



# X12 BMC Firmware Update via WEB GUI & SUM

User's Guide

Revision 1.0

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## Preface

### About this User's Guide

This user's guide is written for system integrators, IT professionals, and knowledgeable end users who intend to configure the remote management settings on Supermicro Baseboard Management Controller (BMC) firmware provided on Supermicro motherboards.

Supermicro BMC firmware is designed based on ASPEED AST2500/AST2600 BMC.

This document provides the guidance on how to update Supermicro BMC firmware supported by ASPEED AST2500/ AST2600 BMC.

### An Important Note to the User

For more remote management utility support resources and details, please refer to our website at <https://www.supermicro.com/products/nfo/IPMI.cfm>.

The graphics shown in this user's guide were based on the latest information available at the time of publishing of the user's guide. The screens shown on your computer may or may not look exactly the same as the screens shown in this user's guide.

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## Introduction

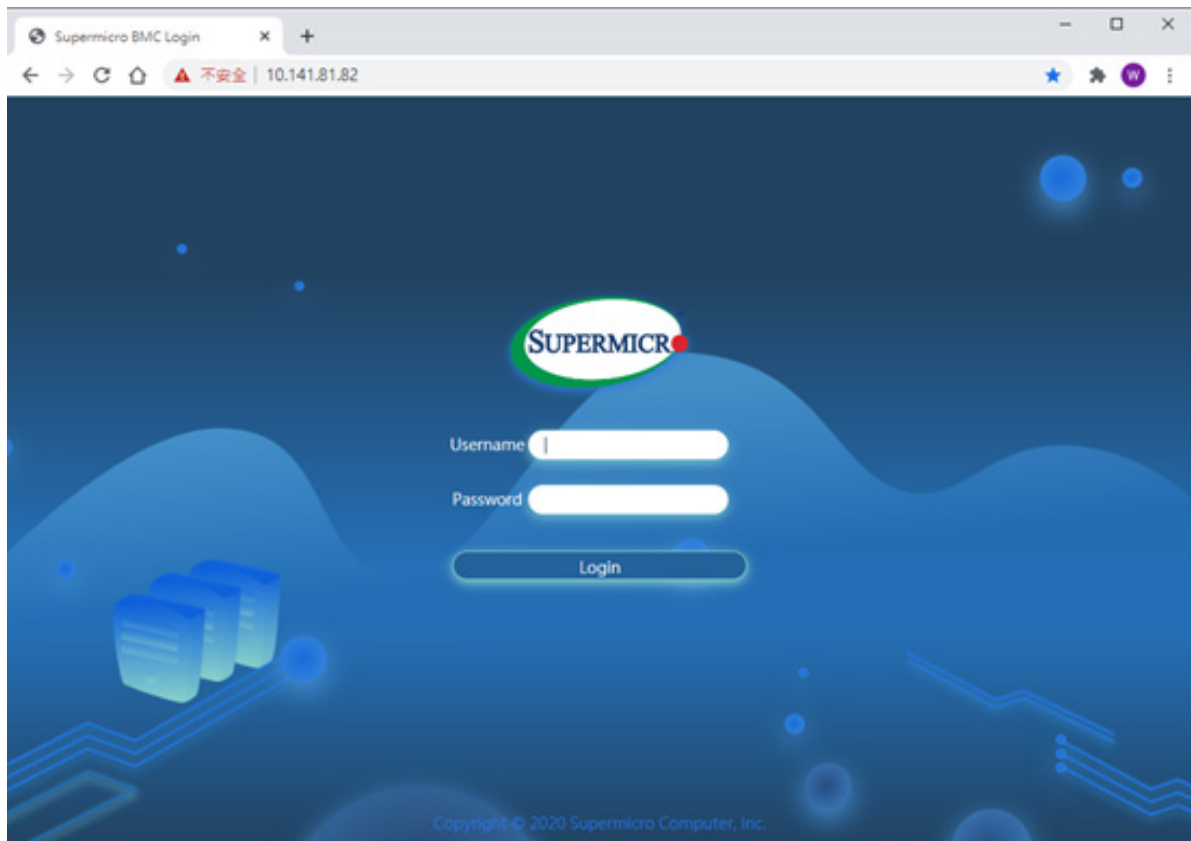
This user's guide provides detailed information on how to update Supermicro BMC firmware on X12 series motherboards using BMC WEB GUI or SUM (Supermicro® Update Manager). The user's guide is comprised of two sections:

