BackupBoxA V100R023C10

Upgrade Guide

Issue	01
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Change History

Change History

Issue	Date	Description
01	2023-09-07	This issue is the first official release.

Contents

1 Description

1.1 Application Scope

- This document applies to the upgrade of the BackupBoxA. The following uses the upgrade of BackupBoxA V100R023C10 as an example.
- The BackupBoxA is a southbound device of the EMMA. It can be upgraded by connecting it to the EMMA through the app or network management system (NMS).

The upgrade modes are as follows.

Upgrade Mode	WLAN
Upgrading the BackupBoxA V100R023C10 (through the NMS)	Supported
Upgrading the BackupBoxA V100R023C10 (through the mobile app)	Supported

NOTICE

- Ensure that the correct upgrade package is selected to prevent future upgrade failures.

1.2 Version Requirements for Upgrade

Version Requirement

This document is applicable to the upgrade of the BackupBoxA V100R023C10.

Impact on Services

The BackupBoxA restarts after it is upgraded.

1.3 Precautions

Follow the instructions in this document during the upgrade. During the upgrade, make sure that devices are not powered off or reset manually to reduce upgrade risks.

2 Upgrade Procedure

The upgrade schedule is as follows.

Procedure	Duration
Preparing for the upgrade	About 30 minutes
Performing the upgrade	Remote upgrade through the NMS: about 10 minutes Upgrade through the app (connected to the EMMA only through WLAN): about 5 minutes
Verifying the upgrade	About 5 minutes

3 Preparing for the Upgrade

3.1 Preparing Software and Documents

3.1.1 Obtaining Required Upgrade Software and Tools

Visit **http://support.huawei.com/enterprise/** and go to the download page based on the software package download path to upgrade the BackupBoxA. After obtaining the package, decompress it to obtain the upgrade package as listed in the following table.

Item	Upgrade Package	Download Path
BackupBoxA V100R023C10	BackupBoxA_V100R023C10 .zip (Note: Obtain the upgrade package of the target version.)	**Product Support** > **Software Download** > **Digital Power** > **FusionSolar** > **BackupBoxA**

3.1.2 Checking the Upgrade Package Integrity

Check the package name and the number of files contained in the package after obtaining it to see whether the package is tampered with or damaged during transmission. The upgrade package can be used only after it passes the verification. The upgrade package checks itself during the upgrade. The composition of the upgrade package is listed in the following table.

Composition of the BackupBoxA Upgrade Package
- vercfg.xml   - signaturelist.crl   - signaturelist.cms   - signaturelist   - config.txt   - BACKUPBOXA_Moni.bin   - BACKUPBOXA_Master.bin

3.2 Checking Before the Upgrade

Before the upgrade, check the human-machine interfaces such as the NMS and app, obtain the current device version, and rectify communication faults and login failures to ensure that the device is running properly.

4 Performing the Upgrade

4.1 Upgrading the BackupBoxA Through the Mobile App

1. The BackupBoxA can be upgraded by connecting it to the EMMA through the local mobile app.

2. The upgrade is complete after the upgrade progress reaches 100% and the BackupBoxA automatically restarts.

4.1.1 Preparations

[Required environments] BackupBox, FusionSolar app, and mobile phone (Android or iOS)

[Device requirements] The BackupBox is powered on and started properly. The FusionSolar app has been installed on the mobile phone and the application permission has been enabled. The app can access the EMMA WLAN.

To install the FusionSolar app, perform the following step:

Step 1 Download and install the app.

Search for **FusionSolar** in one of the following app stores, download the app installation package, and install the app according to the operation guide.

- Baidu Mobile Assistant (Android)
- Huawei AppGallery (Android)
- Google Play (Android)
- App Store (iOS)

