

Analyze the logs

Analyzing log files is the key to successful troubleshooting. With Last Log for Jira, you can analyze your log files directly in the Jira administration interface.

- **All log files in a single location:** Select the log file you want to analyze from a practical sidebar with dropdown menus.
- **Read your log files:** Log files are displayed in an easily readable format with separated log entries and tagged meta information.
- **Configure your log view:** Use the tool bar to switch to classic mode, reverse your output, expand the log view or let your log file be automatically reloaded with new log entries every few seconds, simulating a live preview of your data.
- **Search for information:** The search bar makes it easy to find the precise log entries you're looking for. Use search terms, regular expressions and case sensitivity or switch to advanced search and configure filters via log level, user or timeframe.

Access log files

You can access the log file overview by selecting **View log** in the left sidebar under the **Last Log section**.

ADMIN TOOLBOX

Project Shuttle

Admin Toolbox configuration

SUMUP

Calculation rules

Permissions

Global settings

APPFIRE CONFIGURATION

Create on Transition for Jira

ASSETS

Assets Configuration

Indexing Assets

Assets Script Console

Assets Allowlist

Assets reports

SCRIPTRUNNER

ScriptRunner

LAST LOG

View log

Thread dump

2023-09-15

10:03:13,493+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] WORKLOG : snapshot stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:03:13,488+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] WORKLOG : total stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:03:13,366+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] CHANGE_HISTORY : snapshot stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:03:13,365+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] CHANGE_HISTORY : total stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:03:12,896+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] ISSUE : snapshot stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:03:12,895+0000

INFO c.a.jira.index.WriterWithStats

[JIRA-STATS] [index-writer-stats] ISSUE : total stats: {"addDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}, "deleteDocumentsMillis":{"count":0,"min":0,"max":0,"sum":0,"avg":0,"distributionCounter":{}}}

2023-09-15

10:02:45,841+0000

INFO c.a.jira.plugin.PluginTransactionListener

[JIRA-STATS] [plugin-transaction] numberStartEvents:1200, numberEndEvents:1200, numberSendEvents:725, numberEventsInTransactions:18203, numberOfPluginEnableEvents:336

2023-09-15

10:02:38,053+0000

INFO c.a.j.util.stats.JiraStats

[JIRA-STATS] [UserSearchServiceStats] total stats: duration=PT913H55M0.017S, statsOverhead=6.068

atlassian-jira-sql.log

atlassian-jira-xsrf.log

atlassian-jira.log

atlassian-remoteapps-security.log

atlassian-servicedesk.log

eazybi-queues.log

eazybi-web.log

insight_audit.log

insight_automation.log

insight_import.log

insight_objectschema_export.log

insight_objectschema_import.log

insight_workflow.log

jira-diagnostics.log

Analyze log files

The Last Log app has an advanced graphical user interface including a sectioned overview of the current log, a sidebar displaying all available logs, a toolbar and a search bar. Within the search functionality you can switch between basic and advanced search. The interface makes it easy and straightforward to find what you're looking for among the raw data of different logs.

The screenshot shows the Atlassian Admin console interface. At the top, there's a navigation bar with 'Administration' and a search bar. Below this, the 'Manage apps' section is active, showing a list of installed applications. The 'atlassian-jira-log' application is highlighted with a red box, and an orange arrow points to it from a label 'Selected log file'. To the right, the 'Log file sidebar' is visible, showing a list of log files. The 'atlassian-jira-log' application is also highlighted in the sidebar, and an orange arrow points to it from a label 'Log file sidebar'. The main content area displays the details of the 'atlassian-jira-log' application, including its status, version, and a list of log files. The 'atlassian-jira-log' application is highlighted with a red box, and an orange arrow points to it from a label 'Selected log file'.

Log file sidebar

Select **which log file you want to investigate** in the main interface out of all the available log files in your Jira instance.

1

Click on the grey arrow button (top-right) to **collapse or expand the log files sidebar** to have more space for the main log view.

