User Manual

Integrated Wireless Smart Home Controller
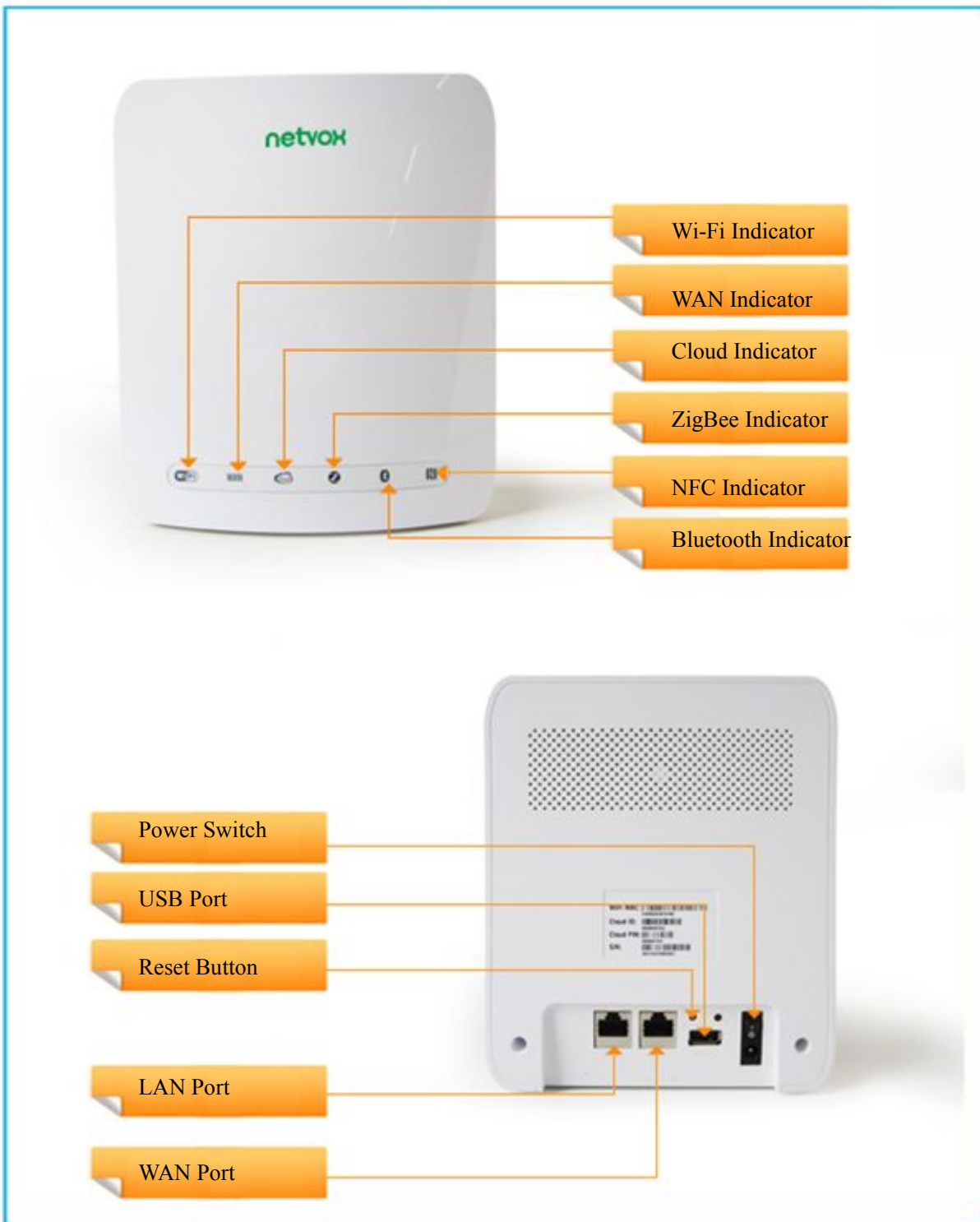## Model: Z203

Table of Contents

1. Introduction

Netvox Z203, a Cloud-Based Wireless Smart Home Controller (CWSH), acts as a Coordinator in ZigBee network. Z203 is also equipped with Wi-Fi technology. It is the main character of Netvox Smart Home Cloud Platform. Z203 provides Cloud services, Wi-Fi connection, and ZigBee network communication. Via Wi-Fi connection, users are able to control the ZigBee network devices through mobile app. Furthermore, Netvox Smart Home Cloud service allows users to remotely manage the devices, like lighting, curtain, or IP Camera, anytime and anywhere.

What is ZigBee?

ZigBee is a short range wireless transmission technology based on IEEE802.15.4 standard and supports multiple network topologies such as point-to-point, point-to-multipoint, and mesh networks. It is defined for a general-purpose, cost-effective, low-power-consumption, low-data-rate, and easy-to-install wireless solution for industrial control, embedded sensing, medical data collection, smoke and intruder warning, building automation and home automation, etc.

2. Product Appearance

Wi-Fi Indicator

WAN Indicator

Cloud Indicator

ZigBee Indicator

NFC Indicator

Bluetooth Indicator

Power Switch

USB Port

Reset Button

LAN Port

WAN Port

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3. Specification

- ZigBee: fully IEEE 802.15.4 compliant (ZigBee Pro); utilizes 2.4GHz ISM band; up to 16 channels

- Wi-Fi: IEEE 802.11 b/g/n; channel 1~11

- 2 x RJ-45 ports: 10/100Mbps WAN x 1; 10/100Mbps LAN x 1

- Power supply: DC 12V

- Up to 300Mbps Wi-Fi speed

- Up to 250 meters ZigBee transmission range in non-obstacle space

- Bluetooth dongle supported

- Internet of Things

- Cloud services

- Easy installation and configuration

4. Installation and Preparation

4-1. Installation Diagram

WAN Port

LAN Port

Reset Button

Power Switch

DV 12V
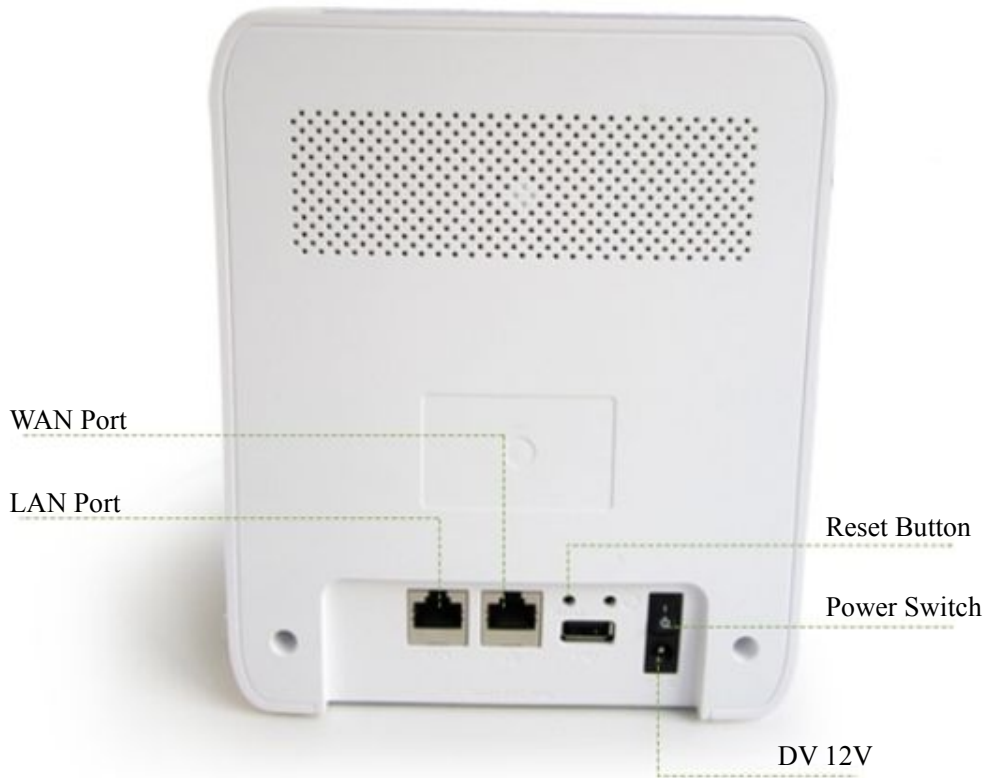
Step1. Connect the Internet connection to the WAN port.

Step2. Connect the computer/IP Camera to the LAN port.

(Please connect the LAN port and the computers/IP cameras to a switch when users would like to use more computers/IP cameras.)

The installation diagram is as below:
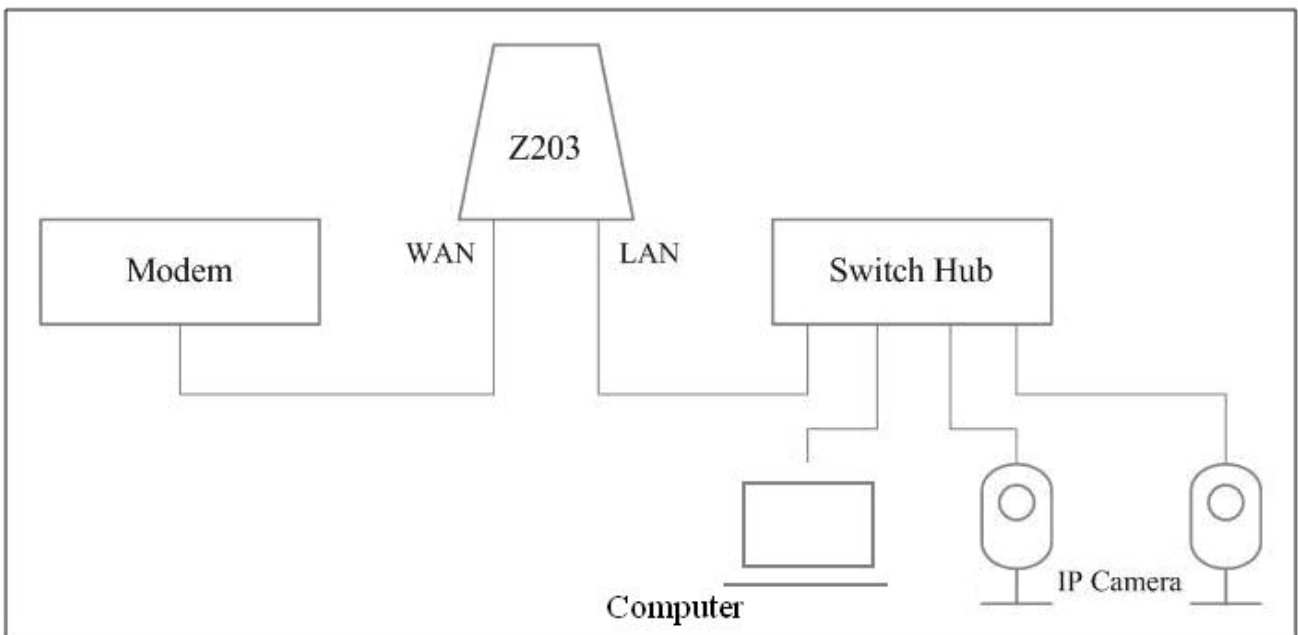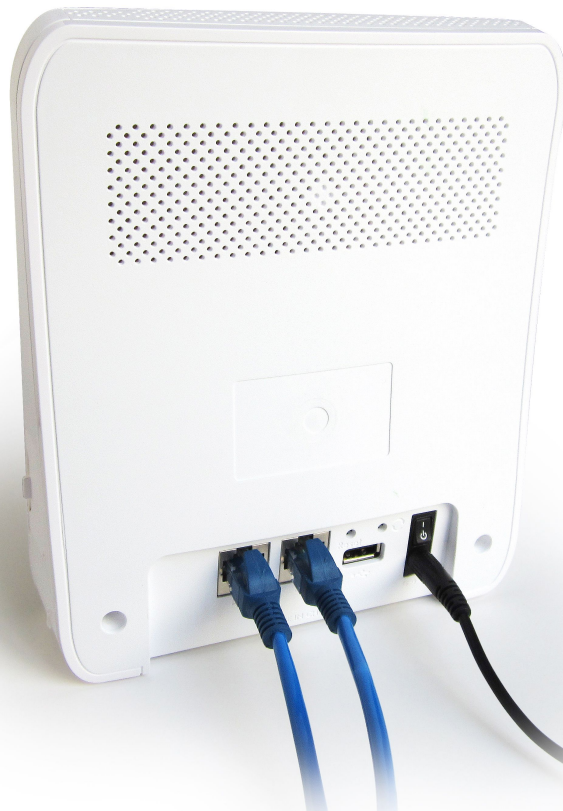
4-2. Power on Z203

Power on Z203 using 110V~220V AC to 12V DC/1.5A power adapter. The power indicator will stay on.