After the installation is complete, the FusionSolar icon is displayed as follows.
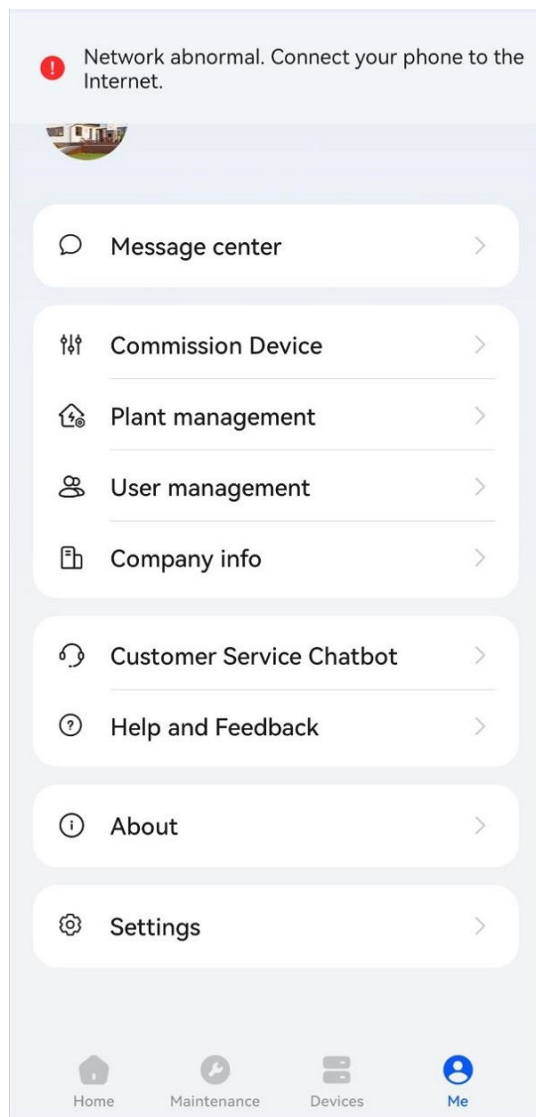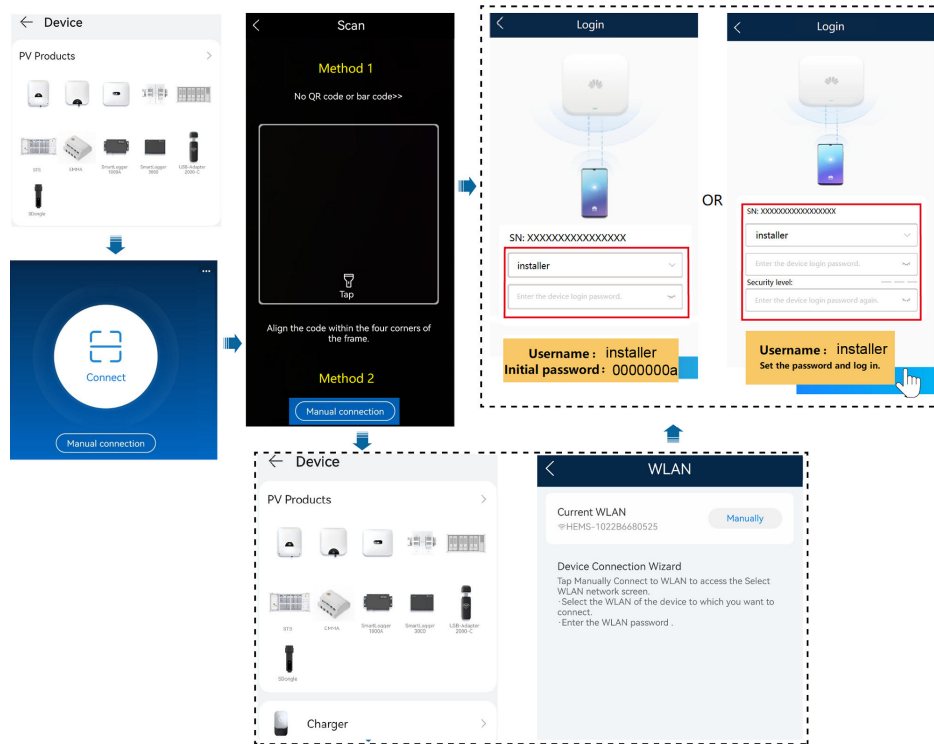
----End

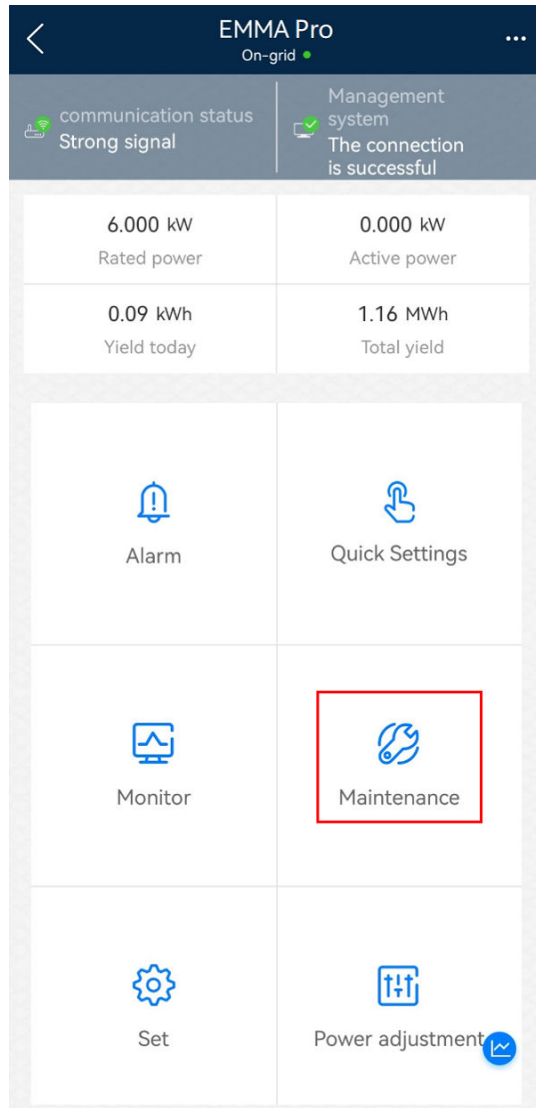# 4.1.2 Procedure

Perform the following steps on the FusionSolar app:

Step 1 Open the FusionSolar app on the mobile phone and tap **Commission Device**.

