

Cloudera Runtime 7.0.1

## Apache Zeppelin Overview

Date published: 2019-09-23

Date modified:

# 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

<b>Overview.....</b>	<b>4</b>
----------------------	----------

## Overview

Apache Zeppelin is a web-based notebook that supports interactive data exploration, visualization, and collaboration.

Zeppelin supports a growing list of programming languages and interfaces, including Python, Scala, Hive, SparkSQL, shell, AngularJS, and markdown.

Apache Zeppelin is useful for working interactively with long workflows: developing, organizing, and running analytic code and visualizing results.

The screenshot displays the Apache Zeppelin Notebook interface for "IoT Data Analysis". At the top, there is a search bar and a user profile labeled "anonymous". Below the title, a table shows data for various event types. The table has columns for event type, a flag (N or Y), a unit (miles), a speed (90), a distance (4,300), and several numerical values representing different metrics.

Normal	N	miles	90	4,300	-89.52	40.7	0	0	0
Normal	N	miles	90	4,300	-91.05	41.72	0	0	1
Normal	N	miles	90	4,300	-91.47	41.74	0	0	0
Lane Departure	N	miles	90	4,300	-91.59	41.7	1	0	0
Unsafe following distance	N	miles	90	4,300	-88.77	40.76	0	1	1

Below the table, three SQL query panels are shown, each with a visualization:

- Panel 1:** SQL query: `select eventType, count(*) occurrences from enrichedEvents group by eventType`. Visualization: Bar chart showing occurrences for "Overspeed" and "Unsafe following distance".
- Panel 2:** SQL query: `select isCertified, count(*) numViolations from enrichedEvents where eventType in ("Unsafe tail distance", "Overspeed", "Lane Departure", "Unsafe following distance") group by isCertified`. Visualization: Pie chart showing the distribution of violations by certification status (N and Y).
- Panel 3:** SQL query: `select eventType, isCertified, hoursDriven from enrichedEvents group by eventType, isCertified, hoursDriven`. Visualization: Stacked area chart showing hours driven by event type and certification status.