2

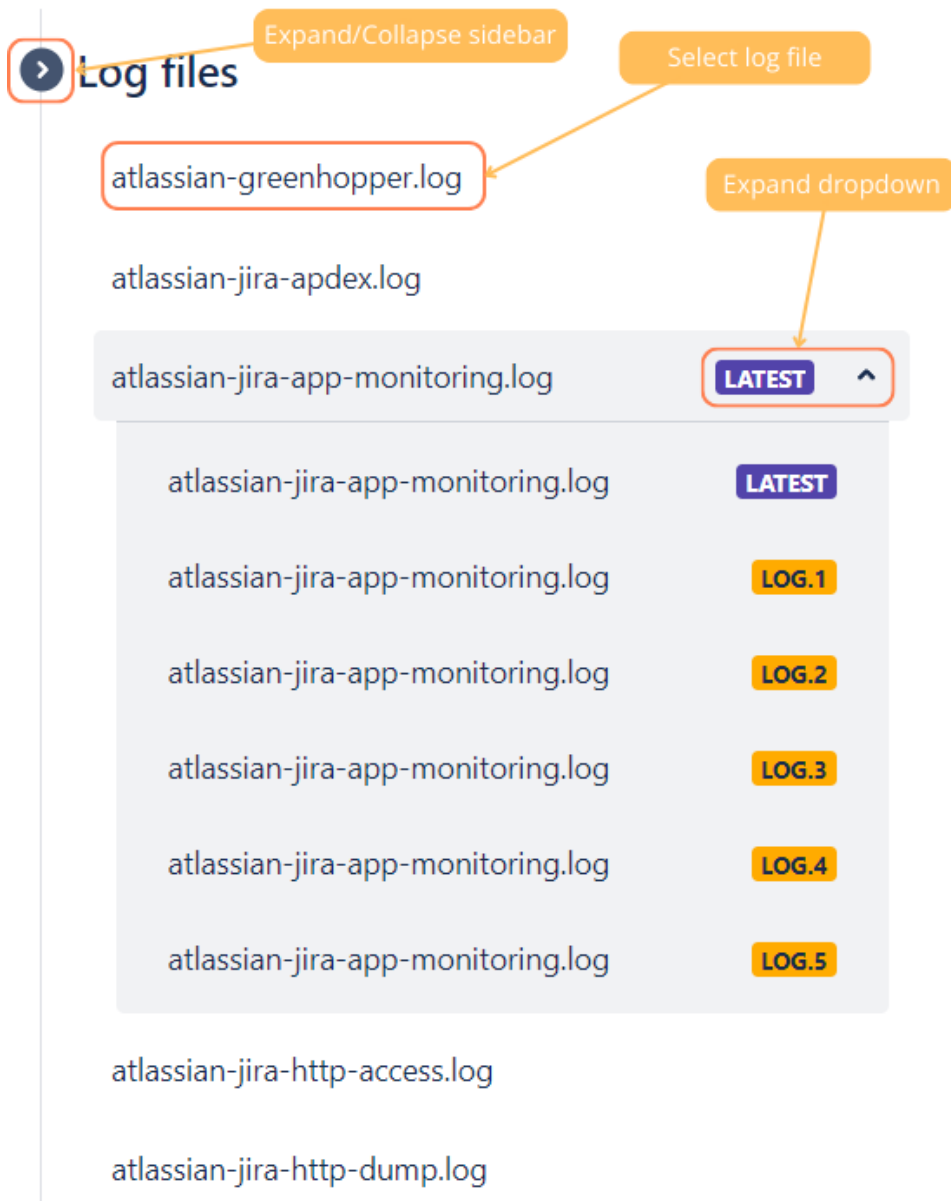
Click on any log file in the sidebar to **select a log**. The selected log will be opened in the main view.

3

Click on the arrow icon on the top-right side of a log file to expand a **dropdown menu with the available parts** of the log file.

This option is present for all log files that are too large to be saved in a single file in the system. The grouping of files is shown because there are multiple files related to one log saved in your instance.

