Cisco C880 M4 Server Firmware Update Guide

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Introduction

This document describes how to update the firmware on a Cisco C880 M4 server. There are two update procedures:

- Offline Firmware Update Procedure, which should be initiated when the server is powered off.

- Online Firmware Update Procedure, which should be initiated when the server is powered on (in Boot state).

The procedures are identical except for the state of the system when the procedure is initiated.

Both update procedures instruct you to perform a Unified Firmware Update from the Management Board (MMB) web UI. The Unified Firmware Update updates the following firmware:

- BIOS firmware

- BMC firmware

- MMB firmware

The BIOS and BMC firmware data are stored in ROM devices on each system board (SB): 0, 1, 2, and 3. The MMB firmware data are stored in a ROM device on the MMB.

The version of the BIOS firmware on each system board should be the same, and the version of the BMC firmware on each system board should be the same. When a system board is replaced with a spare system board, the version of the new system board may not be the same as the version of the firmware on other system boards. When this situation occurs, perform a Unified Firmware Update to make all firmware versions equal.

Procedure Summary

We recommend performing the Offline Firmware Update Procedure as a part of this overall workflow:

Step 1	Shut down the OS and power off the system (but do not disconnect the power cord).
Step 2	Stop issuing IPMI commands from Cisco UCS Director to the ManageMent Board (MMB) of the C880 M4 Server.
Step 3	Perform the Unified Firmware Update from the MMB web UI to apply the firmware binary so that it starts running.
Step 4	Set the new BMC username and password as described in Changing a Username and Password .
Step 5	Resume issuing IPMI commands from Cisco UCS Director to the C880 M4 Server.

Offline Firmware Update Procedure

Step 1	Log in with administrator privilege to the MMB web UI.
Step 2	From the **Navigation** bar, choose **System**.
Step 3	Power off the system (but do not disconnect the AC power).
Step 4	From the **Navigation** bar, choose **Maintenance**.
Step 5	Choose **Firmware Update** > **Unified Firmware Update**.
Step 6	Choose the firmware file.
Step 7	Click **Update**.
	Wait for the firmware version check window to appear, which takes approximately 5 minutes.
Step 8	Click **OK** after confirming the firmware version. The progress bar appears in about 1 minute.

- The time required to update the firmware for a one MMB configuration is about 70 minutes.

- For a one MMB configuration, wait about 5 minutes before logging into the web UI . The web UI is disconnected during the firmware update.

Online Firmware Update Procedure

Before You Begin

Before starting the update, ensure that the system is in boot state and the OS is not running.

Step 1	Log in with administrator privilege to the MMB web UI.
Step 2	From the **Navigation** bar, choose **Maintenance**.
Step 3	Choose **Firmware Update** > **Unified Firmware Update**.
Step 4	Choose the firmware file.
Step 5	Click **Update**.
	Wait for the firmware version check window to appear, which takes approximately 5 minutes.
Step 6	Click **OK** after confirming the firmware version.

The progress bar appears in about 1 minute. The time required to update the firmware for a one MMB configuration is about 70 minutes.

Note This online firmware update procedure writes a new version of the firmware to the ROM device. To apply the new firmware to the system, power off the server and power it on again.

While the new firmware is being applied to the system, the web UI is disconnected. Wait about 5 minutes before logging into the web UI.

Changing a Username and Password

For security purposes, the BMC login credentials configuration changed with the revision of C880 M4 Release Version 1.0.2.

Note   The new BMC login credentials configuration was implemented in an initial firmware revision of C880 M4 with the E7-8800 v3 CPU.

- The username and password are disabled.

- The username and password can be set with a MMB CLI command.

Previously, the default username/password combination was admin/admin, which could not be changed. Once the new firmware is applied, the BMC username and password are disabled. If you need to log into the BMC for IPMI processing, you need to set a username and password using the MMB CLI commands listed here:

```
set bmc user <user id> <password> <password> quiet
    user id: a username to be registered
    password: a password for the username
    password: the confirmation password
```

Example:
```
set bmc user admin admin admin quiet
```

If you enter the IPMI command to BMC without setting a new username, you receive an error message that indicates that the username is invalid and a LAN connection cannot be established.