1. Updating X12 BMC Firmware Using BMC WEB GUI
2. Updating X12 BMC Firmware Using SUM

## 1. Updating X12 BMC Firmware Using BMC WEB GUI

In order to keep your system working properly, please follow the steps below to update X12 BMC firmware through BMC WEB GUI:

1. Log in to your account by entering the IP address on a web browser and follow the prompts on the screen. (Figure 1)

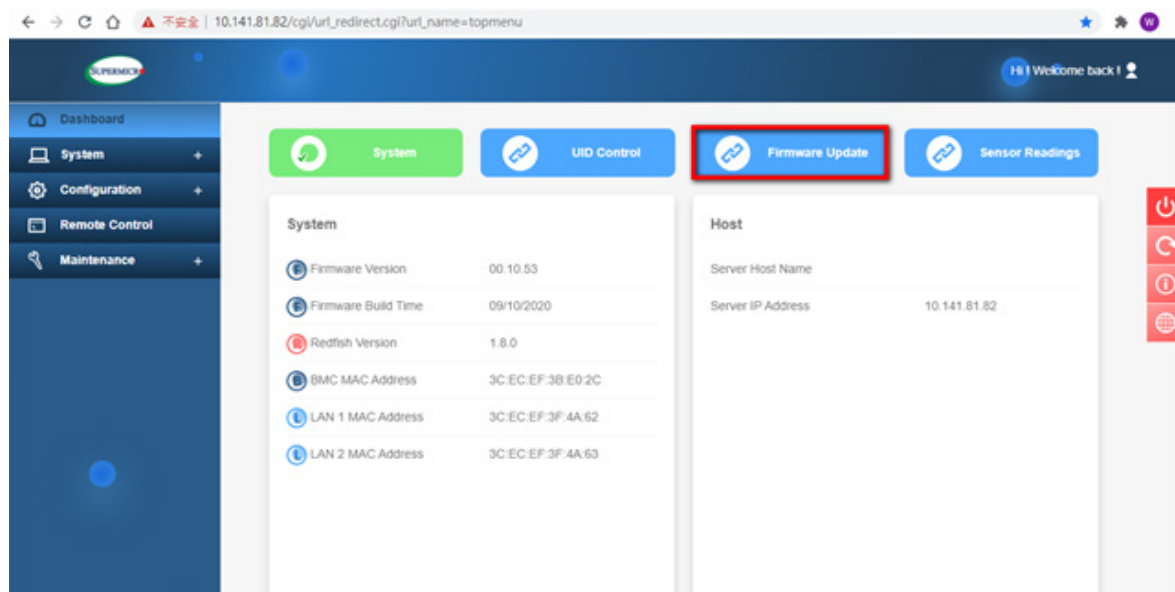


