

NETAŞ NCS6722 N4 Server Firmware Version Upgrade

Sürüm	Tarih	Hazırlayan	Gözden Geçiren	Notlar
V1.0	13/10/2025	NETAŞ		İlk Yazım

NETAŞ Telecommunication

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Directory

1 Compilation Purpose	3
2 Preparations Before Upgrade	3
2.1 Material Preparation	3
2.2 Logging In to the Web Page.....	4
2.3 Confirming Version Before Upgrade	4
3 Pre-upgrade Check	5
3.1 Version Upgrade Sequence	5
3.2 Pre-upgrade Check	5
3.3 Stopping Services	5
4 Firmware Version Upgrade Method	6
4.1 BMC Version Upgrade Method	6
4.2 BIOS Version Upgrade Method.....	8
4.3 Upgrade of Other Firmware Versions (EPLD, FRU, Etc.).....	11
5 Post-upgrade Check 11.....	11
6 Rollback Method 11.....	11

1 Purpose

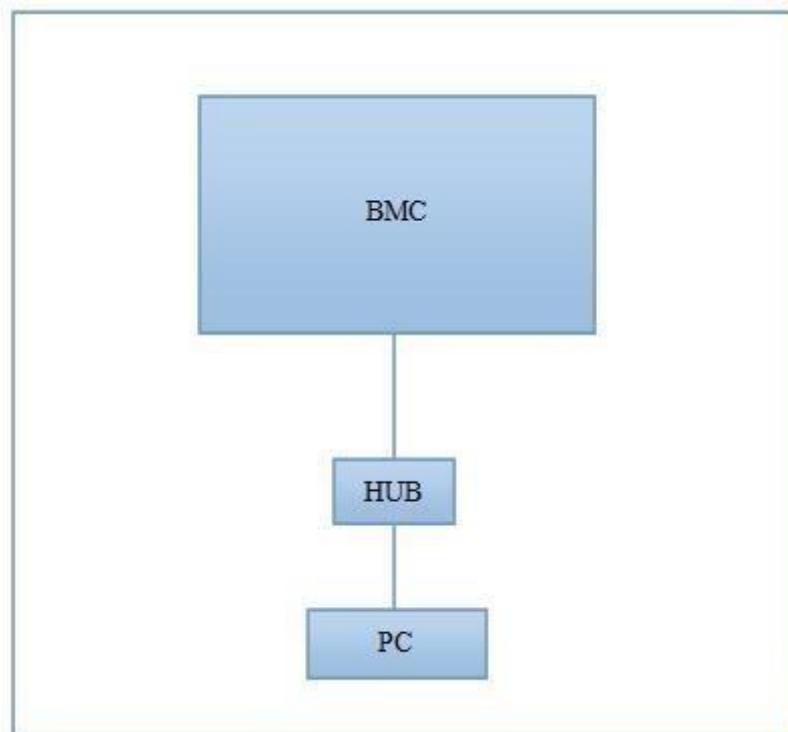
This document describes the firmware version upgrade flow and method of the NETAS NCS6722A N4 server. Through the detailed description of the version upgrade flow and method, onsite maintenance engineers can upgrade the firmware version of the NCS6722A N4 server. This upgrade guide is applicable to NETAS NCS6722A N4 equipment.

2 Preparations Before Upgrade

2.1 Material Preparation

- One PC
Used as the upgrade client.
- Network cables
Used for communication between PCs and the iSAC interface of the server.
- Display, keyboard, and mouse
Used to observe the startup of the server during the upgrade. If there is no display, you can use the KVM of the Web management interface.
- Version File
The new firmware version file needs to be downloaded to the PC client in advance.

Networking Mode Descriptions



2.2 Logging in to The Web Page

1. Use a network cable to connect the client to the iSAC management network interface of the server.
2. The default iSAC address of the server is 192.168.5.7. Set the IP address of the client to the same network segment, for example, 192.168.5.8. If the default IP address is modified, modify it according to the actual situation. After the modification, the client can ping through the IP address of the iSAC interface.
3. Open the browser on the client, and enter <https://192.168.5.7> in the address bar. If the default address has been modified, enter the actual address. Google Chrome 59 or later is recommended.
4. As shown in the following figure 2-1, enter the default username/password: Administrator/Superuser9! In the login interface to enter the BMC WEB management interface. If the user has customized the initial username or password, enter the username and password with administrator permissions.

