

# Redundancy - Installing PCS Cluster

PCS Cluster is required for:

- The role LB (Load Balancer), if two load balancers are used for redundancy
- The role STORE (file storage), if two file stores are setup using DRBD for redundancy

If the system does not contain redundancy, do not install this.

## Install PCS Services (Both nodes)

Install the PCS packages:

### Install packages

```
yum -y install pacemaker pcs resource-agents fence-agents-all
systemctl enable pcsd
systemctl enable corosync
systemctl enable pacemaker
systemctl start pcsd.service
```

## Disable Managed Services (Both nodes)

Disable smb since this will be managed by pacemaker:

### Disable Managed Services

```
systemctl disable smb
```

## Configure the Firewall (Both nodes)

Next configure the firewall for ha services:

### Configure firewall

```
firewall-cmd --zone=public --add-service=high-availability --permanent
firewall-cmd --reload
```

## Change user password (Both nodes)

Change the password of the hacluster user (replace <password> with the chosen password):

### Setup hosts and create user and password

```
echo <password> | passwd --stdin hacluster
```

## Configuration (Only on one node!)

Next configure the names of the machines and the virtual IP address which will be shared in the cluster:

### Setup hosts and create user and password

```
KE_HOST1=uk-acd-store1  
KE_HOST2=uk-acd-store2
```

## Cluster Configuration (Only on one node!)

Now configure the cluster and set some basic options - replace <password> with the chosen password:

### Configure cluster

```
pcs cluster auth ${KE_HOST1} ${KE_HOST2} -u hacluster -p <password> --force  
pcs cluster setup --force --name portal ${KE_HOST1} ${KE_HOST2}  
pcs cluster enable --all  
pcs cluster start --all  
pcs property set stonith-enabled=false  
pcs property set no-quorum-policy=ignore  
pcs resource defaults migration-threshold=1
```

## Test

Check the results on both machines:

## Test

```
pcs status
```

```
# It might take a little time for the cluster to come online. Run the above command, until the cluster comes online on both nodes.
```

```
-->
```

```
Cluster name: portal
```

```
Stack: corosync
```

```
Current DC: uk-acd-store2 (version 1.1.16-12.el7_4.8-94ff4df) - partition with quorum
```

```
Last updated: Mon Mar 19 15:24:25 2018
```

```
Last change: Mon Mar 19 15:24:20 2018 by hacluster via crmd on uk-acd-store2
```

```
2 nodes configured
```

```
0 resources configured
```

```
Online: [ uk-acd-store1 uk-acd-store2 ]
```

```
No resources
```

```
Daemon Status:
```

```
corosync: active/enabled
```

```
pacemaker: active/enabled
```

```
pcsd: active/enabled
```