Step 2 Log in to the app.

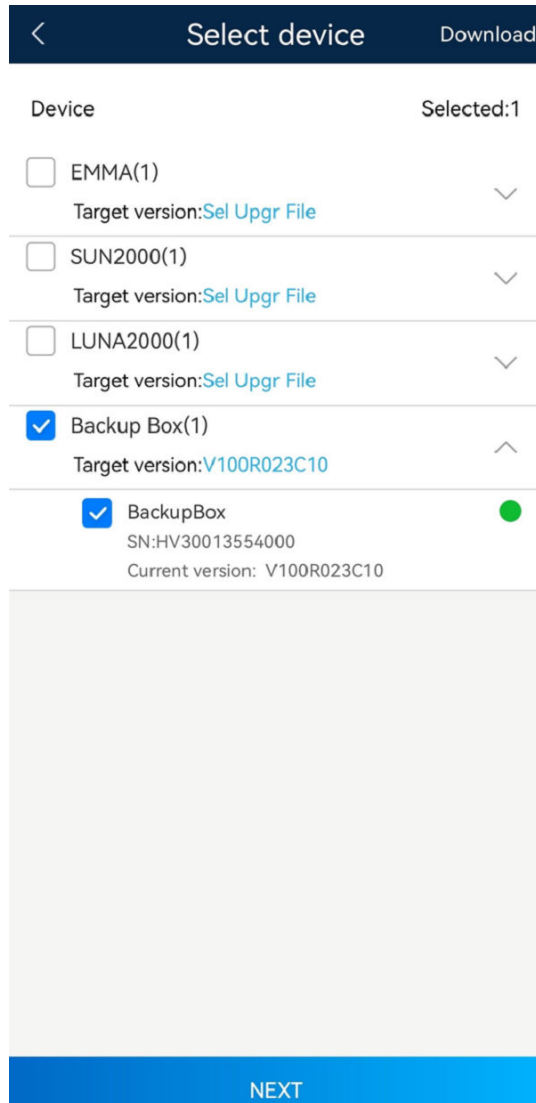**Step 3** Tap **Maintenance**.

Step 4 Tap **Upgrade**.
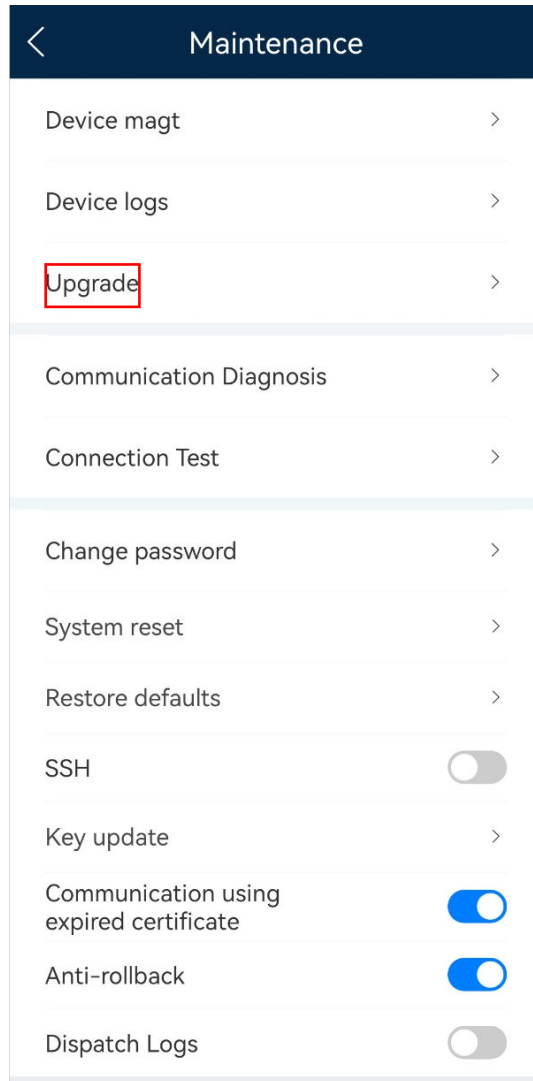
Step 5 On the displayed screen, select the BackupBoxA and upgrade package, and tap **NEXT** to perform the upgrade.

