

EDIT - bug #7085

cdmserver logfiles getting too big, use RollingFileAppender

11/23/2017 08:53 AM - Andreas Kohlbecker

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Highest	<b>Due date:</b>	
<b>Assignee:</b>	Andreas Kohlbecker	<b>% Done:</b>	100%
<b>Category:</b>	cdmserver	<b>Estimated time:</b>	0:00 hour
<b>Target version:</b>	Release 5.15	<b>Found in Version:</b>	
<b>Severity:</b>	major		
<b>Description</b>			
cdmserver logfiles getting too big, use DailyRollingFileAppender			
Keeping 7 daily logs should be sufficient since all logs are also preserved in the backupserver			
Also delete all /var/log/cdmserver/out.log files once this is released.			
see <a href="https://github.com/GoogleCloudPlatform/appengine-java-vm-runtime/issues/231">https://github.com/GoogleCloudPlatform/appengine-java-vm-runtime/issues/231</a>			
Configuring the logging consistently for the cdm-server and for all instances is complicated by the fact that the instances are running separately from the cdm-server in an own thread with own classloader for each instance. Therefore the root logger configured for the cdm-server is not being used by the instances.			
<b>TODO</b>			
<ul style="list-style-type: none"><li>• Setup the logging for the cdm-server so that the server and all instances are using the same DailyRollingFileAppender and logfile.</li><li>• remove FileAppenders configured in /opt/cdmserver/.cdmLibrary/log4j.properties of edit-test, edit-prod, edit-int, edit-demo-*, edit-jobber-1</li><li>• consider using log4j2, see <a href="#">#7821</a></li><li>• logfile paths in the cdm-server/src/main/resources/log4j.properties must not be hardcoded and platform-specific, like log4j.appender.FILE.File= /var/log/cdmserver/cdmserver_log.out - fixed by <a href="#">cdm-server bb431d84</a></li></ul>			
<ul style="list-style-type: none"><li>• On Configuring Jetty logging: <a href="https://www.eclipse.org/jetty/documentation/9.4.29.v20200521/configuring-logging.html">https://www.eclipse.org/jetty/documentation/9.4.29.v20200521/configuring-logging.html</a></li></ul>			
<b>Solution</b>			
Jetty can be configured to use the Managed Diagnostic Context of either log4j or logback to centralize the logging from multiple webapps in to a central log file. This technique is explained in <a href="https://www.eclipse.org/jetty/documentation/9.4.29.v20200521/example-logging-logback-centralized.html">https://www.eclipse.org/jetty/documentation/9.4.29.v20200521/example-logging-logback-centralized.html</a> for a jetty server which uses a deployment manager. In our situation of an embedded jetty which manages the cdm-webapp instance directly the configuration need to be a bit different, see eu.etaxonomy.cdm.server.logging.LoggingConfigurator for details.			
<i>Consequences of this change:</i>			
<ul style="list-style-type: none"><li>• The cdm-server start option logdir has now been replanced by the system property cdm.logDir so all server installations need to checked and modified -logdir=... ==&gt; -Dcdm.logDir=file://...<ul style="list-style-type: none"><li>◦ adapt the docker configuration</li><li>◦ adapt the debian package?</li></ul></li><li>• The system property -Dlog4j.configuration=file://... can no longer be used and needs to be replaced by e.g.: -Dlogback.configurationFile=file:/app/logback.xml</li></ul>			
<b>Related issues:</b>			
Related to EDIT - feature request #7819: Log4j.properties file is not properl...		New	
Related to EDIT - feature request #7820: Add cron job for deleting cdmserver ...		Rejected	
Related to EDIT - feature request #6249: better logging strategy		Closed	
Related to EDIT - bug #9236: stopping an instance breaks the centralized logging		Closed	
Has duplicate EDIT - feature request #7821: Use log4j2 for cdmserver logging ...		Duplicate	

## Associated revisions

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**Revision 3775575b - 10/19/2018 03:53 PM - Patrick Plitzner**

ref #7085 Use DailyRollingFileAppender to generate one log per day

**Revision cf681ac9 - 10/19/2018 03:53 PM - Patrick Plitzner**

ref #7085 Use DailyRollingFileAppender (in code)

**Revision 045673ca - 10/19/2018 03:54 PM - Patrick Plitzner**

ref #7085 Adjust log path

**Revision 3aae2857 - 10/19/2018 03:54 PM - Patrick Plitzner**

ref #7085 Set logging to daily rollover

**Revision ca5c272c - 10/19/2018 03:54 PM - Patrick Plitzner**

ref #7085 Adjust log path

**Revision dc6c8364 - 10/22/2018 07:52 AM - Patrick Plitzner**

ref #7085 Remove whitespace in log file time stamp

**Revision bb431d84 - 10/22/2018 02:41 PM - Andreas Kohlbecker**

ref #7085 changing logging initialization for more consistent logging configuration for bootloader and instances - experimental!

