

Upgrade FTD HA Workflow on FMC-4700-Managed Secure Firewall Firepower 7.4.2

Contents

Issue

The main issue addressed is the workflow and technical requirements for performing a High Availability (HA) upgrade.

Environment

- Technology: Cisco Secure Firewall Firepower - 7.4
- Subtechnology: Firepower Threat Defense (FTD) - Software Update / Security Update / Reimage / Migration / Backup and Restore
- Product Family: FPRLOW (includes FPR1120)
- Firepower Threat Defense (FTD) in High Availability (HA) Pair
- Managed by Firepower Management Center (FMC) 4700
- FMC software version: 7.4.2
- Planned upgrade activity scheduled within a defined maintenance window

Resolution

Adhere to this detailed workflow to ensure a successful upgrade of FTD HA pairs managed by FMC:

1. For a maintenance window, ensure that at least 1 hour of time is reserved for each device requiring upgrade.
 1. Upgrade [FTD HA managed by FMC](#).
2. At the Firepower device as root user, ensure that the system can pass a database integrity check.

```
...  
> expert  
admin@FTD-1:~$ sudo su  
Password:  
root@FTD-1:/Volume/home/admin# DBCheck.pl  
...
```

1. Ensure that the troubleshooting file of the device has been generated to run pre-checks on any issues that could impact upgrade.
 1. Troubleshoot [Firepower File Generation Procedures](#).
2. Generate configuration backups for the ASA/FTD/FMC prior to any upgrade attempts.
3. Ensure familiarity with feature changes in all intermediate versions of Firepower when going from one version to the next.
 1. [Release notes](#)
4. For high availability/failover, ensure that the failover link is stable and that synchronization is healthy.

Step 1: Prepare for the Upgrade

Before starting the upgrade process, it is essential to generate and store configuration backups of both the FTD HA d

To back up FMC configuration:

Navigate to System > Tools > Backup/Restore in the FMC GUI

To ensure FTD device configuration state is preserved, confirm that the latest configuration deployment has been co

Example output (FMC GUI):

Backup completed successfully.

Step 2: Verify the Current Status of FTD HA Pair

Before proceeding with the upgrade, check the HA status to confirm both peers are healthy and synchronized.

From the FMC CLI, use this command to check device status:
device# show failover

Example output:

```
This host: Primary - Active  
Other host: Secondary - Standby Ready  
State: Normal
```

Step 3: Schedule and Communicate the Maintenance Window

Ensure the maintenance window is clearly defined and all stakeholders are informed. For this workflow, the mainten

- Start time: 18/11/2025 12:00:00 (UTC -3 Argentina/Buenos_Aires)
- End time: 18/11/2025 14:00:00 (UTC -3 Argentina/Buenos_Aires)

Step 4: Initiate the FTD HA Upgrade

Initiate the upgrade from the FMC, ensuring that you adhere to the Cisco-recommended procedure for upgrading HA pairs. During the upgrade process, the upgrade is typically performed in

1. Upgrade the standby unit
2. Failover
3. Active unit

In FMC GUI, navigate to Devices > Device Management > [HA Pair] > Upgrade

These are the on-screen instructions to select the appropriate image and initiate the upgrade.

Step 5: Monitor the Upgrade Process

Closely monitor the progress of the upgrade for both units. Use the FMC GUI job monitoring section or the CLI for

To check upgrade progress via CLI:
device# show upgrade status

Example output:

```
Upgrade in progress on standby unit...
Upgrade completed on standby unit.
Initiating failover...
Upgrade in progress on active unit...
Upgrade completed on both units.
HA Pair is synchronized.
```

Step 6: Post-Upgrade Verification

After the upgrade completes, verify that:

- Both FTD devices are running the intended software version.
- HA status reports both units as healthy and synchronized.
- All intended services and network flows are operating as expected.

device# show version

Example output:

```
Cisco Firepower Threat Defense Version 7.4.2
device# show failover
```

Example output:

```
This host: Primary - Active
Other host: Secondary - Standby Ready
State: Normal
```

Step 7: Ensure Backups Are Up-to-Date

As a final step, generate fresh backups of both FMC and FTD after the upgrade to capture the current, upgraded configuration.

Repeat backup process as described in Step 1.

Cause

None. This is a standard upgrade workflow for Cisco FTD HA managed by FMC.

Related Content

- [Cisco Technical Support & Downloads](#)
- [Upgrade FTD HA Managed by FMC](#)
- [Troubleshoot Firepower File Generation Procedures](#)
- [Release Notes](#)