4-3. Reboot Z203

To reboot Z203, please click the [Reset] button using a pin.

5. Setting up Z203

5-1. Enter Into the Login Page

Connect the computer to the LAN port of Netvox Z203 using a RJ-45 cable.

(Windows XP)
Click Start.

Click Network Connections.

Right-click on the Local Area Network, and then click Properties.
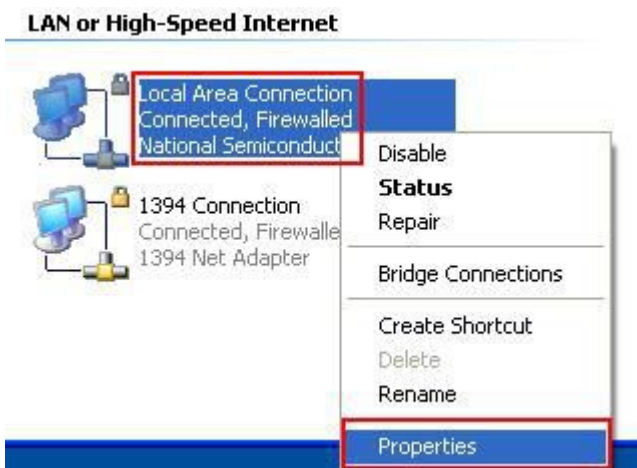
Click Internet Protocol (TCP/IP), and then click Properties.
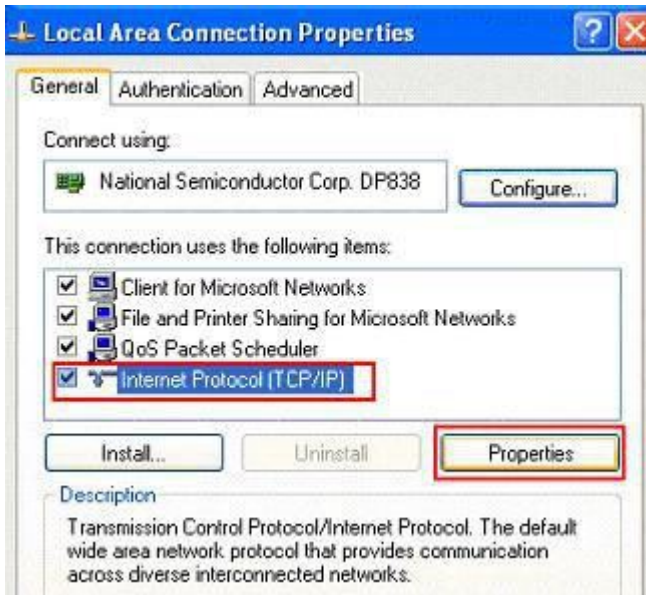
Key in the IP address and subnet mask as below.

Open the web browser and enter http://192.168.15.1 to go into the login page.
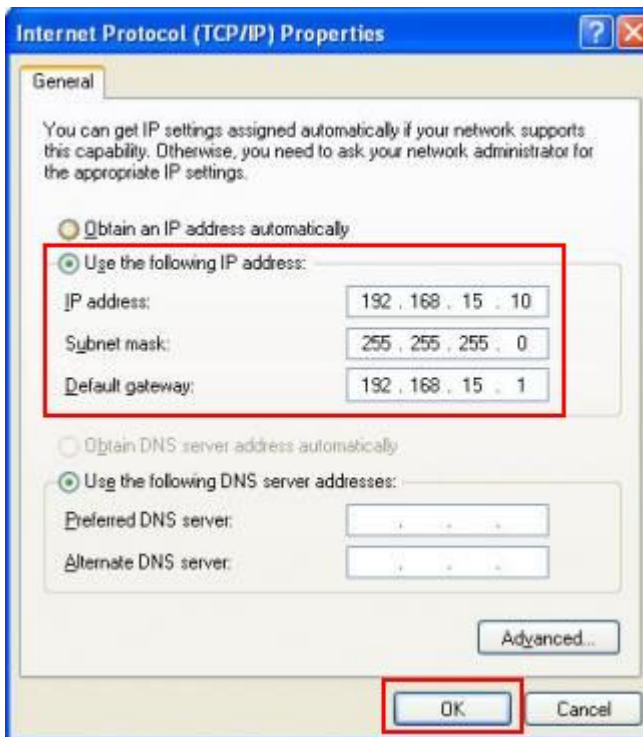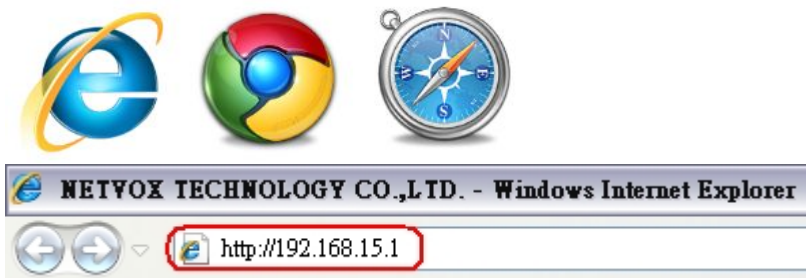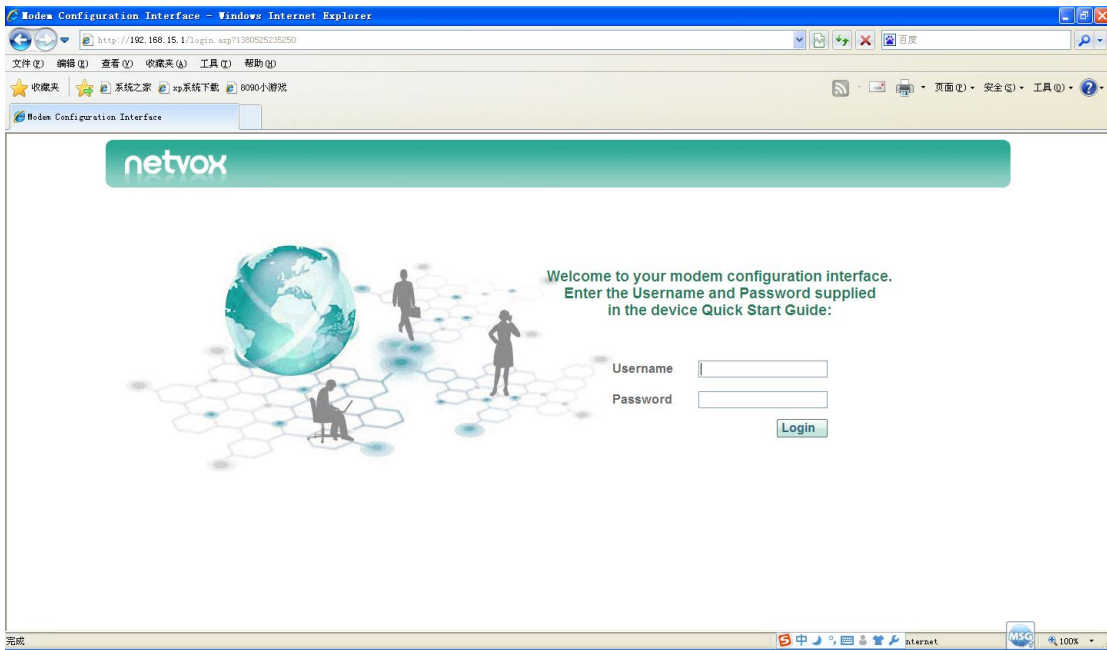
Key in the Username & Password (default: admin/ admin) and login the management system.
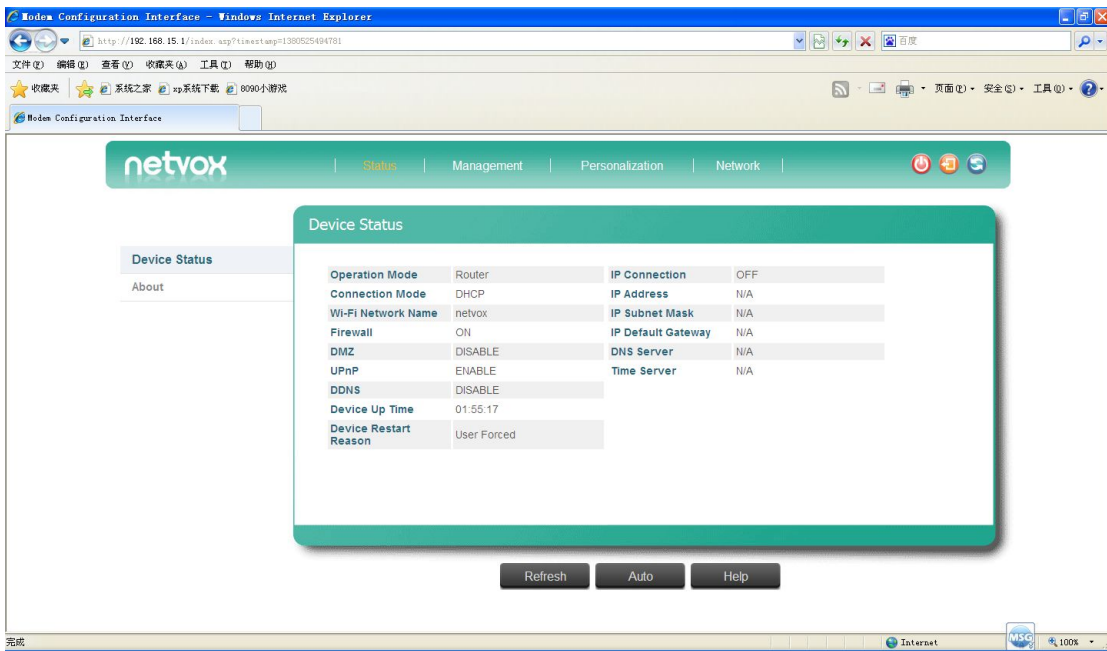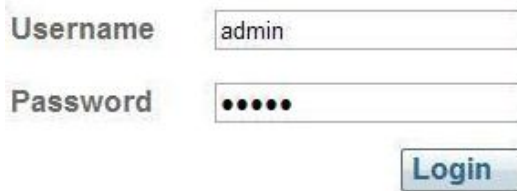
5-2. Modify the Wi-Fi Name and the Security