**Figure 1: BMC Firmware Web User Login**



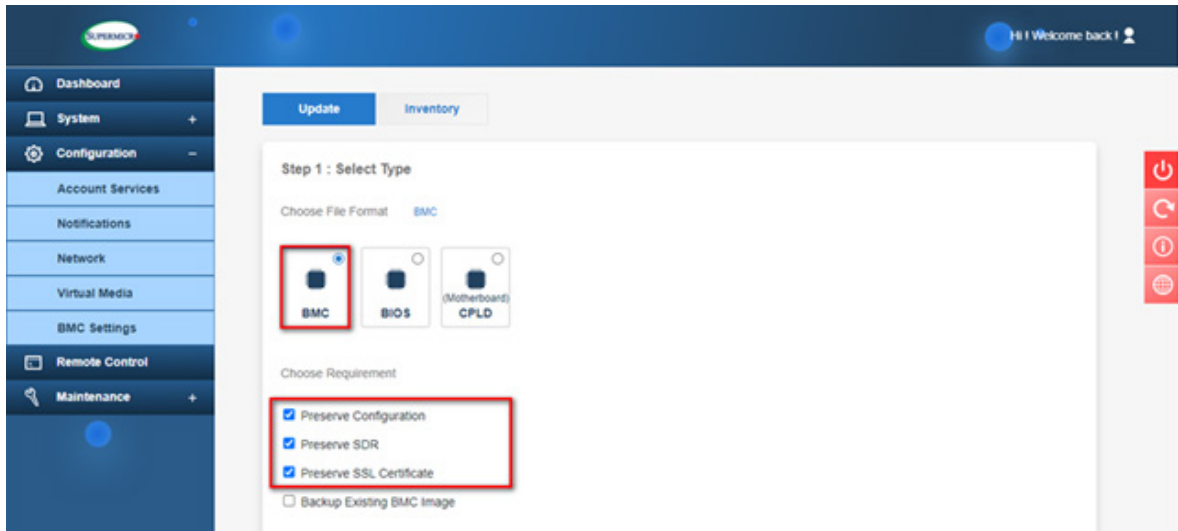
**Note:** Please contact your Supermicro sales or FAE if you don't know your username or password.

2. Click on the <Firmware Update> tab on the BMC dashboard. (Figure 2)




**Figure 2: BMC Firmware Update Dashboard**

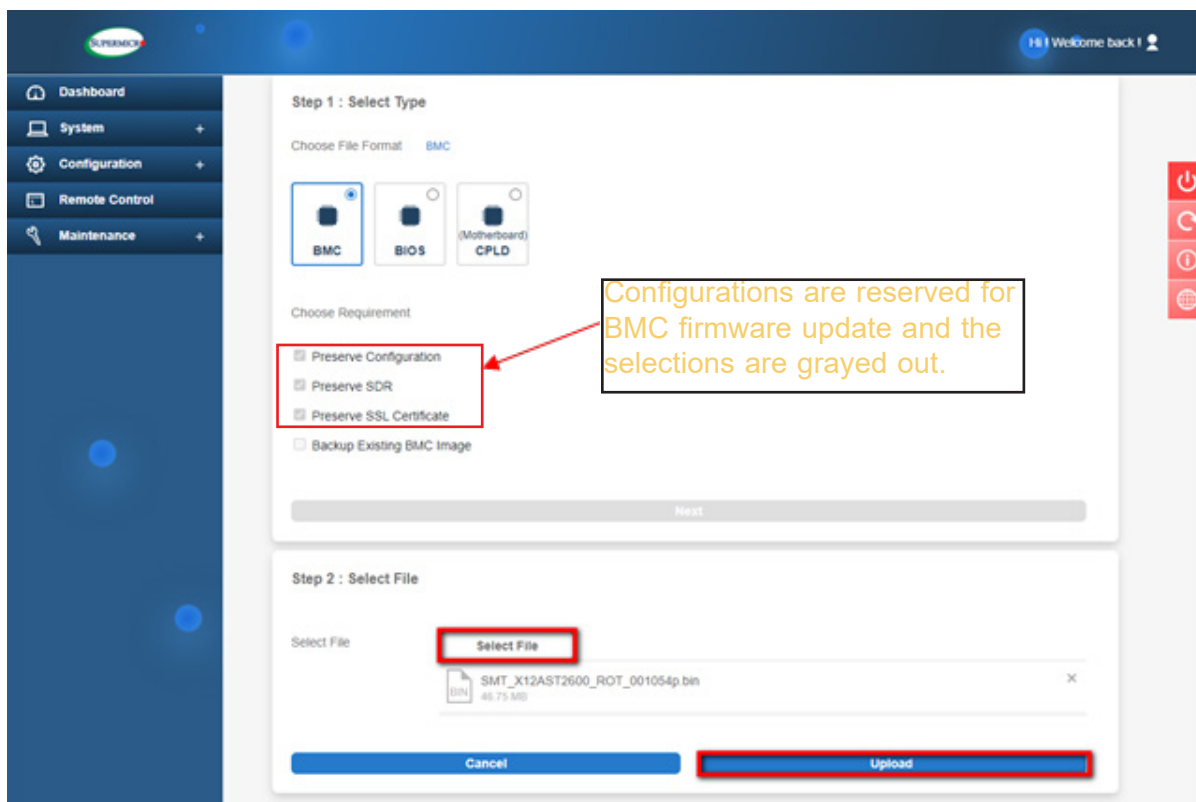
3. When the following screen appears, select the <BMC> option and click <Next>. (Figure 3)



