

Aggregation switches

**MES2300-xx, MES3300-xx, MES3500-xx, MES53xxA, MES5310-48,
MES5400-XX, MES5410-48, MES5500-32**

Firmware upgrade guide

Firmware upgrade via CLI



Do not disable power supply or reboot the device during the process of system firmware upgrade.

To upgrade the firmware using CLI, connect to the switch using a terminal program (such as HyperTerminal) via Telnet or SSH, or via the serial port.

Terminal program configuration when connecting to the switch via serial port:

1. Select the corresponding serial port;
2. Set the data transfer rate to 115200 bps;
3. Specify the data format: 8 data bits, 1 stop bit, non-parity;
4. Disable hardware and software data flow control;
5. Specify VT100 terminal emulation mode (many terminal applications use this emulation mode by default).



A comparison of switch models with system firmware and bootloader files is shown in the table below.

MES2300-24 MES2300B-24 MES2300-24F MES2300B-24F MES2300-24P MES2300D-24P MES2300DI-28 MES2300-48P MES2300B-48 MES3300-08F MES3300-16F MES3300-24 MES3300-24F MES3300-48 MES3300-48F MES3500I-08P MES3500I-10P MES5316A rev.C/C1 MES5324A rev.C/C1 MES5332A rev.C	mes3300-6.x.y.ros
MES5312	mes5300-6.x.y.ros
MES5316A MES5324A MES5332A	mes5300a-6.x.y.ros
MES5310-48 MES5400-24 MES5400-48 MES5410-48 MES5500-32	mes5500-6.x.y.ros

1. System firmware file upload to non-volatile switch memory

System firmware file upload using TFTP

To upload the system firmware file using TFTP, enter the following command in the CLI:

```
boot system tftp://<ip address>/<File Name>
```

where

- *<ip address>* — IP address of the TFTP server from which the system firmware file will be downloaded;
- *<File Name>* — system firmware file name.

Press **Enter**. The following should be displayed in the terminal window:

```
%COPY-I-FILECPY: Files Copy - source URL tftp://<ip address> /mes5300a-622-R2.ros destination URL flash://system/images/mes5300a-622-R2.ros
```

If the file upload was successful, the following message will be displayed:

```
%COPY-N-TRAP: The copy operation was completed successfully  
Copy: 24147296 bytes copied in 00:00:39 [hh:mm:ss]
```

If switches are in a stack, the firmware upgrade will be performed for all units of the stack.

System firmware file upload using USB drive

To upload the system firmware file using USB drive, enter the following command in the CLI:

```
boot system usb:<File Name>
```

where

- *<File Name>* — system firmware file name.

Press **Enter**. The following should be displayed in the terminal window:

```
%COPY-I-FILECPY: Files Copy - source URL usb://mes5300a-622-R2.ros  
destination URL flash://system/images/mes5300a-622-R2.ros
```

If the file upload was successful, the following message will be displayed:

```
%COPY-N-TRAP: The copy operation was completed successfully  
Copy: 36806391 bytes copied in 00:00:23 [hh:mm:ss]
```

If it is necessary to specify the path to the system firmware file on the USB drive, enter the following command in the CLI:

```
boot system usb://<directory>/<File Name>
```

where

- *<directory>* — USB drive directory name;
- *<File Name>* — system firmware file name.

Press **Enter**. The following should be displayed in the terminal window:

```
%COPY-I-FILECPY: Files Copy - source URL usb://firmware/mes5300a-622-R2.ros destination URL flash://system/images/mes5300a-622-R2.ros
```

If the file upload was successful, the following message will be displayed:

```
%COPY-N-TRAP: The copy operation was completed successfully  
Copy: 36806391 bytes copied in 00:00:23 [hh:mm:ss]
```

If switches are in a stack, the firmware upgrade will be performed for all units of the stack.

2. Selecting the system firmware file that will be active after rebooting the switch

The system firmware file is loaded into the inactive memory area by default (inactive image) and will be active after the switch is rebooted.

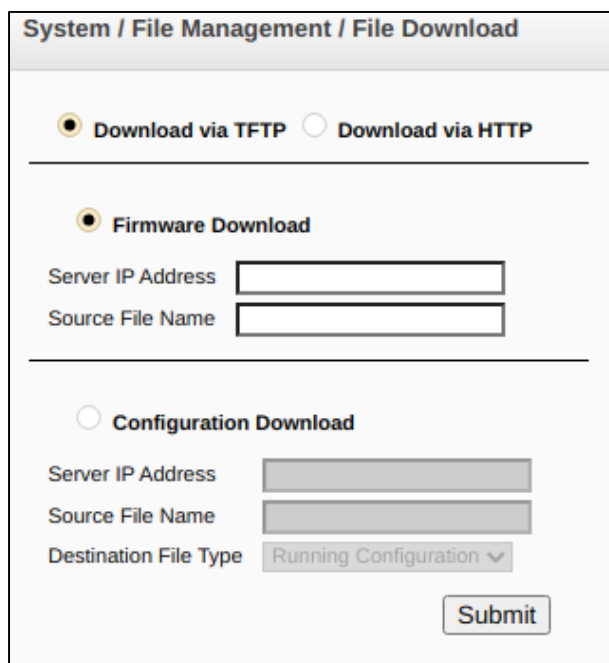
3. Switch reboot

To reboot the switch, execute the *reload* command via CLI.

