



HG630b Home Gateway

User Guide



HG630b Home Gateway

V100R001

User Guide

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Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. Please feel free to contact our local office or company headquarters.

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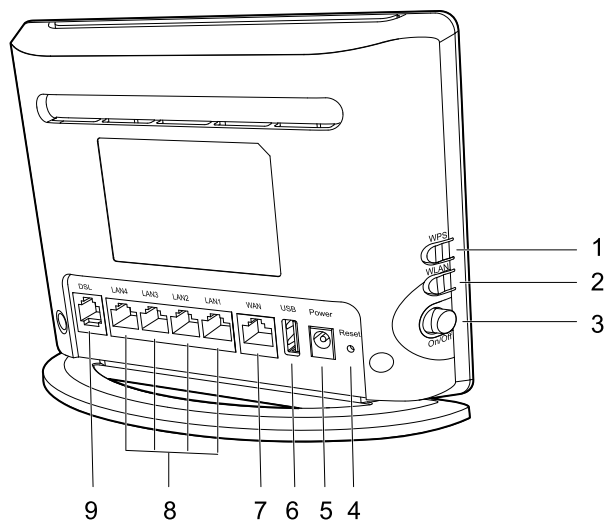
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1 Product Overview

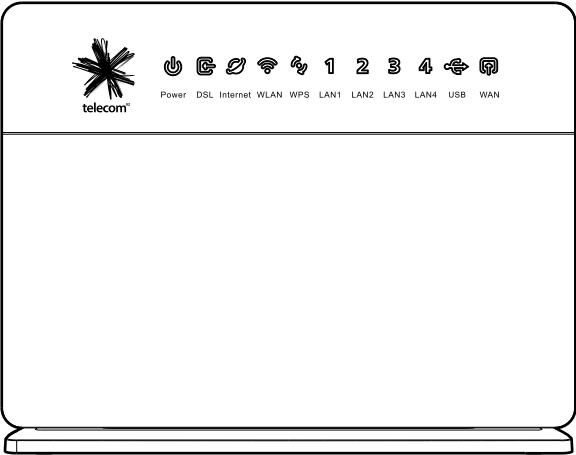
1.1 Ports and Buttons



Number	Port or Button	Description
1	WPS	Starts Wi-Fi protected setup (WPS) negotiation.
2	WLAN	Enables or disables the WLAN function.
3	On/Off	Powers the HG630b on or off.

Number	Port or Button	Description
4	Reset	Restores the HG630b to its default settings after you press and hold this button for 8 seconds to 10 seconds while the HG630b is powered on. CAUTION A reset will result in all custom data and settings being lost. Use with caution.
5	Power	Connects to a power adapter.
6	USB	Connects to a USB device, such as a USB storage device or a printer. CAUTION If you connect a USB device to the HG630b, verify that the input voltage and current of the USB device does not exceed 5 V/0.5 A. Otherwise, the HG630b may malfunction.
7	WAN	Connects to an Ethernet device that provides Internet access, such as a fibre ONT, modem or switch.
8	LAN1 ~ LAN4	Connects to Ethernet devices, such as computers, set-top boxes (STBs), and switches.
9	DSL	Used to connect to the MODEM port on the splitter or connect to the telephone wall jack.

1.2 Indicators



Indicator	Status	Description
Power	Steady on	The HG630b is powered on.
	Off	The HG630b is powered off or faulty.
DSL	Blinking	The HG630b is being activated through DSL.
	Steady on	The HG630b is activated through DSL.
	Off	• The HG630b is powered off. • The HG630b is activated through WAN or USB modem.
Internet	Steady on	• The HG630b is working in routing mode. • The WAN connection is set up. • No data is being transmitted.

Indicator	Status	Description
	Blinking	• The HG630b is working in routing mode. • The WAN connection is set up. • Data is being transmitted.
	Off	• The HG630b is working in bridge mode. • The HG630b is working in routing mode, but the connection to the WAN has not been set up. • The HG630b is powered off.
WLAN	Steady on	The WLAN connection is set up, but no data is being transmitted.
	Blinking	The WLAN connection is set up, and data is being transmitted.
	Off	• The WLAN function is disabled. • The HG630b is powered off.
WPS	Blinking	• A wireless client, such as a computer installed with a wireless network adapter, is connecting to the HG630b using the WPS function. • This process lasts for no longer than 120 seconds.
	Off	• The WPS function is disabled or faulty. • The HG630b is powered off.
LAN1 ~ LAN4	Steady on	The HG630b is connected to a device properly.
	Blinking	Data is being transmitted between the HG630b and the device connected.

Indicator	Status	Description
	Off	• No connection is set up on the port. • The HG630b is powered off.
USB	Blinking	• The HG630b is being activated through USB modem. • Data is being transmitted on the USB port.
	Steady on	• The HG630b is activated through USB modem. • A portable storage device is connected to the USB port.
	Off	• The USB port is not connected. • The HG630b is powered off.
WAN	Steady on	The HG630b is activated through Ethernet, but no data is being transmitted.
	Off	• No connection is set up on the port. • The HG630b is powered off.

2 Hardware Installation

2.1 Selecting an Installation Location

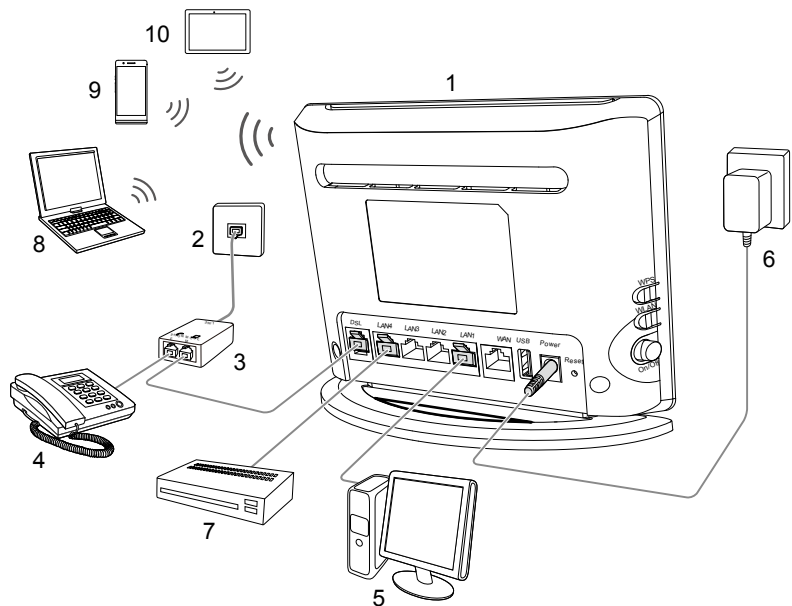
Place the HG630b on a well-ventilated even surface without exposure to direct sunlight. For the best possible performance, take note of the following:

- Make sure there are no obstacles, such as concrete or wooden walls, between the computer and HG630b.
- Ensure that the computer and HG630b are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens.

