

Hortonworks Data Platform for V

System Administration Guide

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Hortonworks Data Platform for Windows : System Administration Guide

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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](#).