Go to **Management → Wi-Fi Setup**.
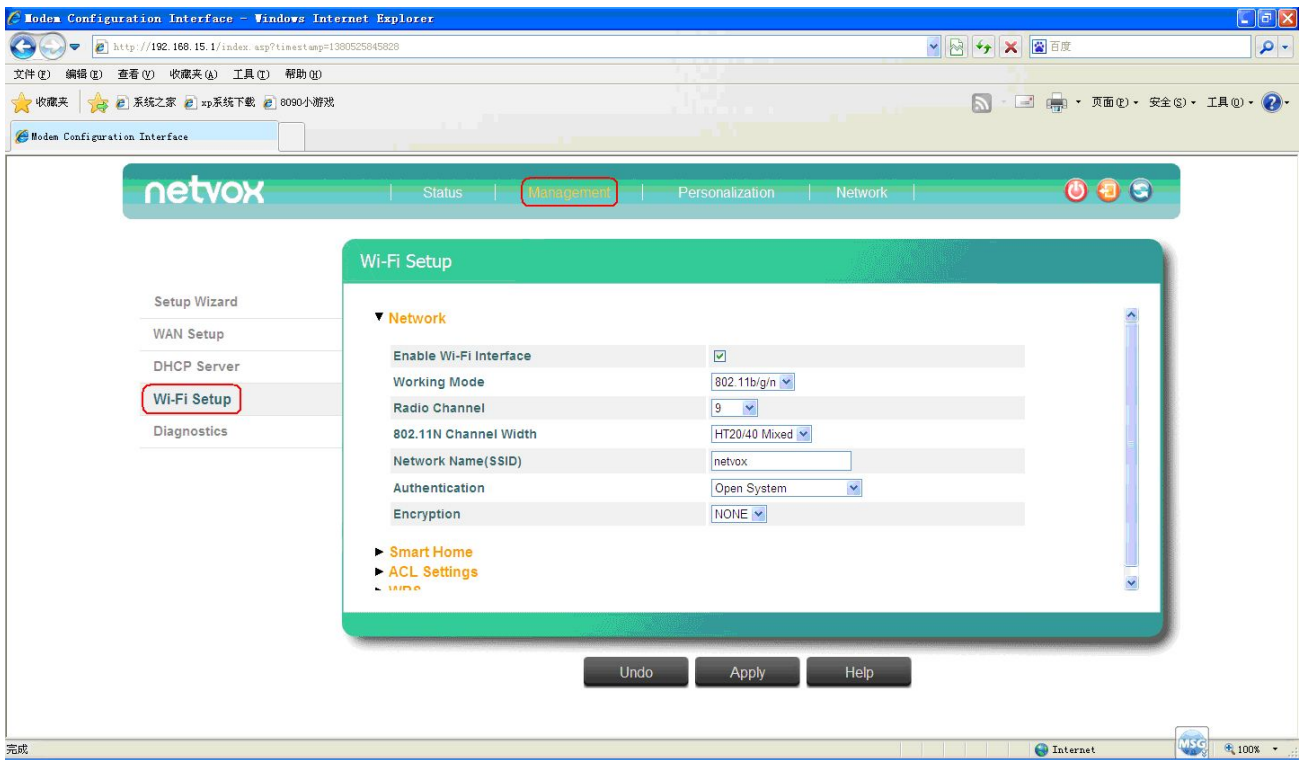
Modify the **Network Name (SSID)** (default: NetvoxSmartHome). Choose **WPA2 PSK** for **Authentication** and setup the **Wi-Fi Password** (at least 8 letters/numbers; default: 12345678).

Click **Apply** and wait for 10 seconds to complete the settings.
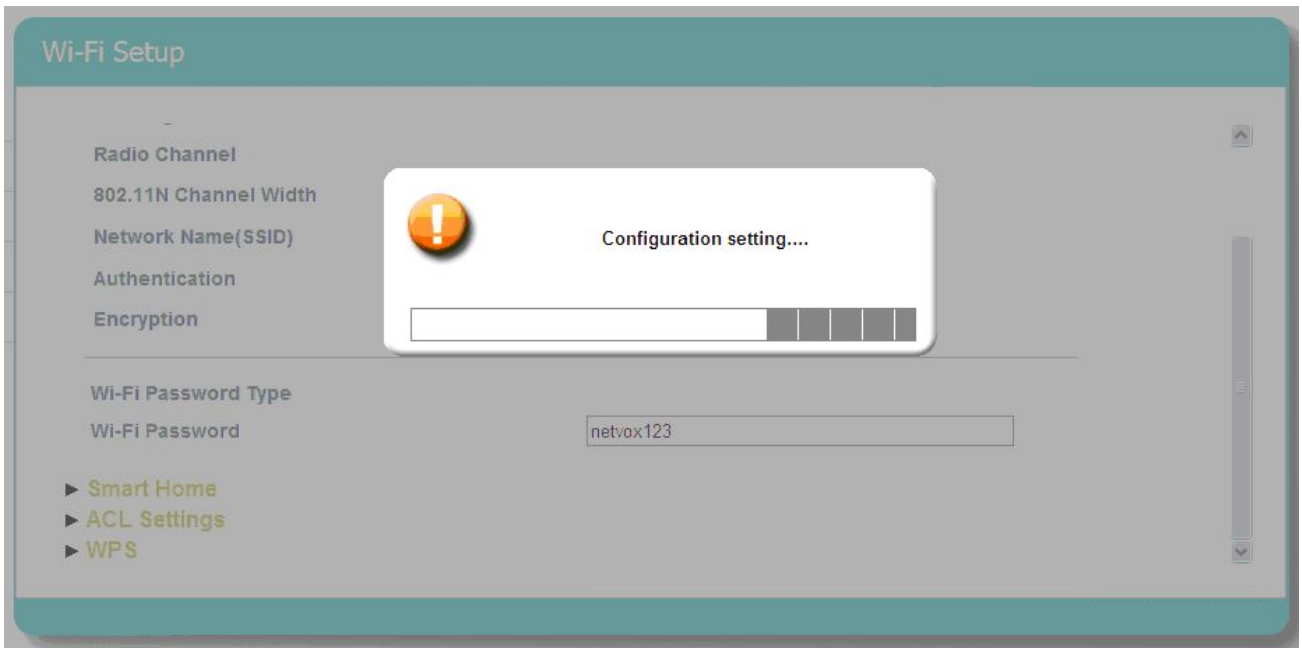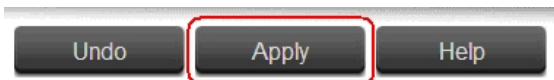
5-3. WAN Setup

Go to **Management** → **WAN Setup**. Choose **Connection Mode** and enter the data which ISP (Internet Service Provider) provided when necessary. Click **Apply** to complete the setting.
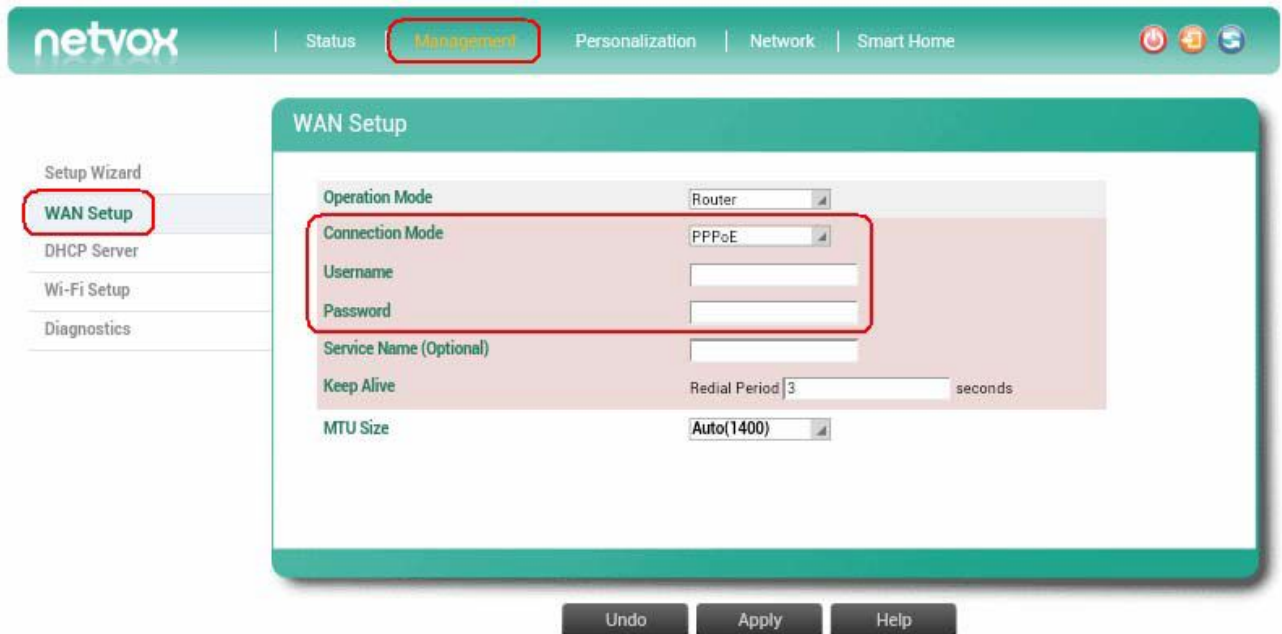
5-4. Firmware Update