2.2 Installing the HG630b on a DSL Broadband Service

If you have subscribed to digital subscriber line (DSL) broadband, you can connect the HG630b to a telephone port for Internet access.

Connect your devices in the sequence indicated in the following figure.



- | | | |
|----------------|------------------------|------------------|
| 1. HG630b | 2. Telephone wall jack | 3. DSL filter |
| 4. Telephone | 5. Desktop computer | 6. Power adapter |
| 7. Set-top Box | 8. Laptop computer | 9. Mobile phone |
| 10. Tablet | | |



NOTE

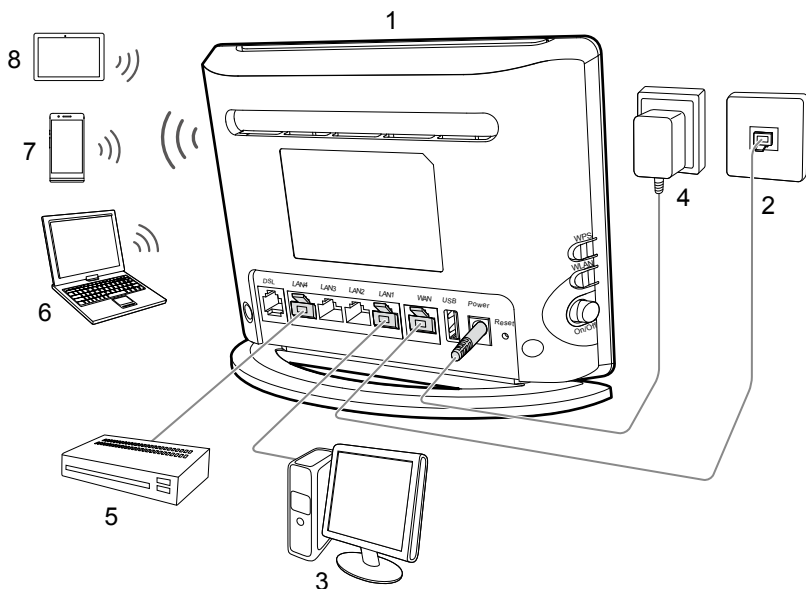
When setting up the HG630b for the first time, connect the HG630b to a computer using an Ethernet cable.

2.3 Installing the HG630b on a Fibre Broadband Service

In some regions, broadband service is delivered by a Fibre connection. On this network, your HG630b gateway is directly connected to the Internet through the local fibre company optical termination point (ONT) installed in your premise.

If you have subscribed to fibre broadband services, connect your HG630b WAN Ethernet port to your fibre company ONT using the blue Ethernet cable supplied.

Connect your devices in the sequence indicated in the following figure.

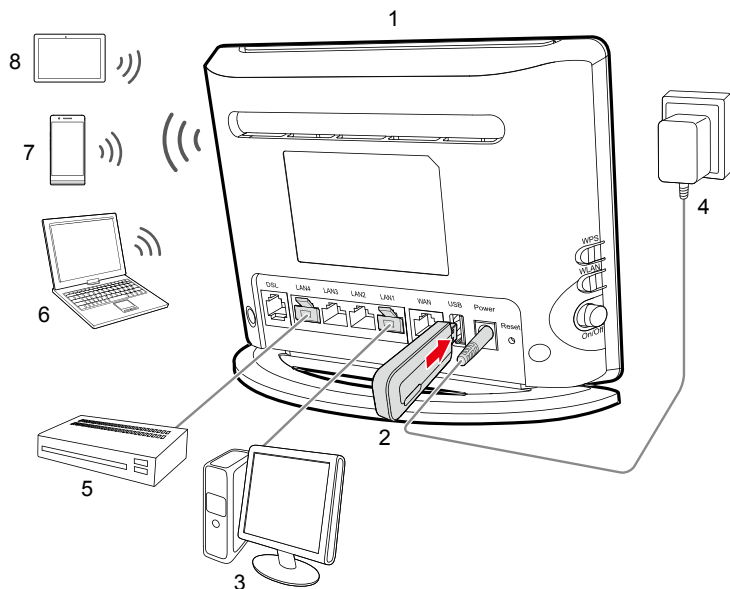


- | | | |
|------------------|-----------------------|---------------------|
| 1. HG630b | 2. Ethernet wall jack | 3. Desktop computer |
| 4. Power adapter | 5. Set-top Box | 6. Laptop computer |
| 7. Mobile phone | 8. Tablet | |

2.4 Installing USB Mobile Broadband on the HG630b

If you wish to use 3G mobile broadband to access the Internet, plug in a supported 3G USB Mobile Broadband T-Stick into the USB interface in the rear of the HG630b.

Connect your devices in the sequence indicated in the following figure.



- | | | |
|------------------|----------------|---------------------|
| 1. HG630b | 2. Data card | 3. Desktop computer |
| 4. Power adapter | 5. Set-top Box | 6. Laptop computer |
| 7. Mobile phone | 8. Tablet | |



NOTE

Using 3G Mobile Broadband incurs mobile broadband data charges. Ensure your mobile broadband data plan is correct for your needs before using.

2.5 Getting Started

To power on the HG630b, press its power button.

After the HG630b is powered on, the HG630b indicator turns on. If the indicators do not behave as expected, ensure that everything is plugged in correctly.