System firmware upgrade via web interface

1. System firmware file upload to non-volatile switch memory

To upgrade the system firmware, connect to the switch via a web browser and go to [System/File Management/File Download](#):



There are two ways to upload a software file via a web browser: using a TFTP server or using an HTTP server.

System firmware file upload using TFTP server

To perform an upload using a TFTP server, set the **Download via TFTP** flag. Next, set the **Firmware Download** flag and fill in the following fields:

- Server IP Address — IP address of the TFTP server from which the system firmware file will be uploaded;
- Source File Name — system firmware file name.

Click **Submit** to upload the file. A status bar for uploading the system software file will be displayed on the page:

System / File Management / File Download

Download via TFTP
 Download via HTTP

Firmware Download

Server IP Address

Source File Name

Configuration Download

Server IP Address

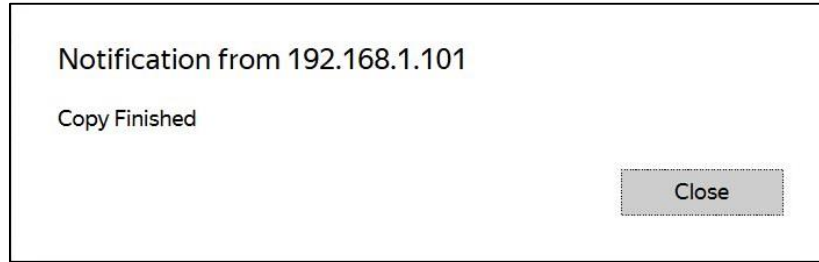
Source File Name

Destination File Type

Completing Download

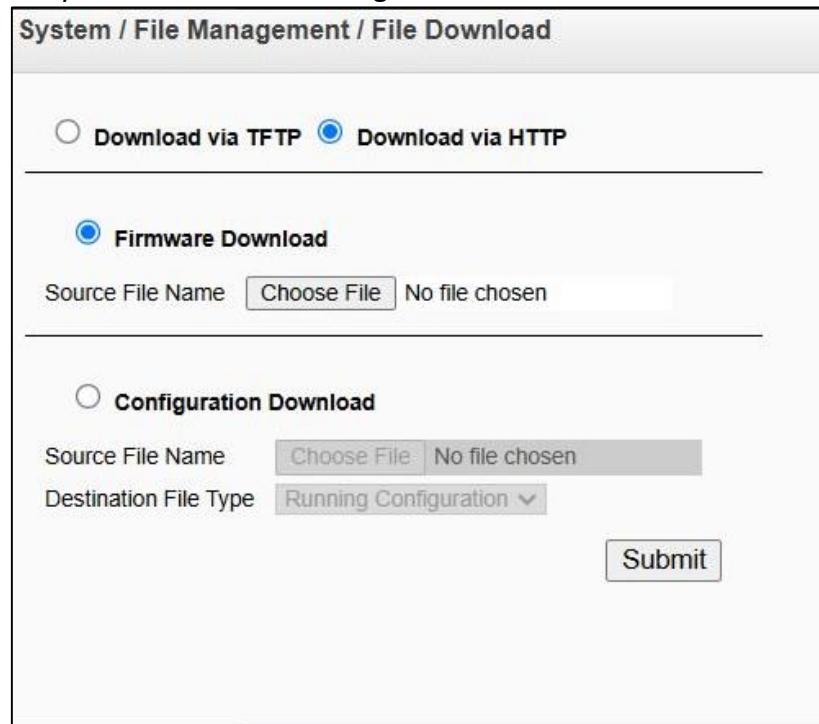
929 792 Bytes Transferred

The following message will be displayed when the download is complete:



System firmware file upload using HTTP server

To perform an upload using an HTTP server, set the **Download via HTTP** flag on the System/File Management/File Download page. Next, set the **Firmware Download** flag. Then specify the path to the system firmware file using the **Select file** button.



System / File Management / File Download

Download via TFTP Download via HTTP

Firmware Download

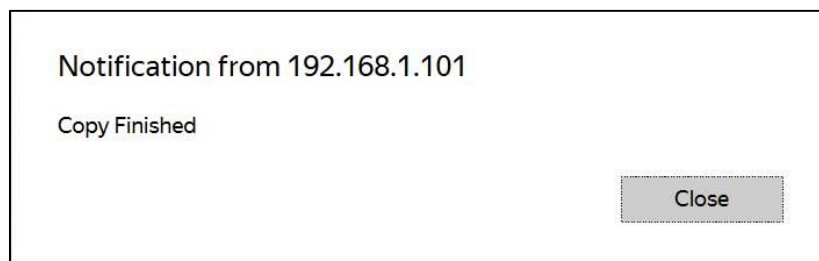
Source File Name No file chosen

Configuration Download

Source File Name No file chosen

Destination File Type ▾

Click **Submit** to upload the file. The following message will be displayed when the download is complete:



2. Selecting the system firmware file that will be active after rebooting the switch

The system firmware file is loaded into the inactive memory area by default (inactive image) and will be active after the switch is rebooted.

3. Switch reboot

To reboot the switch, go to System/Reset and click **Reset**.



The switch will boot with a new firmware version.