Step 6 Upload the upgrade package. Wait until the upload is complete.
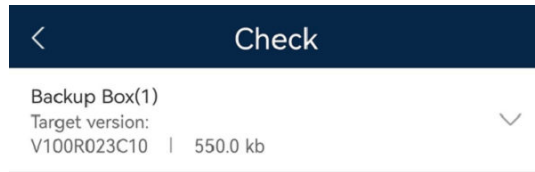
Step 7 After the upgrade package is uploaded, a dialog box is displayed asking you to confirm the upgrade. Tap **Update Now** to continue.
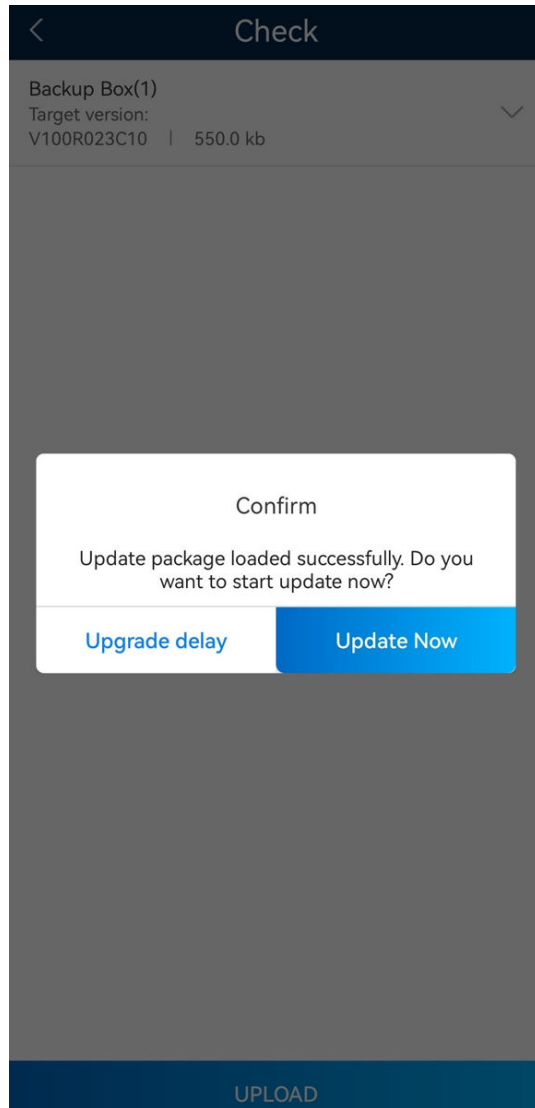
Step 8 After the upgrade task is successfully created, the following dialog box is displayed. Then, tap **OK**.
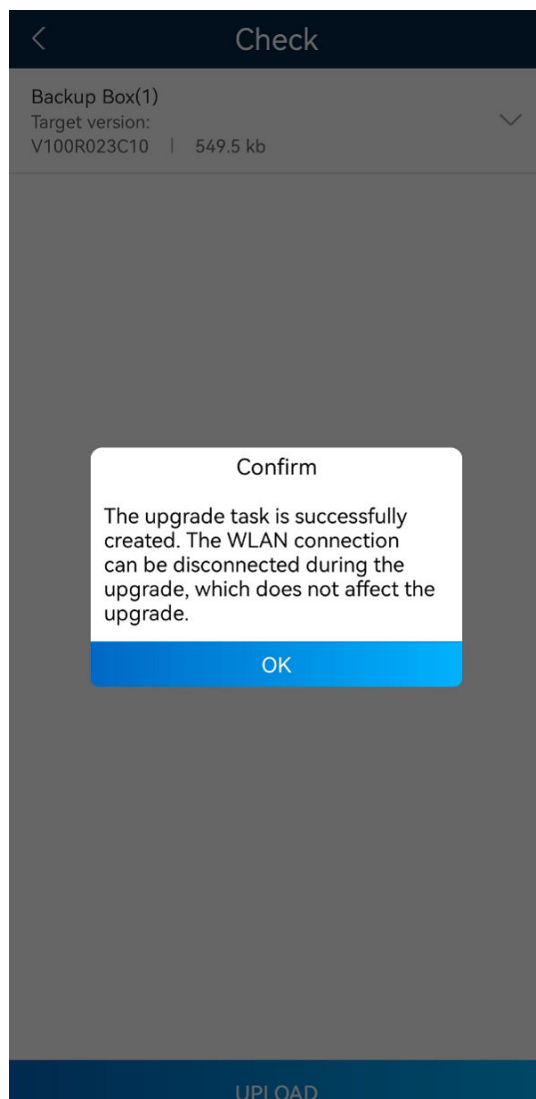
Step 9 Tap **OK** and then the device upgrade progress is displayed. When the upgrade progress reaches 100%, the upgrade is complete.
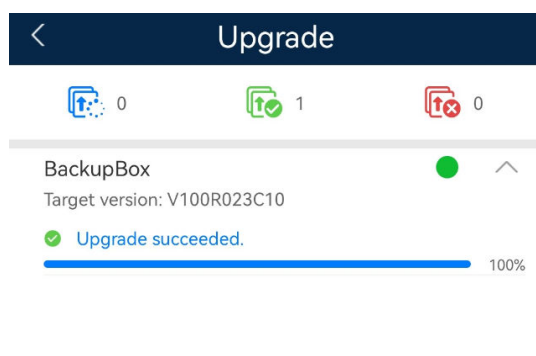
----End

After the preceding process is completed, the BackupBox is upgraded.

If the installer needs to delay the upgrade for a period of time due to reasons such as device installation, tap **Upgrade delay** in Step 7.