**Figure 3: BMC Firmware Update Default Setting**

 **Note:** By default, the firmware update process preserves the existing configuration, SDR and SSL certificates for the new BMC firmware. You can uncheck any of the preservation options if applicable.

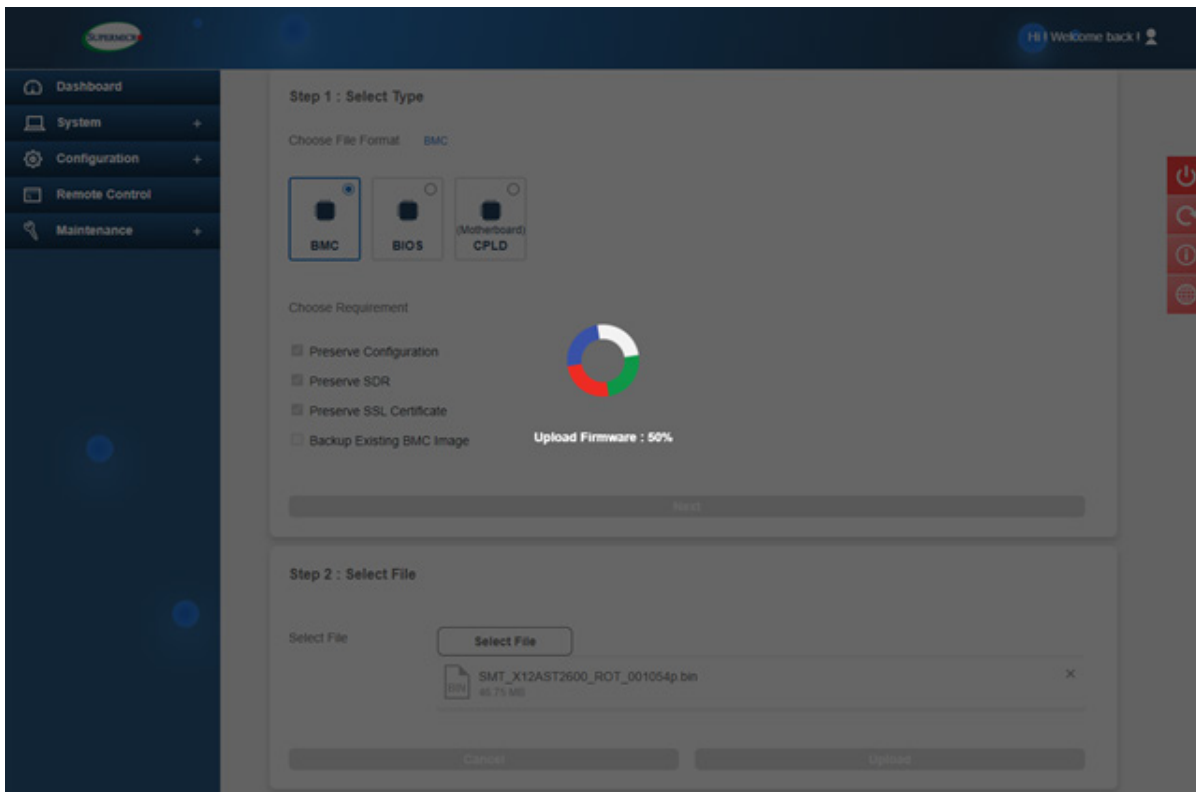
4. Press <Select File> to select the new BMC firmware file and press <Upload> as shown below. (Figure 4)