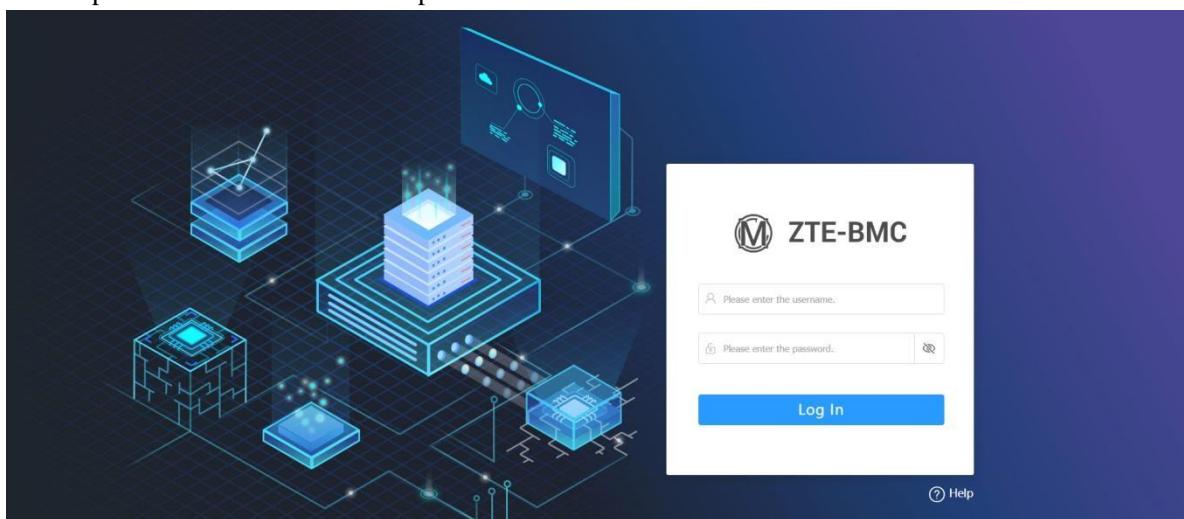


Figure 2-1

2.3 Confirming The Version Before The Upgrade

Log in to the Web management page of the server, and select [BMC Settings --> Firmware Upgrade]. The current firmware version of the active board is displayed.



Firmware Upgrade

! After the BMC is upgraded, the BMC is automatically restarted. When the system is powered off, the BIOS upgrade takes effect directly. When the system is powered on, the BIOS is updated to the backup version and takes effect automatically after the system is powered off. It takes a period of time to make the firmware take effect automatically, and firmware upgrade cannot be performed during this period.

Firmware Operation	
Version Information	<input type="button" value="Reset BMC"/>
	BMC Primary Partition Version 04.23.01.01 (Apr 11 2023)
	BIOS Version 21.23.01.01 (Apr 11 2023)
	EPLD Version 00.00.00.101
<input type="button" value="Upgrade"/>	<input type="checkbox"/> Don't Inherit Configuration When Upgrading BMC
<input type="button" value="Upload"/>	<input type="checkbox"/> Don't Inherit Configuration When Upgrading BIOS
<input type="button" value="Upgrade"/>	

Figure 2-2

3 Pre-upgrade Check

3.1 Version Upgrade Sequence

When multiple firmware versions of NCS6722A N4 server need to be upgraded, follow the recommended sequence: EPLD version --> BMC version --> BIOS version --> FRU version. It is common to upgrade the BMC version and BIOS version. Upgrade the BMC version and BIOS version in turn in accordance with the upgrade method described in Chapter 4.

3.2 Pre-upgrade Check

Before the upgrade, log in to the [Maintenance --> Alarm&Event] page to check whether there is any abnormal alarm on the server. If there is any abnormal alarm, analyze and handle the alarm, and then upgrade the version.

3.3 Stopping Services

In the upgrade of EPLD and BIOS, the server needs to be restarted to make the upgrade effective. Therefore, it is strongly recommended that the services on the server be stopped before the upgrade. First synchronize data in the operating system, and then click the Shutdown or power down button in the system, or use the shutdown command line to shutdown the host to avoid abnormal service interruption or the loss of key data. Back up important service data in advance. Ensure that the server is shut down before performing the upgrade operation.

Operation steps:

Windows. Click Shutdown directly.

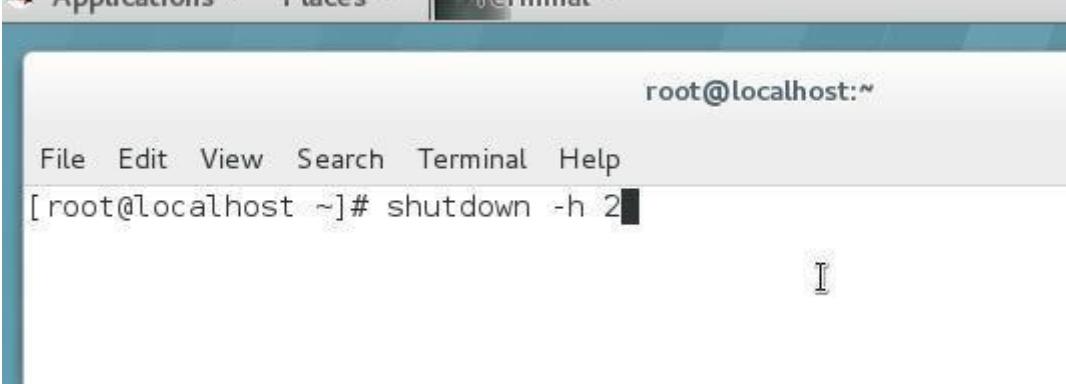
Linux Shutdown Suggestions:

1. shutdown -h 2 #Shut down automatically after two minutes.