The EMMA automatically counts down in the backend. By default, the BackupBoxA will be automatically upgraded after four hours. The following message is displayed when you delay the upgrade.
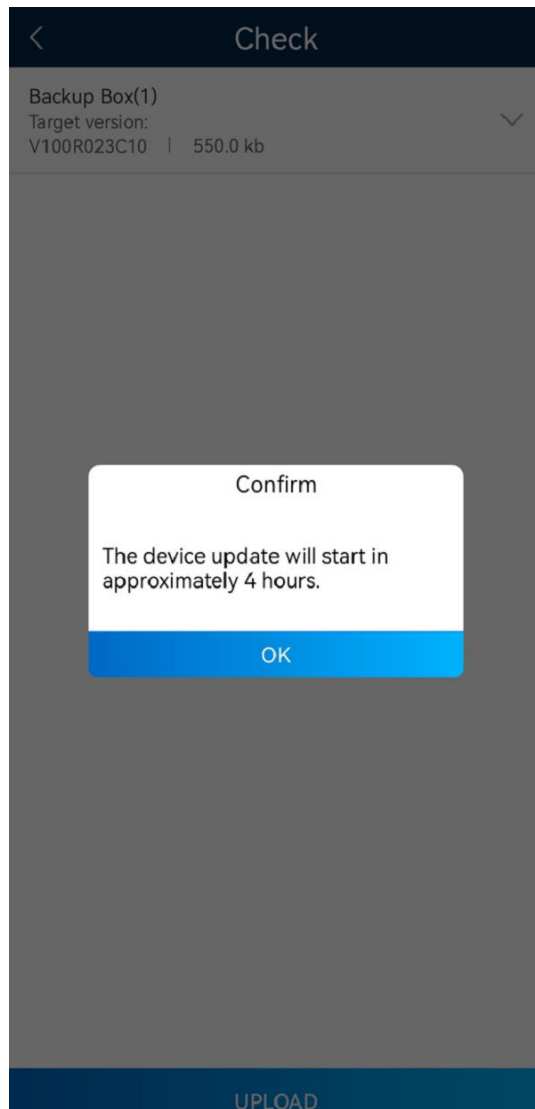
4.1.3 Verifying the Result

After the BackupBoxA restarts, log in to the FusionSolar app and check whether the current software version is the target version.

Follow Step 5 in 4.1.2 to access the device upgrade screen and expand the device details to view the current version of the device.
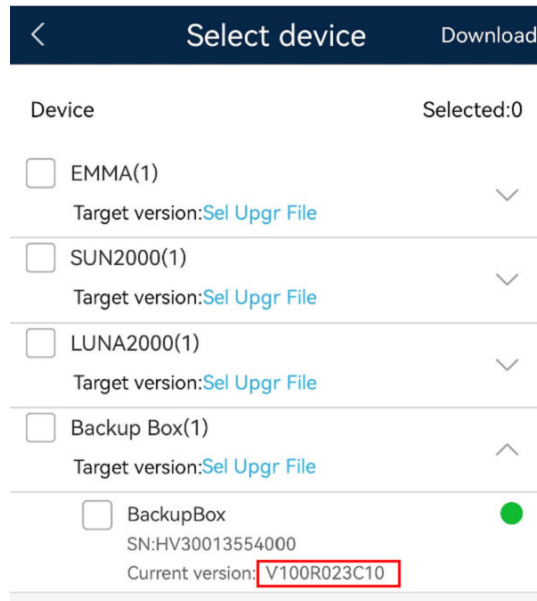
4.1.4 Troubleshooting

Connect to the EMMA WLAN on the app to upgrade the BackupBoxA. If any of the following exception scenarios occurs, perform operations as prompted:

- **Scenario 1**: A message is displayed on the app, indicating that the activation is delayed.

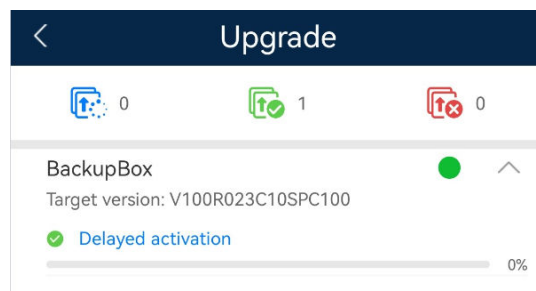**Note**: If this message is displayed above the upgrade progress bar, the device automatically enters the delayed upgrade state because the current working conditions do not meet the immediate upgrade conditions. By default, the device will be upgraded four hours later.

Operation: Disconnect the WLAN. The upgrade task will be automatically processed in the backend of the EMMA. If you want to cancel the delayed upgrade task, you can deliver a new upgrade task on the upgrade screen.