**Revision 72ddab96 - 06/10/2020 03:23 PM - Andreas Kohlbecker**

ref #7085 using logback MDC for centralized logging into a rolling file appender and to system out

**Revision 9526e8ec - 06/10/2020 03:28 PM - Andreas Kohlbecker**

ref #7085 adapting ide launch configs

**Revision 20884bdb - 06/10/2020 03:59 PM - Andreas Kohlbecker**

ref #7085 removing obsolete code from LoggingConfigurer

**Revision e1944271 - 06/10/2020 04:00 PM - Andreas Kohlbecker**

ref #7085 removing obsolete attribute which is no longer used in the LoggingConfigurer

**Revision 0c5f74e6 - 06/10/2020 04:49 PM - Andreas Kohlbecker**

ref #7085 adapting docker files and debian package to changes

**Revision 8881fca1 - 06/10/2020 05:43 PM - Andreas Kohlbecker**

ref #7085 adapting debian package - 2

**Revision e895826c - 06/11/2020 12:27 PM - Andreas Kohlbecker**

ref #7085 better logging configuration and improved init script

**Revision 1f9ea18c - 06/15/2020 09:56 AM - Andreas Kohlbecker**

ref #7085 adding the InstanceManager explicitly to fix broken JSP compilation

## History

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**#1 - 11/23/2017 08:56 AM - Andreas Kohlbecker**

Also delete all /var/log/cdmservice/out.log files once this is released

**#2 - 11/23/2017 08:56 AM - Andreas Kohlbecker**

- Priority changed from New to Highest

**#3 - 11/23/2017 09:35 AM - Andreas Kohlbecker**

- Description updated

**#4 - 12/05/2017 02:02 PM - Andreas Müller**

- Target version changed from Release 4.12 to Release 4.13

**#5 - 01/31/2018 12:12 PM - Andreas Müller**

- Target version changed from Release 4.13 to Release 4.14

**#6 - 02/15/2018 03:00 PM - Andreas Müller**

- Target version changed from Release 4.14 to Release 5.0

**#7 - 05/16/2018 11:20 AM - Andreas Kohlbecker**

- Target version changed from Release 5.0 to Release 5.1

**#8 - 06/20/2018 08:43 AM - Andreas Kohlbecker**

- Status changed from New to In Progress

**#9 - 06/20/2018 10:23 AM - Andreas Kohlbecker**

- Description updated

**#10 - 06/28/2018 08:25 AM - Andreas Kohlbecker**

- Target version changed from Release 5.1 to Release 5.2

**#11 - 08/17/2018 03:55 PM - Andreas Kohlbecker**

- Target version changed from Release 5.2 to Release 5.3

**#12 - 09/17/2018 11:20 AM - Andreas Kohlbecker**

- Status changed from In Progress to New

- Target version changed from Release 5.3 to Release 5.4

**#13 - 10/08/2018 11:54 AM - Andreas Kohlbecker**

- Assignee changed from Andreas Kohlbecker to Patrick Plitzner

**#14 - 10/12/2018 10:50 AM - Patrick Plitzner**

- Related to bug #6287: Rolling cdmserver.log file only contains entries from startup phase added

**#15 - 10/12/2018 10:58 AM - Patrick Plitzner**

- Related to feature request #7819: Log4j.properties file is not properly packaged by the cdmserver install script added

**#16 - 10/12/2018 11:03 AM - Patrick Plitzner**

- Status changed from New to Resolved

- Assignee changed from Patrick Plitzner to Andreas Kohlbecker

- % Done changed from 0 to 50

The logging is now configured to daily logging i.e. every day a new log file is generated.