Clicking on **Latest** will select the latest updated log file. The other parts are numbered according to their sequence.



Selected log file

View the **currently selected log file** and analyze its content.

The log file gets automatically divided into individual log messages which are displayed in a table format to provide an easier overview understanding.

1

In the left column you can view the **date and time** the message got logged.

2

When expanded you can see the **log message body**.

At the top (same level of the expand button) you find the **log level** (INFO, ERROR, WARN, DEBUG or FATAL) and is displayed as a colored label.

Last but not least, on the same level (top section) you can see the **name of the log file** and the **name of the user** who conducted the related action.

see screenshot below for a better visual understanding

3

At the bottom of the message body you can view another label with **meta information** about the message.

The screenshot displays the Jira log viewer interface. At the top, a toolbar includes a 'Log level' dropdown set to 'LATEST', a 'Log file name' field showing 'c.a.j.util.stats.JiraStats /rest/lastlog/1.0/log/atlassian-jira.log', and buttons for 'User' (ADMIN) and 'Expand' (dropdown arrow). Below the toolbar, a list of log entries is shown. The first entry is expanded, revealing its message body and meta information. Callouts identify the following elements:

- Log level:** LATEST
- Log file name:** c.a.j.util.stats.JiraStats /rest/lastlog/1.0/log/atlassian-jira.log
- User:** ADMIN
- Expand:** dropdown arrow
- Date:** 2023-09-15 11:53:40,025+0000
- Message body:** [JIRA-STATS] [GROUP-DAO-STATS] total stats: duration=PT915H45M58.186S, statsOverhead=n/a, data={ "_statsName": "GROUP-DAO-STATS", "_statsType": "total", "_time": "2023-09-15T11:53:40.022Z", "_timestamp": "1694778820022", "_duration": "PT915H45M58.186S", "_invocations": "48607", "_statsOverhead": "n/a", "eager": true, "findByNameOrNullSkipRefreshOnNull": false, "findByNameOrNull": "16201", "findByNameOrNullCacheHit": "16200", "findByNameOrNullCacheMiss": "1", "findByNameOrNullDBHitInMilliseconds": {" "count": "0", "min": "0", "max": "0", "sum": "0", "avg": "0", "distributionCounter": {" "1": "0", "10": "0", "50": "0", "100": "0", "500": "0", "1000": "0", "5000": "0", "10000": "0" } }, "findByNameOrNullDBMissInMilliseconds": {" "count": "1", "min": "4", "max": "4", "sum": "4", "avg": "4", "distributionCounter": {" "1": "0", "10": "1", "50": "0", "100": "0", "500": "0", "1000": "0", "5000": "0", "10000": "0" } }, "findGroupsGenericValueInMilliseconds": {" "count": "1", "min": "3", "max": "3", "sum": "3", "avg": "3", "distributionCounter": {" "1": "0", "10": "1", "50": "0", "100": "0", "500": "0", "1000": "0", "5000": "0", "10000": "0" } }, "groupAddFailed": "0", "groupAddFailedUpdateSuccessful": "0", "groupAddFailedUpdateFailed": "0" }
- Meta information:** HTTP-NIO-8080-EXEC-7

Below the expanded entry, another log entry is visible with the same header and a different message body. At the bottom, a third log entry is partially visible with the header 'c.a.jira.servlet.ApplicationStateResolverImpl' and user 'SERVICERUNNER'.

Tool bar

Change your log view according to your needs by utilizing several options from the tool bar.

1

Click on the reverse icon (↕) to **reverse the output** of the log entries in the list, so that you see the last entries at the top. Clicking on the icon a second time puts the list in the original order.

2

Click on the reload icon (🔄) to let the log view **automatically reload every 5 seconds**. New log entries will appear automatically in the list so that you can analyze the log file on a continuous basis.

Click on the icon again to **deactivate the reload**.

For large log files, activating the live refresh feature can **take up a lot of resources** and may lead to performance issues in your Jira instance!