(It is recommended that you use the delayed shutdown command.)

2. shutdown -h now #Power off immediately. (Used by root users)

(Using the Red Hat system as an example, the shutdown command can be entered through the command line in Figure 3-1)



The screenshot shows a terminal window with a blue header bar. The header bar contains the NETAS logo, the word 'NETAS', and menu items 'Applications', 'Places', and 'Terminal'. The terminal window itself has a light gray background. At the top of the window, the text 'root@localhost:~' is displayed. Below that is a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The main area of the terminal shows the command '[root@localhost ~]# shutdown -h 2' being typed into the terminal. The terminal window is set against a dark blue background.

Figure 3-1

4 Firmware Version Upgrade Method

4.1 BMC Version Upgrade Method

1. The [BMC Settings --> Firmware Upgrade] page is displayed, see Figure 4-1.

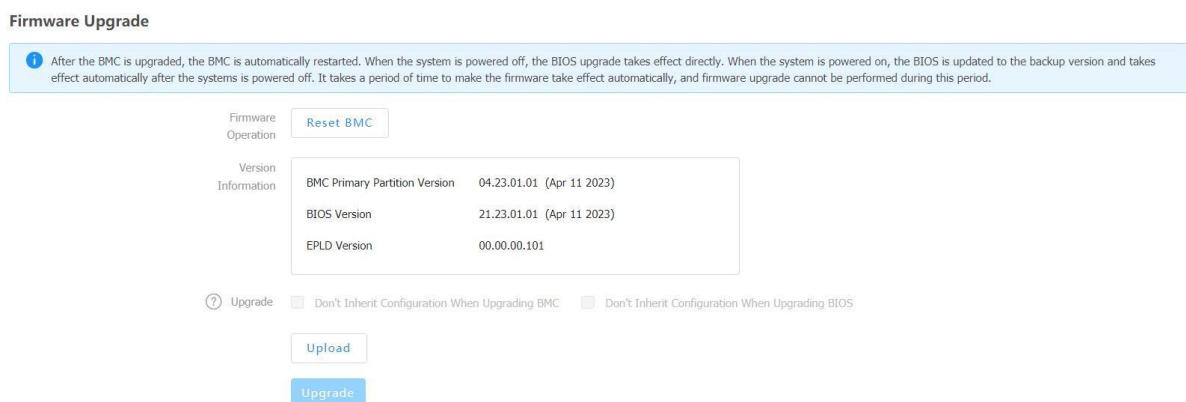


Figure 4-1

2. As shown in the following figure 4-2, click **Upload** and select the BMC version file to be upgraded. The progress bar shows the version upload progress. After the version is uploaded successfully, the version is uploaded successfully.

