



SSF Tools: Log Level Manager User Guide

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Introduction

The Log Level Manager provides an easy-to-use administrative screen for modifying the Log4j log levels of Java class loggers in IdentityIQ when troubleshooting issues. The tool simplifies configuration of logger levels and can remove the need to manually edit the log4j.properties file, therefore avoiding possible incorrect entry of logger names and configurations. The interface allows searching for loggers by name, as well as filtering by a given log level. The search functionality makes it easier to find a given logger, reducing the need to look for its name elsewhere.

NOTE: Log level changes made through this utility are temporary and targeted overrides of the log4j.properties file settings. The log level selected for a given logger will be immediately effective on the IdentityIQ server to which the user is connected. On restarting the application server, the log levels will return to the settings specified in the log4j.properties file.

Installation

The Log Level Manager ships with the SSD as an IdentityIQ Plugin but is not deployed by default as part of the build. Deployment can be switched on or off by use of the “deployLogLevelManager” property in the build.properties file. Set this to “true” to enable deployment, or “false” to disable. Alternatively, the SSD Deployer tool can be used to enable or disable deployment (see the SSD Deployer User Guide). The plugin may also be installed manually through the Gear menu -> **Plugins** page.

The plugin can be found in the SSD file structure in this location:

<SSD Root Folder>/ssdplugins/LogLevelManager/LogLevelManager.1.0.zip

The plugin will only work alongside the IdentityIQ Plugin Framework that comes with IdentityIQ 7.1 and above.

How to Use the Log Level Manager

To use the Log Level Manager, a user must have the **SystemAdministrator** Capability in IdentityIQ. Installation of the plugin adds a QuickLink Category labeled **Administration** in the UI along with a QuickLink under this called **Manage Log Levels**.

On clicking the QuickLink the user will be presented with a screen that, by default, shows the loggers for all the Java classes currently in memory.

Filter

Clear Filter

Reload filters

All levels

trace

debug

info

warn

error

fatal

off

Loggers

Logger Name	Level Control							Parent	Effective Level
javax.servlet.http.HttpSessionListener	trace	debug	info	warn	error	fatal	off	root	WARN
net.sf.ehcache	trace	debug	info	warn	error	fatal	off	root	ERROR
net.sf.jasperreports.engine.util.JRLoader	trace	debug	info	warn	error	fatal	off	root	WARN
net.sf.jasperreports.engine.xml	trace	debug	info	warn	error	fatal	off	root	ERROR
org.apache.bsf.BSFManager	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.commons.beanutils.BeanUtils	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.commons.beanutils.ConvertUtils	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.commons.beanutils.MethodUtils	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.commons.beanutils.PropertyUtils	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.component.html.ext.AbstractHtmlDataTable	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.component.html.ext.AbstractHtmlSelectOneRadio	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.component.html.ext.HtmlInputText	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.custom.aliasbean.AliasBean	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.custom.aliasbean.AliasBeansScope	trace	debug	info	warn	error	fatal	off	root	WARN
org.apache.myfaces.custom.buffer.BufferRenderer	trace	debug	info	warn	error	fatal	off	root	WARN

The following columns are displayed:

Column	Description
Logger Name	Name of the logger
Level Control	Buttons to select the log level for the logger. Options are: <ul style="list-style-type: none"> • trace • debug • info • warn • error • fatal • off The currently selected log level will be greyed out.
Parent	Parent of the logger class
Effective Level	Log level currently in effect

A search box is provided, with a **Filter** button to filter based on the contents of the search box (using a case-insensitive 'contains' search). The **Clear Filter** button clears the filter and the contents of the search box, and the **Reload Filters** button reinitializes the list of loggers based on classes currently in memory.

The screenshot below shows the effect of entering a search term and clicking the **Filter** button. Note that all loggers listed contain the text “aggrega” in their names, matching the filter.

Filter
Clear Filter
Reload filters

☒ All levels
 ☐ trace
 ☐ debug
 ☐ info
 ☐ warn
 ☐ error
 ☐ fatal
 ☐ off

Loggers

Logger Name	Level Control	Parent	Effective Level
org.hibernate.hql.ast.tree.AggregateNode	trace debug info warn error fatal off	root	WARN
sailpoint.api.AggregationLogger	trace debug info warn error fatal off	sailpoint	WARN
sailpoint.api.Aggregator	trace debug info warn error fatal off	sailpoint	DEBUG
sailpoint.api.Aggregator\$AccountGroupAggStatsHelper	trace debug info warn error fatal off	sailpoint	WARN
sailpoint.api.Aggregator\$ApplicationCache	trace debug info warn error fatal off	sailpoint	WARN
sailpoint.object.IdentityEntitlement\$AggregationState	trace debug info warn error fatal off	sailpoint	WARN

Limitations

The Log Level Manager can only be used on IdentityIQ version 7.1 and above.

Only loggers that belong to classes currently in memory will be shown in the logger list. Log levels selected will only be effective on the IdentityIQ server that the user is connected to, and will be reset to the levels specified in the log4j.properties file on a restart of the application server or when using the Reload Logging Configuration function in the IdentityIQ Debug pages.