- **Scenario 2**: When the device is connected to the EMMA on the app and an upgrade task is delivered, a message is displayed, indicating that some upgrade task is in the delayed state.
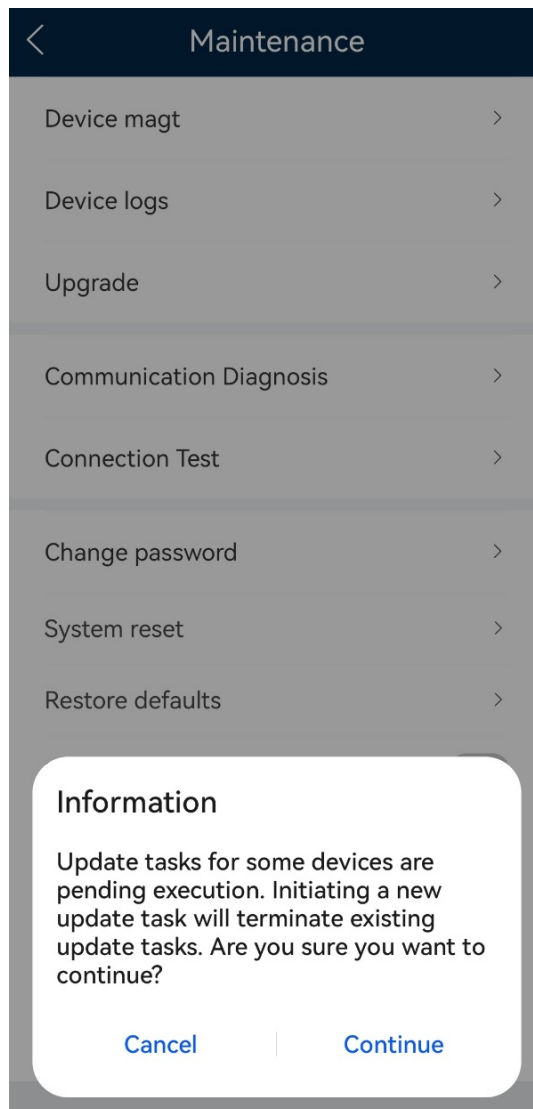
Note: This message indicates that a delayed upgrade task exists in the backend of the EMMA. You can trigger the delayed upgrade task in either of the following ways:

a. Deliver the delayed upgrade task following steps in **4.1.2**.

b. The EMMA upgrades multiple southbound devices at the same time. For devices that require immediate upgrade, if the upgrade conditions are not met or the upgrade fails, the upgrade will be delayed.

Operation: Handle the issue according to the current upgrade requirements. There are two scenarios:

a. If you want to deliver a new upgrade task, tap **Continue**. After receiving the new upgrade task, the EMMA automatically stops the existing delayed upgrade task.

b. If you cancel the new task, the EMMA will execute the existing delayed upgrade task until the task times out seven days later or all devices are successfully upgraded.

- **Scenario 3**: For the first connection to the EMMA on the app, a message is displayed, indicating that the xxx device can be used only after being upgraded.

Note: After the app is connected to the device, it automatically obtains the latest version. If the current version is earlier than the latest version, a dialog box is displayed.

Operation: Perform upgrade operations as prompted on the app to upgrade the device.

Follow steps in **4.1.2** to perform immediate upgrade or delayed upgrade as required.

If you delay the upgrade, the system does not prompt you to upgrade the device to the latest version when you connect to the EMMA next time.

In other upgrade scenarios, if other messages are displayed on the app, perform operations as prompted. If the device is not upgraded to the target version, perform the upgrade again until the upgrade is successful. If the fault persists, contact Huawei technical support.

4.2 Upgrading the BackupBoxA Through the NMS

1. The BackupBoxA can be upgraded through the NMS only after the EMMA of the BackupBoxA is connected to the router. The router needs to be connected to the network.
2. The upgrade is complete after the upgrade progress reaches 100% and the BackupBoxA automatically restarts.

4.2.1 Preparations

[Required environments] BackupBoxA, networked router, and NMS

[Device requirements] The BackupBoxA is properly powered on. The router is properly connected to the EMMA and the public network. The EMMA can be properly connected to the NMS.

4.2.2 Procedure

Step 1 Open the browser, enter the NMS address to access the NMS. Enter the user name and password to log in to the NMS.