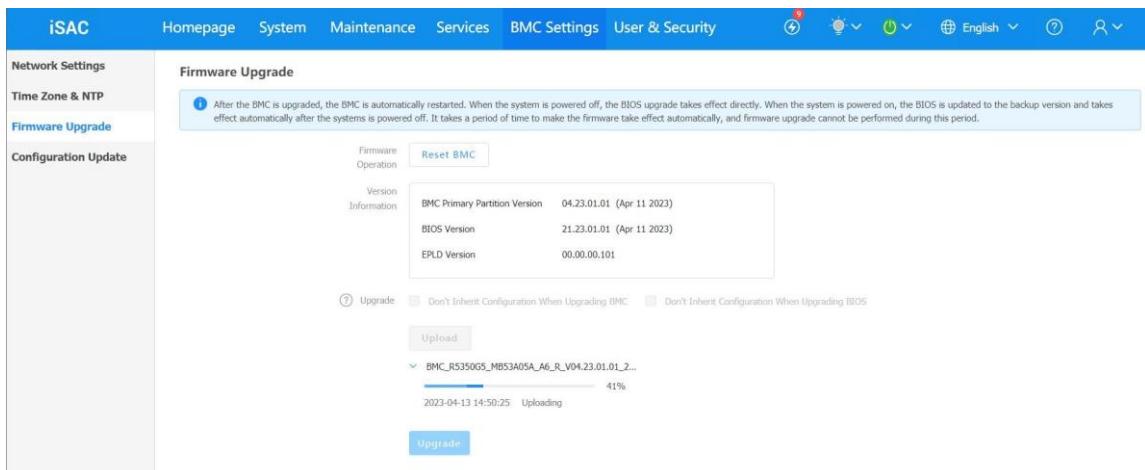


Figure 4-2

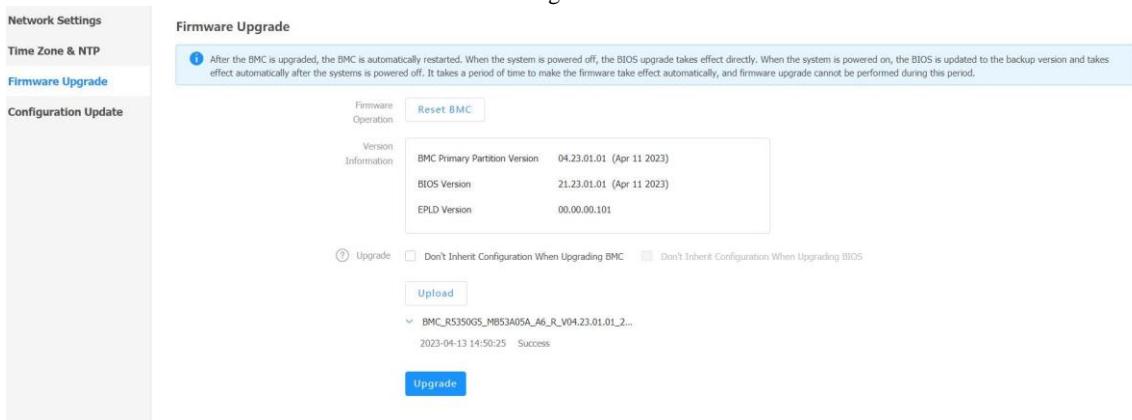


Figure 4-3

3. Click “Upgrade” . The Firmware Upgrade dialog box is displayed. Click “Submit”, see Figure 4-5.

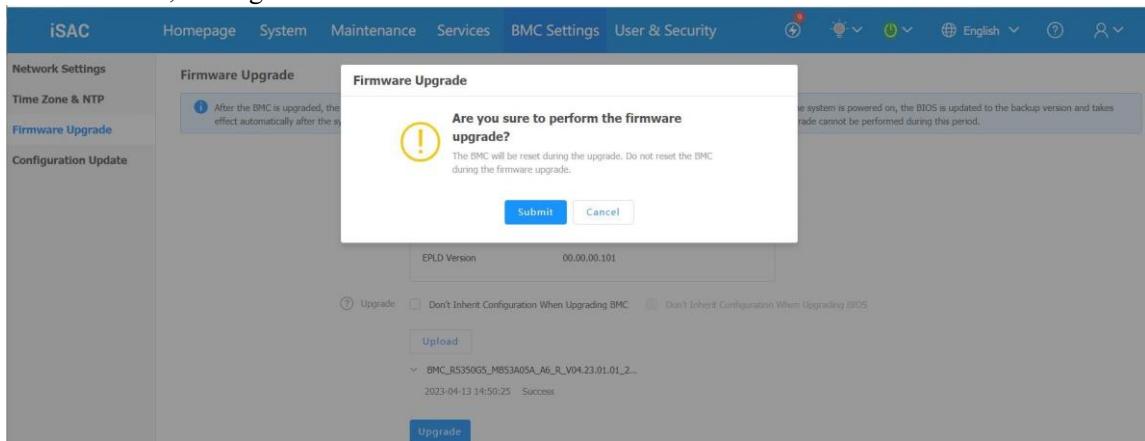


Figure 4-4

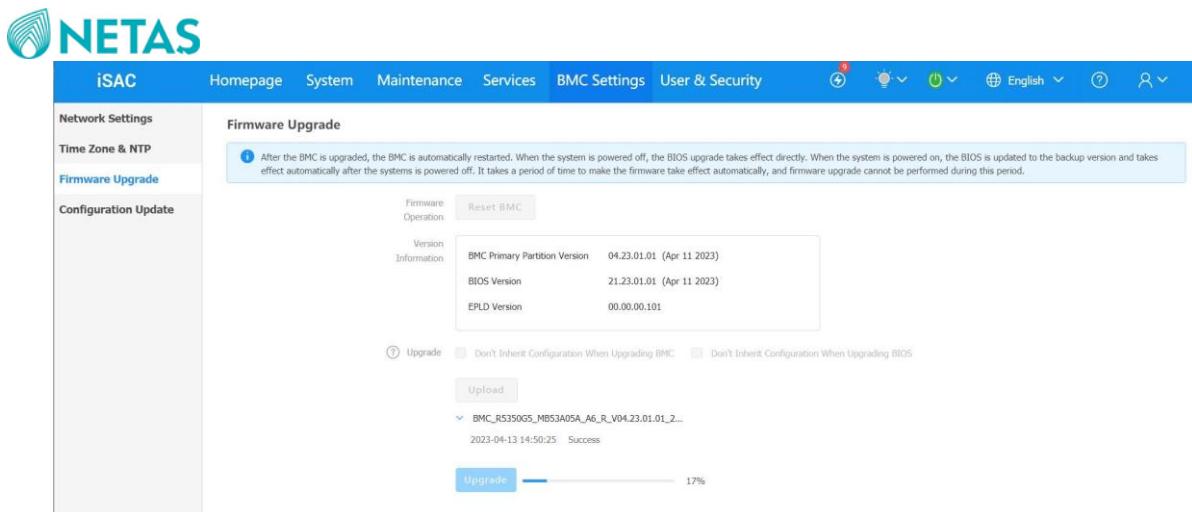


Figure 4-5

4. After the system prompts that the upgrade is successful, the BMC are automatically restarted to take effect. It takes about 11-12 minutes to restart and add the version for synchronization.

