[hadoop能用到的系统端口](http://demo.netfoucs.com/shifenglov/article/details/38583929)

hadoop系统部署时用到不少端口。有的是Web UI所使用的，有的是内部通信所使用的，有的是监控所使用的。实际系统中可能用于防火墙的端口设计。一些内部通信用的端口可能也需要外部能访问。如两个集群的数据对拷。

# 系统

8080，80 用于tomcat和apache的端口。

22 ssh的端口

# Web UI

用于访问和监控Hadoop系统运行状态

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Daemon | 缺省端口 | 配置参数 | 配置参数 | |
| HDFS | Namenode | 50070 | dfs.http.address |
| Datanodes | 50075 | dfs.datanode.http.address |
| Secondarynamenode | 50090 | dfs.secondary.http.address |
| Backup/Checkpoint node\* | 50105 | dfs.backup.http.address |
| MR | Jobracker | 50030 | mapred.job.tracker.http.address |
| Tasktrackers | 50060 | mapred.task.tracker.http.address |
| HBase | HMaster | 60010 | hbase.master.info.port |
| HRegionServer | 60030 | hbase.regionserver.info.port |
| \* hadoop 0.21以后代替secondarynamenode . | | | |

# 内部端口

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Daemon | 缺省端口 | 配置参数 | 协议 | 用于 |
| Namenode | 9000 | fs.default.name | IPC: ClientProtocol | Filesystem metadata operations. |
| Datanode | 50010 | dfs.datanode.address | Custom Hadoop Xceiver: DataNodeand DFSClient | DFS data transfer |
| Datanode | 50020 | dfs.datanode.ipc.address | IPC:InterDatanodeProtocol,ClientDatanodeProtocol ClientProtocol | Block metadata operations and recovery |
| Backupnode | 50100 | dfs.backup.address | 同 namenode | HDFS Metadata Operations |
| Jobtracker | 9001 | mapred.job.tracker | IPC:JobSubmissionProtocol,InterTrackerProtocol | Job submission, task tracker heartbeats. |
| Tasktracker | 127.0.0.1:0\* | mapred.task.tracker.report.address | IPC:TaskUmbilicalProtocol | 和 child job 通信 |
| \* 绑定到未用本地端口 | | | | |

# 相关产品端口

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 产品 | 服务 | 缺省端口 | 参数 | 范围 | 协议 | 说明 |
| HBase | Master | 60000 | hbase.master.port | External | TCP | IPC |
| Master | 60010 | hbase.master.info.port | External | TCP | HTTP |
| RegionServer | 60020 | hbase.regionserver.port | External | TCP | IPC |
| RegionServer | 60030 | hbase.regionserver.info.port | External | TCP | HTTP |
| HQuorumPeer | 2181 | hbase.zookeeper.property.clientPort | TCP | HBase-managed ZK mode |  |
| HQuorumPeer | 2888 | hbase.zookeeper.peerport | TCP | HBase-managed ZK mode |  |
| HQuorumPeer | 3888 | hbase.zookeeper.leaderport | TCP | HBase-managed ZK mode |  |
| REST Service | 8080 | hbase.rest.port | External | TCP |  |
| ThriftServer | 9090 | Pass -p <port> on CLI | External | TCP |  |
| Avro server | 9090 | Pass –port <port> on CLI | External | TCP |  |
| Hive | Metastore | 9083 | External | TCP |  |  |
| HiveServer | 10000 | External | TCP |  |  |
| Sqoop | Metastore | 16000 | sqoop.metastore.server.port | External | TCP |  |
| ZooKeeper | Server | 2181 | clientPort | External | TCP | Client port |
| Server | 2888 | X in server.N=host:X:Y | Internal | TCP | Peer |
| Server | 3888 | Y in server.N=host:X:Y | Internal | TCP | Peer |
| Server | 3181 | X in server.N=host:X:Y | Internal | TCP | Peer |
| Server | 4181 | Y in server.N=host:X:Y | Internal | TCP | Peer |
| Hue | Server | 8888 | External | TCP |  |  |
| Beeswax Server | 8002 | Internal |  |  |  |
| Beeswax Metastore | 8003 | Internal |  |  |  |
| Oozie | Oozie Server | 11000 | OOZIE\_HTTP\_PORT in oozie-env.sh | External | TCP | HTTP |
| Oozie Server | 11001 | OOZIE\_ADMIN\_PORT in oozie-env.sh | localhost | TCP | Shutdown port |

# YARN(Hadoop 2.0)缺省端口

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 产品 | 服务 | 缺省端口 | 配置参数 | 协议 |
| Hadoop YARN | ResourceManager | 8032 | yarn.resourcemanager.address | TCP |
| ResourceManager | 8030 | yarn.resourcemanager.scheduler.address | TCP |
| ResourceManager | 8031 | yarn.resourcemanager.resource-tracker.address | TCP |
| ResourceManager | 8033 | yarn.resourcemanager.admin.address | TCP |
| ResourceManager | 8088 | yarn.resourcemanager.webapp.address | TCP |
| NodeManager | 8040 | yarn.nodemanager.localizer.address | TCP |
| NodeManager | 8042 | yarn.nodemanager.webapp.address | TCP |
| NodeManager | 8041 | yarn.nodemanager.address | TCP |
| MapReduce JobHistory Server | 10020 | mapreduce.jobhistory.address | TCP |
| MapReduce JobHistory Server | 19888 | mapreduce.jobhistory.webapp.address | TCP |

# 第三方产品端口

ganglia用于监控Hadoop和HBase运行情况。kerberos是一种网络认证协议，相应软件由麻省理工开发。

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 产品 | 服务 | 安全 | 缺省端口 | 协议 | 访问 | 配置 |
| Ganglia | ganglia-gmond | 8649 | UDP/TCP | Internal |  |  |
| ganglia-web | 80 | TCP | External | 通过 Apache httpd |  |
| Kerberos | KRB5 KDC Server | Secure | 88 | UDP\*/TCP | External | [kdcdefaults] 或 [realms]段下的kdc\_ports 和 kdc\_tcp\_ports |
| KRB5 Admin Server | Secure | 749 | TCP | Internal | Kdc.conf 文件：[realms]段kadmind\_ |