Upgrade the Firepower Extensible Operating System (FXOS) Using Firepower Chassis Manager

Contents

Introduction

This document describes an example of a an upgrade of the Firepower Extensible Operating System (FXOS) version using the Firepower Chassis Manager.

Prerequisites

Requirements

Cisco recommends knowledge of these topics:

- There are no specific requirements for this guide

Components Used

The information in this document is based on these software and hardware versions:

- Cisco Firepower 4125
- Firepower Chassis Manager (FCM) Version 2.12 (0.484)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

Specific requirements for this document include:

- Connectivity to the Management IP of the Chassis
- The FXOS installation package (.SPA) previously downloaded from the Software Cisco Portal
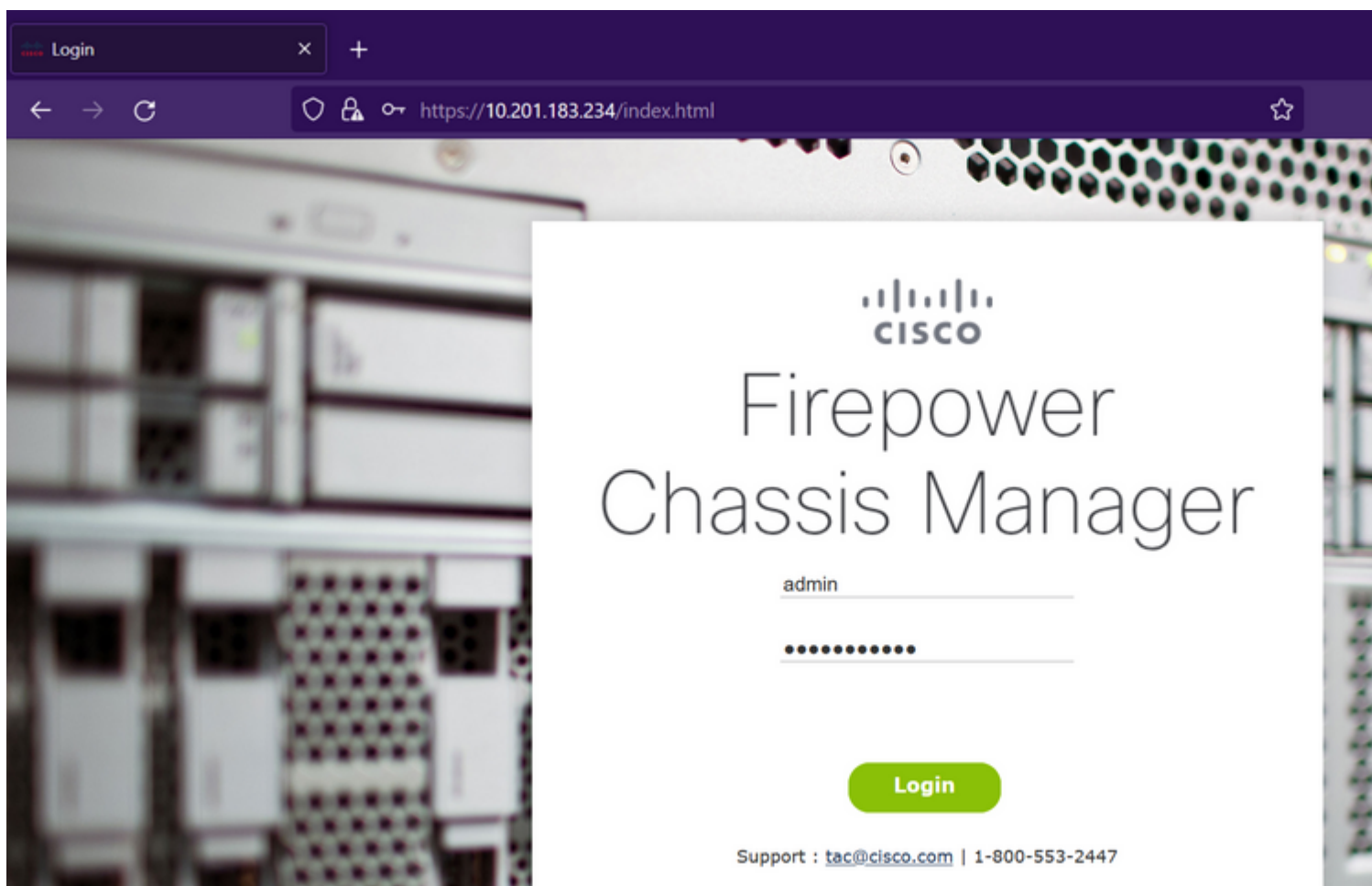
This upgrade procedure is supported on appliances:

- Cisco Firepower 4100 Series
- Cisco Firepower 9300 Series

Before You Begin

1. Verify the model is compatible with this procedure.
2. Backup the FXOS and Logical Device configurations.
3. Schedule a maintenance window to perform this procedure.

