

Under replicated BP-1644312318-10.255.239.50-1476701596879:blk_1073742547_1723.

Target Replicas is 3 but found 2 replica(s).

Details in Cloudera Manager

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Under-Replicated Blocks (Rinzier , HDFS)

Test of whether HDFS has too many under-replicated blocks.

Bad : 696 under replicated blocks in the cluster. 696 total blocks in the cluster. Percentage under replicated blocks: 100.00%. Critical threshold: 95.00%.

Actions

- [Change Under-replicated Block Monitoring Thresholds](#) for this service

Advice

This is an HDFS service-level health test that checks that the number of under-replicated blocks does not rise above some percentage of the cluster's total blocks.

A failure of this health test may indicate a loss of DataNodes. Use the HDFS fsck command to identify which files contain under-replicated blocks.

This test can be configured using the **Under-replicated Block Monitoring Thresholds** HDFS service-wide monitoring setting.

1)Check status of each node

```
-bash-4.2$ hadoop dfsadmin -report
```

```
DEPRECATED: Use of this script to execute hdfs command is deprecated.  
Instead use the hdfs command for it.
```

```
Configured Capacity: 106068868302 (98.78 GB)
```

```
Present Capacity: 86227573966 (80.31 GB)
```

```
DFS Remaining: 85054864590 (79.21 GB)
```

```
DFS Used: 1172709376 (1.09 GB)
```

```
DFS Used%: 1.36%
```

```
Under replicated blocks: 696
```

```
Blocks with corrupt replicas: 0
```

```
Missing blocks: 0
```

```
Missing blocks (with replication factor 1): 0
```

```
-----
```

```
Live datanodes (2):
```

```
Name: 10.255.239.51:50010 (CloudData)
```

```
Hostname: CloudData
```

```
Rack: /default
```

```
Decommission Status : Normal
```

```
Configured Capacity: 49198587495 (45.82 GB)
```

```
DFS Used: 586354688 (559.19 MB)
```

```
Non DFS Used: 9678434304 (9.01 GB)
```

```
DFS Remaining: 38933798503 (36.26 GB)
```

```
DFS Used%: 1.19%
```

DFS Remaining%: 79.14%
Configured Cache Capacity: 4294967296 (4 GB)
Cache Used: 0 (0 B)
Cache Remaining: 4294967296 (4 GB)
Cache Used%: 0.00%
Cache Remaining%: 100.00%
Xceivers: 2
Last contact: Tue Oct 18 09:39:31 EEST 2016

Name: 10.255.239.52:50010 (CloudMan)
Hostname: CloudMan
Rack: /default
Decommission Status : Normal
Configured Capacity: 56870280807 (52.96 GB)
DFS Used: 586354688 (559.19 MB)
Non DFS Used: 10162860032 (9.46 GB)
DFS Remaining: 46121066087 (42.95 GB)
DFS Used%: 1.03%
DFS Remaining%: 81.10%
Configured Cache Capacity: 4294967296 (4 GB)
Cache Used: 0 (0 B)
Cache Remaining: 4294967296 (4 GB)
Cache Used%: 0.00%
Cache Remaining%: 100.00%
Xceivers: 2
Last contact: Tue Oct 18 09:39:31 EEST 2016

2) Check locations of file blocks

```
hadoop fsck / -files -locations
```

3) Check locations of file blocks containing rack information

```
hadoop fsck / -files -blocks racks
```

4) Script for changing the replication to 2

```
#!/bin/bash
CWD="/usr/bin/hadoop"
REPLICA=2
for hfile in $(          $CMD fsck / | grep 'Under replicated' | awk -F':' '{print $1}')
do
    echo "Changing replication in $hfile :" ;
    ${CWD} fs -setrep ${REPLICA} $hfile;
done
~
```

5) Check if it works

```
-bash-4.2$ hadoop dfsadmin -report | grep 'Under replicated blocks'
```

Under replicated blocks: 239

```
-bash-4.2$
```

Number keeps decreasing. Success! ☺