



Configuring APIC High Availability

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About Cold Standby for APIC Cluster

The Cold Standby functionality for an APIC cluster enables you to operate the APICs in a cluster in an Active/Standby mode. In an APIC cluster, the designated active APICs share the load and the designated standby APICs can act as a replacement for any of the APICs in an active cluster.

As an admin user, you can set up the Cold Standby functionality when the APIC is launched for the first time. We recommend that you have at least three active APICs in a cluster, and one or more standby APICs. As an admin user, you can initiate the switch over to replace an active APIC with a standby APIC.

Important Notes

- The standby APIC is automatically updated with firmware updates to keep the backup APIC at same firmware version as the active cluster.
- During an upgrade process, once all the active APICs are upgraded, the standby APIC is also be upgraded automatically.
- Temporary IDs are assigned to standby APICs. After a standby APIC is switched over to an active APIC, a new ID is assigned.
- Admin login is not enabled on standby APIC. To troubleshoot Cold Standby, you must log in to the standby using SSH as *rescue-user*.
- During switch over the replaced active APIC is powered down, to prevent connectivity to the replaced APIC.
- Switch over fails under the following conditions:
 - If there is no connectivity to the standby APIC.
 - If the firmware version of the standby APIC is not the same as that of the active cluster.
- After switching over a standby APIC to active, if it was the only standby, you must configure a new standby.
- The following limitations are observed for retaining out of band address for standby APIC after a fail over.

- Standby (new active) APIC may not retain its out of band address if more than 1 active APICs are down or unavailable.
- Standby (new active) APIC may not retain its out of band address if it is in a different subnet than active APIC. This limitation is only applicable for APIC release 2.x.
- Standby (new active) APIC may not retain its IPv6 out of band address. This limitation is not applicable starting from APIC release 3.1x.
- Standby (new active) APIC may not retain its out of band address if you have configured non Static OOB Management IP address policy for replacement (old active) APIC.



Note In case you observe any of the limitations, in order to retain standby APICs out of band address, you must manually change the OOB policy for replaced APIC after the replace operation is completed successfully.

- We recommend keeping standby APICs in same POD as the active APICs it may replace.
- There must be three active APICs in order to add a standby APIC.
- The standby APIC does not participate in policy configuration or management.
- No information is replicated to standby controllers, including admin credentials.

Switching Over Active APIC with Standby APIC Using CLI

Use this procedure to switch over an active APIC with a standby APIC.

Procedure

	Command or Action	Purpose
Step 1	replace-controller replace <i>ID number</i> Backup <i>serial number</i> Example: <pre>apic1#replace-controller replace 2 FCH1804V27L Do you want to replace APIC 2 with a backup? (Y/n): Y</pre>	Replaces an active APIC with an standby APIC.
Step 2	replace-controller reset <i>ID number</i> Example: <pre>apic1# replace-controller reset 2 Do you want to reset failover status of APIC 2? (Y/n): Y</pre>	Resets fail over status of the active controller.