3 Setting Network Parameters

3.1 Logging In to the Web Management Page

The HG630b provides an intuitive web management page where you can view or set the HG630b parameters.



NOTE

Before you log in to the HG630b web management page, ensure that the computer used for the login is connected to the HG630b and has been configured to automatically obtain an IP address or assigned with a static IP address.

Step 1 Open a browser. In the address box, enter **http://192.168.1.254** and press **Enter** to access the web management page.

Step 2 Enter the login user name (**admin** by default) and password (**admin** by default). Click **Login**.



NOTE

To protect against unauthorized access, change the user name and password after the first login.

3.2 Setting Network Access Parameters

The HG630b works in PPP mode by default, and starts to set up a dial-up connection automatically after starting up, meaning you do not need to install dial-up software or perform dial-up operations on your computer.

To set up a dial-up connection to access the Internet:

Step 1 Log in to the web management page.

Step 2 Click **Setup Wizard** to display the **Wizard** tab.

Step 3 Click **Next**.

Step 4 In **WAN device**, select the type for your device, and enter the user name and password provided by your service provider for dial-up connections in **User name** and **Password**.

Step 5 Click **Next**.

Step 6 In **SSID** and **WPA pre-shared key**, set a wireless network name and password, and click **Next**.



NOTE

The default SSID and WLAN Key printed on the HG630b's rear panel are unique and secure. If you do not want to change them, just turn the WLAN switch on.

Step 7 Confirm the information you set and then click **Submit**.

Then check the status of the **Internet** indicator. When the **Internet** indicator turns green, you can access the Internet.

The preceding operations need only be performed once. The next time you power on the computer, you can access the Internet without any other configurations.

3.3 Enabling Bridge Mode

If you select this method for accessing the network, you need to install and configure the dial-up software on your computer. In addition, you need to perform dial-up operations on your computer upon each startup.

To configure the HG630b and your computer for the network access bridge mode, do as follows:

Step 1 Set the working mode of the HG630b to **Bridge**.

1. Log in to the web management page.
2. In the navigation tree, choose **Basic** > **WAN**.
3. Click **New**.
4. Select **Enable** for **WAN connection**.
5. Select **INTERNET** from the **Service list**.

6. Select **Bridge** from the **Connection type** drop-down combo box.
7. Keep the default settings of other parameters.
8. Click **Submit**.

Step 2 Install and configure the PPP dial-up software on your computer.

The PPP dial-up software is pre-installed on certain computer operating systems. To create a dial-up connection, do as follows:

On Windows XP

1. Choose **Start > Control Panel > Network and Internet Connections > Network Connections**.
2. Under **Network Tasks**, click **Create a New Connection**.
3. In the **Network Connection Wizard** dialog box, click **Next**.
4. Select **Connect to the Internet** and click **Next**.
5. Select **Set up my connection manually** and click **Next**.
6. Select **Connect using a broadband connection that requires a user name and password** and click **Next**.
7. In **ISP Name**, name the dial-up connection. Click **Next**.
8. Select **Anyone's use** or **My use only** and click **Next**.
9. Enter the dial-up connection account name and password provided by your ISP and click **Next**.
10. Select **Add a shortcut to this connection to my desktop** and click **Finish**.

On Windows Vista

1. Choose **Start > Control Panel > Network and Internet**

- > **Network and Sharing Center.**
2. Click **Set up a connection or network.**
 3. In the displayed dialog box, select **Connect to the Internet** and click **Next.**
 4. Click **Broadband (PPPoE)** .
 5. In **User name** and **Password**, enter the dial-up connection account name and password provided by your ISP. In **Connection name**, name the dial-up connection. Select or deselect **Allow other people to use this connection.** Then click **Connect.**
 6. Return to the **Network and Sharing Center** page. Click **Manage network connections.** Right-click the icon for the dial-up connection you just set up and choose **Create Shortcut** from the shortcut menu. In the displayed dialog box, click **Yes.**

On Windows 7

1. Choose **Start > Control Panel > Network and Internet > Network and Sharing Center.**
2. Under **Change your networking settings**, click **Set up a new connection or network.**
3. In the **Set Up a Connection or Network** window, select **Connect to the Internet** and click **Next.**
4. Click **Broadband (PPPoE).**
5. In **User name** and **Password**, enter the dial-up connection account name and password provided by your ISP. In **Connection name**, name the dial-up connection. Select or deselect **Allow other people to use this**

- connection.** Then click **Connect**.
- Return to the **Network and Sharing Center** page. Click **Change adapter settings**. Right-click the icon for the dial-up connection you just set up and choose **Create Shortcut** from the shortcut menu. In the displayed dialog box, click **Yes**.

On Apple MAC OS X

- Choose **System Preferences > Network**.
- Click **+** to add a new network connection.
- In the displayed dialog, select **PPPoE** from the **Interface** drop-down combo box, then select **Ethernet** (for cable connection) or **Airport** (for wireless connection) from the **Ethernet** drop-down combo box, and enter a service name (default is **PPPoE**) you specified in **Service Name**.



NOTE

If your ISP provides a **PPPoE Service Name**, you can enter it as well.

- Choose the network name you set from the services list, and enter the dial-up connection account name and password provided by your ISP in **Account Name** and **Password**. Select or deselect **Remember this password**. Then click **Connect**.
- Select **Show PPPoE status in menu bar**.
- Click **Advanced**.
- In the displayed dialog, select settings as needed.
- Click **OK**.
- Return to the **Network** page, click **Apply**.

After you successfully set up a PPPoE connection, a dial-up connection icon is displayed on your computer desktop. To connect to the Internet, double-click the dial-up connection icon. In the displayed dialog box, click **Connect**.

4 Wireless Connection Setup

4.1 Enabling and Disabling the WLAN on the HG630b

4.1.1 Using the WLAN Button

Press the WLAN button in the HG630b to enable or disable the WLAN. To ascertain whether the WLAN is enabled, view the WLAN indicator.

The WLAN function is enabled by default. You can enable or disable the WLAN as follows:

- Press the WLAN button (more than 1 second) the first time to disable WLAN.
- Press the WLAN button (more than 1 second) the second time to enable WLAN.

4.1.2 Using the Web Management Page

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Basic** > **WLAN**.

