

Hortonworks Data Platform for V

System Administration Guide

(May 2, 2014)

Hortonworks Data Platform for Windows : System Administration Guide

Copyright © 2012-2014 Hortonworks, Inc. Some rights reserved.

The Hortonworks Data Platform, powered by Apache Hadoop, is a massively scalable and 100% open source platform for storing, processing and analyzing large volumes of data. It is designed to deal with data from many sources and formats in a very quick, easy and cost-effective manner. The Hortonworks Data Platform consists of the essential set of Apache Hadoop projects including MapReduce, Hadoop Distributed File System (HDFS), HCatalog, Pig, Hive, HBase, Zookeeper and Ambari. Hortonworks is the major contributor of code and patches to many of these projects. These projects have been integrated and tested as part of the Hortonworks Data Platform release process and installation and configuration tools have also been included.

Unlike other providers of platforms built using Apache Hadoop, Hortonworks contributes 100% of our code back to the Apache Software Foundation. The Hortonworks Data Platform is Apache-licensed and completely open source. We sell only expert technical support, [training](#) and partner-enablement services. All of our technology is, and will remain free and open source.

Please visit the [Hortonworks Data Platform](#) page for more information on Hortonworks technology. For more information on Hortonworks services, please visit either the [Support](#) or [Training](#) page. Feel free to [Contact Us](#) directly to discuss your specific needs.



Except where otherwise noted, this document is licensed under
Creative Commons Attribution ShareAlike 3.0 License.
<http://creativecommons.org/licenses/by-sa/3.0/legalcode>

Table of Contents

1. Configuring HDFS Compression	1
2. WebHDFS Administrator Guide	3

1. Configuring HDFS Compression

This document is intended for system administrators who need to configure HDFS compression on Windows platform.

Windows supports `GzipCodec`, `DefaultCodec`, and `BZip2Codec`. Typically, `GzipCodec` is popularly used for HDFS compression.

Ensure that `zlib1.dll` is installed in the `%HADOOP_HOME%\bin` directory on all the nodes of the cluster. Download the HDP `zlib.dll` from [here](#).

Use the following instructions to use `GZipCodec`

- **Option I:** To use `GzipCodec` with a one-time only job:

1. On the NameNode host machine, execute the following commands as `hdfs` user:

```
hadoop jar hadoop-examples-1.1.0-SNAPSHOT.jar sort "-Dmapred.compress.map.output=true" "-Dmapred.map.output.compression.codec=org.apache.hadoop.io.compress.GzipCodec" "-Dmapred.output.compress=true" "-Dmapred.output.compression.codec=org.apache.hadoop.io.compress.GzipCodec" -outKey org.apache.hadoop.io.Text -outValue org.apache.hadoop.io.Text input output
```

- **Option II:** To enable `GzipCodec` as the default compression:

1. Edit the `core-site.xml` file on the NameNode host machine:

```
<property>
  <name>io.compression.codecs</name>
  <value>org.apache.hadoop.io.compress.GzipCodec,org.apache.hadoop.io.compress.DefaultCodec,org.apache.hadoop.io.compress.BZip2Codec</value>
  <description>A list of the compression codec classes that can be used for compression/decompression.</description>
</property>
```

2. Edit `mapred-site.xml` file on the JobTracker host machine:

```
<property>
  <name>mapred.compress.map.output</name>
  <value>true</value>
</property>

<property>
  <name>mapred.map.output.compression.codec</name>
  <value>org.apache.hadoop.io.compress.GzipCodec</value>
</property>

<property>
  <name>mapred.output.compression.type</name>
  <value>BLOCK</value>
</property>
```

3. [Optional] - Enable the following two configuration parameters to enable job output compression.

Edit `mapred-site.xml` file on the Resource Manager host machine:

```
<property>
  <name>mapred.output.compress</name>
  <value>true</value>
</property>

<property>
  <name>mapred.output.compression.codec</name>
  <value>org.apache.hadoop.io.compress.GzipCodec</value>
</property>
```

4. Restart the cluster using instructions provided [here](#).

2. WebHDFS Administrator Guide

Use the following instructions to set up WebHDFS:

1. Set up WebHDFS.

Add the following property to the `hdfs-site.xml` file:

```
<property>
  <name>dfs.webhdfs.enabled</name>
  <value>true</value>
</property>
```

2. Restart the NameNode and DataNode services using the instructions provided [here](#).