



ElectricFlow 6.0.8 Release Notes

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ElectricFlow version 6.0.8

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ElectricFlow 6.0.8

ElectricFlow 6.0.8 is a maintenance release (MR). For more information about ElectricFlow software release strategy, see the [ElectricFlow/ElectricCommander Release Strategy Update](#) announcement.

Product Description

ElectricFlow™ is an enterprise-grade DevOps Release Automation platform that simplifies provisioning, building, and releasing multi-tiered applications. Its model-driven approach to managing environments and applications lets teams coordinate multiple pipelines and releases across hybrid infrastructure in an efficient, predictable, and auditable way.

What's New or Modified

This release consists of the following updated plugins and resolved issues.

Updated Bundled Plugins

The following plugins are updated. For a complete list of bundled plugins, see the “Plugins That are Bundled with ElectricFlow” appendix in the *ElectricFlow 6.0.8 User Guide* at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html.

Name	New Version	Status
EC-ALM	1.0.9.15	Updated
EC-CheckStyle	2.0.5.121268	Updated
EC-CIManager	1.4.0.121268	Updated
EC-Clover-CMD	2.0.3.121268	Updated
EC-CppCheck	2.0.5.121268	Updated
EC-DBI	2.0.2.121268	Updated
EC-DefectTracking-QC	2.0.9.121268	Updated
EC-DefectTracking-TeamForge	2.0.7.121268	Updated
EC-DefectTracking-TestTrack	2.0.3.121268	Updated
EC-DefectTracking-TFS	2.0.7.121268	Updated
EC-EMake	1.0.6.121268	Updated
EC-EMMA	2.0.1.121268	Updated
EC-FileOps	2.0.5.121268	Updated

EC-FindBugs	2.0.4.121268	Updated
EC-Flog	2.0.3.121268	Updated
EC-Groovy	2.0.3.121268	Updated
EC-Homepage	1.4.0.121268	Updated
EC-HPQualityCenter	3.0.4.13	Updated
EC-Jasmine	2.0.1.121268	Updated
EC-JBoss	2.1.5.54	Updated
EC-Jetty	1.0.3.121268	Updated
EC-JMeter	2.0.4.121268	Updated
EC-JTest	2.0.4.121268	Updated
EC-Klocwork-EA	1.0.4.121268	Updated
EC-Klocwork	2.0.3.121268	Updated
EC-KVM	1.0.6.121268	Updated
EC-LabManager	2.2.3.121268	Updated
EC-Make	2.0.5.121268	Updated
EC-Maven	2.3.3.2	Updated
EC-MSBuild	2.0.5.121268	Updated
EC-MSSystemCenterVMM	2.0.2.121268	Updated
EC-MSTest	1.0.4.121268	Updated
EC-MYSQL	2.0.8.121268	Updated
EC-NAnt	2.0.4.121268	Updated
EC-NCover	2.0.2.121268	Updated
EC-NMake	2.0.3.121268	Updated
EC-NMakeATT	1.0.7.121268	Updated

EC-Oracle	2.0.5.121268	Updated
EC-Pclint	2.0.4.121268	Updated
EC-PHP	2.0.4.121268	Updated
EC-PMD	2.0.4.121268	Updated
EC-Powershell	2.0.4.121268	Updated
EC-PureCoverage	1.0.5.121268	Updated
EC-Purify	2.0.4.121268	Updated
EC-Python	2.0.6.121268	Updated
EC-QTP	2.0.7.121268	Updated
EC-Quantify	1.0.6.121268	Updated
EC-Rake	2.0.3.121268	Updated
EC-Rcov	2.0.4.121268	Updated
EC-Reports	2.1.0.121268	Updated
EC-Ruby	2.0.6.121268	Updated
EC-Selenium	2.0.5.121268	Updated
EC-SilkCentral	1.0.5.121268	Updated
EC-SilkTest	1.0.7.121268	Updated
EC-Sonar	2.0.4.121268	Updated
EC-Splint	2.0.3.121268	Updated
EC-SQLServer	2.0.7.121268	Updated
EC-Tclsh	2.0.3.121268	Updated
EC-TCSH	2.0.3.121268	Updated
EC-TestNG	2.0.4.121268	Updated
EC-Tomcat	2.1.1.121268	Updated

EC-Tutorials	1.0.0.121268	Updated
EC-VirtualBox	1.0.4.121268	Updated
EC-VisualStudio	2.0.3.121268	Updated

Resolved Issues

Security-Related Issues

- PHP is upgraded to version 5.6.30. For details, see <https://secure.php.net/ChangeLog-5.php>. (NMB-25027 and NMB-24885)
- Apache is upgraded to version 2.2.34. For details, see https://www.apache.org/dist/httpd/CHANGES_2.2 and https://httpd.apache.org/security/vulnerabilities_22.html. (NMB-25026 and NMB-24885)
- OpenSSL is upgraded to version 1.0.2l. For details, see <https://www.openssl.org/news/openssl-1.0.2-notes.html>. (NMB-25025 and NMB-24885)

