



Upgrading UFM Software

Table of contents

Upgrading UFM on Bare Metal Server	3
Upgrading UFM on Docker Container	8

After UFM installation, UFM detects existing UFM versions previously installed on the machine and prompts you to run a clean install of the new version or to upgrade. We recommend backing up the UFM configuration before upgrading the UFM as specified in the section UFM Database and Configuration File Backup.

Info

Upgrading the UFM Enterprise software version is supported up to two previous GA software versions (GA -1 or GA -2).

For example, if you wish to upgrade to UFM Enterprise v6.11.0, it is possible to do so only from UFM Enterprise v6.9.0 or v6.10.0.

- [Upgrading UFM on Bare Metal Server](#)
- [Upgrading UFM on Docker Container](#)

Upgrading UFM on Bare Metal Server

Upgrading UFM on Bare Metal - Standalone Server Upgrade

You can upgrade the UFM standalone server software for InfiniBand from the previous UFM version.

To upgrade the UFM server software:

1. Create a temporary directory (for example */tmp/ufm*).
2. Open the UFM software zip file that you downloaded. The zip file contains the following installation files for:
 - RedHat 7/CentOS 7/OEL 7: *ufm-X.X -XXX.el7.x86_64.tgz*
 - RedHat 8/CentOS 8/OEL 8: *ufm-X.X -XXX.el8.x86_64.tgz*
 - Ubuntu 18.04: *ufm-X.X -XXX.ubuntu18.x86_64.tgz*
 - Ubuntu 20.04: *ufm-X.X -XXX.ubuntu20.x86_64.tgz*
 - Ubuntu 22.04: *ufm-X.X-XXX.ubuntu22.x86_64.tgz*
3. Extract the installation file for your system's OS to the temporary directory that you created.
4. Stop the UFM server. Run:

```
systemctl stop ufm-enterprise
```

5. From within the temporary directory, run the following command as root:

```
./upgrade.sh
```

(i) Note

A configuration backup ZIP file will be created in the running directory (e.g. /tmp/ufm). The backup file name is ufm_X.X.X_bkp.zip (X.X.X is the previous version).

1. Upgrade from the previous version: the existing UFM data and configuration are preserved.
2. In case upgrade.sh script stops before completion (e.g. missing prerequisite), the upgrade procedure can be resumed by fixing the issue (e.g. installing missing prerequisite) and rerunning ./upgrade.sh again.

6. Restart the UFM server. Run:

```
systemctl start ufm-enterprise.service
```

(i) Note

/etc/init.d/ufmd start - Available for backward compatibility.

7. After the upgrade, remove the temporary directory

Upgrading UFM on Bare Metal - High Availability Upgrade

Note

As of UFM version 6.14.0, UFM upgrade on HA supports in-service upgrade, meaning UFM can continue running during the steps of the upgrade, and there is no need to stop UFM before the upgrade (although this is also supported).

You can upgrade the UFM server HA software for InfiniBand from the previous release. The upgrade is performed on both servers.

To upgrade the UFM server software:

Upgrading the UFM Enterprise Package

1. On the standby server, extract the new UFM Enterprise package to the /tmp folder:

```
tar -xzf ufm-X.X.X-XXXXX.tgz -C /tmp
```

2. On the standby server, enter to the installation folder and upgrade script:

```
standby# cd /tmp/ ufm-X.X.X-X.<OS_NAME>.x86_64.mofed5/
```

3. Run the UFM upgrade script on the standby server:

```
./upgrade.sh
```

4. After the completion of the upgrade script, the UFM code will undergo an upgrade, while the UFM data will remain unchanged. The automatic upgrade of UFM data will take place during the next startup of UFM. To initiate this process, execute a failover from the Master node (or perform a takeover from the Standby node).

```
master# ufm_ha_cluster failover
```

Note

UFM will log the data upgrade to the syslog of the server, in case of issue a backup of the UFM data is saved prior to the upgrade in /opt/ufm/BACKUP directory and can be restored. For more information, refer to [Appendix – Restoring UFM Data](#).

5. Once UFM is operational on the upgraded node (formerly the standby node), proceed to replicate steps 1 to 3 on the non-upgraded node (previously the master node).

