

# FW CNaas HA-setup (cluster)

## Description

Firewalls can be configured to operate in cluster mode, where a pair of devices can be connected together and configured to operate like a single device to provide high availability.

When configured as a chassis cluster, the two nodes back up each other, with one node acting as the primary device and the other as the secondary device, ensuring stateful failover of processes and services in the event of system or hardware failure.

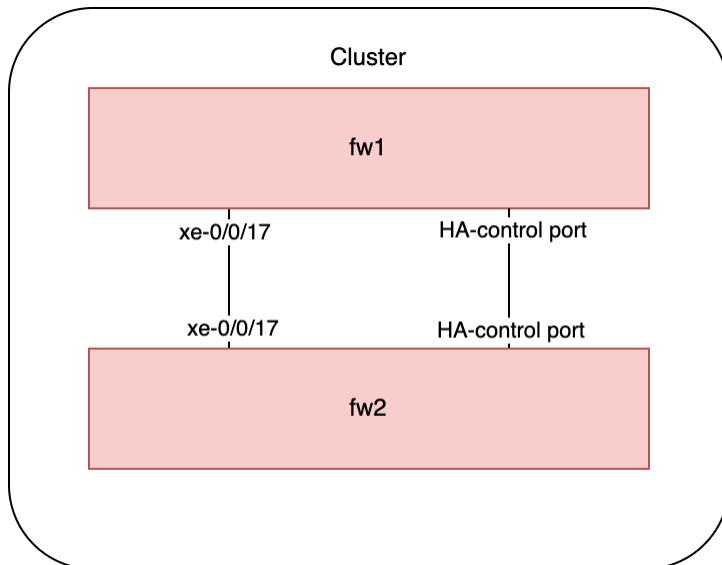
If the primary device fails, the secondary device takes over processing of traffic.

When logged in to the firewalls, it will pretty much look and act as a single firewall, almost all configuration is done on the primary and it is then replicated to the secondary automatically.

## Port names

The ports on the first device will be called as usual (ge-0/0/0), but the ports on the second device will start on 7 instead of 0 (on a SRX 1500), so ge-0/0/0 on the second device will be ge-7/0/0.

## Cabling



## Useful commands

```
#> show chassis cluster status
Monitor Failure codes:
CS Cold Sync monitoring FL Fabric Connection monitoring
GR GRES monitoring HW Hardware monitoring
IF Interface monitoring IP IP monitoring
LB Loopback monitoring MB Mbuf monitoring
NH Nexthop monitoring NP NPC monitoring
SP SPU monitoring SM Schedule monitoring
CF Config Sync monitoring RE Relinquish monitoring
IS IRQ storm
```

```
Cluster ID: 1
Node Priority Status Preempt Manual Monitor-failures
```

```
Redundancy group: 0 , Failover count: 1
node0 255 primary no yes None
node1 1 secondary no yes None
```

```
Redundancy group: 1 , Failover count: 3
node0 100 primary yes no None
node1 1 secondary yes no None
```

```

> show chassis cluster interfaces
Control link status: Up

Control interfaces:
Index Interface Monitored-Status Internal-SA Security
0      em0      Up      Disabled      Disabled

Fabric link status: Up

Fabric interfaces:
Name      Child-interface      Status      Security
          (Physical/Monitored)
fab0      xe-0/0/17      Up / Up      Disabled
fab0
fab1      xe-7/0/17      Up / Up      Disabled
fab1

Redundant-ethernet Information:
Name      Status Redundancy-group
reth0     Up      1

Redundant-pseudo-interface Information:
Name      Status Redundancy-group
lo0       Up      0

Interface Monitoring:
Interface Weight      Status      Redundancy-group
(Physical/Monitored)
xe-7/0/19 255      Up / Up      1
xe-0/0/19 255      Up / Up      1

> show chassis cluster information
node0:
-----
Redundancy Group Information:

Redundancy Group 0 , Current State: primary, Weight: 255

Time From To Reason
May 25 11:44:22 hold secondary Hold timer expired
May 25 11:47:54 secondary primary Remote is in secondary hold

Redundancy Group 1 , Current State: primary, Weight: 255

Time From To Reason
May 25 11:44:22 hold secondary Hold timer expired
May 25 11:46:17 secondary primary Remote is in secondary hold
May 25 15:21:08 primary secondary-hold Monitor failed: IF
May 25 15:21:09 secondary-hold secondary Ready to become secondary
May 25 15:21:54 secondary primary Remote is in secondary hold

Chassis cluster LED information:
Current LED color: Green
Last LED change reason: No failures

node1:
-----
Redundancy Group Information:

Redundancy Group 0 , Current State: secondary, Weight: 255

Time From To Reason
May 25 12:02:36 hold secondary Hold timer expired

Redundancy Group 1 , Current State: secondary, Weight: 255

Time From To Reason
May 25 12:02:36 hold secondary Hold timer expired
May 25 15:21:08 secondary primary Remote yield (1/0), due to IF failures
May 25 15:21:54 primary secondary-hold Preempt (1/100)
May 25 15:21:55 secondary-hold secondary Ready to become secondary

Chassis cluster LED information:
Current LED color: Green
Last LED change reason: No failures

```

## Swap master

The firewalls have a master and a backup node.

If you want to swap master for some reason do:

```
request chassis cluster failover node node-number redundancy-group redundancy-group-number
```