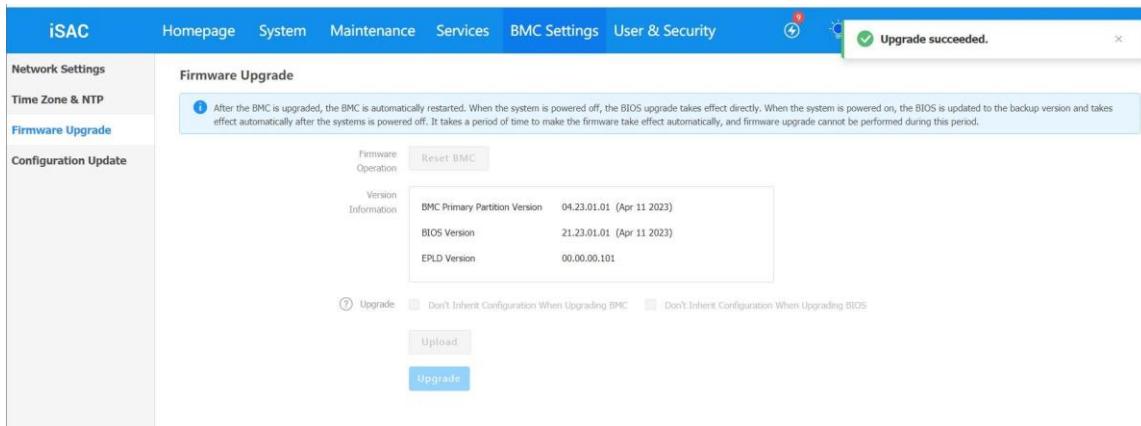


Figure 4-6

- Re-log in to the Web management page. On the [BMC Settings --> Firmware Upgrade] page, verify that the version upgrade is successful.

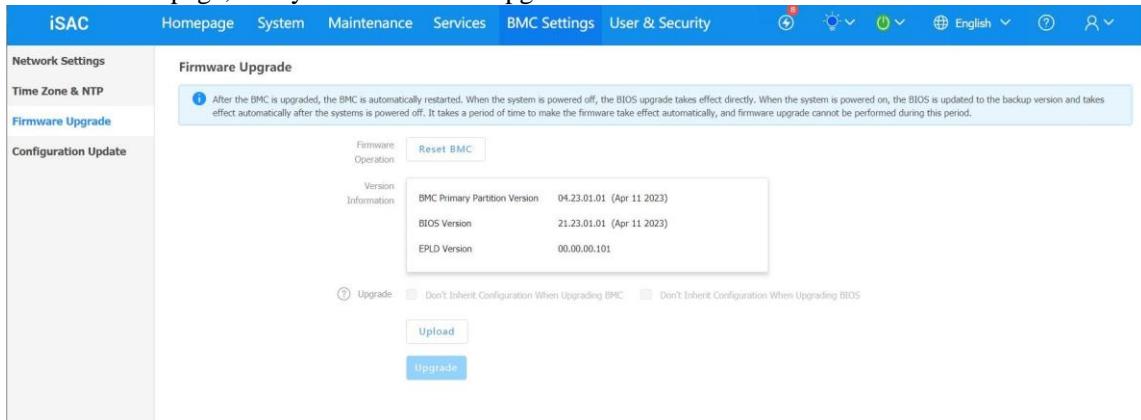


Figure 4-7

4.2 BIOS Version Upgrade Method

- The [BMC Settings --> Firmware Upgrade] page is displayed, see Figure 4-8.

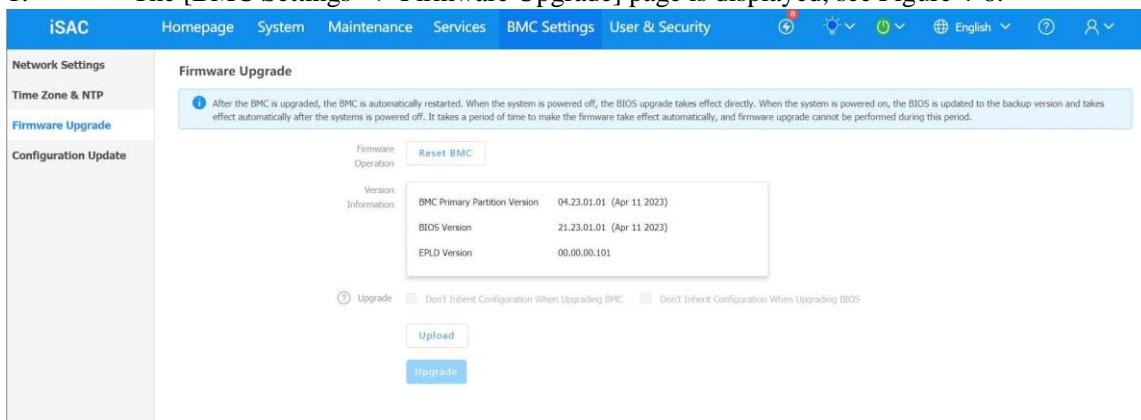


Figure 4-8

- As shown in the following figure 4-9, click and select the BIOS version file to be uploaded. The progress bar shows the version upload progress. After the file is uploaded successfully, the file is uploaded successfully, see Figure 4-10.