**Figure 4: Select and Upload New BMC Firmware file**



5. Wait for the upload process to complete, which might take a few minutes. (Figure 5)



**Figure 5: New BMC Firmware Uploading**

6. Verify the new firmware version and press <Update> to perform the firmware update.  
(Figure 6)

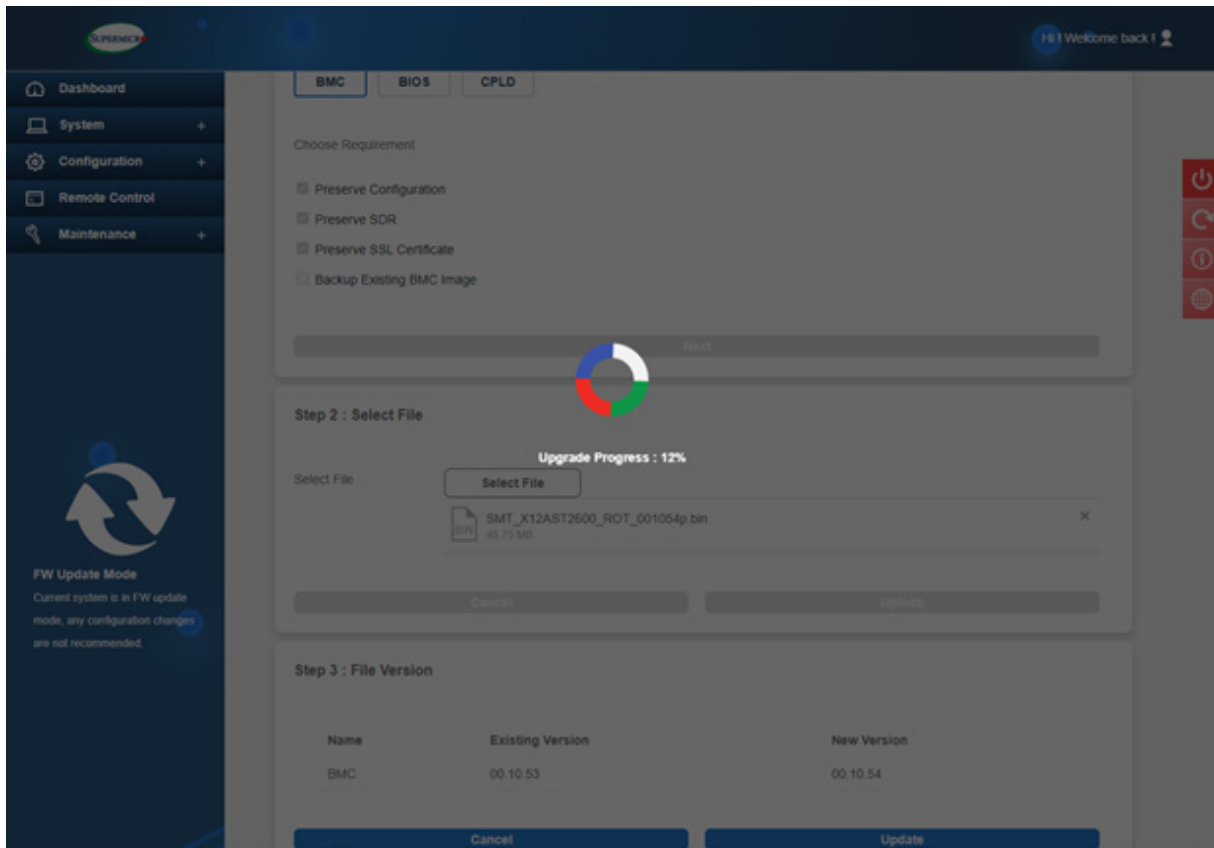
The screenshot displays the BMC Firmware Update web interface. On the left is a navigation sidebar with links to Dashboard, System, Configuration, Remote Control, and Maintenance. The main content area is titled 'BMC' and shows the 'FW Update Mode' with a warning: 'Current system is in FW update mode, any configuration changes are not recommended.' The update process is in 'Step 3 : File Version'. It features a table with columns 'Name', 'Existing Version', and 'New Version'. The 'New Version' field for 'BMC' is highlighted with a red box and contains the value '00.10.54'. Below the table, the 'Update' button is also highlighted with a red box. Above the table, 'Step 2 : Select File' shows a file named 'SMT\_X12AST2600\_ROT\_001054p.bin' (45.75 MB) selected. The 'Choose Requirement' section has checkboxes for 'Preserve Configuration', 'Preserve SDR', 'Preserve SSL Certificate', and 'Backup Existing BMC Image', all of which are checked. A 'Next' button is located below these requirements.