Step 3 Configure **WLAN**.

- Select **Enable WLAN** to enable the WLAN.
- Clear **Enable WLAN** to disable the WLAN.

4.2 Setting Up a Wireless Connection Using the WPS Button

Push the WPS button once to quickly set up a wireless connection between the HG630b and any WPS-capable device.

- The wireless device (laptop, tablet, or mobile phone) to connect to the HG630b is WPS-capable.
- The wireless network security mode of the HG630b is WPA2-PSK or WPA-PSK/WPA2-PSK, for the WPS function can be used only when the security mode of the WLAN is set to WPA2-PSK, or WPA-PSK/WPA2-PSK.

Table 4-1 Security mode and description

Security mode	Description
OPEN	It is the open system authentication mode. In this mode all wireless devices can access the wireless network.
WEP	Include the open system authentication and shared key authentication. When a wireless client accesses the wireless network, an encryption key is required for authentication.
WPA-PSK	The WPA-PSK is a simplified WPA authentication mode that uses a pre-shared key.
WPA2-PSK	The WPA2-PSK is a simplified WPA2 (IEEE 802.11i) authentication mode, which is another authentication mode that uses a pre-shared key, and is a more robust security mode.
WPA-PSK/ WPA2-PSK	Compatible with WPA-PSK and WPA2-PSK authentication mode.

Before you set up a wireless connection using the WPS button, verify the following:

Step 1 Enable the HG630b's WPS function.

1. Log in to the web management page.
2. In the navigation tree, choose **Basic > WLAN**.
3. In **Enable WPS**, click **Enable** to enable the WPS function.

Step 2 Press the WPS button on the wireless device to start WPS negotiation. For details, see the user guide for the wireless device.

Step 3 Within 2 minutes, press and hold the WPS button on the HG630b for 1 second or more. The WPS button indicator blinks.

When the WPS button indicator on the HG630b is steady on, a connection between the HG630b and wireless device is set up. The WPS button indicator is on for 300 seconds.

4.3 Manually Setting Up a Wireless Connection

The wireless configuration software provided by Windows is used as an example to describe how to set up a wireless connection.



NOTE

You can also use the tool built into the network adapter to set up a wireless connection. For details, see the network adapter's user guide.

Before setting up a wireless connection, record the WLAN name and password of the HG630b. The default WLAN name and password are printed on the HG630b cover label.

On Windows XP

- Step 1** Choose **Start > Control Panel > Network and Internet Connections > Network Connections**. Right-click **Wireless Network Connection** and choose **View Available Wireless Networks** from the shortcut menu.
- Step 2** From the wireless network list, select the WLAN provided by the HG630b. Click **Connect**.
- Step 3** In the displayed dialog box, enter the WLAN password and click **Connect**. Note that the WLAN password is case sensitive.
- Step 4** In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG630b.

On Windows Vista

- Step 1** Choose **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage wireless networks**.
- Step 2** In the **Connecting to a network** window, double-click the WLAN provided by the HG630b.

Step 3 In the displayed dialog box, enter the password and click **Connect**.

Step 4 In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG630b.

On Windows 7

Step 1 Choose **Start > Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings**. Right-click **Wireless Network Connection**, and select **Connect/Disconnect**.

Step 2 From the wireless network list, select the WLAN provided by the HG630b. Click **Connect**.

Step 3 In the displayed dialog box, enter the WLAN password and click **OK**. Note that the WLAN password is case sensitive.

Step 4 In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG630b.

On Windows 8 Desktop

Step 1 From the wireless network list on the right side of the desktop, select the SSID of the wireless network you want to connect to, and then click **Connect**.

Step 2 In the displayed dialog box, enter the password and click **Next**. You can also press the WPS button on the access point or wireless router.

Step 3 Choose whether to enable sharing and connect to devices on your network according to the wireless network environment.

Step 4 Check the connecting status of the wireless network. **Connected** indicates that you have successfully connected to the wireless network.

On Windows 8 Mobile

Step 1 From the Home screen, touch  > **SETTINGS > WIFI**.

Step 2 Under **SETTINGS Wi-Fi**, switch **Wi-Fi** to **ON** .

Your phone then searches for WLANs within range.

Step 3 From the search results, touch the WLAN provided by the HG630b.

Step 4 In the displayed dialog box, enter the WLAN password and touch **done**. Note that the WLAN password is case sensitive.

Step 5 When **connected** is displayed under the HG630b's SSID, the device is connected to the wireless network.

On Google Android 4

Step 1 From the Home screen, touch  > **Settings**.

Step 2 In **WIRELESS & NETWORKS**, switch **Wi-Fi** to **ON** .

Your phone then scans for available Wi-Fi networks and displays them.

Step 3 From the search results, touch the WLAN provided by the HG630b.

Step 4 In the displayed dialog box, enter the WLAN password and touch **Connect**. Note that the WLAN password is case sensitive.

Step 5 When **Connected** is displayed under the HG630b's SSID, the device is connected to the wireless network.

On Apple Mac OS X

Step 1 Click  on the status bar on the Mac desktop. Choose **Turn AirPort On** from the displayed menu.

The device then scans for available wireless networks within range.

Step 2 From the search results, select the WLAN provided by the HG630b.

Step 3 In the displayed dialog box, enter the WLAN password and click **Join**. Note that the WLAN password is case sensitive.

Step 4 When a check mark appears next to the HG630b's SSID, the device is connected to the wireless network.

On Apple iOS

Step 1 From the Home screen, touch Settings > Wi-Fi.

Step 2 In Wi-Fi Networks, switch Wi-Fi to on .

Your phone then scans for available wireless networks within range.

Step 3 From the search results, select the WLAN provided by the HG630b.

Step 4 In the displayed dialog box, enter the WLAN password and click **Join**. Note that the WLAN password is case sensitive.

Step 5 When a check mark appears next to the HG630b's SSID, the device is connected to the wireless network.

4.4 Changing Your WLAN Name and Password

WLAN access requires the WLAN name and password. To improve your WLAN security, regularly change your WLAN name and password.

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Basic > WLAN**.

Step 3 In **SSID** and **WPA Pre-Shared Key**, enter your desired WLAN SSID and key.

