

# mapred-site.xml

MapReduce is one type of application that can run on the Hadoop 2.x framework. MapReduce configuration options are stored in the `/opt/mapr/hadoop/hadoop-2.x.x/etc/hadoop/mapred-site.xml` file and are editable by the `root` user. This file contains configuration information that overrides the default values for MapReduce parameters. Overrides of the default values for core configuration properties are stored in the [MapR Parameters](#) (MapR-Parameters.html) file.

To override a default value for a property, specify the new value within the `<configuration>` tags, using the following format:

```
<property>
  <name> </name>
  <value> </value>
  <description> </description>
</property>
```

## ✓ Configurations for MapReduce Applications

Parameter	Value	Description
mapreduce.framework.name	yarn	Execution framework set to Hadoop YARN.
mapreduce.map.memory.mb	1024	Larger resource limit for maps.
mapreduce.map.java.opts	-Xmx1024M	Larger heap-size for child jvms of maps.
mapreduce.reduce.memory.mb	3072	Larger resource limit for reduces.
mapreduce.reduce.java.opts	-Xmx2560M	Larger heap-size for child jvms of reduces.
mapreduce.task.io.sort.mb	512	Higher memory limit while sorting data for efficiency.
mapreduce.task.io.sort.factor	100	More streams merged at once while sorting files.
mapreduce.reduce.shuffle.parallelcopies	50	Higher number of parallel copies run by reduces to fetch outputs from very large number of maps.

## ✓ Configurations for MapReduce JobHistory Server

Parameter	Value	Description
mapreduce.jobhistory.address	MapReduce JobHistory Server <i>host:port</i>	Default port is 10020.
mapreduce.jobhistory.webapp.address	MapReduce JobHistory Server Web UI <i>host:port</i>	Default port is 19888.

Parameter	Value	Description
mapreduce.jobhistory.intermediate-done-dir	/mr-history/tmp	Directory where history files are written by MapReduce applications.
mapreduce.jobhistory.done-dir	/mr-history/done	Directory where history files are managed by the MapReduce JobHistory Server.
mapreduce.jobhistory.webapp.https.address	Secure MapReduce JobHistory Server Web UI host:port (HTTPS)	Default port is 19890

### ✓ Sample Hadoop 2.x mapred-site.xml File

The following `mapred-site.xml` file defines values for two job history parameters.

```
<configuration>
  <property>
    <name>mapreduce.jobhistory.address</name>
    <value>__HS_IP__:10020</value>
  </property>
  <property>
    <name>mapreduce.jobhistory.webapp.address</name>
    <value>__HS_IP__:19888</value>
  </property>
</configuration>
```