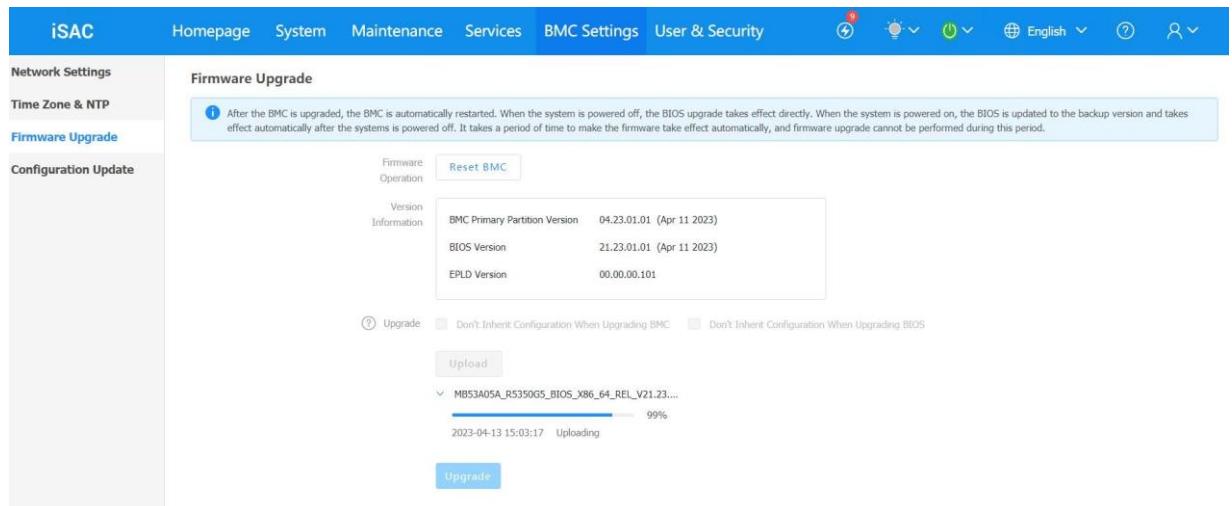


Figure 4-9

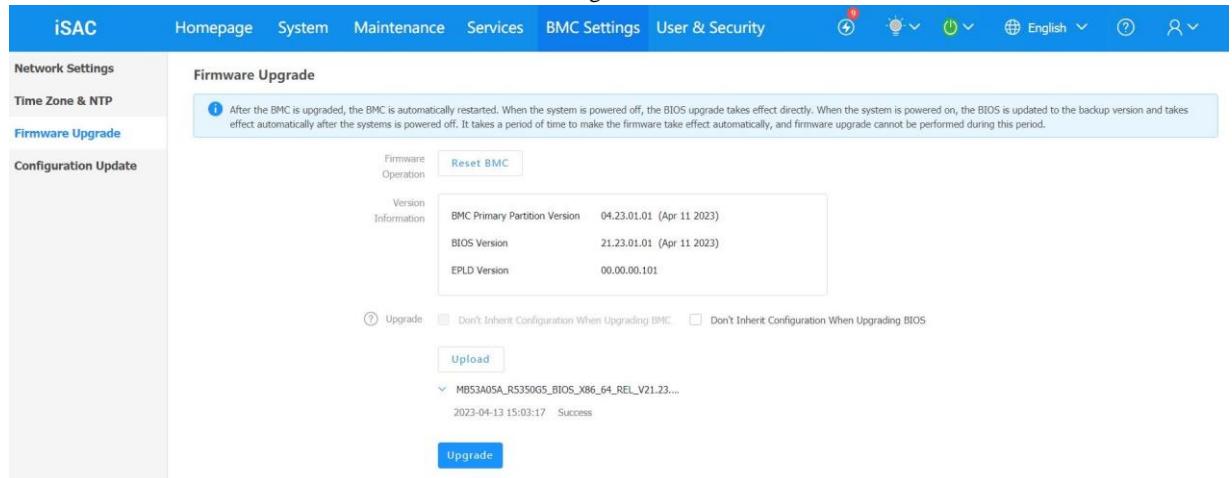


Figure 4-10

3. Click “Upgrade” . A dialog box is displayed. Click “Submit” to upload, and upgrade the BIOS, see Figure 4-11 and Figure 4-12. The progress bar shows the upgrade progress.

