

# HA Upgrade Guide

Throughout the the following examples, we have 2 SBCs, dut-ha1 and dut-ha2 in High Availability setup.

Initially, dut-ha1 is running as a [MASTER] and dut-ha2 is running as a [SLAVE].

Firmware Update must be performed on both machines and they must be running the same firmware version initially.

- Step 1 - Copy configuration from Master dut-ha1 to Slave dut-ha2
- Step 2 - Upgrading the Slave dut-ha2
- Step 3 - Migrate SBC service from dut-ha1 to dut-ha2
- Step 4 - Upgrading the slave dut-ha1
- Step 5 - Copy configuration from Master dut-ha2 to Slave dut-ha1

SBC update is always performed on the [SLAVE] SBC only. This minimize the possible service downtime.

## Step 1 - Copy configuration from Master dut-ha1 to Slave dut-ha2

On the [MASTER] dut-ha1 perform a Copy configuration to Slave action, if configuration has not been copied to Slave.

Configuration has not been copied to Slave Copy configuration to Slave

Copy configuration to Slave Generate Access Key Reset UUID and Access Key

**High Availability**

Dedicated Network / Interface eth2 (10.254.254.252/30)  
Backup Network / Interface eth0 (192.168.77.0/24)  
Operational Mode Active/passive

Edit

**Peer nodes**

Showing 1 to 1 of 1 entries

Name	UUID	Fingerprint	
dut-ha2.qa.sangoma.local	a85db652-5ef0-accb-5409-abad97f743cf	21:c6:b1:52:f9:bc:3d:b5:47:2d:e8:26:ec:b2:ff:84	<span>Modify</span> <span>Delete</span>

Add

## Step 2 - Upgrading the Slave dut-ha2

The first step is to stop the Slave Cluster Service. Please be reminded that HA control must be performed on the [MASTER] WebUI, in this case dut-ha1.

**IMPORTANT:** High Availability control management must be performed from [MASTER] WebUI.

1. Point your browser to access the [MASTER] dut-ha1 WebUI and go to the **Control Panel** page.
2. Stop the [SLAVE] dut-ha2 by selecting "Stop cluster service" for dut-ha2 and click the "Execute" button. Follow the on screen instructions to complete the action.

Home / Overview / Dashboard / Control Panel dut-ha1.qa.sangoma.local MASTER

Cluster Nodes			
Nodes	Status	Notes	
dut-ha1.qa.sangoma.local (localhost) [MASTER]	ONLINE		Stop cluster service <input type="button" value="Execute"/>
dut-ha2.qa.sangoma.local	ONLINE		Stop cluster service <input type="button" value="Execute"/>
<input type="button" value="Stop all nodes"/>			

Confirm that **[SLAVE] dut-ha2** is OFFLINE

Home / Overview / Dashboard / Control Panel dut-ha1.qa.sangoma.local MASTER

Cluster Nodes			
Nodes	Status	Notes	
dut-ha1.qa.sangoma.local (localhost) [MASTER]	ONLINE		Stop cluster service <input type="button" value="Execute"/>
dut-ha2.qa.sangoma.local	OFFLINE		Start cluster service <input type="button" value="Execute"/>
<input type="button" value="Start all nodes"/> <input type="button" value="Stop all nodes"/>			

We are ready to upgrade **dut-ha2** once its cluster service is stopped. The firmware update must be performed via the WebUI of the target machine **dut-ha2**.

**IMPORTANT:** Firmware update must be performed from the WebUI of the target machine.

Please switch your browser to point to **dut-ha2** WebUI and follow the [Standalone Upgrade Guide](#). At the end of the upgrade procedure, the machine will reboot.

Login into the **[SLAVE] dut-ha2** Web UI and verify the new version.

**IMPORTANT:** After reboot the SBC, do NOT apply configuration on **[SLAVE]**

Please switch your browser back to **[MASTER] dut-ha1** WebUI and start the **[SLAVE] dut-ha2** cluster service.

### Step 3 - Migrate SBC service from dut-ha1 to dut-ha2

After **dut-ha2** has been updated to a new version. We can now have **dut-ha2** to take over the SBC service.