Other Resolved Issues

- An issue in which some steps are not in completed status after the job is aborted (without using the “force” option) is fixed. (NMB-25303)
- Job steps no longer hang on “waiting for precondition” even though the precondition is met. (NMB-25231)

Release Notes for Previous ElectricFlow 6.0 Versions

- [ElectricFlow 6.0 Release Notes](#)
- [ElectricFlow 6.0.1 Release Notes](#)
- [ElectricFlow 6.0.2 Release Notes](#)
- [ElectricFlow 6.0.3 Release Notes](#)
- [ElectricFlow 6.0.4 Release Notes](#)
- [ElectricFlow 6.0.5 Release Notes](#)
- [ElectricFlow 6.0.6 Release Notes](#)
- [ElectricFlow 6.0.7 Release Notes](#)

All ElectricFlow documentation is available at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html.

Installation and Upgrade Notes

- In `DATA_DIR/conf/wrapper.conf`, change the default prefix for StatsD from
`wrapper.java.additional.802=-DCOMMANDER_STATSD_PREFIX=commander`
to
`wrapper.java.additional.802=-DCOMMANDER_STATSD_PREFIX=flow`
(NMB-22835)

- In the Oracle database, set the `OPEN_CURSORS` parameter to at least 1000 so ElectricFlow does not run out of open cursors.

For complete installation and upgrade information, see the *ElectricFlow 6.0.8 Installation Guide* at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html.

IMPORTANT: Before beginning the upgrade process, back up your ElectricFlow data.

Upgrading Your Existing ElectricFlow Environment

- Upgrades to ElectricFlow 6.x are supported only from ElectricCommander 4.2.x or from ElectricFlow 5.x. ElectricCommander systems and servers that are pre-Commander 4.2 must be upgraded to an ElectricCommander 4.2.x release. For upgrade instructions, see the *ElectricFlow 6.0.8 Installation Guide* at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html.
- Upgrading to ElectricFlow 6.x from ElectricCommander 4.2.x requires a database upgrade.
- You cannot upgrade the ElectricCommander 4.2.x built-in database to an ElectricFlow 6.x database. If you want to continue using the built-in database in ElectricFlow 6.x, follow the database upgrade procedures described in the *ElectricFlow 6.0.8 Installation Guide*.

Configuration Notes

Updating Application Component Plugin Versions in the Export File When Upgrading from 5.4 to 6.x

When you export your project data before upgrading from ElectricCommander 5.4 to ElectricFlow 6.x, you must replace the application component plugin versions, including EC-Artifact, in the export file before importing the project data to ElectricFlow 6.x. (CEV-6679)

Registering a Custom Plugin Procedure for the Step Creation Dialog

You must register a user-developed plugin so that it appears as an option (CEV-3649):

- When you use the plugin to configure a step in a component or application process.
- In a procedure in the automation platform.

For details, see the “Register your procedure for the step creation dialog” section in the “Examples and Tutorials” chapter of the *ElectricFlow Plugin Developer Guide* at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html.

Diffie-Hellman Key Size Incompatibility

To enable the ElectricFlow server version 7.0 or newer to configure Diffie-Hellman cipher suites properly, ElectricFlow uses OpenSSL-1.0.1T with SSLv2 enabled. Because of OpenSSL and JRE changes, the minimum Diffie-Hellman key size requirement is increased to 1024 bits (from 768 bits) as of version 7.0.

Server versions 7.0 or newer use Jetty (a Java HTTP server), which listens on the 8000 (unsecure) and 8443 (secure) ports. Server versions 7.0 or newer use Java 1.8.0_66, in which the ephemeral DH key size defaults to 1024 bits during SSL/TLS handshaking in the SunJSSE provider.

For details on the increase of the key size requirement as of Java 1.6-u101, see the Java release note at <http://www.oracle.com/technetwork/java/javase/overview-156328.html#6u101-b31>. For details as of Java 1.7-u85, see the Java release note at <http://www.oracle.com/technetwork/java/javase/7u85-relnotes-2587591.html>.

Because their minimum key size is 1024 bits, agent versions 7.0 or newer can connect only to:

- Server versions 5.4, 6.0.1, or 6.5 or higher via ectool
- External applications that require SSL with a minimum key size of 1024 bits

However, ElectricCommander agents of versions 5.0.6, 5.3, or 5.4 and ElectricFlow agent versions 6.0.1 or 6.5 or newer can connect to all ElectricFlow server versions (including 7.0 or newer) via ectool and ec-perl.