Go to **Personalization → Software**.
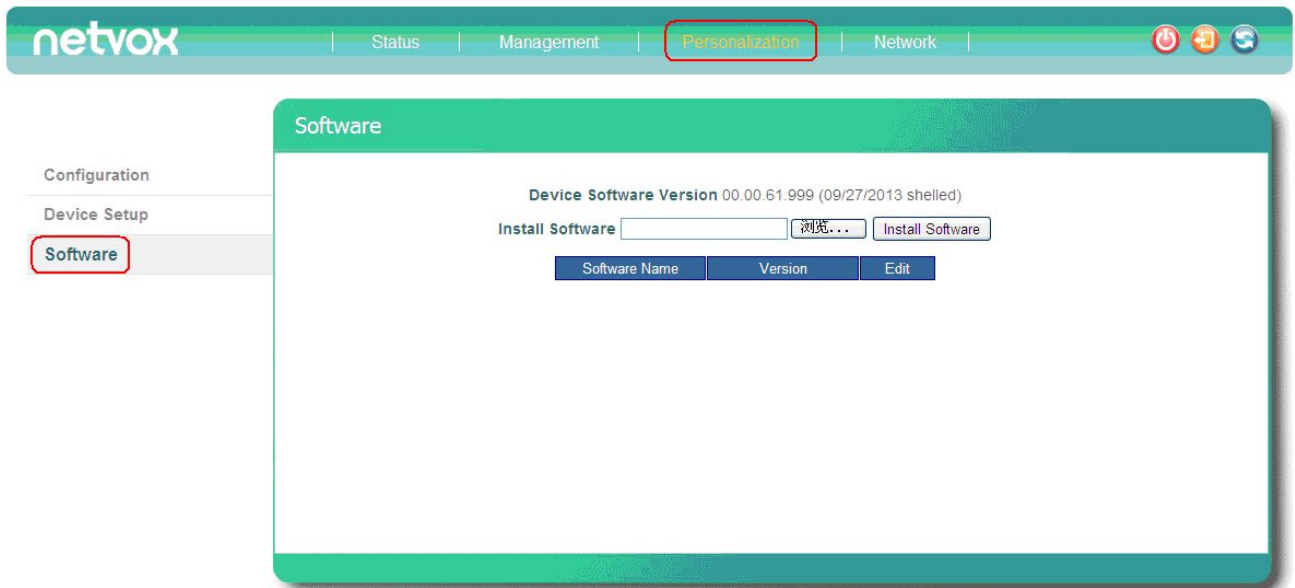
Click **Browse**, select the firmware, and click **Install Software** to update Z203.
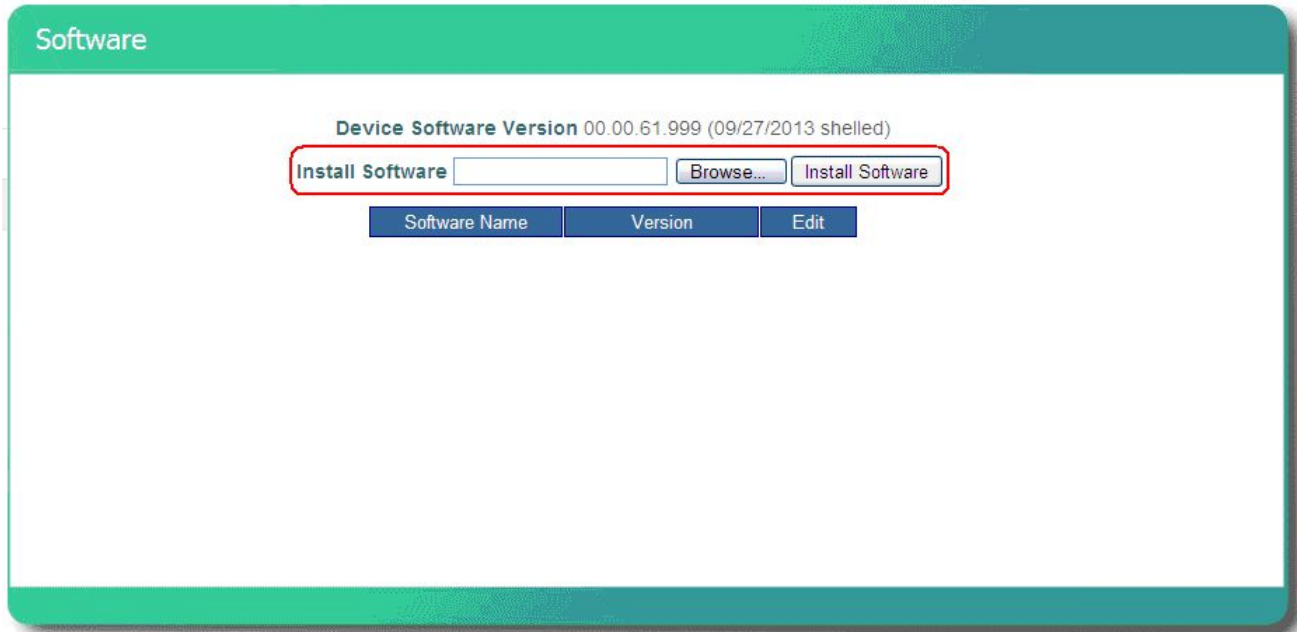
Please DO NOT power off Z203 while updating.
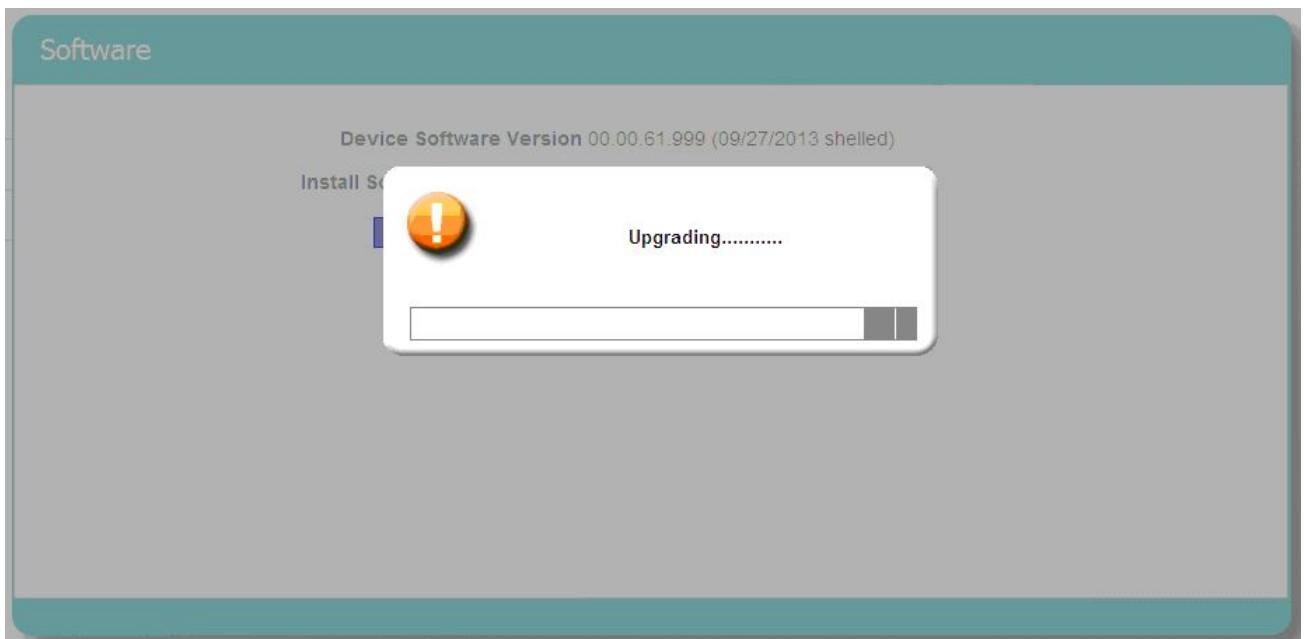
After it returns to the login page, the update is completed.
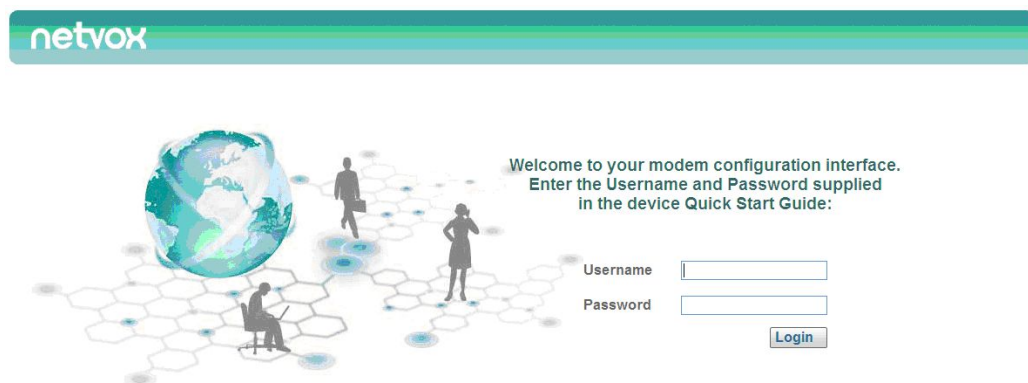
6. Setting up ZigBee Smart Home

Connect the computer to the LAN port of Netvox Z203 using a RJ-45 cable.

Open the web browser and enter http://192.168.15.1 to go into the login page.
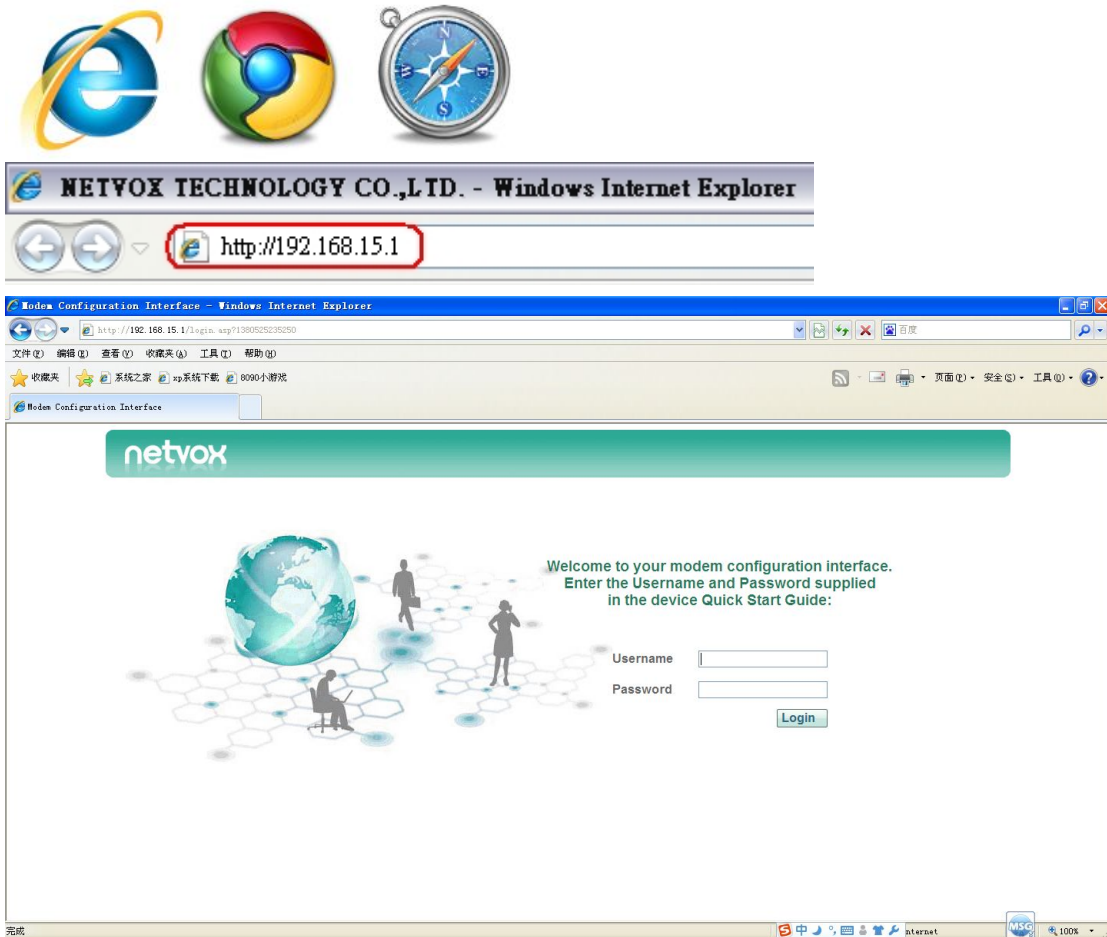
Key in the Username & Password **(for advanced settings, please use operator/ operator)** and login the management system.

Go to **Smart Home** for Smart Home settings.
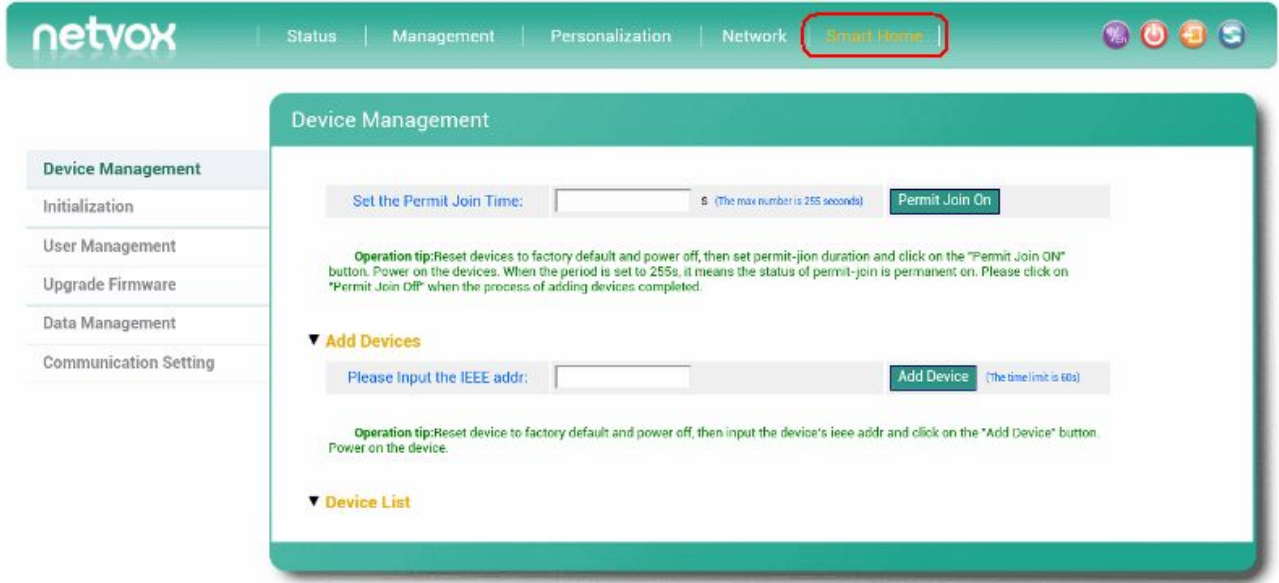
6-1. Device Management

A. Permit-Join On

To add new devices to the network, we need to turn the Permit-Join feature on. After turning on Permit-Join, power on the devices users would like to add to the network.
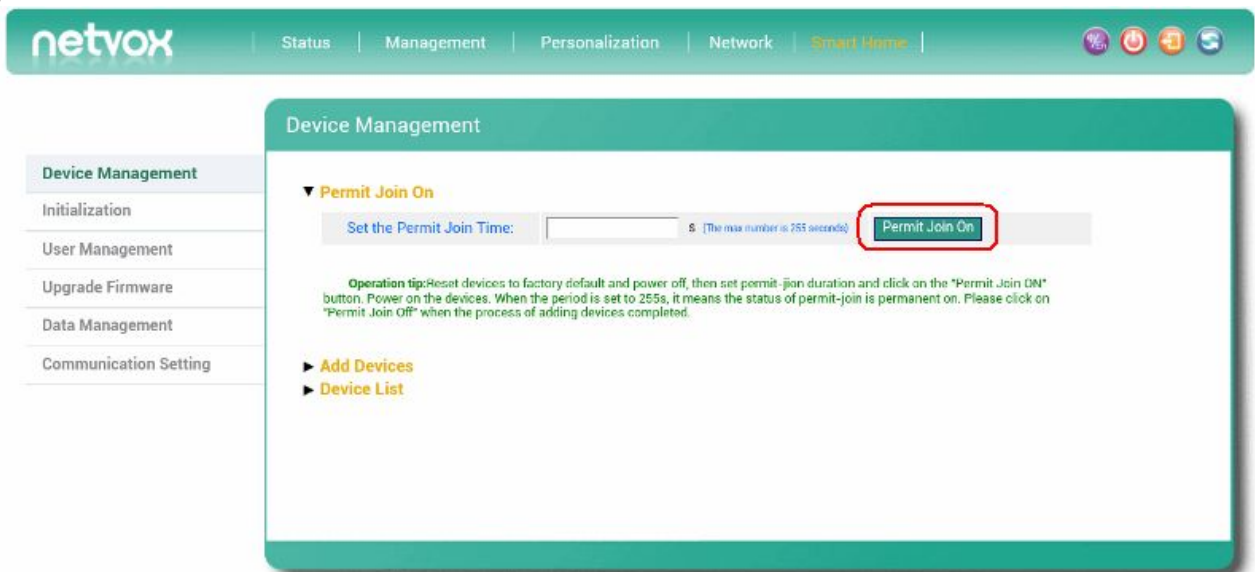
B. Add Devices

