

Hadoop Commands Guide

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Overview

All hadoop commands are invoked by the `bin/hadoop` script. Running the `hadoop` script without any arguments prints the description for all commands.

Usage: `hadoop [--config confdir] [--loglevel loglevel] [COMMAND] [GENERIC_OPTIONS] [COMMAND_OPTIONS]`

FIELD	Description
<code>--config confdir</code>	Overwrites the default Configuration directory. Default is <code>\${HADOOP_HOME}/conf</code> .
<code>--loglevel loglevel</code>	Overwrites the log level. Valid log levels are FATAL, ERROR, WARN, INFO, DEBUG, and TRACE. Default is INFO.
GENERIC_OPTIONS	The common set of options supported by multiple commands.
COMMAND_OPTIONS	Various commands with their options are described in this documentation for the Hadoop common sub-project. HDFS and YARN are covered in other documents.

Generic Options

Many subcommands honor a common set of configuration options to alter their behavior:

GENERIC_OPTION	Description
<code>-archives <comma separated list of archives></code>	Specify comma separated archives to be unarchived on the compute machines. Applies only to job.
<code>-conf <configuration file></code>	Specify an application configuration file.
<code>-D <property>=<value></code>	Use value for given property.
<code>-files <comma separated list of files></code>	Specify comma separated files to be copied to the map reduce cluster. Applies only to job.
<code>-fs <file:///> or <hdfs://namenode:port></code>	Specify default filesystem URL to use. Overrides 'fs.defaultFS' property from configurations.
<code>-jt <local> or <resourcemanager:port></code>	Specify a ResourceManager. Applies only to job.
<code>-libjars <comma separated list of jars></code>	Specify comma separated jar files to include in the classpath. Applies only to job.

Hadoop Common Commands

All of these commands are executed from the `hadoop` shell command. They have been broken up into [User Commands](#) and [Administration Commands](#).

User Commands

Commands useful for users of a hadoop cluster.

archive

Creates a hadoop archive. More information can be found at [Hadoop Archives Guide](#).

checknative

Usage: `hadoop checknative [-a] [-h]`

COMMAND_OPTION	Description
<code>-a</code>	Check all libraries are available.
<code>-h</code>	print help

This command checks the availability of the Hadoop native code. See [Native Libraries](#) for more information. By default, this command only checks the availability of `libhadoop`.

classpath

Usage: `hadoop classpath [--glob | --jar <path> | -h | --help]`

COMMAND_OPTION	Description
<code>--glob</code>	expand wildcards
<code>--jar path</code>	write classpath as manifest in jar named <i>path</i>
<code>-h, --help</code>	print help

Prints the class path needed to get the Hadoop jar and the required libraries. If called without arguments, then prints the classpath set up by the command scripts, which is likely to contain wildcards in the classpath entries. Additional options print the classpath after wildcard expansion or write the classpath into the manifest of a jar file. The latter is useful in environments where wildcards cannot be used and the expanded classpath exceeds the maximum supported command line length.

credential

Usage: `hadoop credential <subcommand> [options]`

COMMAND_OPTION	Description
<code>create alias [-provider provider-path] [-strict] [-value credential-value]</code>	Prompts the user for a credential to be stored as the given alias. The <i>hadoop.security.credential.provider.path</i> within the <code>core-site.xml</code> file will be used unless a <code>-provider</code> is indicated. The <code>-strict</code> flag will cause the command to fail if the provider uses a default password. Use <code>-value</code> flag to supply the credential value (a.k.a. the alias password) instead of being prompted.
<code>delete alias [-provider provider-path] [-strict] [-f]</code>	Deletes the credential with the provided alias. The <i>hadoop.security.credential.provider.path</i> within the <code>core-site.xml</code> file will be used unless a <code>-provider</code> is indicated. The <code>-strict</code> flag will cause the command to fail if the provider uses a default password. The command asks for confirmation unless <code>-f</code> is specified

COMMAND_OPTION	Description
list [-provider <i>provider-path</i>] [-strict]	Lists all of the credential aliases The <i>hadoop.security.credential.provider.path</i> within the core-site.xml file will be used unless a -provider is indicated. The -strict flag will cause the command to fail if the provider uses a default password.

Command to manage credentials, passwords and secrets within credential providers.

The CredentialProvider API in Hadoop allows for the separation of applications and how they store their required passwords/secrets. In order to indicate a particular provider type and location, the user must provide the *hadoop.security.credential.provider.path* configuration element in core-site.xml or use the command line option -provider on each of the following commands. This provider path is a comma-separated list of URLs that indicates the type and location of a list of providers that should be consulted. For example, the following path: user:/// ,jceks://file/tmp/test.jceks ,jceks://hdfs@nn1.example.com/my/path/test.jceks

indicates that the current user's credentials file should be consulted through the User Provider, that the local file located at /tmp/test.jceks is a Java Keystore Provider and that the file located within HDFS at nn1.example.com/my/path/test.jceks is also a store for a Java Keystore Provider.

