Configuring the Number of Storage Pools per Instance

As you add MapR Filesystem instances, MapR assigns SPs to them. If MapR Filesystem instances are removed, the SPs assigned to those instances are reallocated among the remaining live MapR Filesystem instances. By default, the value is 1, which implies that there is only 1 SP for all instances. You can re-configure the number of SPs per instance globally or at the node-level.

Note: If the number of MapR Filesystem instances is not as configured, the Instance Mismatch Alarm (../ReferenceGuide/NodeAlarms-InstanceMismatchAlarm.html) will be raised. If the alarm is raised on a:

- CLDB node, restart warden by running the following command:

```
service mapr-warden restart
```

- Non-CLDB node, restart file server by running the following command:

```
maprcli node services -nodes <node-ip> -fileserver restart
```

Global Configuration

If you configure globally, the configuration will be applied to all the nodes in the cluster. Make the following change only on homogeneous clusters (that is, when all nodes in the cluster have the same type of disks and the stripe width of the disks is the same):

1. Run the following command:

```
maprcli config save -values {multimfs.numsps.perinstance:3}
```

   The default value of this parameter is 0. Suppose a node reports 9 SPs:
   - For a value of 3, the node would need to start 3 instances.
   - For a value of 5, the node would need to start 2 instances.

   For clusters with fast SSDs, this can be set to 1.

   Note: On AWS nodes with HDD, set the `multimfs.numsps.perinstance` parameter value to 50 to use a single instance.

2. Restart Warden in every node for the configuration change to take effect.

Node-level Configuration

At the node level, you can configure different number of instances for each node in the cluster. To change the number of SPs per instance:

1. Run the following command:

```
maprcli node modify -nodes <nodename> -numSpsPerInstance <n>
```

   The number of instances changes automatically when new SPs are created.

2. Restart Warden on the nodes where the configuration has changed.