Users could also add the devices manually using device's IEEE number.
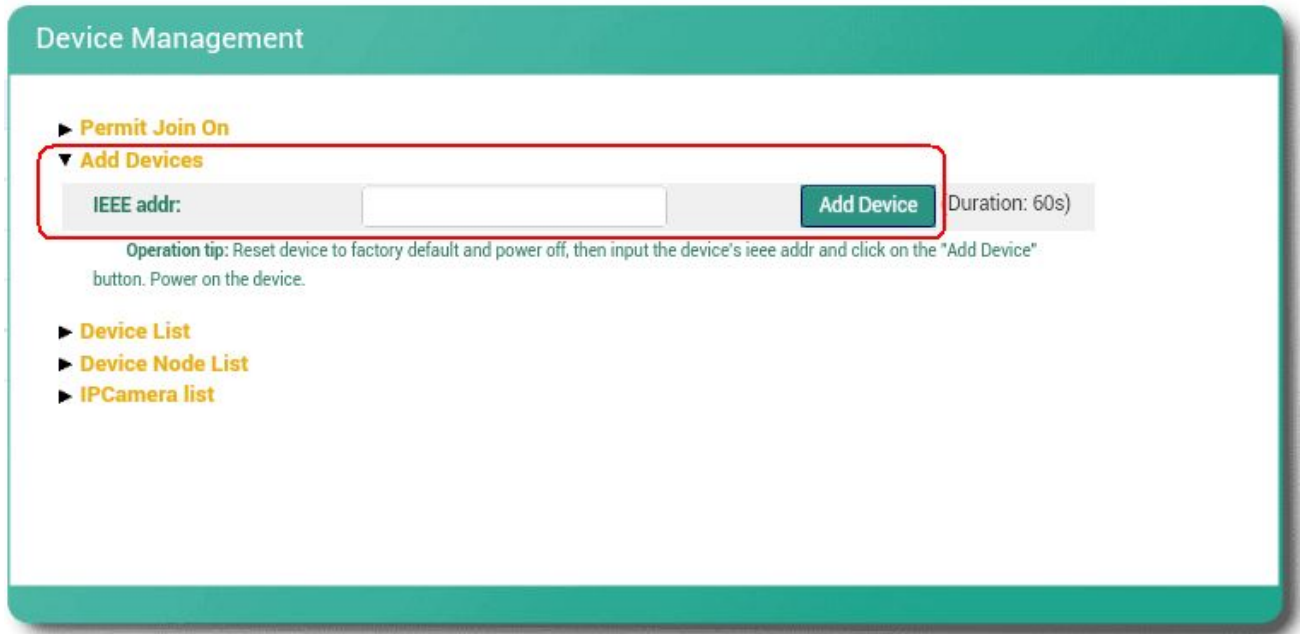
C. Device List

For checking the device status of the network.
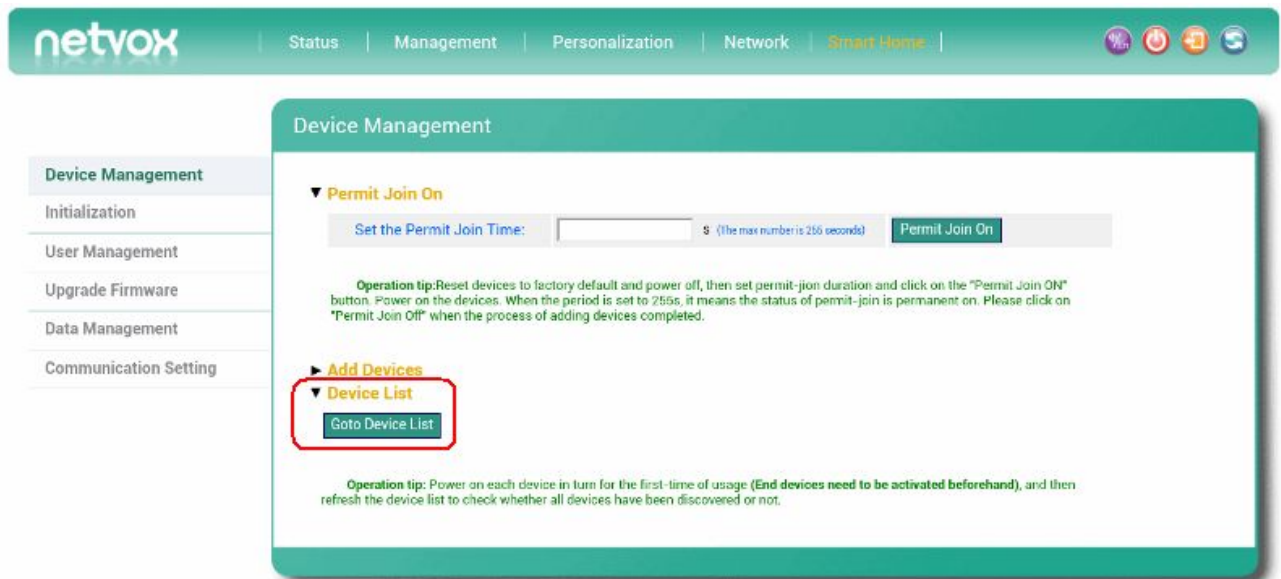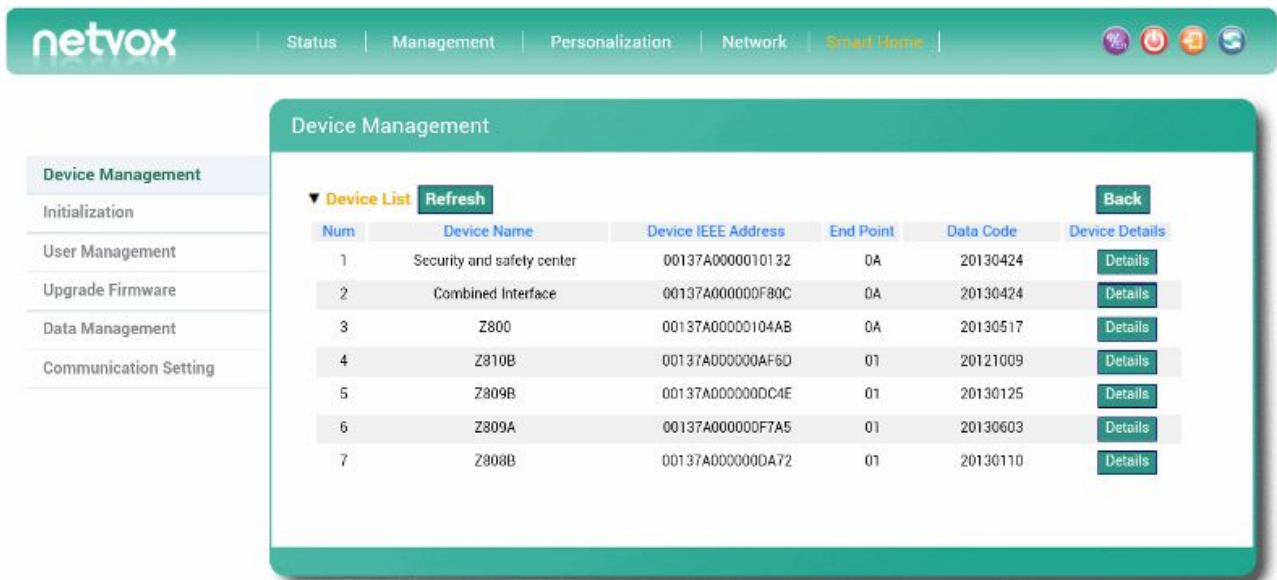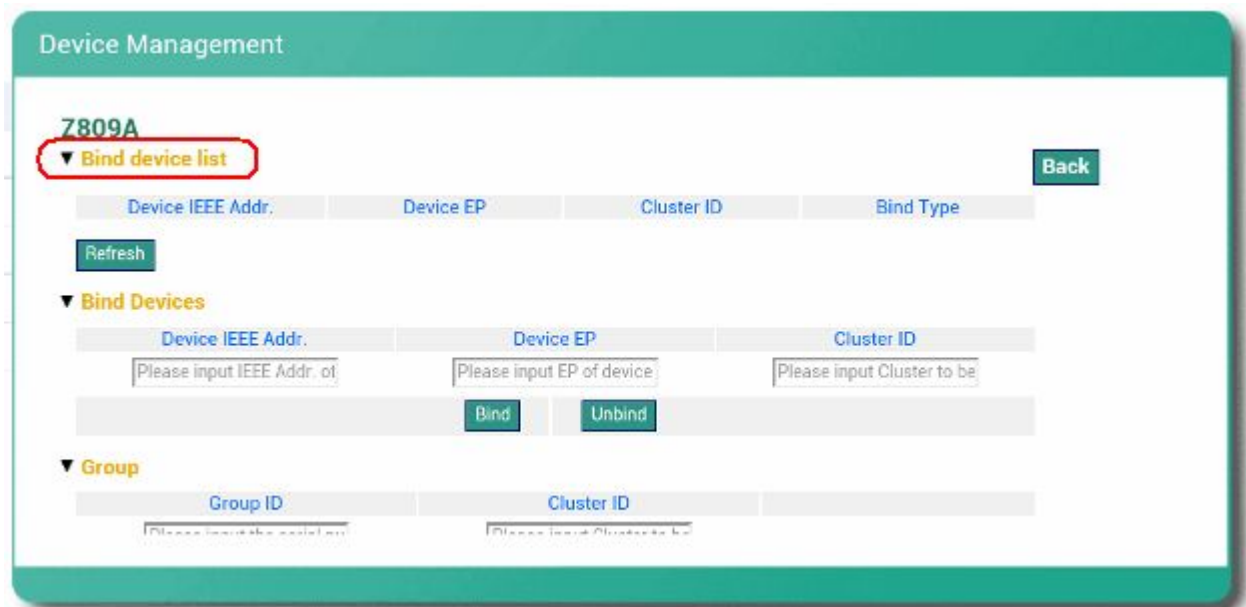
Click **Details** to check device's detailed status.
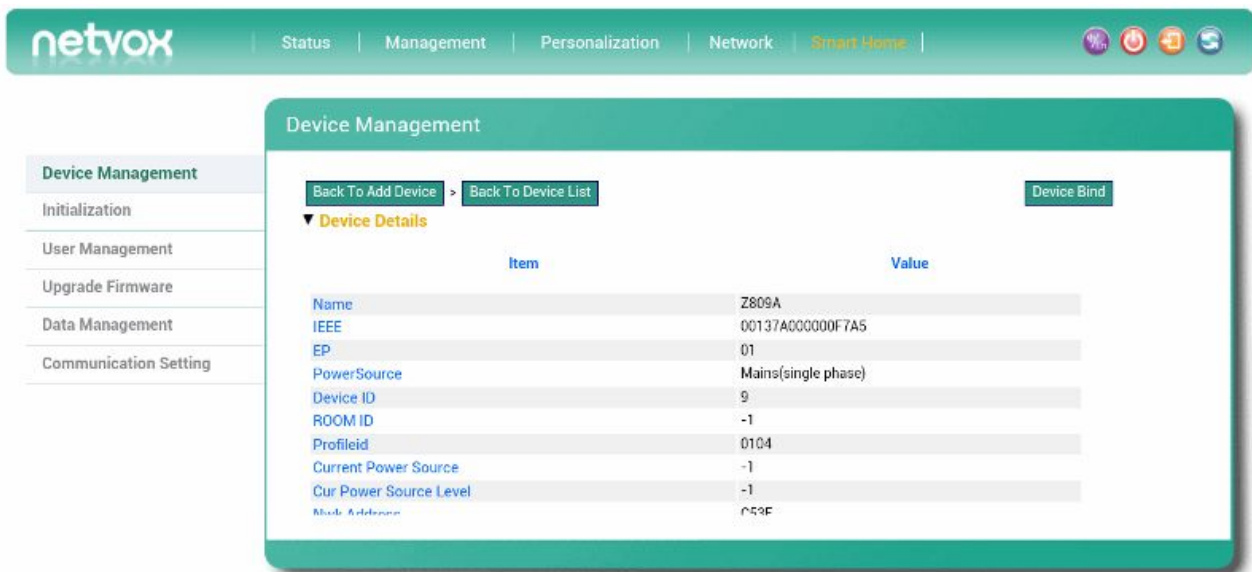
For binding, please click **Device Bind**.

