

Machine Learning

Jupyter Magic Commands

Date published: 2020-07-16

Date modified: 2024-04-01

CLOUDERA

<https://docs.cloudera.com/>

Legal Notice

© Cloudera Inc. 2024. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

Contents

Jupyter Magic Commands.....	4
Python.....	4
Scala.....	4

Jupyter Magic Commands

Cloudera Machine Learning's Scala and Python kernels are based on Jupyter kernels. Jupyter kernels support varying magic commands that extend the core language with useful shortcuts. This section details the magic commands (magics) supported by Cloudera Machine Learning.

Line magics begin with a single `%`: for example, `%timeit`. Cell magics begin with a double `%%`: for example, `%%bash`.

Python

In the default Python engine, Cloudera Machine Learning supports most line magics, but no cell magics.

Cloudera Machine Learning supports the shell magic `!`: for example, `!ls -alh /home/cdsw`.

Cloudera Machine Learning supports the help magics `?` and `??`: for example, `?numpy` and `??numpy`. `?` displays the docstring for its argument. `??` attempts to print the source code. You can get help on magics using the `?` prefix: for example, `?%timeit`.

Cloudera Machine Learning supports the line magics listed at <https://ipython.org/ipython-doc/3/interactive/magics.html#line-magics>, with the following exceptions:

- `%colors`
- `%debug`
- `%edit`
- `%gui`
- `%history`
- `%install_default_config`
- `%install_profiles`
- `%lsmagic`
- `%macro`
- `%matplotlib`
- `%notebook`
- `%page`
- `%pastebin`
- `%pdb`
- `%prun`
- `%pylab`
- `%recall`
- `%rerun`
- `%save`
- `%sc`

Related reference

[Scala](#)

Scala

Cloudera Machine Learning's Scala kernel is based on Apache Toree. It supports the line magics documented in the Apache Toree [magic tutorial](#).

Related reference

[Python](#)