	Type	Instructions	Doc.	R&D Department	No.	XX/XXXX/XX
	Version	1.2			Release Date	20150420
Inspur Electronic Information Industry Co.,Ltd.						

Lnxfash User Guide

Purpose

This document provides information to use the Lnxfash scripts to update the system BIOS.

Application Scope

Inspur Grantley platform server, 64bit Linux OS.

Operation


1. Copy the Lnxfash package and BIOS.bin (the image to be updated) to the 64bit Linux OS.
2. Move to Lnxfash directory (Figure 1). In this directory, Flash.sh is used to update the BIOS part of the image file, Meflash.sh is used to update the BIOS and ME parts of the image file, and the BIOS.bin is the image file to be updated.

```
[root@localhost biosflash]# ls
afulnx_64  BIOS.bin  Flash.sh  Meflash.sh
```

Figure 1

3. If no ME update, execute the command shown below to update the BIOS part. The updated process is shown in figure 2.

```
#./Flash.sh BIOS.bin
```

	Type	Instructions	Doc.	R&D Department	No.	XX/XXXX/XX
	Version	1.2			Release Date	20150420
Inspur Electronic Information Industry Co.,Ltd.						

```
[root@localhost biosflash]# ./Flash.sh BIOS.bin
+-----+
|          AMI Firmware Update Utility  v5.07.01          |
| Copyright (C)2014 American Megatrends Inc. All Rights Reserved. |
+-----+
Reading flash ..... done
- ME Data Size checking . ok
Secure Flash enabled, recalculate ROM size with signature...
- FFS checksums ..... ok
Loading capsule to secure memory buffer ... done
Erasing Boot Block ..... done
Updating Boot Block ..... done
Verifying Boot Block ..... done
Erasing Main Block ..... done
Updating Main Block ..... done
Verifying Main Block ..... done
Erasing NVRAM Block ..... done
Updating NVRAM Block ..... done
Verifying NVRAM Block ..... done
Erasing NCB Block ..... done
Updating NCB Block ..... done
Verifying NCB Block ..... done
Erasing RomHole Block ..... done
Updating RomHole Block ..... done
Verifying RomHole Block ..... done
```

Figure 2

4. If ME Changed, the BIOS and ME parts all need to be updated.

First, execute the command shown below to start the IPMI service (Figure 3). Meflash.sh has integrated the IPMI commands to disconnect the BMC and ME communication, to avoid BMC and ME communications' interference in the update process.


service ipmi start

```
[root@localhost ~]# service ipmi start
Starting ipmi drivers: [ OK ]
```

Figure 3

1. Then, execute the command shown below to update the BIOS and ME parts. The flashing process is shown in Figure 4.

#./Meflash.sh BIOS.bin

	Type	Instructions	Doc.	R&D Department	No.	XX/XXXX/XX
	Version	1.2			Release Date	20150420
Inspur Electronic Information Industry Co.,Ltd.						

```


[root@localhost biosflash]# ./Meflash.sh BIOS.bin
=====
ME reflash Begin.....
=====
3a 32 02
Waiting for ME to reflash now,please wait a moment.....
=====
ME reflashing now.....
=====
+-----+
|               AMI Firmware Update Utility  v5.07.01               |
|      Copyright (C)2014 American Megatrends Inc. All Rights Reserved.      |
+-----+

Reading flash ..... done
- ME Data Size checking . ok
Secure Flash enabled, recalculate ROM size with signature...
- FFS checksums ..... ok
Loading capsule to secure memory buffer ... done
Erasing Boot Block ..... done
Updating Boot Block ..... done
Verifying Boot Block ..... done
Erasing Main Block ..... done
Updating Main Block ..... done
Verifying Main Block ..... done
Erasing NVRAM Block ..... done
Updating NVRAM Block ..... done
Verifying NVRAM Block ..... done
Erasing NCB Block ..... done
Updating NCB Block ..... done
Verifying NCB Block ..... done
Erasing RomHole Block ..... done
Updating RomHole Block ..... done
Verifying RomHole Block ..... done
- Update success for /FDT!!
- Successful Update Recovery Loader to OPRx!!
- Successful Update FPT, MFSB, FTPR and MFS!!
- ME Entire Image update success !!
WARNING : System must power-off to have the changes take effect!
3a 32 00
Please wait a moment.....
ME reflash finished!
System must AC power off to have the changes take effect!

```

Figure 4

WARNING: System must power-off to have the changes take effect!

	Type	Instructions	Doc.	R&D Department	No.	XX/XXXX/XX
	Version	1.2			Release Date	20150420
Inspur Electronic Information Industry Co.,Ltd.						

Appendix

Change History

Date	Revision	Description
2015.2.3	1.0	Initial document
2015.4.10	1.1	Added Warning notes
2015.4.20	1.2	Update Afulnx tool's Version to V5.07.01, and change figure2 and figure4.