i. Bind Device List
It shows the binding devices.

ii. Bind Devices

[Advanced setting] To manually bind with other devices.
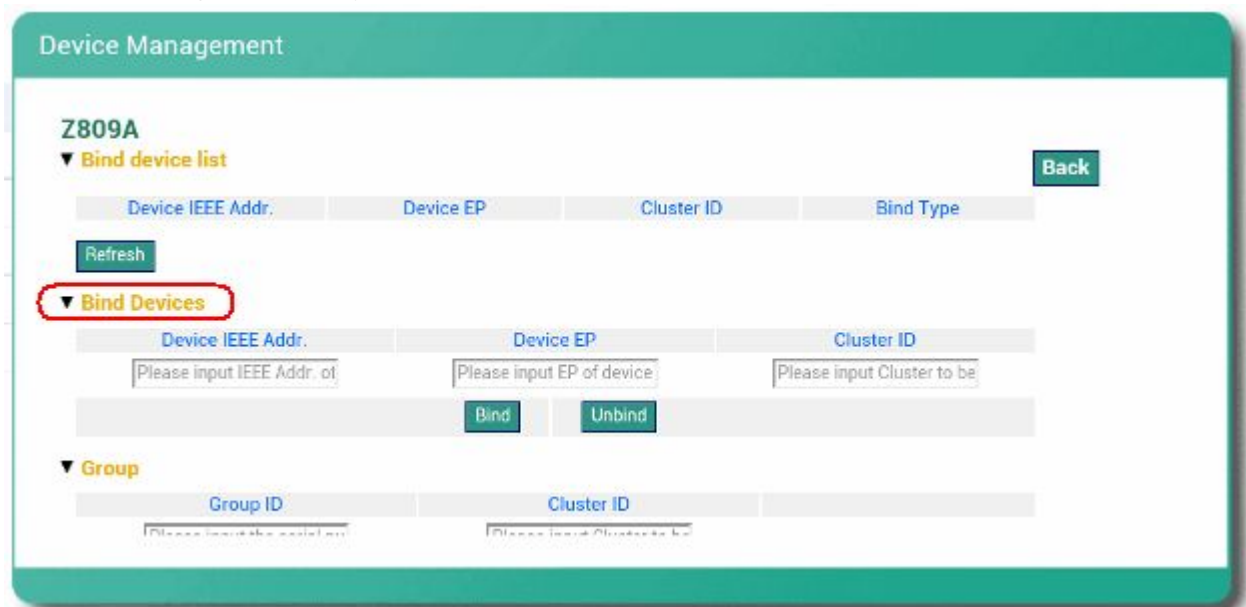
iii. Group

[Advanced setting] To manually bind with a Group.

Device Management

Z809A
▼ **Bind device list**

Back

Device IEEE Addr.	Device EP	Cluster ID	Bind Type

Refresh

▼ **Bind Devices**

Device IEEE Addr.	Device EP	Cluster ID
Please input IEEE Addr. of	Please input EP of device	Please input Cluster to be

Bind   Unbind

▼ **Group**

Group ID	Cluster ID	
Please input the serial nu	Please input Cluster to be	

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D. Device Node List

For checking the node list of the devices.

Click **Details** to check device's detailed status.

For binding, please click **Device Bind**.

E. IPCamera List
This shows the list of IP camera.

6-2. Initiate Smart Home
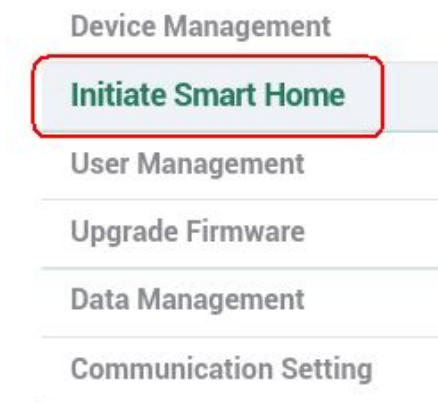
A. ZigBee Channel

The ZigBee channel Z203 is using.
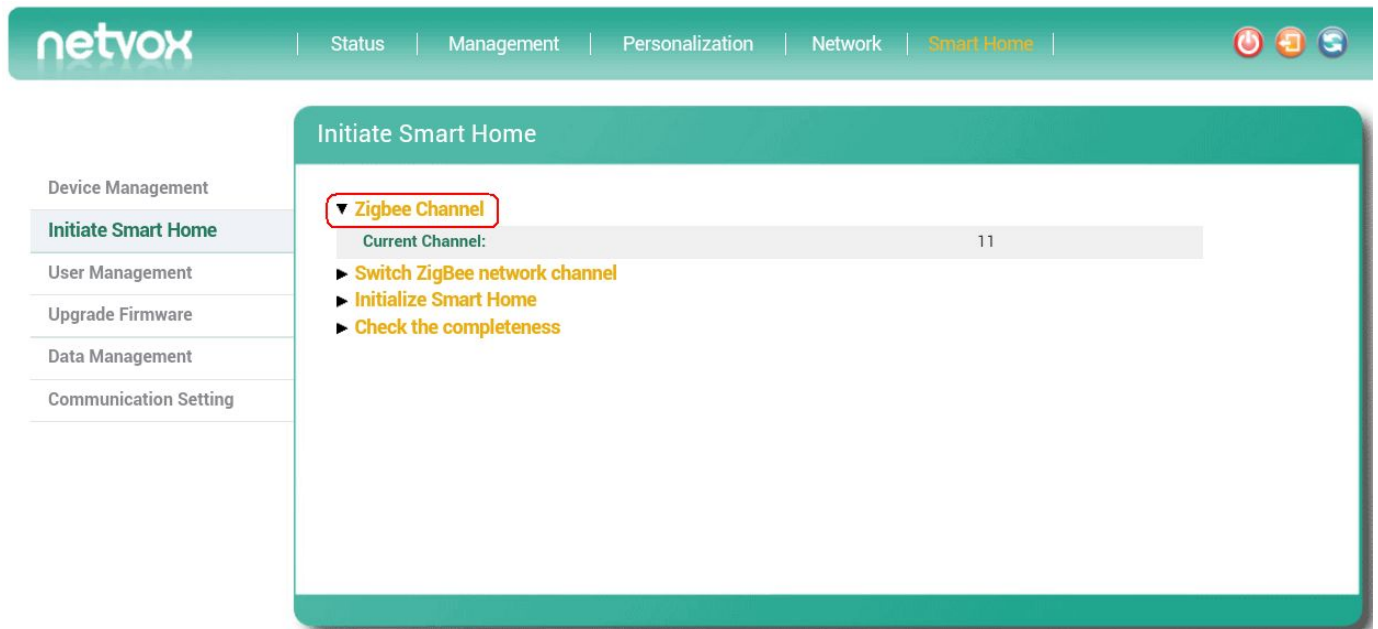
B. Switch ZigBee Network Channel

• To change the ZigBee channel, please make sure the Wi-Fi signal is good.

• Please activate the End Devices before switching the ZigBee channel.

C. Initialize Smart Home

After building up or re-building a ZigBee network, please initialize the ZigBee network.

D. Check the Completeness

Users are able to check the completeness of the network. It will list the problem of the network.
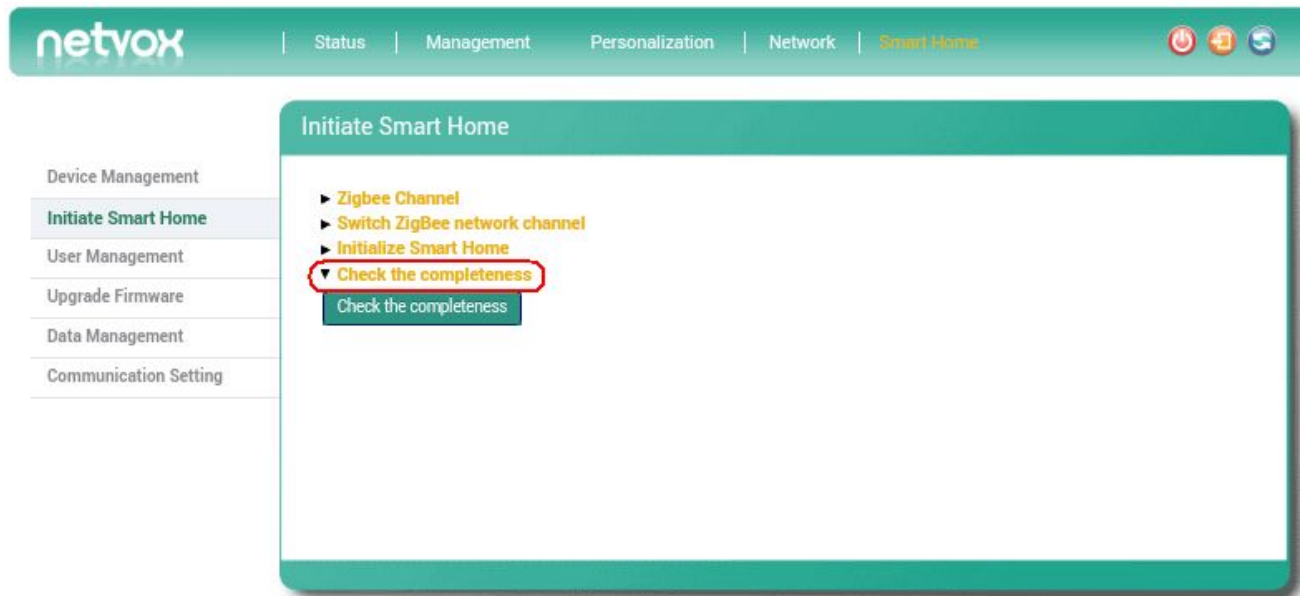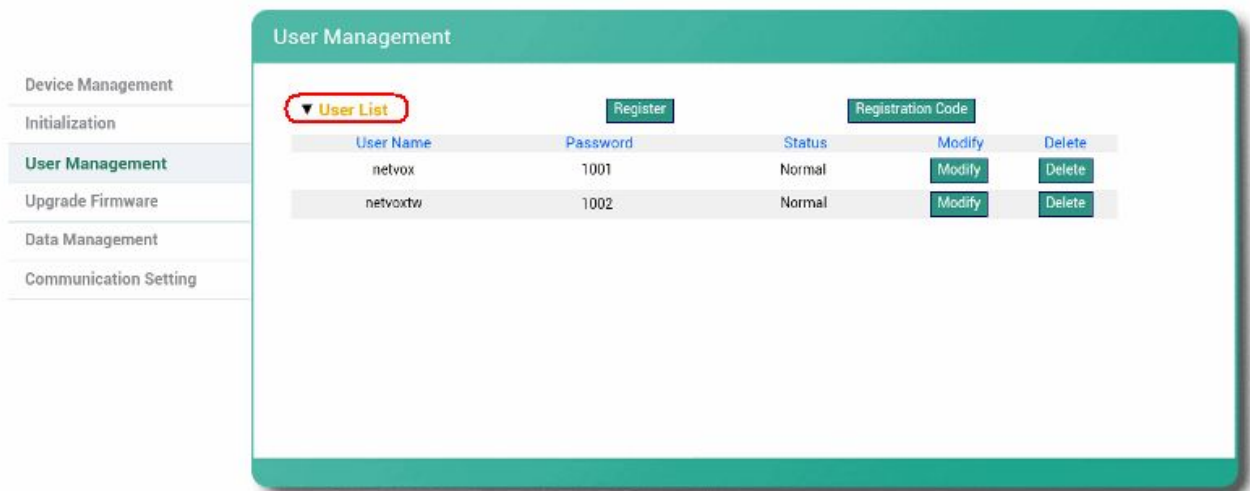
6-3. User Management

A. User List

It shows the user profiles.

