**1. HDFS Ports**

The following table lists the default ports used by the various HDFS services.

| **Table 10.1. HDFS Ports** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
| NameNode WebUI | Master Nodes (NameNode and any back-up NameNodes) | 50070 | http | Web UI to look at current status of HDFS, explore file system | Yes (Typically admins, Dev/Support teams) | dfs.http.address |
| 50470 | https | Secure http service | dfs.https.address |
| NameNode metadata service | Master Nodes (NameNode and any back-up NameNodes) | 8020/9000 | IPC | File system metadata operations | Yes (All clients who directly need to interact with the HDFS) | Embedded in URI specified by fs.default.name |
| DataNode | All Slave Nodes | 50075 | http | DataNode WebUI to access the status, logs etc. | Yes (Typically admins, Dev/Support teams) | dfs.datanode.http.address |
| 50475 | https | Secure http service | dfs.datanode.https.address |
| 50010 |  | Data transfer |  | dfs.datanode.address |
| 50020 | IPC | Metadata operations | No | dfs.datanode.ipc.address |
| Secondary NameNode | Secondary NameNode and any backup Secondary NameNode | 50090 | http | Checkpoint for NameNode metadata | No | dfs.secondary.http.address |

**2. MapReduce Ports**

The following table lists the default ports used by the various MapReduce services.

| **Table 10.2. MapReduce Ports** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
| JobTracker  WebUI | Master Nodes (JobTracker Node and any back-up Job­Tracker node ) | 50030 | http | Web UI for JobTracker | Yes | mapred.job.tracker.http.address |
| JobTracker | Master Nodes (JobTracker Node) | 8021 | IPC | For job submissions | Yes (All clients who need to submit the MapReduce jobs  including Hive, Hive server, Pig) | Embedded in URI specified by mapred.job.tracker |
| Task­Tracker Web UI and Shuffle | All Slave Nodes | 50060 | http | DataNode Web UI to access status, logs, etc. | Yes (Typically admins, Dev/Support teams) | mapred.task.tracker.http.address |
| History Server WebUI |  | 51111 | http | Web UI for Job History | Yes | mapreduce.history.server.http.address |

**3. Hive Ports**

The following table lists the default ports used by the various Hive services.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| [Note] | | **Note** | | | | | |
| Neither of these services are used in a standard HDP installation. | | | | | |
| **Table 10.3. Hive Ports** | | | | | | | | | |
| **Service** | | **Servers** | | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** | |
| Hive Server2 | | Hive Server machine (Usually a utility machine) | | 10000 | thrift | Service for programatically (Thrift/JDBC) connecting to Hive | Yes (Clients who need to connect to Hive either programatically or through UI SQL tools that use JDBC) | ENV Variable HIVE\_PORT | |
| Hive Metastore | |  | | 9083 | thrift |  | Yes (Clients that run Hive, Pig and potentially M/R jobs that use HCatalog) | hive.metastore.uris | |

**4. HBase Ports**

The following table lists the default ports used by the various HBase services.

| **Table 10.4. HBase Ports** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
| HMaster | Master Nodes (HBase Master Node and any back-up HBase Master node) | 60000 |  |  | Yes | hbase.master.port |
| HMaster Info Web UI | Master Nodes (HBase master Node and back up HBase Master node if any) | 60010 | http | The port for the HBase­Master web UI. Set to -1 if you do not want the info server to run. | Yes | hbase.master.info.port |
| Region Server | All Slave Nodes | 60020 |  |  | Yes (Typically admins, dev/support teams) | hbase.regionserver.port |
| Region Server | All Slave Nodes | 60030 | http |  | Yes (Typically admins, dev/support teams) | hbase.regionserver.info.port |
|  | All ZooKeeper Nodes | 2888 |  | Port used by ZooKeeper peers to talk to each other.See [here](http://zookeeper.apache.org/doc/r3.4.3/zookeeperStarted.html#sc_RunningReplicatedZooKeeper) for more information. | No | hbase.zookeeper.peerport |
|  | All ZooKeeper Nodes | 3888 |  | Port used by ZooKeeper peers to talk to each other.See [here](http://zookeeper.apache.org/doc/r3.4.3/zookeeperStarted.html#sc_RunningReplicatedZooKeeper) for more information. |  | hbase.zookeeper.leaderport |
|  |  | 2181 |  | Property from ZooKeeper's config zoo.cfg. The port at which the clients will connect. |  | hbase.zookeeper.property.clientPort |

**5. WebHCat Port**

The following table lists the default ports used by the WebHCat service.

| **Table 10.5. WebHCat Port** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
| WebHCat Server | Any utility machine | 50111 | http | Web API on top of HCatalog and other Hadoop services | Yes | templeton.port |

**6. Ganglia Ports**

The following table lists the default ports used by the various Ganglia services.

| **Table 10.6. Ganglia Ports** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
|  | Ganglia server | 8660/61/62/63 |  | For gmond collectors |  |  |
|  | All Slave Nodes | 8660 |  | For gmond agents |  |  |
|  | Ganglia server | 8651 |  | For ganglia gmetad |  |  |

**7. MySQL Ports**

The following table lists the default ports used by the various MySQL services.

| **Table 10.7. MySQL Ports** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Service** | **Servers** | **Default Ports Used** | **Protocol** | **Description** | **Need End User Access?** | **Configuration Parameters** |
| MySQL | MySQL database server | 3306 |  |  |  |  |