

Cloudera Public Cloud

## Cloudera SDK

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# CLOUDERA

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

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## 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.