



## **Retire node1**

### AFF and FAS Controller Upgrade

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# Retire node1

To retire node1, you need to disable the HA pair with node2, shut node1 down properly, and remove it from the rack or chassis.

## Steps

1. Verify the number of nodes in the cluster:

```
cluster show
```

The system displays the nodes in the cluster, as shown in the following example:

```
cluster::> cluster show
Node                Health  Eligibility
-----
node1               true   true
node2               true   true
2 entries were displayed.
```

2. Disable storage failover, as applicable:

If the cluster is...	Then...
A two-node cluster	<ol style="list-style-type: none"><li>a. Disable cluster high availability by entering the following command on either node: <pre>cluster ha modify -configured false</pre></li><li>a. Disable storage failover: <pre>storage failover modify -node &lt;node1&gt; -enabled false</pre></li></ol>
A cluster with more than two nodes	<p>Disable storage failover:</p> <pre>storage failover modify -node &lt;node1&gt; -enabled false</pre>

3. Verify that storage failover was disabled:

```
storage failover show
```

The following example shows the output of the `storage failover show` command when storage failover has been disabled for a node:

```

cluster::> storage failover show
Node           Partner           Takeover
-----
Possible State Description
-----
node1          node2             false      Connected to node2, Takeover
failover is    is not possible: Storage
              disabled
node2          node1             false      Node owns partner's aggregates
as part       of the nondisruptive controller
upgrade      procedure. Takeover is not
possible:    Storage failover is disabled
2 entries were displayed.

```

4. Verify the data LIF status:

```
network interface show -role data -curr-node <node2> -home-node <node1>
```

Look in the **Status Admin/Oper** column to see if any LIFs are down. If any LIFs are down, consult the [Troubleshoot](#) section.

5. Take one of the following actions:

If the cluster is...	Then...
A two-node cluster	Go to <a href="#">Step 6</a> .
A cluster with more than two nodes	Go to <a href="#">Step 8</a> .

6. Access the advanced privilege level on either node:

```
set -privilege advanced
```

7. Verify that the cluster HA has been disabled:

```
cluster ha show
```

The system displays the following message:

```
High Availability Configured: false
```

If cluster HA has not been disabled, repeat [Step 2](#).

8. Check whether node1 currently holds epsilon:

```
cluster show
```

Because there is the possibility of a tie in a cluster that has an even number of nodes, one node has an extra fractional voting weight called epsilon. Refer to [References](#) to link to the *System Administration Reference* for more information.



If you have a four-node cluster, epsilon might be on a node in a different HA pair in the cluster.

The following example shows that node1 holds epsilon:

```
cluster::*> cluster show

Node                Health  Eligibility  Epsilon
-----
node1                true    true         true
node2                true    true         false
```

9. If node1 holds epsilon, then mark epsilon `false` on the node so that it can be transferred to the node2:

```
cluster modify -node <node1> -epsilon false
```

10. Transfer epsilon to node2 by marking epsilon `true` on node2:

```
cluster modify -node <node2> -epsilon true
```

11. Verify that the change to node2 occurred:

```
cluster show
```

```
cluster::*> cluster show

Node                Health  Eligibility  Epsilon
-----
node1                true    true         false
node2                true    true         true
```

The epsilon for node2 should now be true and the epsilon for node1 should be false.

12. Verify whether the setup is a two-node switchless cluster:

```
network options switchless-cluster show
```

```
cluster::*> network options switchless-cluster show  
  
Enable Switchless Cluster: false/true
```

The value of this command must match the physical state of the system.

13. Return to the admin level:

```
set -privilege admin
```

14. Halt node1 from the node1 prompt:

```
system node halt -node <node1>
```



**Attention:** If node1 is in same chassis as node2, do not power off the chassis by using the power switch or by pulling the power cable. If you do so, node2, which is serving data, will go down.

15. When the system prompts you to confirm that you want to halt the system, enter `y`.

The node stops at the boot environment prompt.

16. When node1 displays the boot environment prompt, remove it from the chassis or the rack.

You can decommission node1 after the upgrade is completed. See [Decommission the old system](#).

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