To edit the profile, please click **Modify**.

Users are able to change the password or lock/unlock the user.

B. Register

To create a new user profile, please key in the Username. Password, Confirm Password, and Registration Code. To acquire registration code, please refer to the next section.

• **Password only supports numbers so far.**

C. Registration Code

To get registration code, please click **Get Registration Code**.

6-4. Upgrade Firmware

Device Management
Initialization
User Management
Upgrade Firmware
Data Management
Communication Setting

To upgrade the firmware of the ZigBee module, click **Browse**, select the firmware, and click **Upgrade** to update the ZigBee module.

Upgrade Firmware

Browse   Upgrade (Please select a file to be upgraded and click on the button of Upgrade)
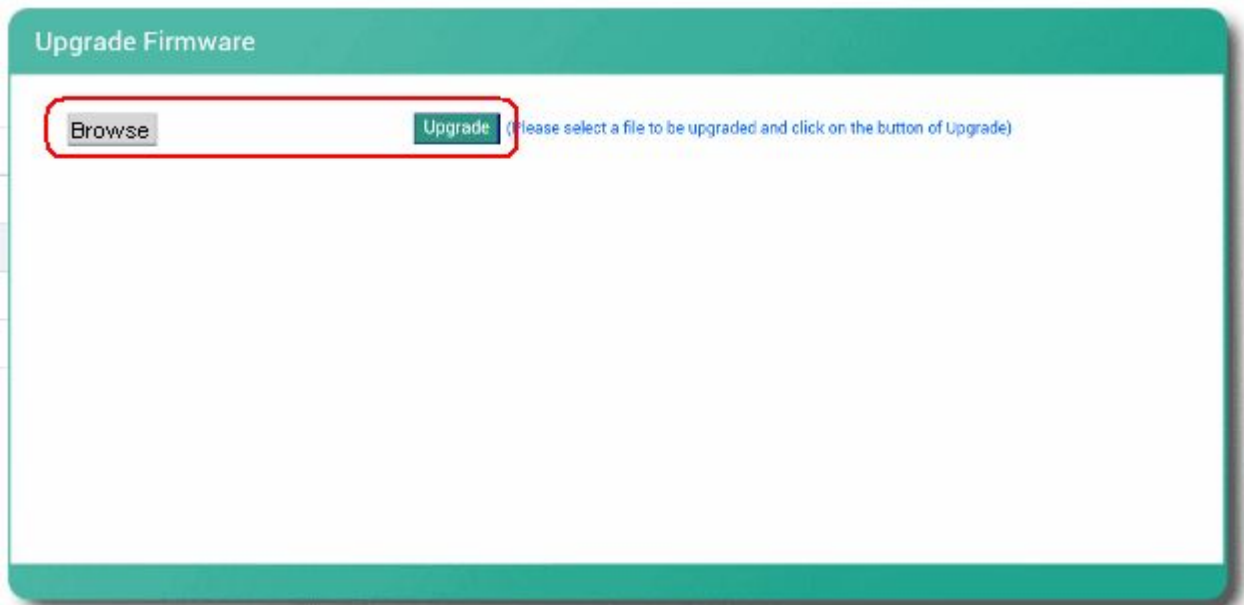
6-5. Data Management
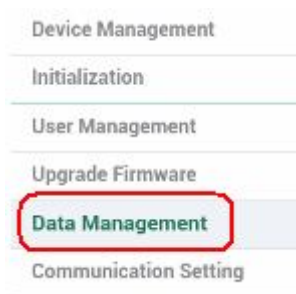
A. Backup Data

Backup the settings of the ZigBee network such as user profiles or room photos. Users are able to choose the backup destination.
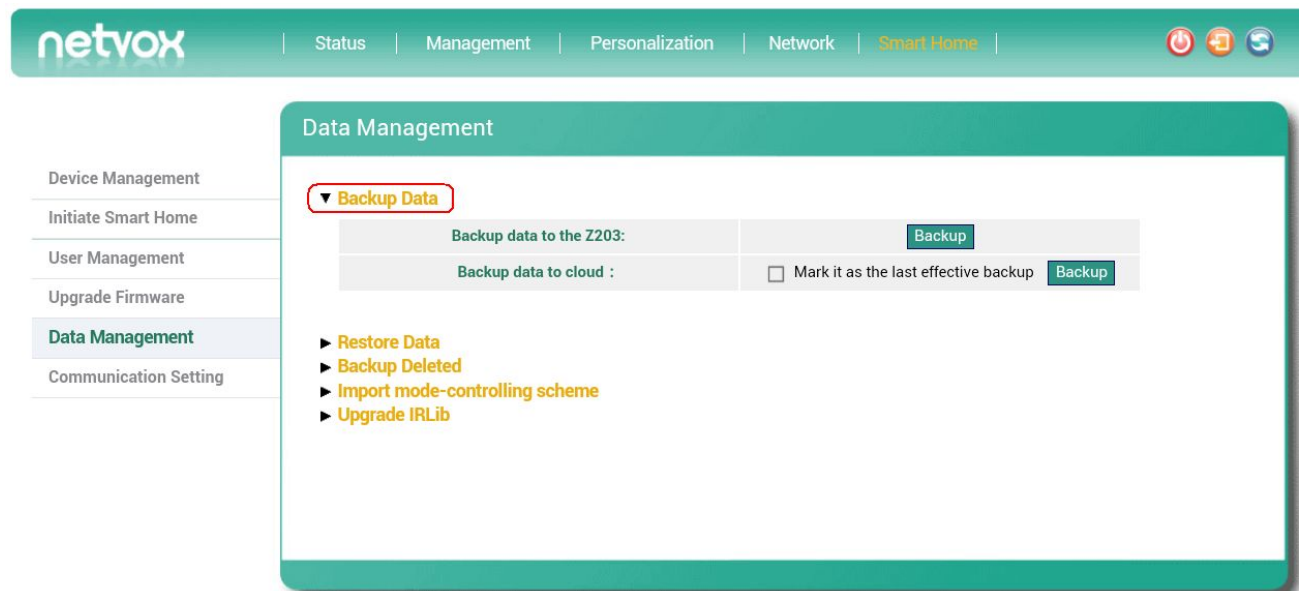
B. Restore Data

Restore to the saved settings or the factory default setting.
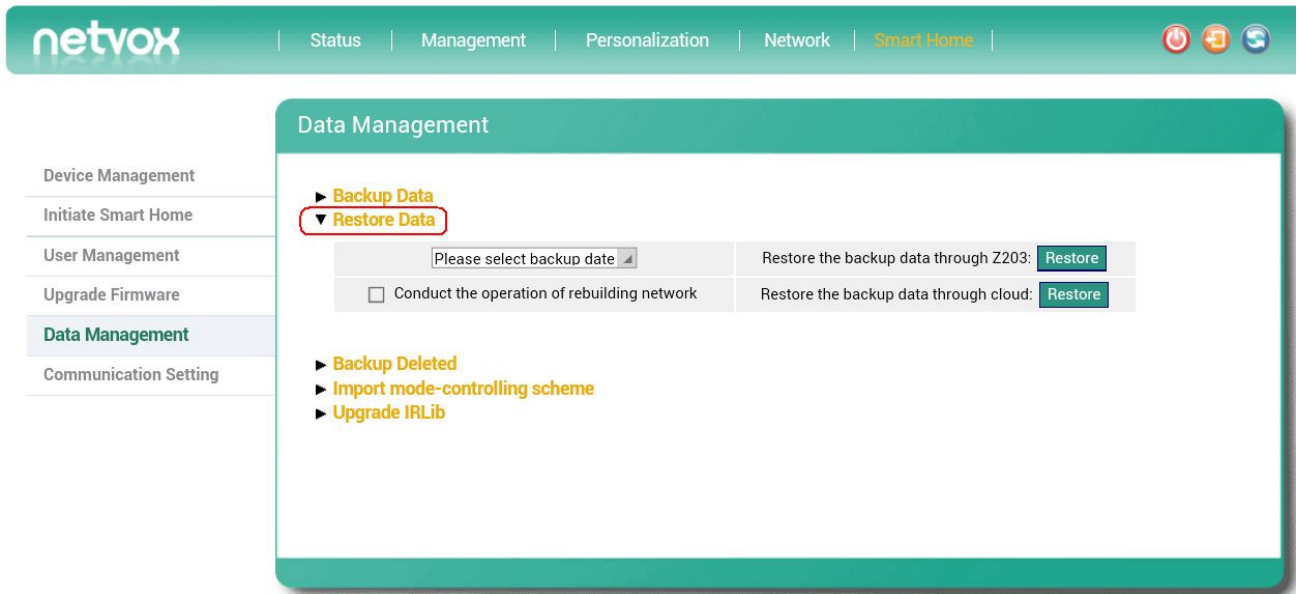
C. Backup Deleted

Z203 can only save up to 4 profiles of the settings. Users are able to delete the saved profile here.
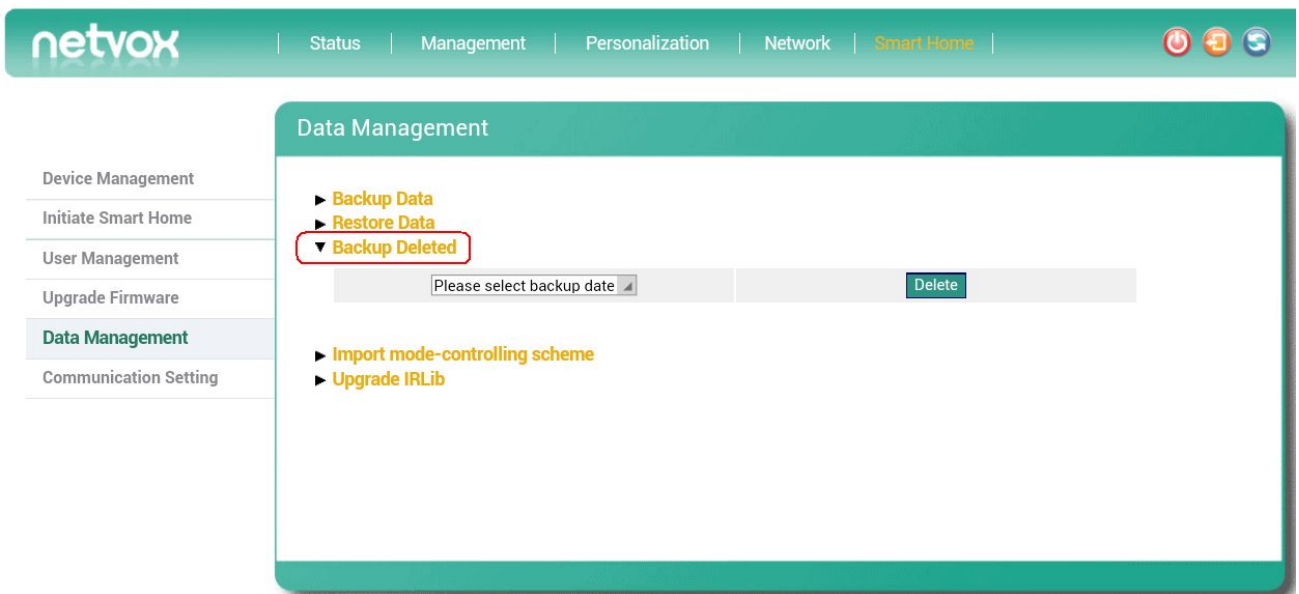
D. Import Mode-controlling Scheme

