



Polycom®

Resolve Reboot Loop of Polycom® RealPresence Trio™ Systems on Cisco CDP Switches

Technical Notification 1291

RealPresence Trio 8800 systems using Polycom UC Software 5.4.2AA enter a reboot loop when connected to Cisco switches that support IEEE 802.3af power over Ethernet (PoE) and have Cisco Discovery Protocol (CDP) enabled and Link Layer Discovery Protocol (LLDP) disabled. This issue does not exist with any other UC Software version or switches other than Cisco. This technical notification offers several options to resolve the issue.

This engineering advisory applies to the following Polycom phones:

- RealPresence Trio 8800 system

Issue

When connected to a Cisco switch supporting IEEE 802.3af (PoE) with CDP enabled and LLDP disabled, RealPresence Trio running UC Software 5.4.2AA attempts to negotiate 30W of IEEE 802.3at (PoE+) power from the switch using CDP. Rather than offering 15W of PoE power, the switch continuously terminates and restarts power to the RealPresence Trio port. The latest UC Software 5.4.2AB does not use CDP to negotiate PoE requirements and instead respects the hardware signature of the connected port.

Resolution

To resolve this issue, Polycom offers the following options. All UC Software and RealPresence Trio solution documentation is available at [RealPresence Trio](#) on Polycom Support.

Choose one of the following resolution options:

- Temporarily enable LLDP on the switch port and RealPresence Trio system (LLDP is enabled on Trio by default), then update the RealPresence Trio system to UC Software 5.4.2AB using your preferred update method, and disable LLDP after the update.
- Use USB provisioning to update the RealPresence Trio system to UC Software 5.4.2AB. For instructions on updating software with a USB, see the section *Provision and Update with a USB Device* in the RealPresence Trio Administrator's Guide at [RealPresence Trio](#).
- Power the RealPresence Trio with the optional Power Kit accessory (power injector), then update to UC Software 5.4.2AB using your preferred update method, and resume using PoE on the switch after the software update.
- Temporarily disable CDP on the switch port, then update the RealPresence Trio to UC Software 5.4.2AB using your preferred update method, and re-enable CDP after the software update.



Note: RealPresence Trio VLANs

If you are using Voice virtual local area networks (VLANs), did not statically set the VLAN on the RealPresence Trio, and disabled CDP, the RealPresence Trio system will use the native VLAN for that port instead of the Voice VLAN.

Workaround

While Polycom recommends upgrading to UC Software 5.4.2AB, Polycom UC Software 5.4.2AA can be used in the problem environment if the 'PoE PSE Power' and 'USB Charging' features are disabled. Polycom recommends that you complete this configuration change before upgrading to 5.4.2AA.

You can disable the PoE PSE Power feature from the RealPresence Trio system's Web Configuration Utility: go to **Settings > Power Management > Power over Ethernet > Power Sourcing Equipment > Disable > Save**. You can also disable the PoE PSE Power feature by adding the configuration parameter `poe.pse.enabled="0"` to your configuration file.

USB Charging is disabled by default. If it is enabled in your environment you can disable it from the RealPresence Trio system's Web Configuration Utility: go to **Settings > Power Management > USB > USB Charging > Disable > Save**. You can also disable the USB Charging feature by adding the configuration parameter `usb.charging.enabled="0"` to your configuration file.

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