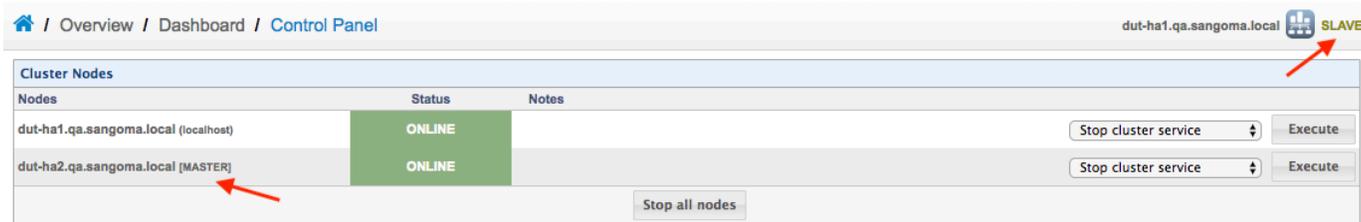
From **[MASTER] dut-ha1** WebUI, select "Migrate to this node" for **dut-ha2** and click on the "Execute" button.

Follow the on screen instruction to complete the action.

Home / Overview / Dashboard / Control Panel dut-ha1.qa.sangoma.local MASTER

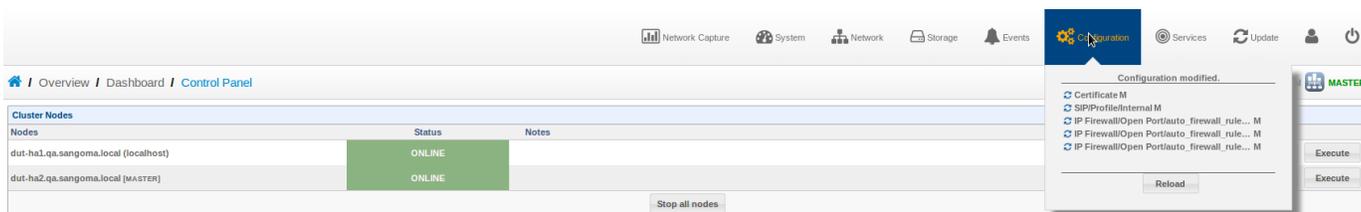
Cluster Nodes			
Nodes	Status	Notes	
dut-ha1.qa.sangoma.local (localhost) [MASTER]	ONLINE		Stop cluster service <input type="button" value="Execute"/>
dut-ha2.qa.sangoma.local	ONLINE		Migrate to this node <input type="button" value="Execute"/>
<input type="button" value="Stop all nodes"/>			

Once the migration is completed, confirm that **dut-ha1** has change status to **[SLAVE]** and **dut-ha2** becomes the **[MASTER]**.



You have successfully migrated SBC service to **dut-ha2**.

Apply configuration on the **[MASTER] dut-ha2**.



**IMPORTANT:** Do NOT perform a HA Copy configuration to Slave on the **[MASTER]**.

## Step 4 - Upgrading the slave dut-ha1

Once **dut-ha1** becomes a **[SLAVE]**, we can now update firmware on **dut-ha1**.

Please following the same procedure in section "**Upgrading the slave dut-ha2**".

**Note:** Please be reminded that we must first "Stop cluster service" for **dut-ha1** from the **[MASTER] dut-ha2** WebUI.

After the upgrade reboot on **[SLAVE] dut-ha1**, login into the Web UI and verify the new version.

**IMPORTANT:** After reboot the SBC, do NOT apply configuration on **[SLAVE]**

Please switch your browser back to **[MASTER] dut-ha2** WebUI and start the **[SLAVE] dut-ha1** cluster service.

## Step 5 - Copy configuration from Master dut-ha2 to Slave dut-ha1

On the **[MASTER] dut-ha2**, verify that **[SLAVE] dut-ha1** cluster service is online.

Navigate to HA Configuration page and copy configuration to **[SLAVE] dut-ha1**.