

1.HDFS 的命令行使用

hdfs 常用的操作命令

hdfs dfs -ls / 查看根路径下面的文件或者文件夹

```
[root@node01 hadoop-2.6.0-cdh5.14.0]# hdfs dfs -ls /
Found 3 items
drwxr-xr-x - root supergroup          0 2019-07-17 19:42 /test
drwxrwx--- - root supergroup          0 2019-07-17 19:49 /tmp
drwxr-xr-x - root supergroup          0 2019-07-17 19:49 /user
```

hdfs dfs -ls /test 查看 test 路径下面的文件或者文件夹

```
[root@node01 hadoop-2.6.0-cdh5.14.0]# hdfs dfs -ls /test
Found 1 items
drwxr-xr-x - root supergroup          0 2019-07-17 19:46 /test/input
You have new mail in /var/spool/mail/root
```

hdfs dfs -ls -R / 递归的查看根路径下面的文件或者文件夹

```
[root@node01 hadoop-2.6.0-cdh5.14.0]# hdfs dfs -ls -R /
drwxr-xr-x - root supergroup          0 2019-07-17 19:55 /slg
drwxr-xr-x - root supergroup          0 2019-07-17 19:55 /slg/jsj
drwxr-xr-x - root supergroup          0 2019-07-17 19:42 /test
drwxr-xr-x - root supergroup          0 2019-07-17 19:46 /test/input
-rw-r--r-- 3 root supergroup      28523 2019-07-17 19:46 /test/input/install.log
drwxrwx--- - root supergroup          0 2019-07-17 19:49 /tmp
drwxrwx--- - root supergroup          0 2019-07-17 19:40 /tmp/hadoop-yarn
drwxrwx--- - root supergroup          0 2019-07-17 19:49 /tmp/hadoop-yarn/staging
drwxrwx--- - root supergroup          0 2019-07-17 19:40 /tmp/hadoop-yarn/staging/history
drwxrwx--- - root supergroup          0 2019-07-17 19:52 /tmp/hadoop-yarn/staging/history/done
drwxrwx--- - root supergroup          0 2019-07-17 19:52 /tmp/hadoop-yarn/staging/history/done/2019
drwxrwx--- - root supergroup          0 2019-07-17 19:52 /tmp/hadoop-yarn/staging/history/done/2019/07
drwxrwx--- - root supergroup          0 2019-07-17 19:52 /tmp/hadoop-yarn/staging/history/done/2019/07/17
drwxrwx--- - root supergroup          0 2019-07-17 19:52 /tmp/hadoop-yarn/staging/history/done/2019/07/17/000000
-rwxrwx--- 3 root supergroup      40152 2019-07-17 19:49 /tmp/hadoop-yarn/staging/history/done/2019/07/17/000000/j
bb_1563363483467_0001-1563364185893-root-QuasiMonteCarlo-1563364196889-2-1-SUCCEEDED-root.root-1563364194709.jhist
-rwxrwx--- 3 root supergroup      140977 2019-07-17 19:49 /tmp/hadoop-yarn/staging/history/done/2019/07/17/000000/j
bb_1563363483467_0001-root.xml
```

hdfs dfs -mkdir -p /slg/jsj 在 hdfs 上面递归的创建文件夹

```
[root@node01 hadoop-2.6.0-cdh5.14.0]# hdfs dfs -mkdir -p /slg/jsj
You have new mail in /var/spool/mail/root
[root@node01 hadoop-2.6.0-cdh5.14.0]# hdfs dfs -ls /
Found 4 items
drwxr-xr-x - root supergroup          0 2019-07-17 19:55 /slg
drwxr-xr-x - root supergroup          0 2019-07-17 19:42 /test
drwxrwx--- - root supergroup          0 2019-07-17 19:49 /tmp
drwxr-xr-x - root supergroup          0 2019-07-17 19:49 /user
```

hdfs dfs -moveFromLocal sourceDir(本地磁盘的文件或者文件夹的路径)

destDir (hdfs 的路径)

```
hdfs dfs -moveFromLocal /root/install.log /
```

```
[root@node01 hadoop-2.6.0-cdh5.14.0]# cd ~
You have new mail in /var/spool/mail/root
[root@node01 ~]# ll
total 44
-rw-----. 1 root root 1429 Jul 15 21:18 anaconda-ks.cfg
-rw-r--r--. 1 root root 28523 Jul 15 21:18 install.log
-rw-r--r--. 1 root root 7570 Jul 15 21:16 install.log.syslog

[root@node01 ~]# hdfs dfs -moveFromLocal /root/install.log /
You have new mail in /var/spool/mail/root
[root@node01 ~]# ll
total 12
-rw-----. 1 root root 1429 Jul 15 21:18 anaconda-ks.cfg
-rw-r--r--. 1 root root 7570 Jul 15 21:16 install.log.syslog
[root@node01 ~]# hdfs dfs -ls /
Found 5 items
-rw-r--r-- 3 root supergroup 28523 2019-07-17 20:09 /install.log
drwxr-xr-x - root supergroup 0 2019-07-17 19:55 /slg
drwxr-xr-x - root supergroup 0 2019-07-17 19:42 /test
drwxrwx--- - root supergroup 0 2019-07-17 19:49 /tmp
drwxr-xr-x - root supergroup 0 2019-07-17 19:49 /user
```