Name	Existing Version	New Version
BMC	00.10.53	00.10.54

Buttons: Cancel, Update

**Figure 6: Verify the New BMC Firmware Version**

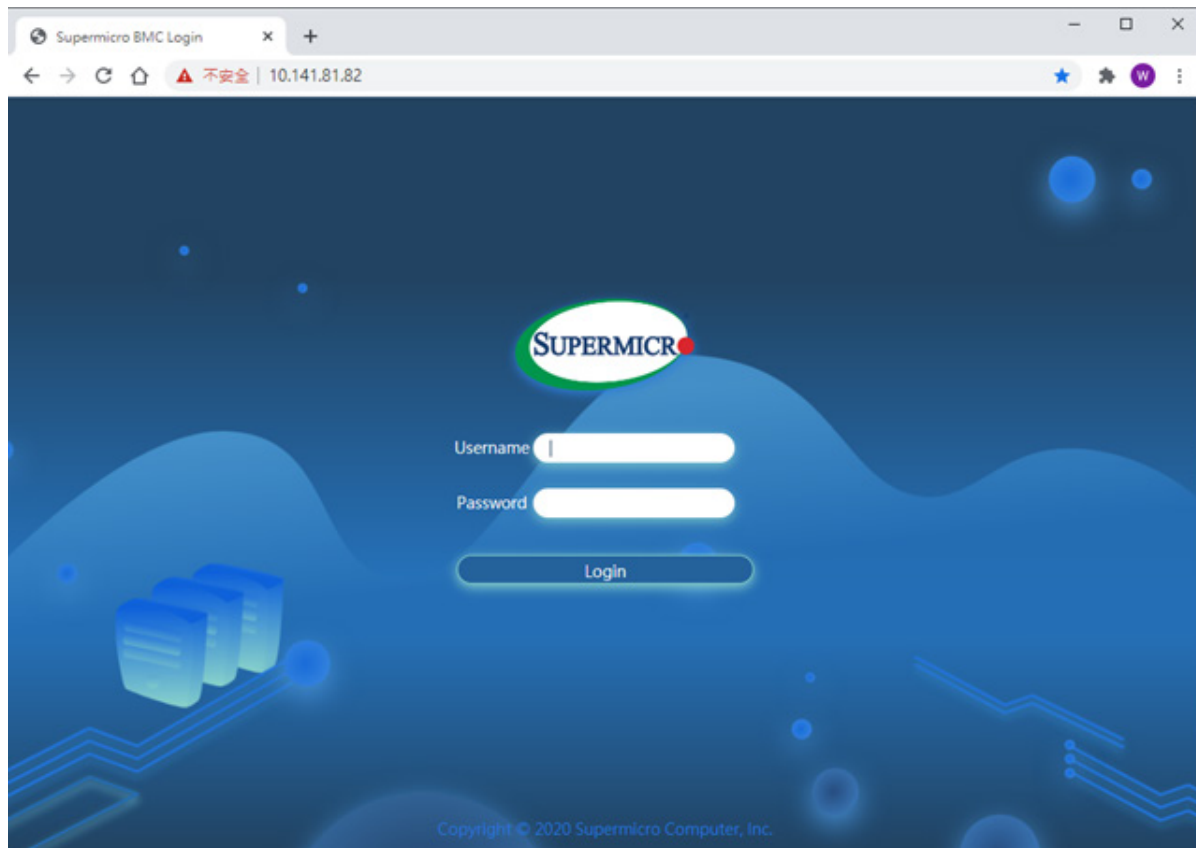
7. Wait for the update process to be completed. It might take a few minutes. Any system configuration change is not recommended during the update process. (Figure 7)



**Figure 7: BMC Firmware Updating in Progress**

8. BMC will reboot after the firmware is completely updated. Please wait for BMC to complete the system reboot.

9. Once the reboot process is complete, WEB GUI will return to the login screen, and you need to log in to the system again. (Figure 8)



**Figure 8: BMC Firmware Web User Login**

## 2. Updating BMC Firmware Using SUM

Please follow the procedure below to update X12 BMC firmware in SUM (Supermicro® Update Manager).

