eSpace EGW1530B Enterprise Gateway
V100R001C01
Quick Start

eSpace EGW1530B 企业网关
V100R001C01
快速入门

HUAWEI

Welcome

Welcome to eSpace EGW1530B Enterprise Gateway (EGW1530B). This document describes how to install and configure the EGW1530B. For more information, please refer to the eSpace EGW1530B Enterprise Gateway Product Documentation provided in the CD-ROM delivered with the device.

Usage Notice

- Keep the power plugs clean and dry to avoid electric shock and other potential risks.
- Use the power supply adapter provided with this product.
- Keep your hands dry when plugging in out the device cable.
- Power off the device, remove all connected cables, and contact authorized maintenance personnel if smokes, noises, or odors come from the device.

Packing List

|			
EGW1530B	Power supply adapter	Analog phone lines (3)	Network cable (1)
Document CD-ROM	Quick Start	Warranty Card	PoE Power（optional）

Device Appearance

Rear View

Side View

1 RESET: Press the button for short time (≤ 6s) to restart. Press the button for long time (> 6s) to restore factory settings.

2 WLAN: Press the button for short time (≤ 6s) to enable or disable WLAN. Press the button for long time (> 6s) to activate WPS.

Installation

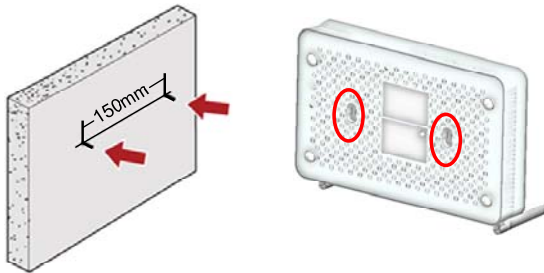## 1 Preparing Installation Tools

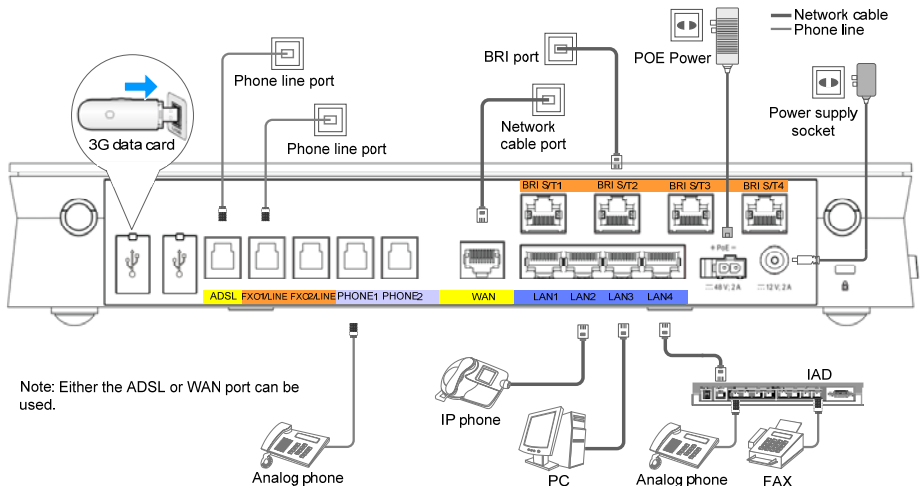|			
Phillips screwdriver	Claw hammer	Hammer drill	Level ruler
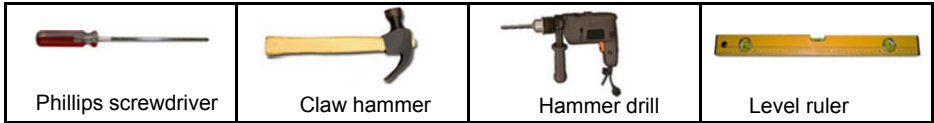
2 Installing the EGW1530B

Install the EGW1530B on a horizontal surface or on a wall.

- Installing the EGW1530B on a horizontal surface is easy. You only need to place it on the surface and leave 10 cm space around for heat dissipation.
- To install the EGW1530B on a wall, fix the swell fixtures (M4) and ensure that 5 mm of the swell fixtures is exposed for mounting the EGW1530B.