hdfs dfs -mv hdfsSourceDir hdfsDestDir

```
hdfs dfs -mv /install.log /slg
```

```
[root@node01 ~]# hdfs dfs -mv /install.log /slg
You have new mail in /var/spool/mail/root
[root@node01 ~]# hdfs dfs -ls /
Found 4 items
drwxr-xr-x - root supergroup 0 2019-07-17 20:14 /slg
drwxr-xr-x - root supergroup 0 2019-07-17 19:42 /test
drwxrwx--- - root supergroup 0 2019-07-17 19:49 /tmp
drwxr-xr-x - root supergroup 0 2019-07-17 19:49 /user
[root@node01 ~]# hdfs dfs -ls /slg
Found 2 items
-rw-r--r-- 3 root supergroup 28523 2019-07-17 20:09 /slg/install.log
drwxr-xr-x - root supergroup 0 2019-07-17 19:55 /slg/jsj
```

hdfs dfs -put localDir hdfsDir 将本地文件系统的文件或者文件夹放到

hdfs 上面去

```
hdfs dfs -put /root/install.log.syslog /slg
```

```
[root@node01 ~]# hdfs dfs -put /root/install.log.syslog /slg
[root@node01 ~]# hdfs dfs -ls /slg
Found 3 items
-rw-r--r-- 3 root supergroup 28523 2019-07-17 20:09 /slg/install.log
-rw-r--r-- 3 root supergroup 7570 2019-07-17 20:19 /slg/install.log.syslog
drwxr-xr-x - root supergroup 0 2019-07-17 19:55 /slg/jsj
```

hdfs dfs -cat hdfsDir 查看 hdfs 的文件内容

```
hdfs dfs -cat /slg/install.log
```

```
[root@node01 ~]# hdfs dfs -cat /slg/install.log
```

hdfs dfs -cp hdfsSourceDir hdfsDestDir 拷贝文件或者文件夹

```
hdfs dfs -cp /slg/install.log /slg/in2.log
```

```
hdfs dfs -ls /slg
```

```
[root@node01 ~]# hdfs dfs -cp /slg/install.log /slg/in2.log
You have new mail in /var/spool/mail/root
[root@node01 ~]# hdfs dfs -ls /slg
Found 4 items
-rw-r--r--  3 root supergroup      28523 2019-07-17 20:22 /slg/in2.log
-rw-r--r--  3 root supergroup      28523 2019-07-17 20:09 /slg/install.log
-rw-r--r--  3 root supergroup       7570 2019-07-17 20:19 /slg/install.log.syslog
drwxr-xr-x  - root supergroup         0 2019-07-17 19:55 /slg/jsj
```

hdfs dfs -rmr (递归) 删除文件或者文件夹

```
hdfs dfs -rmr /slg/in2.log
```

```
[root@node01 ~]# hdfs dfs -rmr /slg/in2.log
rmr: DEPRECATED: Please use 'rm -r' instead.
19/07/17 20:24:38 INFO fs.TrashPolicyDefault: Moved: 'hdfs://node01:8020/slg/in2.log'
0/user/root/.Trash/Current/slg/in2.log
You have new mail in /var/spool/mail/root
[root@node01 ~]# hdfs dfs -ls /slg
Found 3 items
-rw-r--r--  3 root supergroup      28523 2019-07-17 20:09 /slg/install.log
-rw-r--r--  3 root supergroup       7570 2019-07-17 20:19 /slg/install.log.syslog
drwxr-xr-x  - root supergroup         0 2019-07-17 19:55 /slg/jsj
```

hdfs 的权限管理两个命令:

```
hdfs dfs -chmod -R 777 /xxx
```

```
[root@node01 ~]# hdfs dfs -ls /test
Found 1 items
drwxr-xr-x  - root supergroup         0 2019-07-17 19:46 /test/input
```

```
hdfs dfs -chmod -R 777 /test
```

```
[root@node01 ~]# hdfs dfs -chmod -R 777 /test
You have new mail in /var/spool/mail/root
[root@node01 ~]# hdfs dfs -ls /test
Found 1 items
drwxrwxrwx  - root supergroup         0 2019-07-17 19:46 /test/input
```

2.hdfs 的高级使用命令

hdfs 的安全模式

安全模式是 HDFS 所处的一种特殊状态，在这种状态下，文件系统只接受读数据请求，而不接受删除、修改等变更请求。在 NameNode 主节点启动时，HDFS 首先进入安全模式，DataNode 在启动的时候会向 namenode 汇报可用的 block 等状态，当整个系统达到安全标准时，HDFS 自动离开安全模式。如果 HDFS 出于安全模式下，则文件 block 不能进行任何的副本复制操作，因此达到最小的副本数量要求是基于 datanode 启动时的状态来判定的，启动时不会再做任何复制(从而达到最小副本数量要求)，hdfs 集群刚启动的时候，默认 30S 钟的时间是出于安全期的，只有过了 30S 之后，集群脱离了安全期，然后才可以对集群进行操作

hdfs dfsadmin -safemode

```
[root@node01 ~]# hdfs dfsadmin -safemode
Usage: hdfs dfsadmin [-safemode enter | leave | get | wait]
You have new mail in /var/spool/mail/root
[root@node01 ~]#
[root@node01 ~]# hdfs dfsadmin -safemode get
Safe mode is OFF
```