Step 4 Click **Submit** to save the settings.

5 USB Device

5.1 USB Storage Device

USB storage devices use their USB ports to exchange data with other devices.

You can connect a USB storage device to your HG630b and access the USB device from your computer. Both the USB drive and removable hard disk can connect to your HG630b. Your HG630b supports the following file systems for reading and writing.

- FAT32/FAT
- NTFS
- MAC OS
- Ext 2/3

5.2 Connecting a USB Device

After you connect a USB device to your HG630b, computers or other devices connected to the HG630b network can access and share the data in or applications provided by the USB device.



If you connect a USB device to the HG630b, verify that the input voltage and current of the USB device does not exceed 5 V/0.65 A. Otherwise, the HG630b may malfunction.

You can connect the following USB devices to your HG630b:

- Spark USB Mobile Broadband T-Stick
- USB storage device
- USB printer

5.3 Connecting to the Internet When Using USB Mobile Broadband

The HG630b is not set to automatically connect through a supported 3G USB mobile broadband T-Stick when it is inserted. A mobile broadband connection must be manually started by the user.



NOTE

You are charged at mobile broadband data rates when connecting. Ensure your data plan is correct before starting.

To connect, do as follows:

Step 1 Log in to the web-based configuration utility.

Step 2 Click **Advanced** > **PIN** in the navigation tree on the left to display the PIN Page.

Step 3 Enable the **UPLINK** function.

1. Choose the **UPLINK** page.
2. Select the **HSPA Backup** check box.
3. Click **Submit**.

Step 4 Verify the PIN code of your SIM card.

1. Choose the **PIN** page.
2. Select **Verify** from the **PIN operation** drop-down combo box.
3. Enter the PIN code that provided by your SIM card operator in the **PIN** text box.
4. Click **Submit**.

Step 5 Set the working mode of the HG630b to **PPP**.

1. In the navigation tree on the left of the web-based configuration utility, choose **Basic** > **WAN**.
2. Click **New**.

3. Select **TNZ_MOBILEBB** from the **Connetion device**.
4. Select **INTERNET** from the **Service list**.
5. Select **PPP** from the **Connection type** drop-down combo box.
6. Enter the user name and password provided by the network operator in the **User name** and **Password** text boxes.
7. Enter the APN and Dial number that are provided by the network operator in the **APN** and **Dial number** text boxes.
8. Keep the default settings of other parameters.
9. Click **Submit**.

Step 6 Enable the connection.

1. Click **Basic > Link Interface**.
2. Choose the **3G** page.
3. Select the connection and enable it.
4. Click **Submit**.

Then check the status of the **Internet** indicator. When the **Internet** indicator turns green, you can access the Internet.

5.4 Content Sharing

The HG630b supports a home storage function, you can read and write files on a storage device and access the removable storage device through the HG630b, and configure the HG630b through a FTP server or Samba server to access the portable storage device from the LAN or Internet.

5.4.1 Accessing a Portable Storage Device Using the FTP Client

Step 1 Connect the mobile storage device to the HG630b's USB port.

Step 2 Enable the FTP server, and configure the FTP server settings.

1. Log in to the web management page.
2. Choose **Advanced** > **USB Port** to display the **FtpServer** tab.
3. Select **Enable FTP Server**.
4. In **User name** and **Password**, enter a user name (default is **TNZHG630**) and password (default is the last 8 digits of your gateway serial number) for the FTP server.

NOTE

For security reasons or to make the password easy to remember, you can change the user name and password for the FTP server.

5. Enter a server port number (default is **21**) in the **Port** text box.
6. Click **Submit** to save the settings.

Step 3 Start the FTP client, and access the HG630b's LAN IP address through the FTP server.

1. On your computer, launch a browser.

2. Enter **FTP:// 192.168.1.254** in the address bar, and press **Enter**.

 NOTE

If the default server port has been modified, please enter FTP:// 192.168.1.254:port number to access the FTP server.

3. In the login dialog box, enter the user name and password for FTP server login (values that you set in Step 2), and click **Login**.

After the user name and the password are verified, you can read data from or write data to the mobile storage device connected to the HG630b.

5.4.2 Accessing a Portable Storage Device Using a Samba Server

Step 1 Connect the mobile storage device to the HG630b's USB port.

Step 2 Enable the samba server.

1. Log in to the web management page.
2. Choose **Advanced > USB Port**.
3. Click **Samba**.
4. Select **Enable Samba**.
5. Click **Submit** to save the settings.

Step 3 Access the portable storage device.

1. Choose **Start > Run** on your computer to display the **Run** dialog box.
2. Enter **\\192.168.1.254** in the **Open** text box and click **OK** to display **Connecting to 192.168.1.254** dialog box.

Then you can access samba server window and the contents on the portable storage device that is connected to the HG630b.

5.5 Sharing a USB Printer

HG630b supports USB printers. After you connect a USB printer to your HG630b through the USB port, and install the printer's driver in your computer, you can access the printer from the Internet or internal network.

Step 1 Connect the USB cable of the printer to the USB port on the HG630b.

Step 2 Add a Network Printer.

On Windows XP

1. Choose **Start > Printers and Faxes**.
2. Choose **Add a printer**.
3. In the **Add Printer Wizard** dialog box, click **Next**.
4. Choose **A network printer, or a printer attached to another computer** and click **Next**.
5. Choose **Connect to a printer on the Internet or on a home or office network** and enter the printer's address <http://192.168.1.254:631/printers/myprinter> in the **URL** text box. **myprinter** is the customized name of the printer to add. Click **Next**.
6. Select the model of the printer you want or click **Have Disk** to manually install the printer drive. Click **OK**.
7. Determine whether to set the printer as the default printer. Click **Next**.
8. Click **Finish**.

On Windows Vista

1. Choose **Start > Control Panel > Hardware and Sound >**

Printer.

2. Choose **Add Printer**.
3. Choose **Add a network, wireless or Bluetooth printer**.
4. The operating system will now attempt to independently make the printer connected locate. If the connected printer can not be found, click **The printer that I want isn't listed**.
5. Choose **Select a shared printer by name** and enter the printer address
`http://192.168.1.254:631/printers/myprinter` in the text box. **myprinter** is the customized name of the printer to add. Click **Next**.
6. Select the model of the printer you want or click **Have Disk** to manually install the printer drive. Click **OK**.
7. Determine whether to set the printer as the default printer. Click **Next**.
8. Click **Finish**.

