Cloudera Data Science Workbench

Configuring HTTP Headers for Cloudera DataScience Workbench

Date published: 2020-02-28 Date modified: 2021-02-25



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

Config	guring HTTP Headers for Cloudera Data Science Workbench	4
E	Enable HTTP Security Headers	4
	Enable HTTP Strict Transport Security (HSTS)	
C	Cross-Origin Resource Sharing (CORS)	.4

Configuring HTTP Headers for Cloudera Data Science Workbench

Cloudera Data Science Workbench 1.4.2 (and higher) include three properties that allow you to customize the HTTP headers accepted by Cloudera Data Science Workbench. They are available under the site administrator panel at Admin Security .

Required Role: Site Administrator



Important: Any changes to the following properties require a full restart of Cloudera Data Science Workbench. For CSD deployments, go to Cloudera Manager and restart the CDSW service. For RPM deployments, run cdsw restart on the master host.

Enable HTTP Security Headers

Provides information on HTTP security headers.

When Enable HTTP security headers is enabled, the following HTTP headers will be included in HTTP responses from servers:

- X-XSS-Protection
- X-DNS-Prefetch-Control
- X-Frame-Options
- X-Download-Options
- X-Content-Type-Options

This property is enabled by default.

Disabling this property could leave your Cloudera Data Science Workbench deployment vulnerable to clickjacking, cross-site scripting (XSS), or any other injection attacks.

Enable HTTP Strict Transport Security (HSTS)

When both TLS/SSL and this property (Enable HTTP Strict Transport Security (HSTS)) are enabled, Cloudera Data Science Workbench will inform your browser that it should never load the site using HTTP.



Note: Without TLS/SSL enabled, configuring this property will have no effect on your browser.

All attempts to access Cloudera Data Science Workbench using HTTP will automatically be converted to HTTPS.

This property is disabled by default.

If you ever need to downgrade to back to HTTP, use the following sequence of steps: First, deactivate this checkbox to disable HSTS and restart Cloudera Data Science Workbench. Then, load the Cloudera Data Science Workbench web application in each browser to clear the respective browser's HSTS setting. Finally, disable TLS/SSL across the cluster. Following this sequence should help avoid a situation where users get locked out of their accounts due to browser caching.

Cross-Origin Resource Sharing (CORS)

Most modern browsers implement the Same-Origin Policy, which restricts how a document or a script loaded from one origin can interact with a resource from another origin.

When the Enable cross-origin resource sharing property is enabled on Cloudera Data Science Workbench, web servers will include the Access-Control-Allow-Origin: * HTTP header in their HTTP responses. This gives web applications on different domains permission to access the Cloudera Data Science Workbench API through browsers.

This property is disabled by default.

When this property is disabled, web applications from different domains will not be able to programmatically communicate with the Cloudera Data Science Workbench API through browsers. In most circumstances, this property should remain disabled. If you have a website that needs to access the CDSW cluster, then enabling this property will make the cluster less secure.