Upgrading the UFM HA Package

1. On **both servers**, download latest UFM-HA package:

```
wget https://www.mellanox.com/downloads/UFM/ufm_ha/5.6.0/ufm_ha_5.6.0-4.tgz
```

For Sha256:

```
wget https://download.nvidia.com/ufm/ufm_ha/5.6.0/ufm_ha_5.6.0-4.sha256
```

2. On **both servers**, extract the HA package under /tmp/ and enter the new directory
3. Stop the UFM HA cluster, run the following command on the **Master server**:

```
ufm_ha_cluster stop
```

4. On the UFM **Standby server**, run the upgrade command from within the extracted HA package located in /tmp:

```
./install.sh --upgrade
```

5. On the UFM **Master server**, run the upgrade command from within the extracted HA package located in /tmp:

```
./install.sh --upgrade
```

6. Start the UFM HA cluster, run the following command on the **Master server**:

```
ufm_ha_cluster start
```

7. Run the following command to verify that the UFM HA cluster is up and running:

```
ufm_ha_cluster status
```

Upgrading UFM on Docker Container

Note

Upgrade the UFM container based on the existing UFM configuration files that are mounted on the server. It is important to use that same directory as a volume for the UFM installation command.

In the below example `/opt/ufm_files` is used.

Upgrading UFM on Docker Container in Standalone Mode

1. Stop the UFM Enterprise service. Run:

```
systemctl stop ufm-enterprise
```

2. Remove the existing docker image. Run:

```
docker rmi mellanox/ufm-enterprise:latest
```

3. Load the new UFM Enterprise docker image. Run:

```
docker pull mellanox/ufm-enterprise:latest
```

4. Run the docker upgrade command:

```
docker run -it --name=ufm_installer --rm \  
-v /var/run/docker.sock:/var/run/docker.sock \  
-v /etc/systemd/system:/etc/systemd_files/ \  
-v /opt/ufm/files:/opt/ufm/shared_config_files/ \  
mellanox/ufm-enterprise:latest --upgrade
```

5. Reload system manager configuration:

```
systemctl daemon-reload
```

6. Start UFM Enterprise service:

```
systemctl start ufm-enterprise
```

Upgrading UFM Container in High Availability Mode

Note

As of UFM version 6.14.0, UFM upgrade on HA supports in-service upgrade, meaning UFM can continue running during the steps of the upgrade, and there is no need to stop UFM before the upgrade (although this is also supported).

Upgrading the UFM Enterprise Package

1. Remove the old docker image from the **Standby** server. Run:

```
Stand-by# docker rmi mellanox/ufm-enterprise:latest
```

2. Pull the new UFM Enterprise docker image on the **Standby** server. Run:

```
docker pull mellanox/ufm-enterprise:latest
```

Note

At this stage, the UFM container has been updated with the latest code. The UFM data, however, will be updated during the next UFM run.

3. Perform a failover to start UFM on the upgraded node. On the **Master** node, run:

```
ufm_ha_cluster failover
```

Note

When UFM starts, it will automatically update the UFM configuration.

4. Repeat steps 1-2 on the un-upgraded node (previous **Master** node).

Upgrading the UFM HA Package

1. On **both servers**, download and extract the latest UFM HA package. Run:

```
wget https://www.mellanox.com/downloads/UFM/ufm_ha/5.6.0/ufm_ha_5.6.0-4.tgz
```

For Sha256:

```
wget https://download.nvidia.com/ufm/ufm_ha/5.6.0/ufm_ha_5.6.0-4.sha256
```

2. Stop the UFM HA cluster, run the following command on the **Master** server:

```
ufm_ha_cluster stop
```

3. On both the **Master** and **Standby** servers, execute the upgrade command from within the extracted HA package. Ensure you run it first on the **Standby** server, then on the **Master** server:

```
./install.sh --upgrade
```

4. Start the UFM HA cluster by running this command on the **Master** server:

```
ufm_ha_cluster start
```

5. Run the following command to verify that the UFM HA cluster is up and running:

```
ufm_ha_cluster status
```

Copyright 2024. PDF Generated on 08/14/2024