The change was done manually in the /opt/cdmserver/.cdmLibrary/log4j.properties file. This should be handled by the install script of the cdm server  
-> [#7819](#)

Remaining issues is deleting the old log files after a specified time period -> [#7820](#)

**#17 - 10/12/2018 11:03 AM - Patrick Plitzner**

- Related to feature request #7820: Add cron job for deleting cdmserver log files after a specified time period added

**#18 - 10/12/2018 11:15 AM - Patrick Plitzner**

- Related to feature request #7821: Use log4j2 for cdmserver logging to avoid having a separate cron job for deleting log files added

#### #19 - 10/19/2018 12:19 PM - Andreas Kohlbecker

- Status changed from Resolved to In Progress

- Assignee changed from Andreas Kohlbecker to Patrick Plitzner

The rolled daily log files have a whitespace character, please remove the whitespace from the filenames.

```
-rw-r--r-- 1 cdm adm 409569 Oct 19 12:18 cdmserver_log.out
-rw-r--r-- 1 cdm adm 262768 Oct 12 09:43 cdmserver_log.out. 2018-10-12
-rw-r--r-- 1 cdm adm 143578 Oct 13 05:07 cdmserver_log.out. 2018-10-13
-rw-r--r-- 1 cdm adm 150123 Oct 14 09:40 cdmserver_log.out. 2018-10-14
-rw-r--r-- 1 cdm adm 549825 Oct 15 19:11 cdmserver_log.out. 2018-10-15
-rw-r--r-- 1 cdm adm 343656 Oct 16 18:27 cdmserver_log.out. 2018-10-16
-rw-r--r-- 1 cdm adm 599338 Oct 17 20:14 cdmserver_log.out. 2018-10-17
-rw-r--r-- 1 cdm adm 623044 Oct 18 23:11 cdmserver_log.out. 2018-10-18
```

#### #20 - 10/19/2018 12:24 PM - Andreas Kohlbecker

i found a second issue:

The rolling daily file appender only works if the custom log4j.properties are defined in the /etc/default/cdmserver

```
#
# user custom log4j.properties
#
JAVA_OPTIONS="$JAVA_OPTIONS -Dlog4j.configuration=file:///opt/cdmserver/.cdmLibrary/log4j.properties"
```

The rolling daily file appender should be used in default configuration.

#### #21 - 10/19/2018 12:39 PM - Andreas Kohlbecker

third issue:

unfortunately you committed all changes to the master branch:

```
* 469b75d - Fri, 12 Oct 2018 11:26:09 +0200 (7 days ago) (origin/master, origin/HEAD)
|   ref #7085 Adjust log path - Patrick Plitzner
* 0465659 - Fri, 12 Oct 2018 10:47:59 +0200 (7 days ago)
|   ref #7085 Set logging to daily rollover - Patrick Plitzner
* 72c3d33 - Fri, 12 Oct 2018 09:18:02 +0200 (7 days ago)
|   ref #7085 Adjust log path - Patrick Plitzner
* b78e167 - Thu, 11 Oct 2018 17:13:40 +0200 (8 days ago)
|   Revert "ref #7085 Use DailyRollingFileAppender (in code)" - Patrick Plitzner
* 02ef1e4 - Thu, 11 Oct 2018 16:57:36 +0200 (8 days ago)
|   ref #7085 Use DailyRollingFileAppender (in code) - Patrick Plitzner
* 99c113d - Thu, 11 Oct 2018 16:43:44 +0200 (8 days ago)
|   ref #7085 Use DailyRollingFileAppender to generate one log per day - Patrick Plitzner
* c172618 - Mon, 17 Sep 2018 11:28:56 +0200 (5 weeks ago) (tag: 5.3.0)
|\   jenkins merging release branch into master (strategy: theirs) - jenkins
| * 9efc161 - Mon, 17 Sep 2018 11:28:15 +0200 (5 weeks ago)
| |   updating poms for branch'release/5.3.0' with non-snapshot versions - jenkins
* |   83415cd - Fri, 17 Aug 2018 16:08:00 +0200 (9 weeks ago) (tag: 5.2.0)
```

This will break the next release since git-flow can not deal with intermediate commits to the master branch, we will run into merge conflicts. Your changes being committed to the master branch could also be the reason why the daily rolling fileappender is not working in those servers which are not configured to use the custom log4j.properties

Please fix the git repo. The clone at git hub must also be fixed. You must whipe out your changes completely from master. A git revert might not be enough in this case.

BTW: Did you replace the old log4j.properties on the edit-test server or did exchange the old appender by the daily rolling fileappender?

#### #22 - 10/22/2018 11:15 AM - Patrick Plitzner

- Assignee changed from Patrick Plitzner to Andreas Kohlbecker

#### #23 - 10/22/2018 01:24 PM - Andreas Kohlbecker

- Description updated

#### #24 - 10/22/2018 02:36 PM - Andreas Kohlbecker

- % Done changed from 50 to 20

#### #25 - 10/22/2018 02:48 PM - Andreas Kohlbecker

we can use the Log4J config provided as

```
-Dlog4j.configuration=file:///opt/cdmserver/.cdmLibrary/log4j.properties
```

in the /etc/default/cdmserver as preliminary solution. But this is not reliable since it does not work out of the box when the cdm-server is installed newly.

