

# BMC Firmware Update

## 2. Update through TCP/IP network

### 2.1. Use the "Yafuflash" utility

#### 2.1.1. Single Image

- Full upgrade without Config Module preserved  
\$ Yafuflash -nw -ip <BMC IP Address> -u <Username> -p <Password> -force-boot <Firmware Filename>
- Upgrade with Config Module preserved  
\$ Yafuflash -nw -ip <BMC IP Address> -u <Username> -p <Password> -preserve-config <Firmware Filename>

#### 2.1.1. Dual Image

- Full upgrade without Config Module preserved  
\$ Yafuflash -nw -ip <BMC IP Address> -u <Username> -p <Password> -mse <Select Image> -force-boot <Firmware Filename>
- Upgrade with Config Module preserved  
\$ Yafuflash -nw -ip <BMC IP Address> -u <Username> -p <Password> -mse <Select Image> -preserve-config <Firmware Filename>

The options for <Select Image> are listed below.

| Option | Description               |
|--------|---------------------------|
| 0      | Update the inactive image |
| 1      | Update the image 1        |
| 2      | Update the image 2        |
| 3      | Update both images        |

### 2.2. Use the "Redfish"

Steps for full upgrade without Config Module preserved follow.

Using POSTMAN for the request is recommended.

#### (1) Upload Image

Request:

```
POST https://{ip}/redfish/v1/UpdateService/Actions/Oem/UpdateService.UploadFirmwareImage
```

Content-Type: multipart/form-data; boundary=-----287032381131322

-----287032381131322

Content-Disposition: form-data; name="image\_file"; filename="rom.ima"

Content-Type: application/octet-stream

(image file content)

-----287032381131322--

Response:

- Success: HTTP status will be **204 No content**. This means the action has been completed and the resource has been updated.
- Failure: HTTP status will be other.

## (2) Update Firmware

Request:

POST <https://{ip}/redfish/v1/UpdateService/Actions/Oem/UpdateService.BMCFwUpdate>

Content-Type: application/json

In the POST Request Body, there are options for the FlashType and UploadSelector.

| FlashType         |                     | UploadSelector |                           |
|-------------------|---------------------|----------------|---------------------------|
| Option            | Description         | Option         | Description               |
| FULLFwUpdate      | Single image update | Default        | Update the current image  |
| DUALIMAGEFwUpdate | Dual image update   | AutoInactive   | Update the inactive image |
|                   |                     | Image1         | Update the image 1        |
|                   |                     | Image2         | Update the image 2        |
|                   |                     | ImageBoth      | Update both images        |
|                   |                     | Default        | Update the current image  |
| HPMFwUpdate       | HPM firmware update | Default        | Update the current image  |

Response:

- Success: HTTP status will be **202 Accepted**. The server would create a Task and response status 202 after accepted this request, but the update has not been completed. The response http headers would include a Location header. Location header has the link to the Task resource for this updating service.
- Failure: HTTP status will be other.