Configure

Step 1. Log into the Firepower Chassis Manager:

    Caution: To log into FCM you need to use the Management IP Address of the Chassis, be aware that this IP is different from the Management IP from the Logical Device (FTD or ASA).

Step 2. Navigate to System > Updates to visit the updates page on the Firepower Chassis Manager:

Overview	Interfaces	Logical Devices	Security Engine	Platform Settings			Config

Available Updates

Image Name	Type	Version	Status	Build Date	Image
fxos-k9.2.12.0.484.SPA	platform-bundle	2.12(0.484)	Installed	04/06/2023	✔ Verif
cisco-ftd.7.2.4.165.csp	ftd	7.2.4.165	Installed	05/03/2023	Verified

11 Successful Login in last 24 hrs - View Details | Tue Jul 18 2023 at 22:56:05 from - console

Step 3. Upload the installation package on the Firepower Chassis Manager:

   I.   Click on the **Upload Image** button.

   II. Click on the **Browse** button and select on the File Explorer your installation package.

   III. Select the **Upload** button to start the upload of the package.

Upload progress bar example:

Step 4. Click **OK** on the pop-up window to return to the Updates page:

Image Name	Type	Version	Status	Build Date	Image
fxos-k9.2.13.0.212.SPA	platform-bundle	2.13(0.212)	Not-Installed	02/07/2023	✔ Veri
fxos-k9.2.12.0.484.SPA	platform-bundle	2.12(0.484)	Installed	04/06/2023	✔ Veri
cisco-ftd.7.2.4.165.csp	ftd	7.2.4.165	Installed	05/03/2023	Verified

Step 5. Click on the **Upgrade** button to initiate the installation process:

Image Name	Type	Version	Status	Build Date	Image
fxos-k9.2.13.0.212.SPA	platform-bundle	2.13(0.212)	Not-Installed	02/07/2023	✔ Verif
fxos-k9.2.12.0.484.SPA	platform-bundle	2.12(0.484)	Installed	04/06/2023	✔ Verif
cisco-ftd.7.2.4.165.csp	ftd	7.2.4.165	Installed	05/03/2023	Verified

Step 6: Select **Yes** to confirm the upgrade procedure:

Caution: This upgrade process takes up to 45 minutes, be aware that the chassis is going to reboot while upgrading.

Validation

Review the upgrade process with an FXOS CLI session:

I. Create an SSH Session using the Management IP of the Chassis.

II. Review on the firmware monitor the progress of the FXOS Upgrade.

A. Move to the system scope with the command **scope system**

B. To display the progress of the upgrade use the command **show firmware monitor**

Example of the suggested procedures:

```
B-09-FPR4125-NGFW-K9-18# scope system
B-09-FPR4125-NGFW-K9-18 /system # show firmware monitor
FPRM:
    Package-Vers: 2.12(0.484)
    Upgrade-Status: Ready

Fabric Interconnect A:
    Package-Vers: 2.12(0.484)
    Upgrade-Status: Upgrading

Chassis 1:
    Server 1:
        Package-Vers: 2.12(0.484)
        Upgrade-Status: Ready

B-09-FPR4125-NGFW-K9-18 /system # █
```

> **Caution**: When the upgrade finishes you must see all the components in **Ready** state, if you notice a component in **Failed** state please reach out to TAC.

Once the upgrade finishes you can log into the Firepower Chassis Manager to validate the current version, this can be found on the Overview dashboard:

To perform FXOS upgrades validations via CLI you can use these steps:

I. Create an SSH Session using the Management IP of the Chassis.

II. Use the **show version** command to validate the current version on your chassis.

III. Review the operative state of the Slots on the Chassis:

A. Move to the ssa scope with the command **scope ssa**

B. Review the current state of the slots with the command **show slot**

IV. You can use the **show app-instance** command to validate the status of the logical device after the upgrade.

Example of the suggested procedures:

```
B-09-FPR4125-NGFW-K9-18# scope ssa
B-09-FPR4125-NGFW-K9-18 /ssa # show slot

Slot:
    Slot ID    Log Level Admin State  Oper State
    ---------- --------- ------------ ----------
    1          Info      Ok           Online
B-09-FPR4125-NGFW-K9-18 /ssa # show app-instance
App Name   Identifier Slot ID    Admin State Oper State      Running Version Startup Version Deploy Type Turbo Mode Profile
---------- ---------- ---------- ----------- --------------- --------------- --------------- ----------- ---------- -------
ftd        FTD        1          Enabled     Online          7.2.4.165       7.2.4.165       Native      No
B-09-FPR4125-NGFW-K9-18 /ssa #
```