

Troubleshooting Synchronizers

[Structure synchronizers](#) work in background and can lead to changes in the structures or issue data that might be hard to trace. Complex configuration rules don't make things better, so it's important for JIRA admin to be able to track which synchronizers are doing what and what has caused a particular change a user is complaining about.

Log Files

You can reconfigure your JIRA logging to give structure synchronizers log messages lower logging level to get detailed reports about what's going on, and probably direct messages from the synchronizers into a separate log files.

The package name that all bundled synchronizers log under is `com.almworks.jira.structure.ext.sync`. You can add the following lines to `log4j.properties` file to have debug messages from synchronizers show on the console and/or in the log file (depending on their respective log levels):

```
log4j.logger.com.almworks.jira.structure.ext.sync = DEBUG, console, filelog
log4j.additivity.com.almworks.jira.structure.ext.sync = false
```

Or, you can set up a separate log file for synchronizer actions:

```
log4j.appender.structure-sync=com.atlassian.jira.logging.MultiTenantJiraHomeAppender
log4j.appender.structure-sync.File=structure-sync.log
log4j.appender.structure-sync.Threshold=TRACE
log4j.appender.structure-sync.MaxFileSize=20480KB
log4j.appender.structure-sync.MaxBackupIndex=1
log4j.appender.structure-sync.layout=org.apache.log4j.PatternLayout
log4j.appender.structure-sync.layout.ConversionPattern=%d %t %p %X{jira.username} [%c{4}] %m%n

log4j.logger.com.almworks.jira.structure.ext.sync = DEBUG, structure-sync, console
log4j.additivity.com.almworks.jira.structure.ext.sync = false
```

Synchronization Undo Files

Structure keeps synchronization undo files for possible script processing in case massive changes are erroneously effected on issue data. The undo files contain actions that should be taken, in reverse order, to bring issue database to the original / previous state. However, undo files do not contain changes for the structures - only for the issue data.

See [Structure Files Location](#) for information about where syncundo files are located.

In some cases undo files may be preferred to the logs as they more clearly indicate the changes.