

# Logging of Node.js Services

You can only inspect the details of Node.js services of the node instance the used Bridge is running on. If you have aggregated multiple node instances into a Bridge domain, you need to use the Bridge of the specific node instance the Node.js service is running on.

Switch to the **Logging** tab in the information/working area.  
All users have access to logged information that is categorized as follows:



Log	Technical Name	Description																
<a href="#">Installation Log</a>	npm-install	Contains errors and warnings that have been written during npm install.																
<a href="#">Start Log</a>	start	Contains information about the selected Node.js service, environment variables, and errors logged by the Bridge process at startup.																
<a href="#">Error Log</a>	stderr	Contains errors that have been written by the Node.js service to stderr.																
<a href="#">Service Log</a>	stdout	Contains messages that have been written by the Node.js service to stdout.																
Custom Logs	<your name>	The Bridge can also display custom logfiles. To be able to access this custom logfiles via the Bridge, they must meet the following conditions:																
		<table><tr><th>Condition</th><th>Description</th></tr><tr><td>Save Location</td><td>Custom log files of a service must be saved to the <b>/logs</b> folder of the service data directory.</td></tr><tr><td rowspan="5">Naming Scheme</td><td>Names of custom log files must conform to the following naming scheme:</td></tr><tr><td>&lt;custom name part&gt;.log</td><td>for logs that do not rotate</td></tr><tr><td>&lt;custom name part&gt;_yyyy-mm-dd.log</td><td>for logs that rotate per day</td></tr><tr><td>&lt;custom name part&gt;_yyyy-mm-dd-hh.log</td><td>for logs that rotate per hour</td></tr><tr><td colspan="2">The custom name part of the logfile must not contain underscores and must not be one of the reserved log types mentioned <a href="#">above</a>.</td></tr><tr><td>Log File Content Format</td><td>The log files can be in text or in JSON (Bridge 7.7.0) format. If the log files are in JSON format, they must contain the following properties which will be displayed:<ul style="list-style-type: none"><li>• <b>timestamp</b>: Timestamp</li><li>• <b>message</b>: Log message</li></ul><div>Log files in JSON format can be filtered in the same way as text log files. See <a href="#">Filtering the Log Entries</a> below.</div></td></tr></table>	Condition	Description	Save Location	Custom log files of a service must be saved to the <b>/logs</b> folder of the service data directory.	Naming Scheme	Names of custom log files must conform to the following naming scheme:	<custom name part>.log	for logs that do not rotate	<custom name part>_yyyy-mm-dd.log	for logs that rotate per day	<custom name part>_yyyy-mm-dd-hh.log	for logs that rotate per hour	The custom name part of the logfile must not contain underscores and must not be one of the reserved log types mentioned <a href="#">above</a> .		Log File Content Format	The log files can be in text or in JSON (Bridge 7.7.0) format. If the log files are in JSON format, they must contain the following properties which will be displayed: <ul style="list-style-type: none"><li>• <b>timestamp</b>: Timestamp</li><li>• <b>message</b>: Log message</li></ul> <div>Log files in JSON format can be filtered in the same way as text log files. See <a href="#">Filtering the Log Entries</a> below.</div>
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# Filtering the Log Entries

Logs may contain big amounts of data and in these cases it may be difficult to find the peace of information you are looking for. Therefore, you can filter the logfile entries by a regular expression, and - depending on the log type - by log level and date/time.


Filter Element	Description	Default
Search for	Insert a string or a valid regular expression to search the log entries for. Only log entries that match the expression will be displayed. Refer to <a href="#">Java Regular Expressions</a> for more information on which regular expressions you can use here.  Pressing <b>Enter</b> in this field triggers the search.	empty
type	Select the type of logfile you want to display: npm-install, start, stderr, stdout, custom log types. See top of this page for more information on the log types.  The log types are displayed in this list in alphabetical order and the first log type of this list will be the default. So, if you added a custom log named aa. log, this log will be displayed on going to the <b>Logging</b> page.	first available log type
log level	This filter is not available for Node.js services.	
from	Select the date/time range you want to inspect. <ul style="list-style-type: none"><li>Upon opening the logging tab, <b>from</b> is set to (now - 10 minutes) if there are log entries existing within this range of time. If not, <b>from</b> will be set to the point of time the first entries are found.</li></ul>	actual timestamp - 10 min
to	<ul style="list-style-type: none"><li>An empty <b>to</b> field displays all log entries from the <b>from</b> date/time until the most recent entries. An empty <b>from</b> field triggers a search backwards until the first entries are found.</li><li>You can remove the time part of the <b>to</b> field to search until the end of the day, and of the <b>from</b> field to search from the beginning of the day.</li></ul> <p>Pressing <b>Enter</b> in these fields triggers the search. To enter the dates, you can use a date picker next to the input fields: . Refer to section <a href="#">The Date Picker</a> for more information on this.</p> <div><p> This filter is available only for the error log, service log and for custom logs, if they feature timestamps. The timestamp must follow one of the following patterns:</p><ul style="list-style-type: none"><li>YYYY-MM-DD HH:MI:SS or [YYYY-MM-DD HH:MI:SS</li><li>HH:MI:SS or [HH:MI:SS</li></ul><p>It is allowed to put the timestamp in square brackets.</p></div>	empty

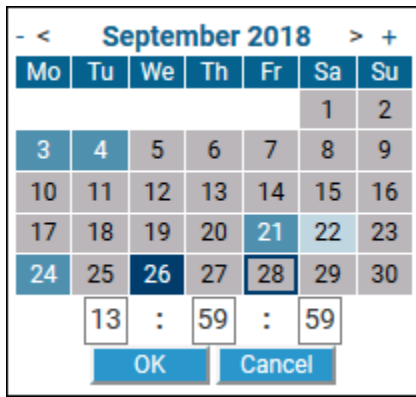
Click **View** to update the displayed logging information.  
As per default, for logs with a time stamp the log entries are displayed latest first in the search results.  
Click the tiny arrow in the table header to change the order to oldest first.