On Windows 7

1. Choose **Start > Devices and Printers**.
2. Choose **Add a printer**.
3. Choose **Add a network, wireless or Bluetooth printer**.
4. Select **The printer that I want isn't listed to add a new one**.
5. Choose **Select a shared printer by name** and enter the printer address
`http://192.168.1.254:631/printers/myprinter` in the text box. **myprinter** is the customized name of the printer to add. Click **Next**.

6. Select the model of the printer you want or click **Have Disk** to manually install the printer drive. Click **OK**.
7. Click **Next**.
8. Determine whether to set the printer as the default printer. Click **Finish**.

On Windows 8 Desktop

1. Choose **Start > Control Panel > Hardware and Sound > Devices and Printers**.
2. Choose **Advanced Printer Setup**.
3. Choose **Add a printer**.
4. The operating system will now attempt to independently make the printer connected locate. If the connected printer can not be found, click **The printer that I want isn't listed**.
5. Choose **Select a shared printer by name** and enter the printer address
`http://192.168.1.254:631/printers/myprinter` in the text box. **myprinter** is the customized name of the printer to add. Click **Next**.
6. Select the model of the printer you want or click **Have Disk** to manually install the printer drive. Click **Next**.
7. Click **Next**.
8. Click **Finish**.

On Mac OS X

1. Choose **System Preferences > Print & Fax**.
2. Click **+** to add a new printer.

3. Select **IP Printer** on the **Printer Browser**.
4. Set the printer information as follows:
 - **Protocol: Internet Printing Protocol-IPP**
 - **Address: 192.168.1.254:631**
 - **Queue: printers/myHG630bPrinter**

The printer name **myHG630bPrinter** is the customized name of the printer, which can be any text string up to 40 characters.

- **Print Using:** Select a correct driver for the printer.
5. Click **Add**.

Then check the status of new printer from **Print & Fax**, status should be shown ready.

After you complete the preceding settings, open the files you want to print on your computer. Then you can choose the printer just installed to print your files.

6 Advanced Configuration

6.1 Parental Controls

6.1.1 MAC Filter

The HG630b supports controlling the Internet access rights of computers through the MAC address filtering function, and you can prevent certain computers from accessing the Internet or allow only certain computers to access the Internet. In addition, you can specify the period during which computers are not allowed to access the Internet.

For example, if you buy a computer for a young child and wish to restrict the Internet access period of the child for all periods except

19:00 to 20:00 each evening while preventing your own computer from being restricted, you can use the blacklist mode of the MAC address filtering function as follows:

(Suppose the MAC address of the computer of your child is **00:11:09:11:04:DD**.)

Step 1 Log in to the web management page.

Step 2 Enable the network time.

1. In the navigation tree, choose **Advanced > SNTP**.

The network time configuration page is then displayed.

2. Select **Enable auto synchronization with network time**.

3. Select a time service address for **Time server 1**.

For example, you can select **clock.fmt.he.net**.

4. Select your time zone for **Time zone**.

For example, if you are in China, you can select **(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi**.

5. Click **Submit**.

Step 3 In the navigation tree, choose **Advanced > Filter**.

The filter page is then displayed.

Step 4 Click **MAC Filter**.

Step 5 Click **New**.

Step 6 Set a rule name and parameters based on the rule.

For example:

- Rule name: rule1
- Source MAC address: 00:11:09:11:04:DD
- Time control: Enable
- Start time: 00:00
- End time: 18:59

- Effective day: Select from Monday to Sunday.
- Status: Reject

Step 7 Click **Submit**.

Step 8 Click **New** and set other rules and parameters.

For example:

- Rule name: rule2
- Source MAC address: 00:11:09:11:04:DD
- Time control: Enable
- Start time: 19:59
- End time: 23:59
- Effective day: Select from Monday to Sunday.
- Status: Reject

Step 9 Click **Submit**.

If you don't need to set other rules, skip the step 8 and step 9.

6.1.2 URL Filter

The HG630b supports prohibiting computers from accessing specified web sites through the Uniform Resource Locator (URL) filtering function. You can restrict computers from accessing specified web sites or restrict computers to access only specified web sites as follows:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced > Filter**.

The filter page is then displayed.

Step 3 Click **URL Filter**.

Step 4 Click **New**.

Step 5 In **URL**, enter **www.*.com** (* indicates any domain name that you specify).

Step 6 Set restrict status.

- **Reject**: the web site is not suitable for browsing and

you wish to prevent your family from browsing it.

- **Accept:** your family only can access the specified web sites.

Step 7 Click **Submit**.

6.2 Configuring Port Forwarding

You can set forwarding rules on the HG630b so that users can easily access server resources provided by your computer (such as personal websites and FTP servers) from the Internet.

6.2.1 Port Mapping

Port mapping maps the HG630b port using a WAN IP address to a LAN computer. When Internet users access the HG630b port, the HG630b maps access requests to the LAN computer and provides services for the Internet users through the LAN computer. Internet users can then access the LAN computer.

Configure a port mapping rule as follows:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced** > **NAT**.

The NAT page is then displayed.

Step 3 Click **Port Mapping**.

Step 4 In **Type**, select **Application** and choose the application you want to set.

For example, if your computer is required to provide the FTP service, select **FTP Server** from the drop-down list box.

Step 5 In **Remote host**, enter a WAN IP address.

Step 6 In **Internal host**, enter a LAN computer's IP address.

Step 7 Keep the default settings of other parameters.

Step 8 Click **Submit**.

6.2.2 Port Trigger

When an Internet server initiates a connection request to a LAN computer, an application of the LAN computer initiates a connection to the Internet server port, triggering the HG630b port to be enabled. Then the application on the LAN computer can communicate with the Internet server through the HG630b port.

Configure a port triggering rule as follows:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced** > **NAT**.

The NAT page is then displayed.

Step 3 Click **Port Triggering**.

Step 4 In **Type**, select **Application** and choose the application you want to set.

