

Hortonworks Data Platform for V

System Administration Guide

(Feb 3, 2015)

Hortonworks Data Platform for Windows : System Administration Guide

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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 `zlib1.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](#).