

Cloudera Public Cloud

Cloudera API

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

Cloudera API overview.....	4
Getting started with the Cloudera API.....	4
Request signing.....	5
Cloudera API reference.....	5

Cloudera API overview

Cloudera provides a REST API that enables you to access Cloudera functionality from a script, or to integrate Cloudera features with an application. In practice you can use the Cloudera API to script repetitive tasks, manage Cloudera resources, or even create custom applications.

The Cloudera API contains much of the functionality within the Cloudera Management Console and Cloudera Data Hub, as well as Cloudera AI, Cloudera Data Warehouse, and Cloudera Operational Database. For a complete Cloudera API reference, see the [Cloudera Control Plane Public API Documentation](#).

Before you can use the Cloudera API, you must generate an API access key pair, which consists of an access key ID and a private key. You can generate the API access key through the Cloudera Management Console.

There are multiple ways to access the API:

- CDP CLI client
- Cloudera SDK for Java
- Directly, through a tool such as `cdpcurl`

Getting started with the Cloudera API

Getting started with the Cloudera API involves determining the best method for using the API, generating an API access key, and understanding permissions in the Cloudera API.

API access methods

Cloudera offers a CLI client, and all API commands have a CLI equivalent. See the CLI documentation for more details.

Java programmers might prefer to use the Cloudera SDK for Java. For more information, see the SDK documentation.

Alternatively, you can access API endpoints directly through your chosen HTTP client, such as `curl`. Cloudera offers `cdpcurl`, which is a Python command line tool that you can use to directly make Cloudera API calls, or embed in an application. `cdpcurl` returns JSON output for ease of use. It is based on [awscurl](#) and installation and usage are similar. Like the CDP CLI and SDK, `cdpcurl` has built-in Cloudera request signing to construct the headers required to make an API call. However, if you want to use a different HTTP client, such as `curl`, you can use a script within `cdpcurl` to generate the required headers.

You can also use the Cloudera API service definition files to create your own client-side code. The service definitions are in OpenAPI / Swagger 2.0 format and can be accessed [here](#).

Generating an API access key

A Cloudera user account must have API access credentials (an API access key and private key) to access the Cloudera API through the CLI or other means. To use the CLI client, you configure the Cloudera client with the API access key and private key. To make API calls with `cdpcurl`, you pass the API access key and private key to `cdpcurl`.

Permissions

You are restricted to making API calls that are permissible based upon your user roles and resource roles. For more information on user roles, see the topic *Understanding Roles and Resource Roles* in the Cloudera Management Console documentation.

Related Information

[Getting started with the Cloudera API](#)

Request signing

cdpcurl, the Cloudera SDK, and CDP CLI offer built-in request signing, but if you use a different HTTP client to make an API call, you must generate the required headers.

A Cloudera API call requires a request signature to be passed in the "x-altus-auth" header, along with a corresponding timestamp in the "x-altus-date" header. cdpcurl constructs the headers automatically. However, if you would rather use a different HTTP client, such as ordinary curl, you can use the `cdpvlsign` script within `cdpcurl` to generate these required headers.

You can then parse the header values from the script output and feed them to your preferred client. Note that Cloudera API services will reject calls with timestamps too far in the past, so generate new headers for each call.

For example:

```
$ cdpvlsign -X POST https://api.us-west-1.cdp.cloudera.com/api/v1/environmen
ts2/listEnvironments
Content-Type: application/json
x-altus-date: Fri, 28 Aug 2020 20:38:38 GMT
x-altus-auth: (long string value)
```

The request signing specification is available [here](#).

Cloudera API reference

The Cloudera API reference documentation is available [here](#). Use this documentation to find the desired API endpoint, request parameters, and responses.