Step 5 In **Interface**, select a connection the application apply to.

Step 6 In **Enable**, select **Enable** from the drop-down list box to enable the triggering.

Step 7 Click **Submit**.

6.3 Configuring the Dynamic DNS

The HG630b supports Dynamic Domain Name Service (DDNS) function, which allows Internet users to use fixed domain names to access the resources provided on servers.

After the DDNS function is enabled, the HG630b automatically submits the new IP address obtained to the server of a DDNS provider. On the DDNS server, the IP address that corresponds to the domain name is updated to the latest IP address. When a computer on the Internet accesses the domain name, the DDNS server provides the latest IP address to that computer.

Before configure a DDNS function, you need to complete the following actions:

- Apply for the DDNS from a DDNS provider to obtain relevant

parameters.

- Apply for a domain name for the web site from the institution that manages web site domain names.

Configure a DDNS as follows:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced** > **DDNS**.

The DDNS configuration page is then displayed.

Step 3 Click **New**.

Step 4 In **Service provider**, select your service provider.



NOTE

The DDNS function of the router provides parameter setting templates of multiple DDNS providers. After a template is selected, the router sets relevant parameters automatically. You can change the parameter settings as required. You can also set all the parameters again as required.

Step 5 Set the parameters provided by the DDNS provider.

Step 6 In **Domain**, enter the domain name you applied from the institution that manages web site domain names.

Step 7 Click **Submit**.

6.4 Configuring the DMZ

The HG630b supports Demilitarized Zone (DMZ), which is used to solve the problem that the external network equipped with a firewall cannot access the internal network server. After DMZ is enabled, the computer that is configured as a DMZ host is exposed to the Internet.

For example, when building a server, you can configure the computer providing external services as a DMZ host, which helps protect other computers on the home network.

To assign a computer or server to be a DMZ host:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced** > **NAT**.

The NAT configuration page is then displayed.

Step 3 Click **DMZ**.

Step 4 In **Host address**, enter the computer's IP address that assigned to be a DMZ host.

Step 5 In **DMZ**, click **Enable**.

Step 6 Click **Submit** to activate the DMZ host.



NOTE

You can clear the host IP address and click **Submit** to inactivate the DMZ host.

6.5 Configuring the UPnP

The HG630b supports universal plug and play (UPnP) for various network devices. If UPnP is enabled, devices supporting UPnP can automatically join the network, simplifying configuration procedures.

To enable UPnP:

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Advanced** > **UPnP**.

The UPnP configuration page is then displayed.

Step 3 In **UPnP**, click **Enable**.

Step 4 Click **Submit**.

6.6 Configuring the DLNA

You can play media files on a portable storage device using the DLNA function of the HG630b.

To play media files on the portable storage device with Windows Media Player, do as follows:

Step 1 Enable the DLNA function.

1. Log in to the web management page.
2. In the navigation tree, choose **Advanced > DLNA**.
The DLNA configuration page is then displayed.
3. Select **Enable**.
4. In **Share directory**, Click **Browse**.
5. In the displayed dialog box, select a USB device path as a share directory, and then click **OK**.
6. Click **Submit** to saving the settings.

Step 2 Access your portable storage device using Windows Media Player.

1. Open the Windows Media Player on your computer.
2. In the navigation tree, choose **Home Gateway Media Server**.

You can then select media files (such as music, video, photo) and enjoy them.

7 Maintenance Guide

7.1 Changing the Web Management Page User Name and Password

The correct user name and password are required to log in to the web management page. Regular changes to the web management page user name and password can effectively prevent unauthorized users from logging in and modifying important parameters.

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Maintenance > Account**.

Step 3 Enter a new user name, your current password, and a new password. Re-enter the new password to confirm it.

Step 4 Click **Submit**.

When modify password successfully, this page will jump to the login page, enter the new user name and password to log in.



NOTE

If you forget the password, you can press and hold the Reset button for 6 seconds or more, then the user name and password of the web management page will back to factory value. This operation will make your own configuration data lost, please perform this operation with caution.

7.2 Restoring Default Settings



If you restore the HG630b to its default settings, all customized user data will be lost. Use this function only when necessary.

7.2.1 Using the Configuration Tool

If the HG630b parameter settings were configured incorrectly, log in to the web management page to reload the default configuration file and restore the user to its default settings. Perform this operation with caution. After the user is restored to its default settings, all custom data and settings will be lost, and the password will be restored to user.

Step 1 Log in to the web management page.

Step 2 In the navigation tree, choose **Maintenance > Device Management**.

Step 3 In **Reset** tab, click **Restore Default Settings**.

Step 4 In the displayed dialog box, click **OK**.

7.2.2 Using the Reset Button

If you forget the login password to the web management page or could not access the web management page, use the Reset button on the HG630b rear panel to restore the HG630b to its default settings. Perform this operation with caution. After the HG630b is restored to its default settings, all custom data and settings will be lost, and the password will be restored to user.

Step 1 Press the HG630b power button to power the HG630b on.

Step 2 Press and hold the **Reset** button for 8 seconds to 10 seconds.

The HG630b will restart, which will cause temporary network interruptions.



NOTE

After the HG630b is restored to its default settings, change the computer IP address so that it is in the same network segment as the 192.168.1.254 default IP address.

7.3 Changing the Web Management Page IP

To make the login IP address easy to remember or from avoiding the IP address of the router conflict with other device in your home, you can change the IP address of the router after logging in to the web management page.

Step 1 Log in to the web management page.

Step 2 Choose **Basic** > **LAN**.

Step 3 In **LAN Host Settings** area, enter the new IP address you specified in **IP address**, and then click **Submit**.

After you change the IP address successfully, enter the new IP address for logging in.

7.4 Configuring the Firewall

The firewall can protect the terminal against malicious access on the WAN port and is used when the HG630b works in routing mode. To configure the firewall, do as follows:

Step 1 Log in to the HG630b's web-based configuration utility.

Step 2 Choose **Advanced** > **Firewall** to display the firewall page.

Step 3 Select a firewall level for **Firewall level**.