The date filter settings will be kept as long as your Browser tab is open. They will be reset to default as soon as you open the **Logging** tab in a new Browser tab.

If you close your Browser with the **Logging** tab open, and start your Browser again with restoring all recent tabs (session restore), your date filter settings will be reloaded from your previous search.

## The Date Picker

When filtering the log entries of a service by date and time, you can use a date picker to select a date from/to. Click the date picker icon  next to the input fields to open the a tiny calendar to pick the dates from.



The time part will be only visible if the related log entries contain a time part in format "HH:MM:SS". In all other cases, it is not possible to select log entries by time.

Some dates within the calendar are colored to help you finding the appropriate date:

Color	Meaning
dark blue border	Today.
dark blue	The selected date.
bright blue	A weekday on which data has been logged.
light blue	A weekend day on which data has been logged.
grey	A day on which no data has been logged.

Select a day, enter a time (if necessary), and click **OK** to apply the selected date to the search field.

## The Search Results

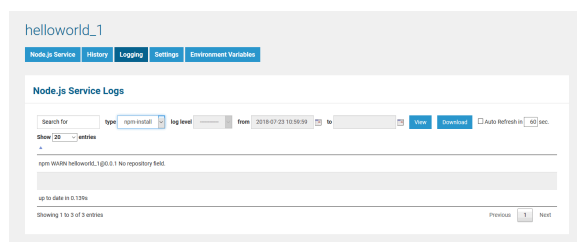
The results according to your search conditions are displayed in a paged list:

- You can define how many results should be displayed on one page by selecting one of 20, 50, 100, 250 and 1000 from the **Show entries** dropdown.
- At the bottom of the log table, you can see how many log entries have been found and how many of them are displayed: Showing 1 to 20 of 78 entries.
- You can auto refresh the search results by checking the **Auto Refresh** checkbox. Specify an interval in seconds, or leave the default (60 seconds).
- Multi-line log messages are collapsed to not clutter the list of results. You can expand those multipart lines by clicking the plus sign at the end of the visible message part.
- Use the buttons **Previous** and **Next** to browse through the results, or select a result page by clicking on a page number.
- By clicking **Download**, you can download the search result (all pages) as a simple flat file that resides in a ZIP archive.

## Installation Log

The npm-install log contains the output of the npm install command. Select **npm-install** from the **Type** drop-down list to view the installation log. You cannot select a date range, as the npm-install log will be overwritten each time the command is executed.

Figure: The Node.js Service npm-install Log



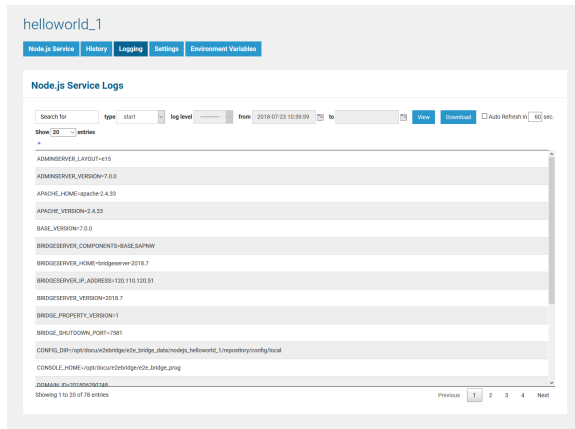
# Start Log

Select **start** from the **Type** drop-down list. Selecting a date has no effect, as the start log will be overwritten each time the Node.js service is started.

The start log contains the following information:

- information on the environment variables used (see also [Setting Environment Variables for Node.js Services](#))
- information on the selected service
  - service name and version
  - working directory of the service
  - start script
- errors that occurred during startup

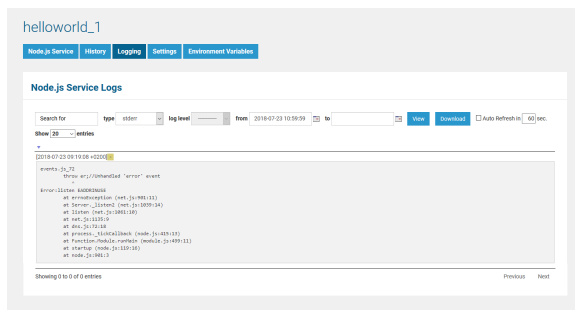
Figure: The Node.js Service Start Log



# Error Log

Select **stderr** from the **Type** drop-down list and filter the log by date, if necessary. The error log contains errors that have been written by the Node.js service to stderr.

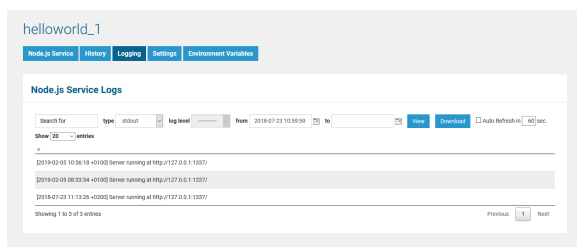
Figure: The Node.js Service Error Log



# Service Log

Select **stdout** from the **Type** drop-down list. The service log contains messages that have been written by the Node.js service to stdout.

Figure: The Node.js Service Log



## Log Encoding

If you are writing messages to log files that will be displayed on the Bridge (npm-install, start, stdout, stderr, custom logfiles), you must use **UTF-8 encoding**. If you do not, special characters may be displayed wrongly in the log view.