ElectricCommander server versions 5.0.6 or 5.3 or newer can run jobs using all agent versions (including 7.0 or newer). ElectricFlow server versions 7.0 or newer can run jobs using ElectricCommander agent versions 5.0.6 or 5.3 or newer.

Limitations

Session management has the following limitations:

- When a user logs out, the user is logged out only on the node where the logout occurred.
- When a user is deleted from the system, their session is active until it expires.
- When a job ends, the user's session is active until it expires.

Known Issues

- An error occurs when you complete the following steps. (CEV-7890)
 1. In ElectricFlow 5.4, attach credentials to a component process or a component process step.
 2. Export the application that contains the component process.
 3. Upgrade to ElectricFlow 6.x.
 4. Import the application to ElectricFlow 6.x.
 5. Deploy the application process that contains the component process.

To work around this error:

1. View the details of the component process step where you previously set the credentials in the **Edit Step** dialog box.
 2. Click **Next**.
 3. Click **OK**.
 4. Redeploy the application process.
- When you import a previously exported application from ElectricFlow 5.4 to ElectricFlow 6.x, and the application has parameters with options, the application process parameters that you defined in ElectricFlow 5.4 need to be re-created. (CEV-7788)
 - The following entry in the wrapper.conf file might cause a gradual slowdown of everything over time and should be deleted. (NMB-19735)

```
wrapper.java.additional.105=-XX:+TieredCompilation
```

- When you add a resource to a remote ElectricFlow server during an agent installation, the server does not discover the host name of the agent machine through DNS, and a `Name or service not known` error message appears. (NMB-20605)

The workaround is to do one of the following so that the resource is available after the agent installation:

- Add the host name of the agent machine to the host file of the remote server.
- In the **Resource Details** panel, edit the **Agent Host Name** of your resource and use the IP address of the agent machine instead of the fully qualified domain name (FQDN).
- The `evalDsl` API fails if a DSL script contains strings exceeding 65,535 characters. The `generateDsl` API can generate such a DSL script if step commands have more than 65,535 characters. In this case, you must update the DSL script and use a file to load the required content. (NMB-23816)
- If you delete the default project and do not re-create it, ElectricFlow is no longer available. To use it again, you must reinstall ElectricFlow.
- Before importing an export file, you must change the plugin name (including the plugin version) in the file.
- Change tracking:

IMPORTANT: Restarting the ElectricFlow server while new records are created for all tracked objects might take at least as long as an export or import of all projects (a large project can take 10 to 40 minutes).

- You can revert changes only for high-level design objects such as applications, procedures, procedure steps, workflow definitions, and state definitions.
- When you disable change tracking and then re-enable it, the system performance might be reduced when:
 1. Change tracking is disabled at the server level.
 2. Change tracking is re-enabled at the server level. The change history for all objects, including those not in projects, is now tracked.
- Pages in the ElectricFlow UI might render slowly if the application or environment has too many tiers.

Performance and Scalability Issues

- For hundreds of parallel job steps, job scheduler performance issues might occur at job startup. (NMB-16185)
- The time needed to add a property to a job increases with the number of properties. (NMB-16120)
- The time needed to add a step to a procedure increases with the number of steps. (NMB-16118)

Documentation and Online Help

Product Documentation

ElectricFlow product documentation is available at http://docs.electric-cloud.com/eflow_doc/FlowIndex.html as follows:

- *ElectricFlow Installation Guide*
- *ElectricFlow User Guide*
- *ElectricFlow API Guide*
- *ElectricFlow Release Notes*
- *ElectricFlow SDK Plugin Developer Guide* (updated on its own release cycle)
- *ElectricFlow SDK Plugin Developer Release Notes* (updated on its own release cycle)

Documentation on the website is updated periodically.

Automation Platform Online Help

The Automation Platform has a complete, robust, context-sensitive online help system. To use it, click the **Help** button in any page of the Automation Platform web UI.

Troubleshooting and Getting Help

Technical Support

Contact Electric Cloud technical support:

- 408.419.4300, option 2. Hours are 9 A.M.–5 P.M. PT Monday–Friday (except holidays)
- support@electric-cloud.com
- <https://helpcenter.electric-cloud.com/> and then click **Submit a request** to submit or see your support tickets

Be prepared to provide your:

- Name, title, company name, phone number, and email address
- Operating system and version number
- Product name and release version
- Problem description

Electric Cloud “Ask” Website

Go to <http://ask.electric-cloud.com> to:

- Ask questions or read answers to questions from other users
- Get help with installation and configuration
- Submit feedback

ElectricAccelerator Knowledge Base

Go to <https://helpcenter.electric-cloud.com/hc/en-us/sections/200516893-Accelerator-KB> to find in-depth explanations of specific topics and solutions for specific problems.