- **Off:** The firewall does not monitor or filter through any Internet activities.
- **Low:** The firewall monitors and filters through some Internet activities. If you play network games and access entertainment services often without connecting to computers on the home network, select this level.
- **High:** The firewall monitors and filters through all Internet activities. If you have high security requirements, select this level.

Step 4 Click **Submit**.

8 FAQs

Can I use the HG630b as a DHCP server?

Yes. The HG630b incorporates the DHCP server software.

How can I quickly restore the default settings of the HG630b?

When the HG630b is powered on, press and hold the **Reset** button for 6 or more seconds, and then release it. The HG630b then automatically restarts and the default settings are restored.

What can I do if I cannot access the HG630b configuration page?

Step 1 Check the IP address of your computer and ensure that this IP address is in the same network segment as the HG630b LAN IP address.

Step 2 Ensure that your Web browser does not use a proxy server.

Step 3 Ensure that you have entered the valid user name and password used to access the HG630b configuration page.

If the problem persists, restore the default settings of the HG630b.

Does the WPS function have any special requirement on the wireless encryption settings of the HG630b?

The WPS function can be used only when the WLAN security mode is set to **WPA2-PSK** or **WPA-PSK/WPA2-PSK**. It is recommended that you set the security mode to **WPA-PSK/WPA2-PSK**.

If my computer fails to connect to a WLAN after I press and hold the WPS button, what should I do?

Step 1 Ensure that only one computer is connecting to the HG630b through the WPS function at one time.

Step 2 On the HG630b, ensure that the wireless network function and the WPS function implemented through the PBC method are enabled.

Step 3 Ensure that the security mode of the WLAN is set to **WPA2-PSK** or **WPA-PSK/WPA2-PSK**. Note that the WPS function of the HG630b is forcibly disabled if the WEP encryption is used for the WLAN.

Step 4 Check the positions of the HG630b and computer. Ensure that they are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and cordless telephones.

Step 5 Place the HG630b and the computer in an open space. Although radio signals can pass through obstacles, passing through too many obstacles, such as walls and columns may negatively impact the transmission of WLAN radio signals.

What can I do if I cannot access the Internet through a wireless network adapter?

Step 1 Ensure that the power cables and telephone lines of the HG630b are connected properly.

Step 2 Check whether the **WLAN** indicator of the HG630b is on.

If the **WLAN** indicator is off, the WLAN function of the HG630b is disabled. If this is the case, enable the WLAN function.

For details about how to enable the WLAN function, see section 5.1 "Enabling or Disabling the WLAN Function."

Step 3 Look at the description of the wireless network adapter that is installed on the computer and check whether the wireless network adapter supports the 802.11b, 802.11g, or 802.11n protocols.

If the wireless network adapter does not support the preceding protocols, replace it.

Step 4 Check whether the driver for the wireless network adapter is installed on the computer properly.

If the driver is installed improperly, re-install it.

Step 5 Check whether the computer can receive signals from the WLAN.

Using a computer that runs Windows XP as an example,

check whether the computer can receive signals from a WLAN by doing the following:

1. In the **Control Panel** window, double-click **Network Connections** to display the **Network Connections** window.
2. In the **Network Connections** window, right-click **Wireless Network Connection** and choose **View Available Wireless Networks**.

If the computer cannot detect a WLAN, place the computer close to the HG630b and ensure that no obstacles (such as cement or wooden walls) are present between the computer and the HG630b.

Step 6 Check whether the computer accesses the WLAN of the HG630b successfully.

Check the list of wireless network connections and ensure that the HG630b is connected to the WLAN.

Step 7 Try to access different web sites to check whether the HG630b can access other web sites.

If the HG630b cannot access other web sites, restore to the default settings of the HG630b. If the problem persists, contact your service provider.

How do I improve the transmission quality of wireless signals?

Step 1 Check the positions of the HG630b and computer. Ensure that they are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and cordless telephones.

Step 2 Place your HG630b in an open space.

Although radio signals can pass through obstacles, passing through too many obstacles, such as cement or wooden walls may negatively impact the transmission of WLAN radio signals.

Step 3 Place your computer close to your HG630b.

If your computer is far from your HG630b, the transmission of radio signals may be negatively impacted.

Step 4 Place your HG630b and computer in a different direction.

Step 5 Avoid using your HG630b to access a WLAN during thunderstorms.

What can I do if the WLAN of the HG630b is not encrypted and the computer cannot access the WLAN?

Step 1 Delete the settings of wireless network connections from your computer.

Using a computer that runs Windows XP as an example, delete the settings of wireless network connections by doing the following:

1. In the **Control Panel** window, double-click **Network Connections** to display the **Network Connections** window.
2. In the **Network Connections** window, right-click **Wireless Network Connection** and choose **Properties**.
3. In the **Wireless Network Connection Properties** dialog box, click the **Wireless Networks** tab.
4. In the **Preferred Networks** group box, select the latest wireless network connection saved on your computer, and then click **Remove**.
5. Delete all the other wireless network connections from the **Preferred Networks** group box.
6. Click **OK**.

Step 2 Create a wireless network connection that is not encrypted.

9 Appendix

9.1 Default Settings

Parameter	Setting
IP address of the LAN port	192.168.1.254
Subnet mask of the LAN port	255.255.255.0
User name used to log in to the web-based configuration utility	admin
Password used to log in to the web-based configuration utility	admin
SSID used to access wireless network	Check the label on the HG630b's rear panel
WLAN key used to access wireless network	Check the label on the HG630b's rear panel
DHCP server function	Enable
WLAN function	Enable

9.2 Technical Specifications

Item	Specification	
Ambient temperature for operation	0°C to 40°C (32°F to 104°F)	
Dimensions (without antenna, H × W × L)	About 182 mm × 141 mm × 66 mm	
Weight (Not including the power adapter)	< 266 g	
Relative humidity for operation	5% to 95%, non-condensing	
WLAN standards	802.11b, 802.11g and 802.11n (2.4 GHz)	
Wireless transmission rates	802.11b	Up to 11 Mbit/s
	802.11g	Up to 54 Mbit/s
	802.11n	Up to 300 Mbit/s

10 For More Help

Please visit www.huaweidevice.com/worldwide/support/hotline for recently updated hotline and email address in your country or region.

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