3

Click on the screen icon to switch to the **classic view of the log file screen**. Here the log entries are shown as raw data, as how they appear in the file instead of getting profiled and separated data into distinct entries like in the modern view. While meta information, like the date, the user and the log level can still be found within the raw data, you need to have a good grasp on the structure of the log entries to know where to find them. The classic view enables you to focus on the raw data itself if necessary, but makes it more difficult for you to swiftly look up important information.

Click on the icon again to switch back to the modern view if you're in the classic view.

4

Click on the expand icon to **expand all log entries at once** so that you can see the message bodies. Without using the expand option you would have to manually click on the expand arrow at the end of each entry to expand them. By using the icon in the tool bar you can save time and choose what part of the log file you want to focus on.

5

Limit the output in the table by specifying how many **maximum entries** should be shown. You can enter any number you want manually into the bar, the default is 500 entries.

The screenshot shows the log viewer interface. At the top, there's a toolbar with several icons: a downward arrow (Reverse output), a circular arrow (Reload), a screen icon (Classic View), an expand icon (Expand), and a dropdown menu (Max entries: 500). Annotations with orange boxes and arrows point to these icons: 'Reverse output' points to the downward arrow, 'Reload' points to the circular arrow, 'Classic View' points to the screen icon, 'Expand' points to the expand icon, and 'Limit' points to the dropdown menu. Below the toolbar, there's a list of log entries. Each entry has a date and time on the left, a log level and message on the right, and an 'ADMIN' button with a dropdown arrow. The first entry is from 2023-09-15 at 13:08:35,325+0000, with the message '[JIRA-STATS] [GROUP-DAO-STATS] total stats: duration=PT...'. The second entry is from 2023-09-15 at 13:08:35,324+0000, with the message '[JIRA-STATS] [GROUP-DAO-STATS] snapshot stats: duration=PT1H14M55.301S, statsOverhead=n/a, d...'. The third entry is from 2023-09-15 at 13:08:13,620+0000, with the message 'Checking index consistency. Time taken: 4.282 ms'.

Search bar

Filter the output of log entries in your currently selected file with the search bar. Switch between **basic and advanced search** according to your needs.

1

Click on the letter icon (**Aa**) to enable **case sensitive search**. If enabled, search terms you enter will only display results that match the case of the letters. For example, searching for the term "log1" will only display results that contain "log1" and not "Log1" or "LOG1".

Click on the icon a second time to disable case sensitive search and search in **case insensitive mode**. Here, searching for "log1" will also display results containing "Log1" or "LOG1".

2

Click on the regex icon to enable the search functionality with **regular expressions**.

A **regular expression** is a sequence of symbols and characters expressing a string or pattern to be searched for within a longer piece of text. For example, you can search for words that start or end with certain characters and contain or don't contain certain characters.

3

Click on **Switch to basic** to switch to basic search where advanced filtering options under the search bar aren't available.

If you're in basic search mode, click on **Switch to advanced** to switch to advanced search.

In **advanced search mode**, you can configure further **filters** to trim down the output of the log entries:

- **Log level:** Filter by one or multiple log levels (ERROR, WARN, DEBUG, INFO and FATAL). This shows only log entries which are of the specified log type.
- **User:** Filter by user name. This shows only log entries which are associated with the specified user.
- **Timeframe:** Filter by date and time. This shows only log entries which are from within the specified timeframe.

The diagram illustrates the advanced search interface. At the top is a search bar with the placeholder text "Search". To the right of the search bar are three toggle buttons: "Case sensitive" (with "Aa" icon), "Regex" (with "(.*)" icon), and "Basic search" (with a "Switch to basic" button). Below the search bar are three filter fields: "Log level" (with a dropdown arrow), "User", and "Timeframe" (with a calendar icon). Below these fields are three orange callout boxes: "Select log level" pointing to the "Log level" field, "Select user" pointing to the "User" field, and "Select times" pointing to the "Timeframe" field. A blue "Search" button is located to the right of the filter fields.

If you still have questions, feel free to refer to our [support](#) team.