General information about Blancco Management Console logging

Created date	Updated date	Affects version	Fix version
13 Feb 2023			

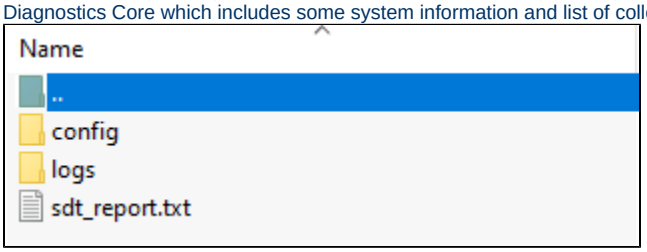
Description

Blancco Management Console uses Apache Tomcat, meaning a lot of Apache documentation can also be applied to Management Console. To generate logging files mentioned in this article, see How to collect log files and system information from the Management Console.

Blancco Management Console log files

Blancco Management Console activity is logged in detail. Sometimes troubleshooting an issue might require inspecting the log files.

When generating the log files, two folders are created, **config** and **logs**. In addition, an **sdt_report.txt** is created from the Blancco Management Console Diagnostics Core which includes some system information and list of collected files from BMC.



config -folder

- **build.properties** - BMC information used when building the service
- **configuration.properties** - All active configuration settings
- **log4j2.xml** - Logging settings for BMC log files
- **main.properties** - General, database, BI and report transfer settings
- **server.xml** - Tomcat's main configuration file, includes the server port and HTTP Connector settings
- **wrapper.conf** - Wrapper properties

logs -folder

- **audit.log** - Logs all user activity
- **bmc_access_log** - HTTP requests handled by the web server
- **catalina.log** - Catalina logging (BMC's servlet container)
- **host-manager.log** - Logs of any related web applications (not used in BMC)
- **install.log** - Logs from the initial install of BMC
- **localhost.log** - Logs of the host
- **main.log** - General activity of the service
- **manager.log** - Logs of any related web applications (not used in BMC)
- **trace.log** - Logs HTTP communication with erasure clients and Asset Management System (AMS), needs to be enabled by editing the logging level of **log4j2.xml** to **trace**
- **wrapper.log** - Wrapper logs

Note! All access log files (bmc_access_log.*) that are older (modification time) than 28 days, are automatically deleted. The deletion happens after the first HTTP request after 00:00:00, when it also creates the new access log file for that day.

Configuring BMC logging levels

Blancco Management Console uses standard Apache Log4j2 as the logging framework. In addition, Apache Tomcat implements the access logging.

Following directories are used for storing log files:

- Log4j: [Installation path]\logs\
- Apache Tomcat: [Installation path]\apache-tomcat\logs\

Log4j configuration

The configuration file is located at: [Installation path]\apache-tomcat\webapps\ROOT\WEB-INF\classes\log4j2.xml.

Blancco Management Console is required to be restarted after changes of log configuration file.

The main log level can be set by XML element: <Root level="info">

Available logging levels:

- trace - log all HTTP communication messages with erasure clients and Asset Management System (AMS)
- debug - logs verbose debug information, not recommended in production
- info - the default logging level of Blancco Management Console
- audit - info level logging and audit logging to the separate file (audit.log)
- warn - logs warnings and errors
- error - logs only errors
- off - logging is completely disabled

Log4j archives old log files into ZIP files. The maximum size of open log file is defined by XML element <SizeBasedTriggeringPolicy size="100MB"/>, separately for main.log and audit.log.

Archived log files are stored into date formatted path: [Installation path]/logs/archive-logs/<yyyy-mm>/<app|audit>-yyyy-mm-dd-n.log.zip

Apache Tomcat logging configuration

The access logging is implemented by standard Apache Tomcat AccessLogValve in server.xml. By default the pattern is 'common' but also 'combined' can be used.

The access logs are written into daily files named bmc_access_log.<yyyy-mm-dd>.txt.