

Cloudera Public Cloud

Cloudera SDK

Date published: 2019-08-22

Date modified: 2025-08-18

CLOUdera

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

Legal Notice

© Cloudera Inc. 2025. 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

CDP SDK overview.....	4
CDP SDK prerequisites.....	4
Using the Cloudera SDK for Java.....	4

Overview of the Cloudera SDK for Java

You can use the Cloudera SDK for Java to integrate Cloudera services with your applications. Use the Cloudera SDK to connect to Cloudera services and create and manage clusters and run jobs from your Java application or other data integration tools that you use in your organization.

[Comprehensive Java documentation](#) is available on Cloudera's Github. The [Cloudera SDK repository](#) is also available.

To use the Cloudera SDK for Java, you must have a Cloudera account and a user account or machine user account with the appropriate role and environment to enable you to perform your required tasks in Cloudera.

Prerequisites for using the Cloudera SDK for Java

Before you use the Cloudera SDK to perform the tasks from an application, we recommend that you first verify that you can perform the tasks on the Cloudera console or through the CLI.

When you are able to successfully create clusters and run jobs on the Cloudera Management Console or by using the CLI, use the Cloudera SDK to create clusters and run jobs from your application.

Using the Cloudera SDK for Java

You must download the SDK Jar file, set up your access key, create your application, and run the Cloudera SDK sample applications.

About this task

To use the Cloudera SDK for Java, complete the following steps:

Procedure

1. Download the latest version of the Cloudera SDK jar files from the [Cloudera SDK repository](#).
2. Set up your API access credentials. Cloudera uses an access key to manage access to Cloudera services through the Cloudera API. You must set up the API credentials for your application.
 - Use the Cloudera Management Console to generate an access key. You must be a Cloudera administrator or have the IAM User role to generate an API access key.
 - If you are a Cloudera administrator, you can generate an access key for a user or machine user account. For more information, see *Generating an API access key* (for a long-lived API access key) or *Logging into the CDP CLI/SDK* (for a shorter-lived access key).
 - If you are a user with the IAM User role, you can generate an access key for your own user account.
 - You can set up the API access key for your application in one of the following ways:
 - Environment variable. For an example of how to set up the API access key in an environment variable, see the source code in the [CDPEnvironmentVariableCredentialsProvider.java](#) file.
 - Java system variable. For an example of how to set up the API access key in a Java system variable, see the source code in the [CDPSystemPropertiesCredentialsProvider.java](#) file.
 - Cloudera credentials file. For an example of how to set up the API access key in a Cloudera profile, see the source code in the [CDPProfileCredentialsProvider.java](#) file.
3. Create your application.
4. View or run the Cloudera SDK sample applications to understand how to use the Cloudera API to access Cloudera services.