.com-user.log
- kms-audit.log

use the following properties to configure logging behavior.

Table 4: Ranger KMS Logging Properties

Property	Description	Default Value
Ranger KMS Server Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/kms
Ranger KMS Server Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger KMS Server Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger KMS Server Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger KMS Server role instance:

Procedure

1. Go to Ranger KMS service Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger KMS.

How to manage logging properties for Ranger RMS

How to configure properties that control log file rotation in Ranger RMS.

About this task

Ranger RMS has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- ranger-rms-hostname.example.com-user.log
- ranger-rms-perf-hostname.example.com-user.log

use the following properties to configure logging behavior.

Table 5: Ranger RMS Logging Properties

Property	Description	Default Value
Ranger RMS Server Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/rms
Ranger RMS Server Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger RMS Server Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger RMS Server Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger RMS Server role instance:

Procedure

1. Go to Ranger RMS service Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger RMS.

How to manage logging properties for Ranger RAZ

How to configure properties that control log file rotation in Ranger RAZ.

About this task

Ranger RAZ has log files stored on the node where it is installed and started from Cloudera Manager.

The log files

- ranger-raz-hostname.example.com-user.log
- ranger-raz-metrics.log
- audit.log

use the following properties to configure logging behavior.

Table 6: Ranger RAZ Logging Properties

Property	Description	Default Value
Ranger RAZ Server Log Directory	The path to the directory where the log files are saved.	/var/log/ranger/raz
Ranger RAZ Server Logging Threshold	Logging level to limit the number of entries saved in the log file.	INFO
Ranger RAZ Server Max Log Size	Maximum size for a log file before the log file rolls over into a new file.	200 MB
Ranger RAZ Server Maximum Log File Backups	Maximum number of rolled-over log files to retain.	10

To manage log file configurations for Ranger RAZ Server role instance:

Procedure

1. Go to Ranger RAZ service Configuration .
2. Select the Category Logs filter.
3. Edit the values of any of the logging properties.
4. Click Save Changes.
5. Restart Ranger RAZ.

Enabling selective debugging for Ranger Admin

You can limit the verbose log output for Ranger Admin by enabling (selective) debugging at the package level.

About this task

When you enable the DEBUG level for Ranger Admin, a detailed verbose log is generated. Alternatively, you can enable debugging at a package level, so that only the package logs show detailed verbose logs.

Procedure

1. From Cloudera Manager, go to Ranger Configuration .
2. In Search, type log4j_
3. In Ranger Admin Logging Advanced Configuration Snippet (Safety Valve), add the following:

```
loggers=rangerPerf, rangerPatch, orgSpring, orgHibernate, jdbcSql,
jdbcSqlTiming, jdbcAudit, jdbcResult, jdbcConnection, comMchange,
rangeradmin
logger.rangeradmin.name=<PACKAGE_OR_FULLY_QUALIFIED_CLASS_NAME>
logger.rangeradmin.level=DEBUG
```

Enabling selective debugging for RAZ

You can limit the verbose log output for RAZ by enabling (selective) debugging at the package level.

About this task

When you enable the DEBUG level for RAZ, a detailed verbose log is generated. Alternatively, you can enable debugging at a package level, so that only the package logs show detailed verbose logs.

Procedure

1. From Cloudera Manager, go to Ranger-RAZ Configuration .
2. In Search, type log4j_
3. In Ranger Admin Logging Advanced Configuration Snippet (Safety Valve), add the following:

```
loggers=AUDIT, METRICS, RANGERRAZ
logger.RANGERRAZ.name=<PACKAGE_OR_FULLY_QUALIFIED_CLASS_NAME>
logger.RANGERRAZ.level=DEBUG
logger.RANGERRAZ.additivity=false
logger.RANGERRAZ.appenderRef.RANGERRAZ.ref=DRFA
```