NOTE
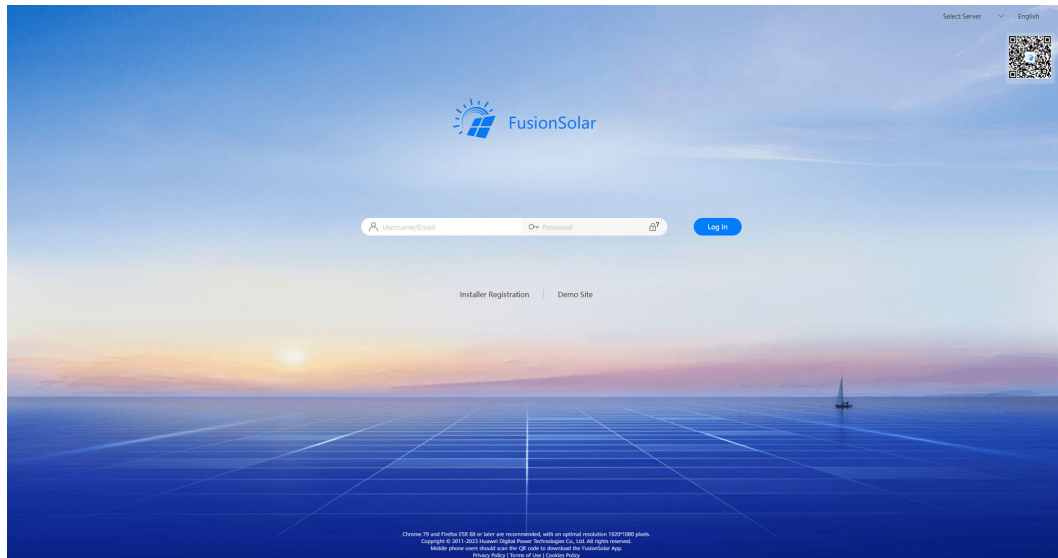
- This document uses **https://cn.fusionsolar.huawei.com/** as an example. The actual NMS connected to the BackupBoxA prevails.
- If you do not have a login account, register an installer account and then log in.
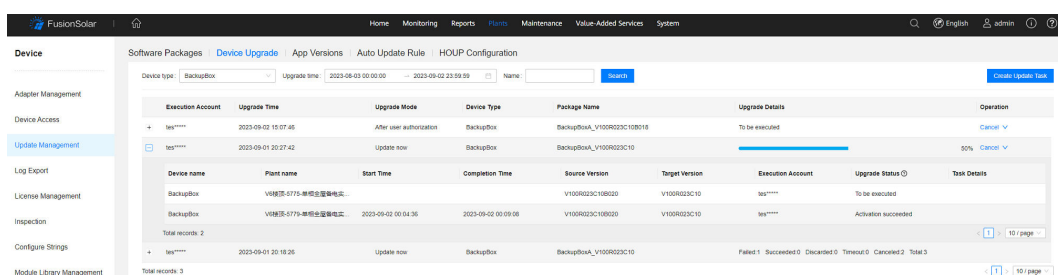- Chrome 79, Firefox ESR 68, and later versions are recommended.

Step 2 On the home page of the FusionSolar, choose **Plants** > **Update Management**.
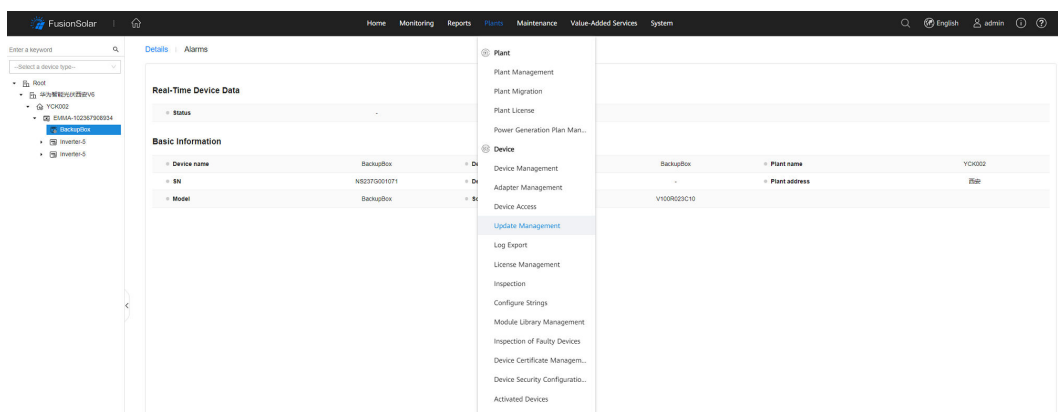

NOTE

Before upgrading a device, ensure that the plant has been created and the device can be found in the plant.

Step 3 On the **Update Management** page, click **Device Upgrade** to query the upgrade information about devices of the plant.

