ElectricAccelerator
ElectricInsight Release Notes

Version 5.0

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Product Description

ElectricInsight® is a reporting and visualization tool for ElectricAccelerator®. ElectricInsight reads an annotation file, which is produced by Electric Make® (eMake), to provide a graphical representation of the build structure for performance analysis. ElectricInsight provides detailed information and reports for each job on each host in the build cluster. ElectricInsight shows how a build is structured and run, which lets you find performance problems or conflicts in a parallel build.

You can use ElectricInsight for at-a-glance diagnostics by identifying which jobs are being performed, when they are being performed, and the files that are associated with them. ElectricInsight is a simpler alternative to examining the annotation file itself to find errors and tune performance.

What's New or Modified

New Features and Functionality

JobCache Features

JobCache is an add-on option introduced in ElectricAccelerator 8.0 that lets a build avoid recompiling object files that it previously built, if their inputs have not changed. The JobCache add-on works even after you clean the build output tree (for example, using “make clean”). ElectricInsight 5.0 is enhanced with several new features that allow it to display JobCache-related information:

- Subcommands for the JobCache add-on are added to the annolib library.
- The Job Cache Misses report is introduced. This report summarizes the causes of misses for the JobCache add-on. It shows the files that caused misses, how many misses each file caused, and which misses each file caused. (EI-682)
- The ElectricSimulator report now lets you simulate build performance with or without the JobCache add-on enabled, with or without schedule optimization enabled, and with or without parse avoidance enabled. The report now includes a **Second series** checkbox, which lets you set two combinations of the above simulation options at the same time, so you can compare two predicted performances on one chart. (EI-680)
- You can now search for jobs by job cache type and status. The `jobcache` search specifier accepts either job cache status identifiers (`hit`, `miss`, `newslot`, `uncacheable`, and `rootschanged`) or job cache types (`parse` or `gcc`). (EI-673)

For more information about the JobCache add-on, see the *ElectricAccelerator 8.0 Electric Make User Guide* at http://docs.electric-cloud.com/accelerator_doc/AcceleratorIndex.html.

Other New Features and Functionality

- Several API commands are deprecated and replaced with new commands. The new commands allow any number of simultaneous iterators (the prior API commands allowed only one iteration to be “active” at a time). Also, the syntax for the new commands is more standardized than the syntax in the prior commands.

  The deprecated commands are

  ```
  $anno jobiterbegin
  $anno jobitermore
  $anno jobiternext
  $anno rjobiterbegin
  ```

```
$anno rjobitermore
$anno rjobiternext
```

The replacement commands are

```
$anno jobs begin
$anno jobs end
$anno jobs rbegin
$anno jobs rend
$anno job next <jobId>
$anno job prev <jobId>
```

For usage information for the replacement API commands, see the *ElectricInsight 5.0 User Guide* at http://docs.electric-cloud.com/insight_doc/5_0/PDF/InsightUserGuide_5_0.pdf.

- A 64-bit version of ElectricInsight is introduced. Electric Cloud recommends the 64-bit version for loading large annotation files or on 64-bit Linux systems without 32-bit libraries installed. (The live build monitoring feature is not available in 64-bit ElectricInsight.) For details and installation instructions, see the *ElectricInsight 5.0 User Guide* at http://docs.electric-cloud.com/insight_doc/5_0/PDF/InsightUserGuide_5_0.pdf. (EI-691 and EI-660)
- The Terminator Lag report is introduced. Terminator lag time is the time that the terminator is active after the completion of the last job in the build. The Terminator lag report shows the portions of terminator lag time that are used by terminator activities (commit, write-to-disk, and wait-for-completion). This report uses the terminator activity that is included in the annotation file as of ElectricAccelerator 8.0. (EI-678)
- Terminator activity is added to the main ElectricInsight user interface (on the row labeled **Terminator** under **Agents & Jobs**). (EI-675)

Behavior Changes

The *ElectricInsight User Guide* is no longer included in the ElectricInsight installation and is now available exclusively online. To view the user guide, choose **Help > User Guide** in the ElectricInsight application or browse to http://docs.electric-cloud.com/insight_doc/5_0/PDF/InsightUserGuide_5_0.pdf. (EI-703)

Resolved Issues

- (Windows platforms) Updated annolib to fix an issue where ElectricInsight hung when an ElectricSimulator report was run using a corrupted annotation file. (EI-674)
- (Windows platforms) Fixed an issue where job details showed the incorrect agent when a job was restarted because of cluster sharing. (EI-663)

Known Issues

None.

Documentation

The *ElectricInsight User Guide* is available online. To view the user guide, choose **Help > User Guide** in the ElectricInsight application or browse to http://docs.electric-cloud.com/insight_doc/5_0/PDF/InsightUserGuide_5_0.pdf. The *ElectricInsight Release Notes* (this document) are available at http://docs.electric-cloud.com/insight_doc/5_0/PDF/InsightReleaseNotes_5_0.pdf.

ElectricAccelerator documentation is available online at http://docs.electric-cloud.com/accelerator_doc/AcceleratorIndex.html:

- *ElectricAccelerator Installation and Configuration Guide*
- *ElectricAccelerator Electric Make User Guide*
- *ElectricAccelerator cmtool Reference Guide*
- *ElectricAccelerator Visual Studio Integration Guide*
- *ElectricAccelerator Release Notes*
- PDF, HTML, and mobile-optimized HTML versions of the online help that is also built into the Cluster Manager

The documents listed above are updated periodically.

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

Before you contact technical support, have the following information available:

- 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:

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

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