

STANDARD OPERATING PROCEDURE

CIMC Factory Reset & BIOS Configuration — Cisco UCS C-Series Node Server

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Applies To:	Cisco UCS C-Series Node Servers with CIMC

Purpose

This SOP provides step-by-step instructions for performing a CIMC factory reset and configuring BIOS settings on Cisco UCS C-Series node servers, including enabling UEFI, configuring X550 network port boot options, and booting into the Aiken environment.

Scope

Applicable to Cisco UCS C-Series node servers equipped with CIMC (Cisco Integrated Management Controller) and Intel X550 network adapters requiring initial configuration or reset.

Prerequisites

- Physical or KVM console access to the server
- Server is powered on and at the POST/boot screen
- Required credentials for CIMC and BIOS access (if previously set)
- Knowledge of which X550 port is designated for Boot Option 1 vs Boot Option 2

Procedure

Step 1: Boot into CIMC Utility

- During server POST/boot, press F8 when prompted to enter the CIMC Configuration Utility.
- Wait for the CIMC utility interface to fully load before proceeding.

Step 2: Factory Reset CIMC

- Navigate to the Factory Default option within the CIMC Configuration Utility.
- Confirm the factory reset when prompted.
- Allow the CIMC to reboot and reinitialize — this may take several minutes.
- Once complete, exit the CIMC utility.

⚠ NOTE: A factory reset will clear all custom CIMC settings including network configuration and credentials. Ensure you have a plan to re-access CIMC after reset if needed.

Step 3: Boot into BIOS

- During the next server POST/boot sequence, press F2 to enter BIOS Setup.

- Wait for the BIOS interface to fully load.

Step 4: Enable UEFI

- In the BIOS, navigate to the Boot settings or Firmware/BIOS settings section.
- Locate the Boot Mode option and set it to UEFI.
- Confirm and apply the change.

Step 5: Disable UEFI Shell Boot from Boot Manager

- In the BIOS Boot Manager or Boot Order settings, locate the "UEFI Shell" entry.
- Disable or remove the UEFI Shell from the boot options list.
- Save this change.

Step 6: Enable X550 Ports for Boot Options 1 and 2 (Enable USB as Well)

- Navigate to the Boot Options configuration in the BIOS.
- For Boot Option 1: select the first X550 network port (by position — Port 1).
- For Boot Option 2: select the second X550 network port (by position — Port 2).
- Confirm that each boot option references a different physical port — do not assign the same port to both options.
- Enable Rear USB ports by going to USB Configuration

⚠ NOTE: Boot option port selection is position-based. Carefully verify that Boot Option 1 and Boot Option 2 are mapped to two distinct X550 ports to avoid provisioning the same port twice.

**some cisco servers come with the USB ports in the back disabled...enable them*

Step 7: Save and Exit BIOS

- Press F10 (or navigate to Save & Exit) to save all BIOS changes.
- Confirm the save when prompted.
- The server will reboot automatically.

Step 8: Boot into Aiken

- During the reboot/POST sequence, press F12 to access the Boot Menu.
- Select the appropriate X550 port / PXE option to boot into the Aiken environment.
- Allow the Aiken boot process to complete.

Quick Reference — Key Shortcuts

Key	Function
F8	Enter CIMC Configuration Utility
F2	Enter BIOS Setup
F10	Save & Exit BIOS
F12	Boot Menu (for Aiken PXE boot)

