**Maintenance (Add/Remove/Replace Cluster Nodes)**

Maintenance Mode tells the cluster to go to a hands-off mode, and not start or stop any services until told otherwise. When maintenance mode is completed, the cluster does a sanity check of the current state of any services, and then stops or starts any that need it.

Example:

[Raw](https://access.redhat.com/solutions/3018461)

# pcs property set maintenance-mode=true

To move back, change the value to false as :

[Raw](https://access.redhat.com/solutions/3018461)

# pcs property set maintenance-mode=false

Controlled (Planned) removal

**1. Disable the node**

pcs cluster disable dwauslhacmppoc012cl

**2. Remove the node**

pcs cluster node delete dwauslhacmppoc012cl

**3. Verify status of removed node**

pcs status

Controlled (Planned) add - for a node that is already authorized to the cluster

**1. Add the node**

pcs cluster node add dwauslhacmppoc012cl

**2. Enable the node**

pcs cluster enable dwauslhacmppoc012cl

**2. Start the node**

pcs cluster start dwauslhacmppoc012cl

**3. Verify status of added node**

pcs status or pcs status nodes

Controlled (Planned or UnPlanned) replace - for a node that is NOT already authorized to the cluster.

NOTE: Make sure all packages are installed first on new node.

**1. Authorize the node**

pcs cluster auth dwauslhacmppoc011cl

**1. Add the node**

pcs cluster node add dwauslhacmppoc011cl

**2. Enable the node**

pcs cluster enable dwauslhacmppoc011cl

**2. Start the node**

pcs cluster start dwauslhacmppoc011cl

**3. Verify status of added node**

pcs status or pcs status nodes