# 1. Upgrade

In CLI, the command “upgrade” is used for system upgrade.

First, login uBMC and enter “configure” mode:

```
ubmc login: is_admin
Password:1qaz2wsX
ubmc> enable
ubmc# configure
ubmc(config)#
```

Then you can use scp/http/https/ftp to upload the image.

SCP:

```
ubmc(config)# upgrade file-url scp://x.x.x.x/path/file user <name>
```

FTP:

```
ubmc(config)# upgrade file-url ftp://x.x.x.x/path/file user <name> password <pass>
```

HTTP/HTTPS:

```
ubmc(config)# upgrade file-url http://x.x.x.x/path/file
```

```
ubmc(config)# upgrade file-url https://x.x.x.x/path/file
```

You can also upload the image into uBMC /var/images directory via SCP and use “upgrade image” to do the upgrade. Here is an example if the uBMC management IP is 192.168.0.10:

**Remote server:**

```
# scp ./ UBMC_1.2.0.7_BUILD_202e3c40_UPGRADE.img is_admin@192.168.0.10:/var/images
```

**uBMC:**

```
ubmc(config)# upgrade image UBMC_1.2.0.7_BUILD_202e3c40_UPGRADE.img
Checking the upgrade package...
[100%]  Done Check OK.

The software upgrade list is:
software:  UBMC_1.2.0.6_BUILD_e047e8b9 => UBMC_1.2.0.7_BUILD_202e3c40
The upgrade might take about 3 minutes to complete. Do you want to continue? (y|n):y
System upgrade starts.
[100%]  Done
System upgrade successfully.
Current booting bank 0
Software upgrade version: UBMC_1.2.0.7_BUILD_202e3c40
Software backup version: UBMC_1.2.0.6_BUILD_e047e8b9
Please reload the device to complete the upgrade.
```

The upgrade output will be like the above and then use command “reload” to reboot the device to complete the upgrade.

# 2. New Features

## 2.1 Thermal Profile

From 1.2.0.5, uBMC supports thermal profile setting to change fan speed with different CPU temperatures on **Small**/**Medium** boxes.

At present, it provides 4 fan profiles:
**Normal**: the fan speed will increase when temperature rises, which is the default profile.
**Quiet**: the fan speed will be low to reduce the fan noise.
**Strong**: the fan speed will increase quickly when temperature rises.
**Fullspeed**: the fan speed will be in full speed when temperature rises.

**NOTE**: The uBMC will shut down the host when the CPU temperature >= **88 °C**, and a warning like "Current temperature is 88C, so shut down HOST due to overheat." will be logged in syslog.

In CLI, use "bmc thermal profile <profile>" to change the thermal profile.

```
ubmc(config)# bmc thermal profile
fullspeed normal    quiet     strong
ubmc(config)# bmc thermal profile quiet
ubmc(config)#
```

Then you can use "show bmc configured" to view the current thermal profile.

```
ubmc(config)# show bmc configured
BMC Console Configuration:
Log File            : true
Log Rotate Num      : 20
Log Rotate Size(M)  : 5
COM Speed           : 115200
COM Data            : 8
COM Parity          : none
COM Stopbits        : 1
COM HW flowctrl     : true
COM SW flowctrl     : false

BMC Thermal Configuration:
Profile             : quiet
```

And you can use "show health" to check the current fan speed and host CPU temperature.

```
ubmc(config)# show health
Fan State:
ID  Name                Speed(RPM)  Status  Fault       Warning
1   FAN1_TACH           7563        green   no          no
2   FAN2_TACH           0           green   no          no
3   FAN3_TACH           7563        green   no          no

Temperature State:
ID  Name                Temperature(°C)    Peak(°C)
1   TEMP_HOST_CPU       46.000              46.000
2   TEMP_HOST_PCB       40.250              40.500
3   TEMP_IN_SYS         38.000              38.000
```

In Fan State, there are 3 fans displayed: FAN1, FAN2 and FAN3. FAN1 and FAN3 are mapped to the 2 fans at the rear of device as below, while FAN2 is reserved for future usage.


Please refer to the document below for the details of thermal profile test.

Fan_profile_all_info.xlsx

## 2.2 Voltage Change

In 1.2.0.5, the description and threshold of some voltage sensors are changed.

Before 1.2.0.5:

Host Voltage Status

| ID | Name | Voltage(V) |
|---|---|---|
| 1 | CPU_BRD 5V | 5.0560 |
| 10 | IO_BRD VCC3V3 | 3.3060 |
| 11 | IO_BRD VDD1V8 | 1.8120 |
| 12 | IO_BRD VDD1V5 | 1.4860 |
| 13 | IO_BRD VDD1V0 | 0.9980 |
| 14 | IO_BRD VDD1V0A | 1.0220 |
| 15 | IO_BRD V3P3A | 3.3360 |
| 16 | IO_BRD V1P1 | 1.0920 |
| 17 | IO_BRD RTC_BAT | 0.0000 |
| 18 | IO_BRD V5TO12A | 3.2460 |
| 2 | CPU_BRD 3.3V | 3.2958 |
| 3 | CPU_BRD VCCSRAM | 1.1910 |
| 4 | CPU_BRD VCCP | 1.0450 |
| 5 | CPU_BRD 1.05V | 1.7770 |
| 6 | CPU_BRD MEM_VDDQ | 1.6900 |
| 7 | CPU_BRD CPU_VNN | 1.4940 |
| 8 | CPU_BRD 1.8V | 2.1970 |
| 9 | IO_BRD 5V | 5.0620 |

After 1.2.0.5:

Voltage Status

| ID | Name | Voltage(V) |
|---|---|---|
| 1 | CPU_BRD V5P0-STBY | 4.9910 |
| 10 | IO_BRD VCC3V3 | 3.3060 |
| 11 | IO_BRD VDD1V8 | 1.8180 |
| 12 | IO_BRD VDD1V5 | 1.4900 |
| 13 | IO_BRD VDD1V0 | 1.0060 |
| 14 | IO_BRD VDD1V0A | 1.0000 |
| 15 | IO_BRD V3P3A | 3.3660 |
| 16 | IO_BRD V1P1 | 1.0980 |
| 17 | IO_BRD RTC_BAT | 0.0000 |
| 18 | IO_BRD V5TO12A | 3.2580 |
| 2 | CPU_BRD V3P3-STBY | 3.2673 |
| 3 | CPU_BRD VDDQ | 1.1910 |
| 4 | CPU_BRD V1P05 | 1.0450 |
| 5 | CPU_BRD VCCIN | 1.7770 |
| 6 | CPU_BRD V1P7 | 1.6990 |
| 7 | CPU_BRD V1P5 | 1.4940 |
| 8 | CPU_BRD V3P3-PCH | 3.2670 |
| 9 | IO_BRD 5V | 5.0880 |