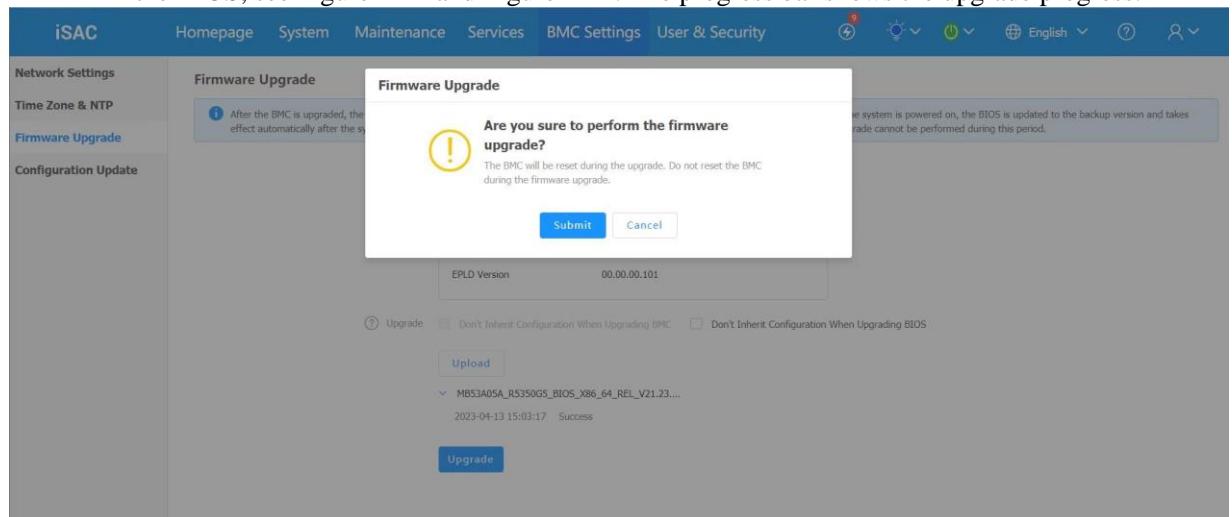
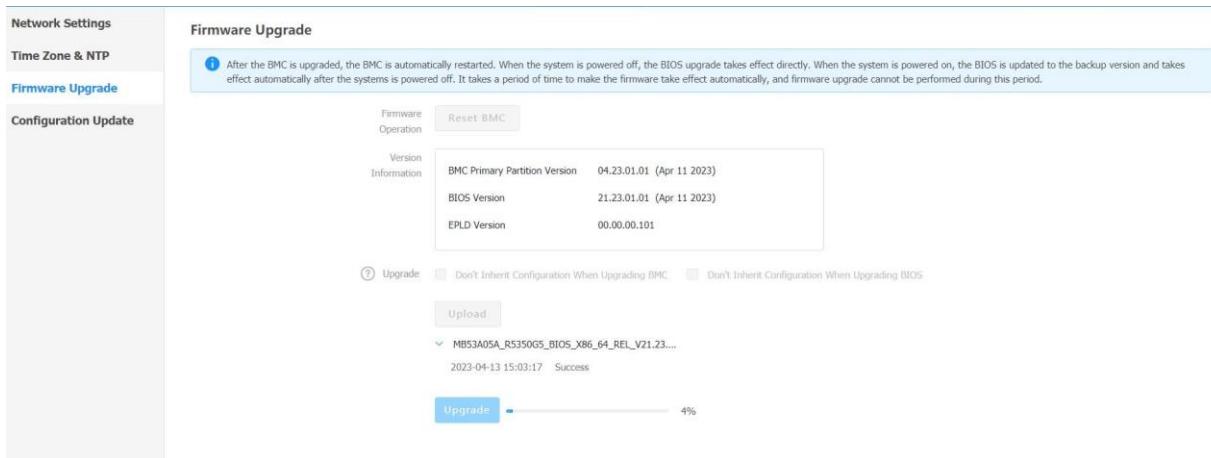