When utilizing the credential command it will often be for provisioning a password or secret to a particular credential store provider. In order to explicitly indicate which provider store to use the -provider option should be used. Otherwise, given a path of multiple providers, the first non-transient provider will be used. This may or may not be the one that you intended.

Providers frequently require that a password or other secret is supplied. If the provider requires a password and is unable to find one, it will use a default password and emit a warning message that the default password is being used. If the -strict flag is supplied, the warning message becomes an error message and the command returns immediately with an error status.

Example: `hadoop credential list -provider jceks://file/tmp/test.jceks`

distcp

Copy file or directories recursively. More information can be found at [Hadoop DistCp Guide](#).

fs

This command is documented in the [File System Shell Guide](#). It is a synonym for `hdfs dfs` when HDFS is in use.

jar

Usage: `hadoop jar <jar> [mainClass] args...`

Runs a jar file.

Use [yarn jar](#) to launch YARN applications instead.

key

Usage: `hadoop key <subcommand> [options]`

COMMAND_OPTION	Description
create <i>keyname</i> [-cipher <i>cipher</i>] [-size <i>size</i>] [-description <i>description</i>] [-attr]	Creates a new key for the name specified by the <i>keyname</i> argument within the provider specified by the -provider argument. The -strict flag will cause the command to fail if the provider uses a default password. You may

COMMAND_OPTION	Description
<i>attribute=value</i> [-provider <i>provider</i>] [-strict] [-help]	specify a cipher with the <code>-cipher</code> argument. The default cipher is currently "AES/CTR/NoPadding". The default keysize is 128. You may specify the requested key length using the <code>-size</code> argument. Arbitrary <code>attribute=value</code> style attributes may be specified using the <code>-attr</code> argument. <code>-attr</code> may be specified multiple times, once per attribute.
roll <i>keyname</i> [-provider <i>provider</i>] [-strict] [-help]	Creates a new version for the specified key within the provider indicated using the <code>-provider</code> argument. The <code>-strict</code> flag will cause the command to fail if the provider uses a default password.
delete <i>keyname</i> [-provider <i>provider</i>] [-strict] [-f] [-help]	Deletes all versions of the key specified by the <i>keyname</i> argument from within the provider specified by <code>-provider</code> . The <code>-strict</code> flag will cause the command to fail if the provider uses a default password. The command asks for user confirmation unless <code>-f</code> is specified.
list [-provider <i>provider</i>] [-strict] [-metadata] [-help]	Displays the keynames contained within a particular provider as configured in <code>core-site.xml</code> or specified with the <code>-provider</code> argument. The <code>-strict</code> flag will cause the command to fail if the provider uses a default password. <code>-metadata</code> displays the metadata.
-help	Prints usage of this command

Manage keys via the KeyProvider. For details on KeyProviders, see the [Transparent Encryption Guide](#).

Providers frequently require that a password or other secret is supplied. If the provider requires a password and is unable to find one, it will use a default password and emit a warning message that the default password is being used. If the `-strict` flag is supplied, the warning message becomes an error message and the command returns immediately with an error status.

NOTE: Some KeyProviders (e.g. `org.apache.hadoop.crypto.key.JavaKeyStoreProvider`) do not support uppercase key names.

NOTE: Some KeyProviders do not directly execute a key deletion (e.g. performs a soft-delete instead, or delay the actual deletion, to prevent mistake). In these cases, one may encounter errors when creating/deleting a key with the same name after deleting it. Please check the underlying KeyProvider for details.

trace

View and modify Hadoop tracing settings. See the [Tracing Guide](#).

version

Usage: `hadoop version`

Prints the version.

CLASSNAME

Usage: `hadoop CLASSNAME`

Runs the class named `CLASSNAME`.

Administration Commands

Commands useful for administrators of a hadoop cluster.

daemonlog

Usage:

```
hadoop daemonlog -getlevel <host:httpport> <classname>
hadoop daemonlog -setlevel <host:httpport> <classname> <level>
```

COMMAND_OPTION	Description
<code>-getlevel <i>host:httpport</i> <i>classname</i></code>	Prints the log level of the log identified by a qualified <i>classname</i> , in the daemon running at <i>host:httpport</i> . This command internally connects to <code>http://<host:httpport>/logLevel?log=<classname></code>
<code>-setlevel <i>host:httpport</i> <i>classname</i> <i>level</i></code>	Sets the log level of the log identified by a qualified <i>classname</i> , in the daemon running at <i>host:httpport</i> . This command internally connects to <code>http://<host:httpport>/logLevel?log=<classname>&level=<level></code>

Get/Set the log level for a Log identified by a qualified class name in the daemon.

```
Example: $ bin/hadoop daemonlog -setlevel 127.0.0.1:50070 org.apache.hadoop
```