Users are able to import the controlling mode/scheme which is created from mode editor.
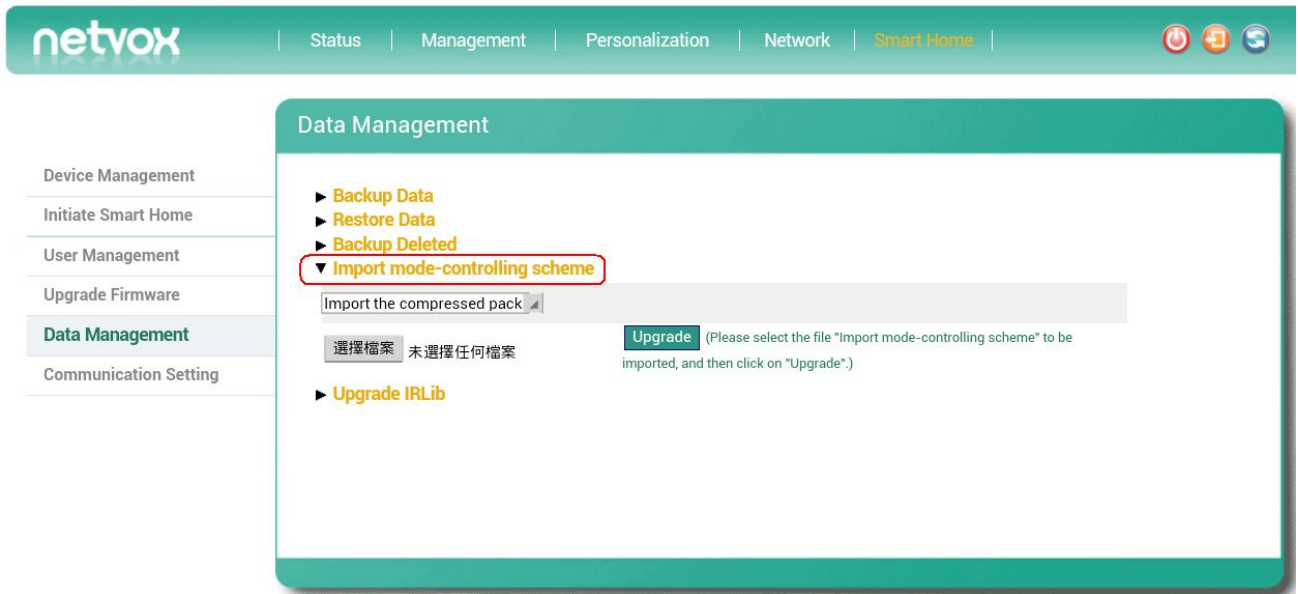
E. Upgrade IRLib

Users are able to upgrade the IR controlling library.
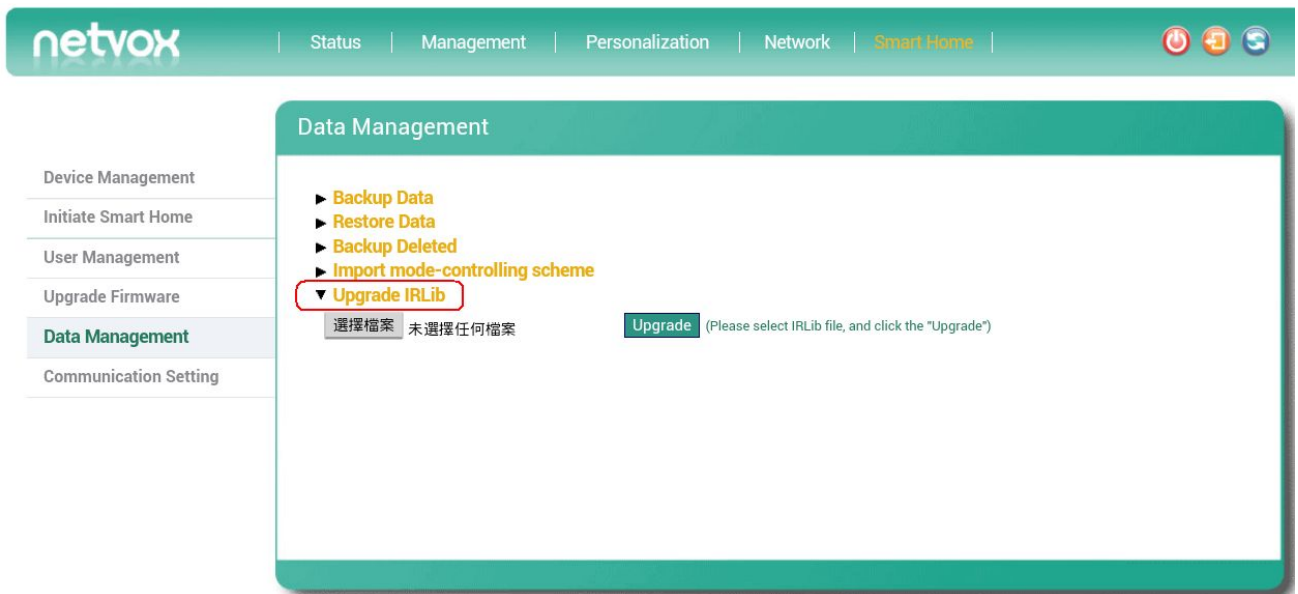
After upgrading, import the IR data in Netvox app.

6-6. Communication Setting

A. Modify Security Key

Users are able to secure/insecure the ZigBee communication.

B. Cloud Link

Users are able to set up the IP address of the Cloud server.

7. Related Netvox Devices

- Z103: USB Dongle

8. Important Maintenance Instructions

- This device is NOT truly waterproof/ resistant and is for indoor use.
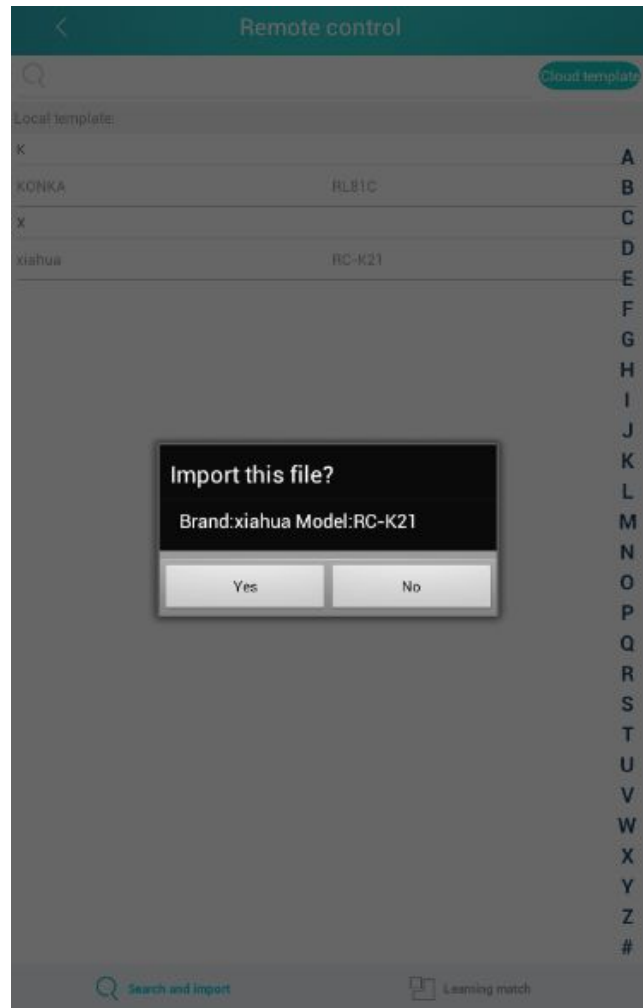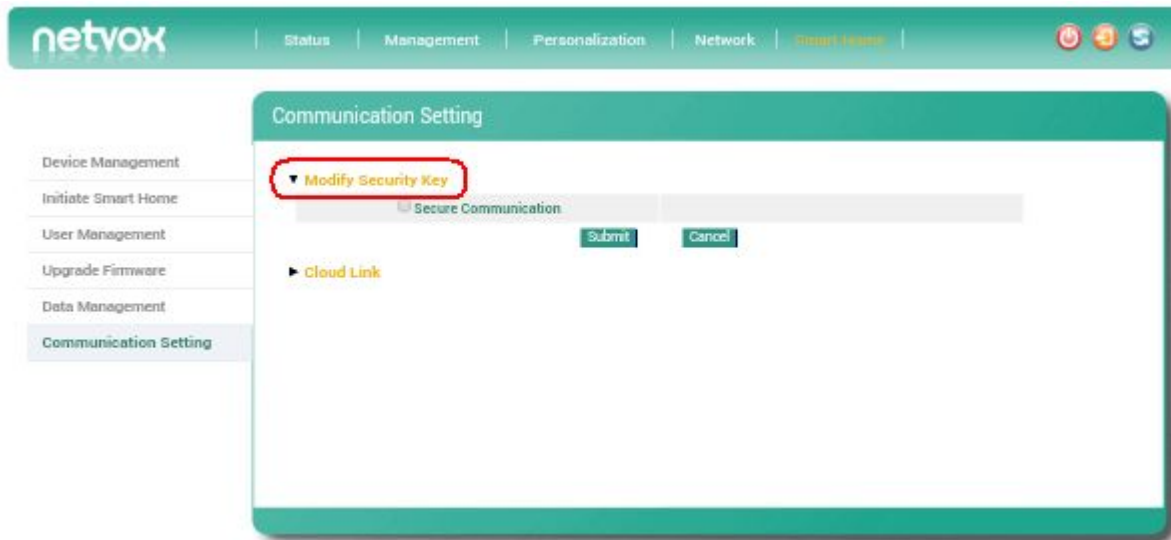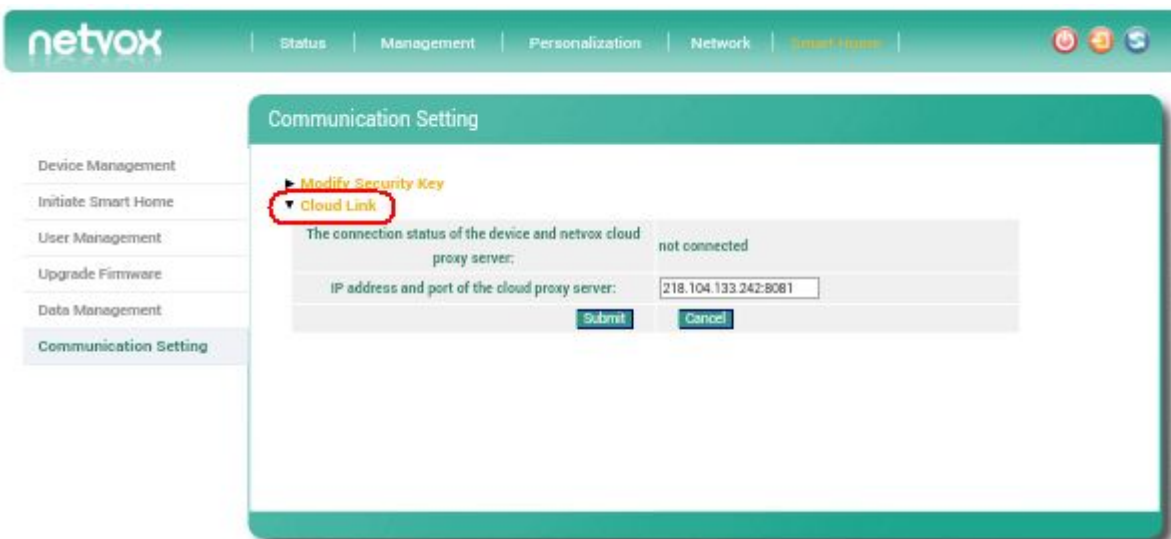- Please keep the device in a dry place. Precipitation, humidity, and all types of liquids or moisture can contain minerals that corrode electronic circuits. In cases of accidental liquid spills to a device, please leave the device dry properly before storing or using.
- Do not use or store the device in dusty or dirty areas.
- Do not use or store the device in extremely hot temperatures. High temperatures may damage the device or battery.
- Do not use or store the device in extremely cold temperatures. When the device warms to its normal temperature, moisture can form inside the device and damage the device or battery.
- Do not drop, knock, or shake the device. Rough handling would break it.
- Do not use strong chemicals or washing to clean the device.
- Do not paint the device. Paint would cause improper operation.

Handle your device, battery, and accessories with care. The suggestions above help you keep your device operational. For damaged device, please contact the authorized service center in your area.