Figure 4-11

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Page

Figure 4-12

4. After about 6-7 minutes, the "Upgrade succeeded" message will be displayed, as shown in the following figure (4-13).

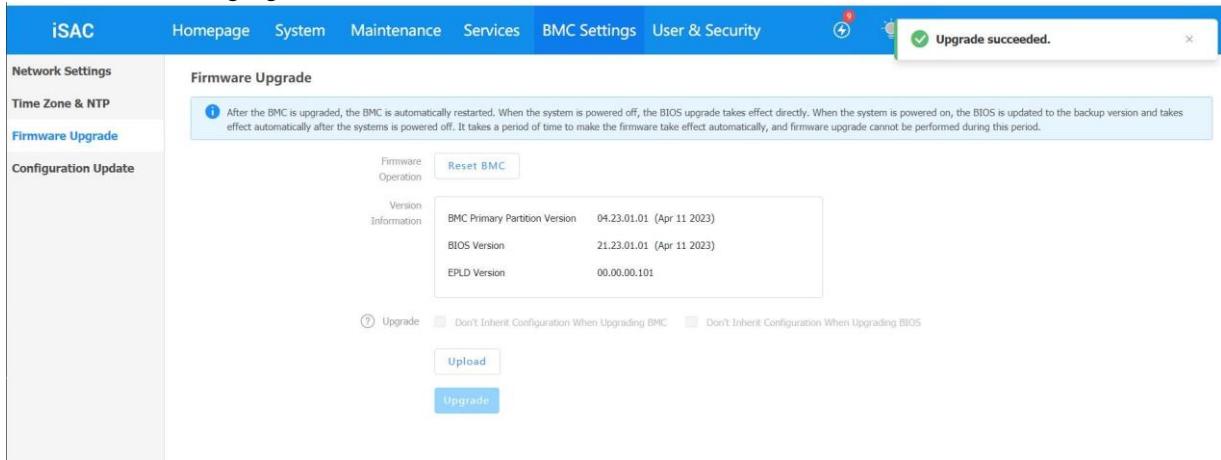
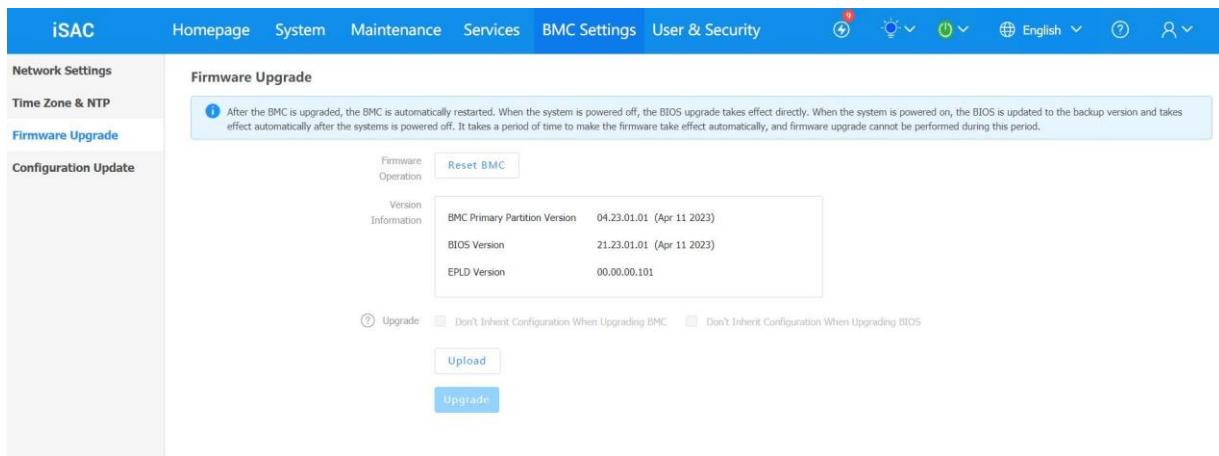


Figure 4-13

If you do not shut down the operating system as recommended before the version upgrade, you need to manually shut down the operating system, and the server will automatically restart to make the version effective.

If you shut down the operating system as recommended before the version upgrade, you need to wait for 3-5 minutes and then the server automatically switches to the new version.

5. The server is restarted successfully, log in to the web again, and check the BIOS version from [BMC Settings --> Firmware Upgrade]. After the BIOS version is updated successfully (see Figure 4-14), the BIOS version is upgraded to the target version 21.23.01.01.



Firmware Upgrade

After the BMC is upgraded, the BMC is automatically restarted. When the system is powered off, the BIOS upgrade takes effect directly. When the system is powered on, the BIOS is updated to the backup version and takes effect automatically after the system is powered off. It takes a period of time to make the firmware take effect automatically, and firmware upgrade cannot be performed during this period.

Version Information	Value
BMC Primary Partition Version	04.23.01.01 (Apr 11 2023)
BIOS Version	21.23.01.01 (Apr 11 2023)
EPLD Version	00.00.00.101

Upgrade
 Don't Inherit Configuration When Upgrading BMC
 Don't Inherit Configuration When Upgrading BIOS

Figure 4-14

- If you need to upgrade the standby BIOS to the new version, repeat the second, third, fourth, and fifth steps to upgrade the BIOS again. After the system prompts that the upgrade is successful, both the active and standby BIOS are of the new version. On the [BMC Settings --> Firmware Upgrade] page, check the active BIOS.

4.3 Upgrade of Other Firmware Versions (EPLD, FRU, Etc.)

Other firmware versions support web online upgrade. For the upgrade method and steps, refer to 4.1 BMC Version Upgrade Method.

Note: If some versions fail to be upgraded occasionally during the firmware version upgrade, start the upgrade again.

5 Check After Upgrade

1. Log in to the Web management page of the server (the IP address and password of the iSAC interface are the same as those of the user before and after the upgrade), enter the [BMC Settings --> Firmware Upgrade] page, and check whether the BMC and BIOS are upgraded successfully.
2. Enter the [Maintenance --> Alarm&Event] page. Verify that no new abnormal alarm is displayed after the upgrade.
3. The server is started properly, and you can enter the operating system properly.

6 Rollback Method

The version rollback method is the same as the version upgrade method. Select the history version file for the rollback.

Note: After the firmware version is upgraded to support the new functions, version rollback may cause compatibility problems. Therefore, it is not recommended to roll back the version of the fixed parts in unnecessary cases.