### Step 1: Installing SUM

To install SUM in Linux/FreeBSD OS, follow the steps below. Windows installation is similar.

1. Extract the `sum_x.x.x_Linux_x86_64_YYYYMMDD.tar.gz` archive file.
2. Go to the extracted `sum_x.x.x_Linux_x86_64` directory. Rename this directory to "SUM\_HOME".
3. Run SUM in the `SUM_HOME` directory.

#### Linux Example:

```
[shell]# tar xzf sum_x.x.x_Linux_x64_YYYYMMDD.tar.gz
[shell]# cd sum_x.x.x_Linux_x86_64
[SUM_HOME]# ./sum
```

### Step 2: Updating X12 BMC Firmware

Complete the steps below to update X12 BMC firmware:

1. Use the command "UpdateBmc" to run SUM to update X12 BMC firmware.

#### Syntax:

```
sum [[-i <IP or host name> | -I Redfish_HI] -u <username> -p <password>]
-c UpdateBmc --file <filename> [--overwrite_cfg] [--overwrite_sdr]
[--backup] [--forward]
```

#### Notes:

- BMC SOC will be updated after the firmware update process is completed.
- BMC configuration settings will be preserved by default for the new BMC firmware unless the `--overwrite_cfg` option is used.
- DO NOT flash BIOS and BMC firmware images at the same time.
- The `--overwrite_cfg` option overwrites the current BMC configuration using the factory default values in the given BMC image file.
- The `--overwrite_sdr` option overwrites the current BMC SDR data.
- SUM command is recommended for X12 BMC firmware updates: `sum [[-i <IP or host name> | -I Redfish_HI] -u <username> -p <password>] -c UpdateBmc --file <filename>`

2. The progress of the firmware updating will be displayed as shown below. DO NOT interrupt the process until it is complete. BMC will reboot after the firmware is completely updated. Please wait for BMC to complete the system reboot. (Figure 9)

**Example:**

### Remote Update (Figure 9)

The user can use SUM to update X12 BMC firmware via X12 IPMI port.

```
[SUM_HOME]# ./sum -i 192.168.34.56 -u ADMIN -p XXXXXX -c UpdateBmc
--file SMCI_BMC.rom
```

[illegible]

### Figure 9: Output of BMC Remote Update in SUM

The user can use SUM to update X12 BMC firmware under Linux, Windows or FreeBSD.

```
root@141-173-89:~/sum_2.5.0_Linux_x86_64
[root@141-173-89 sum_2.5.0_Linux_x86_64]# ./sum -I Redfish_HI -u ADMIN -p ADMIN
-c UpdateBmc --file SMC_I_BMC.rom
Supermicro Update Manager (for UEFI BIOS) 2.5.0 (2020/07/22) (x86_64)
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Managed system.....169.254.3.254
  BMC type.....X12_RoT_ATEN_AST2600
  BMC version.....00.10.52
  BMC ext. version....03 00 00 (T)
Local BMC image file....SMC_I_BMC.rom
  BMC type.....X12_RoT_ATEN_AST2600
  BMC version.....00.10.52

Status: Start updating BMC for 169.254.3.254

*****WARNING*****
Do not remove AC power from the server.
*****

Uploading FW.....
.....
.....
.....
.....Done
Updating FW...>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>Done

Status: BMC is updated for 169.254.3.254

Update Complete, Please wait for BMC reboot, about 6 mins
.....
.....
.....
.....
.....
.....
...
[root@141-173-89 sum_2.5.0_Linux_x86_64]#
```

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