Step 4 On the **Device Upgrade** tab page, click **Create Update Task** and options of the device to be upgraded are displayed. Set **Upgrade** to **Update now** and **Device type** to **BackupBox**, and choose the target device and target device version. After all options are set, click **OK** to upgrade the device.
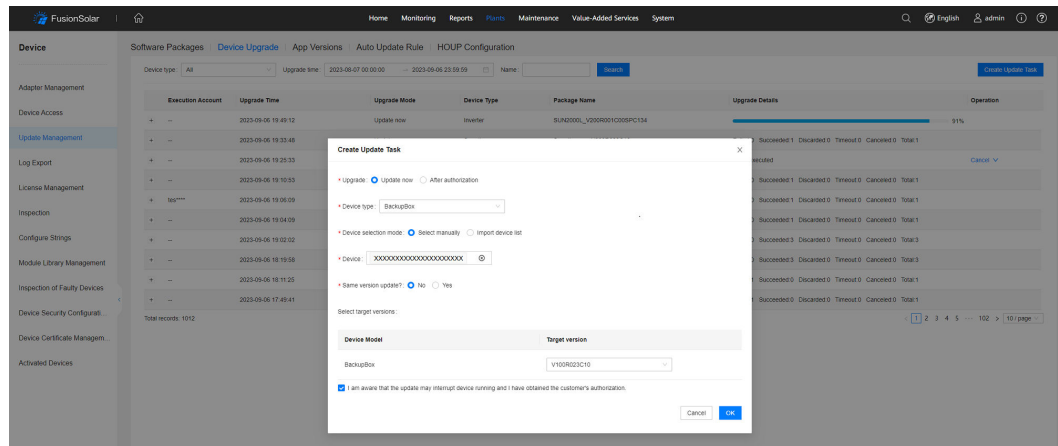
Step 5 Query the upgrade details. After the upgrade task is created, you can query the upgrade details of the BackupBoxA on the **Device Upgrade** tab page, including the upgrade progress, number of devices to be upgraded, and upgrade result.
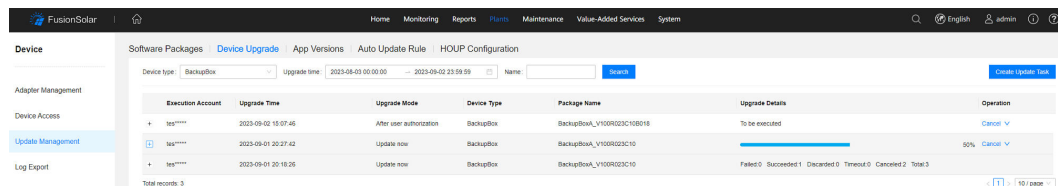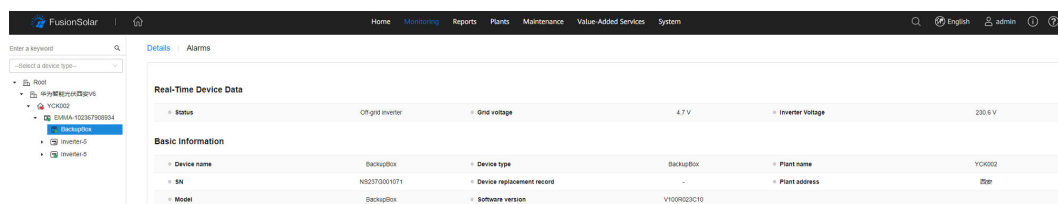

Step 6 View the upgrade result. After the upgrade is complete, the BackupBoxA restarts and the upgrade result is displayed in **Upgrade Details**.
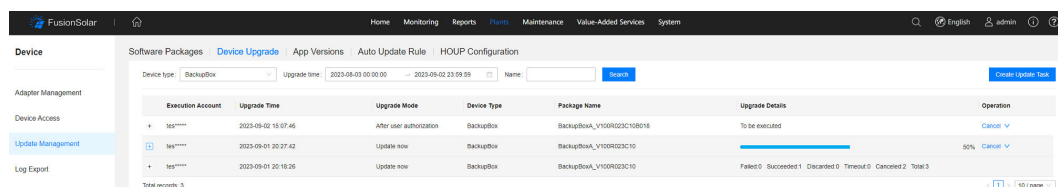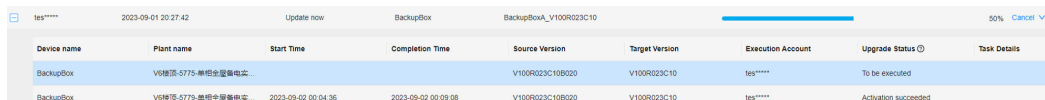

----End

4.2.3 Verifying the Result

On the **Monitoring** page, check whether the current software version of the BackupBoxA is the target version.

4.2.4 Troubleshooting

Scenario 1: After an upgrade task is delivered on the NMS, a message is displayed, indicating that the task is waiting to be executed.

tes*****	2023-09-01 20:27:42	Update now	BackupBox	BackupBoxA_V100R023C10			50% Cancel ∨	
Device name	Plant name	Start Time	Completion Time	Source Version	Target Version	Execution Account	Upgrade Status ⓘ	Task Details
BackupBox	V6植顶-5775-单相全屋备电实...			V100R023C10B020	V100R023C10	tes*****	To be executed	
BackupBox	V6植顶-5779-单相全屋备电实...	2023-09-02 00:04:36	2023-09-02 00:09:08	V100R023C10B020	V100R023C10	tes*****	Activation succeeded	

Note: If this message is displayed, an upgrade task is to be executed on the device.

In other upgrade scenarios, if the device is not upgraded to the target version, perform the upgrade again until the upgrade is successful. If the fault persists, contact Huawei technical support.

5 Verifying the Upgrade

5.1 Verifying Basic Features

The basic features are verified as follows.

No.	Feature Verification	Expected Result
1	Check the version in use.	The version in use is the same as the target version.
2	Check the device running status.	The device is running properly.
3	Check the real-time running information of the device.	All device data is collected and set properly.
4	Check the device parameters.	The device parameters are the same as those before the upgrade.

5.2 Verifying Modified and New Features

For details, see the corresponding release notes.