Interestingly with -Dlog4j.configuration the log4j.properties is used in the bootloader and in the instances. In contrast to that consistent configuration seems to be hard to achieve out of the Bootloader, see [cdm-server/bb431d84](#)

#### #26 - 10/22/2018 04:37 PM - Andreas Kohlbecker

for the coming release I will add the following configuration to edit-int, edit-test and edit-production:

```
##
## NOTICE !!!!
## no need to configure a FileAppender here
## use eu.etaxonomy.cdm.remote.config.LoggingConfigurer instead
##
#-----
# as interim solution in order to have a daily rolling file appender we configer it here
# see https://dev.e-taxonomy.eu/redmine/issues/7085
log4j.appender.FILE=org.apache.log4j.DailyRollingFileAppender
log4j.appender.FILE.File= ${LOGGING_FOLDER}/cdmserver.log
log4j.appender.FILE.ImmediateFlush=true
log4j.appender.FILE.Threshold=debug
log4j.appender.FILE.Append=true
log4j.appender.FILE.DatePattern='.'yyyy-MM-dd
log4j.appender.FILE.layout=org.apache.log4j.PatternLayout
log4j.appender.FILE.layout.ConversionPattern=%d %p [%c] - %m%n
#-----
```

This needs to be removed once the DailyRollingFileAppender is being applied out of the cdm-server.

#### #27 - 10/22/2018 04:40 PM - Andreas Kohlbecker

- Description updated

#### #28 - 10/22/2018 04:44 PM - Andreas Kohlbecker

- Description updated

#### #29 - 10/22/2018 05:06 PM - Andreas Kohlbecker

- Target version changed from Release 5.4 to Release 5.5

#### #30 - 01/30/2019 11:45 AM - Andreas Kohlbecker

- Target version changed from Release 5.5 to Release 5.6

#### #31 - 02/22/2019 03:42 PM - Andreas Kohlbecker

- Target version changed from Release 5.6 to Reviewed Next Major Release

#### #32 - 02/24/2020 02:35 PM - Andreas Kohlbecker

- Target version changed from Reviewed Next Major Release to Release 5.13

#### #33 - 03/18/2020 12:50 PM - Andreas Kohlbecker

- Target version changed from Release 5.13 to Release 5.14

#### #34 - 04/08/2020 05:07 PM - Andreas Müller

- Target version changed from Release 5.14 to Release 5.15

#### #35 - 05/27/2020 09:32 AM - Andreas Kohlbecker

- Description updated

#### #36 - 05/27/2020 09:33 AM - Andreas Kohlbecker

- Description updated

**#37 - 05/27/2020 09:40 AM - Andreas Kohlbecker**

- Description updated

**#38 - 06/10/2020 02:22 PM - Andreas Kohlbecker**

- Description updated

- % Done changed from 20 to 30

**#39 - 06/10/2020 02:53 PM - Andreas Kohlbecker**

- Description updated

**#40 - 06/10/2020 03:16 PM - Andreas Kohlbecker**

- Subject changed from *cdmserver logfiles getting too big, use DailyRollingFileAppender* to *cdmserver logfiles getting too big, use RollingFileAppender*

**#41 - 06/10/2020 03:34 PM - Andreas Kohlbecker**

- Related to feature request #6249: better logging strategy added

**#42 - 06/16/2020 01:41 PM - Andreas Kohlbecker**

- Status changed from *In Progress* to *Closed*

- % Done changed from 30 to 100

implemented and tested locally, on edit-test and edit-int.

**#43 - 06/16/2020 01:43 PM - Andreas Kohlbecker**

- Related to deleted (feature request #7821: Use log4j2 for cdmserver logging to avoid having a separate cron job for deleting log files)

**#44 - 06/16/2020 01:43 PM - Andreas Kohlbecker**

- Has duplicate feature request #7821: Use log4j2 for cdmserver logging to avoid having a separate cron job for deleting log files added

**#45 - 10/01/2020 05:29 PM - Andreas Kohlbecker**

- Related to deleted (bug #6287: Rolling cdmserver.log file only contains entries from startup phase)

**#46 - 10/01/2020 05:30 PM - Andreas Kohlbecker**

- Has duplicate bug #6287: Rolling cdmserver.log file only contains entries from startup phase added

**#47 - 10/01/2020 05:38 PM - Andreas Kohlbecker**

- Related to bug #9236: stopping an instance breaks the centralized logging added