150mm

3 Connecting Cables

Network cable
Phone line
BRI port
POE Power
Phone line port
Power supply socket
3G data card
Phone line port
Network cable port
BRI S/T1   BRI S/T2   BRI S/T3   BRI S/T4
ADSL FXO1/LINE FXO2/LINE PHONE1 PHONE2   WAN   LAN1 LAN2 LAN3 LAN4
Note: Either the ADSL or WAN port can be used.
IAD
IP phone
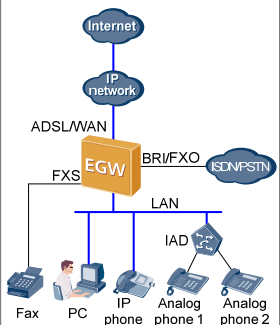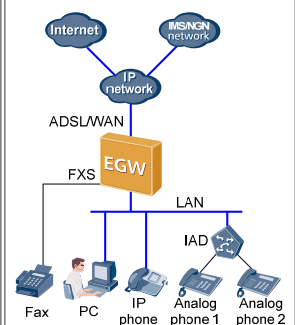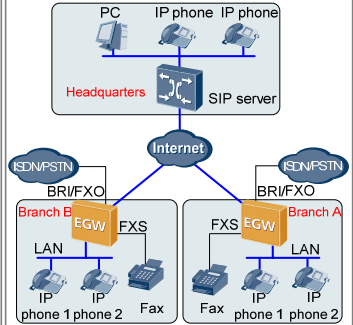Analog phone
PC
Analog phone
FAX

After cables are connected, press the power button to power on the EGW1530B. View the POWER indicators (on the front panel) and check the EGW1530B working status. If the POWER indicator is steady, the EGW1530B is working properly.

Configuring the EGW1530B

Scenario Description

This chapter describes the Internet access and voice functions of the EGW1530B. The EGW1530B supports Internet access through ADSL or WAN. In WAN mode, three methods are available: account and password, static IP, and DHCP. For the specific Internet access mode and data, contact your local network carrier.

The audio function of the EGW1530B is used in one of the following scenarios: independent IP PBX, IMS/NGN access gateway, and local gateway in a branch in the UC solution. The following describes the configuration methods in these scenarios. For details about scenario description and configuration cases, see the documentation CD-ROM delivered with devices.

Scenario 1 Independent IP PBX	Scenario 2 IMS/NGN Access Gateway	Scenario 3 Local Gateway in a Branch in the UC Solution
Functioning as an IP PBX, the EGW1530B allocates internal numbers to users and provide the audio service. The incoming calls made by users are routed through the BRI or FXO ports on the EGW1530B.	Functioning as the access gateway for the IMS or NGN, the EGW1530B connects the IMS or NGN through the SIP trunk and provides the audio service.	When the EGW1530B functions as the local gateway in a branch in the UC solution, the SIP server at the headquarters allocates and synchronizes all user numbers to the EGW1530B. The EGW1530B works with the SIP server to provide the audio service. The EGW1530B can function as the local PSTN trunking gateway and route local outgoing calls, which helps the enterprise to reduce toll costs.

Starting Configuration ——Networking

a Planning Network Access Information

Item	Parameter		Planning Description
WAN	Account	PPPoE user name	ADSL and WAN are available. The WAN modes include the account, static IP, and DHCP submodes. To obtain the network access mode and data, contact the local network carrier.
		PPPoE password	
	Static IP	WAN IP address	
		WAN subnet mask	
		WAN gateway IP address	
		Primary DNS server	
	DHCP		
ADSL	PVC Identifier (VPI)		
	PVC Identifier (VCI)		
	PPPoE user name		
	PPPoE password		
Wireless function	SSID		Indicates the ID of the EGW1530B. The ID is displayed on a Wi-Fi terminal after the terminal finds the EGW1530B. The default ID is **eSpace EGW_******. ******** is the last four digits in the WLAN MAC address.
	Wireless access password		The password is a string consisting of 8 to 63 ASCII characters or 64 hexadecimal digits. The default password is the WLAN MAC address of the EGW1530B.

b Logging In to the Web Management System

❶ Connect a PC to a LAN port on the EGW1530B using a network cable.

❷ Log in to the EGW1530B using Internet Explorer 6.0 or a later version on the PC. The default URL is https://192.168.1.1.

❸ Enter the user name (**admin**) and password (default: **Admin@123**) and click **Log In**.

c Starting Configuration

❶ Choose **Quick Setup** from the navigation tree on the web management system.

❷ Choose a country and click **Next**.

❸ Select a network connection mode according to step a , set relevant parameters, and click **Next**. Verify parameter settings.

❹ Click **Save And Continue** and configure the audio function. If the audio function does not need to be configured, click **Save And Exit** to exit the configuration wizard.

a Planning Users' Internal Numbers

Analog phones, fax machines, IP phones, and IADs can be connected to the EGW1530B. You are advised to connect fax machines to the EGW1530B through the PHONE port.

When the EGW1530B functions as an independent IP PBX, users can dial the outgoing prefix plus the called number to make an outgoing call, and the call is routed through the FXO ports or BRI ports.

The default outgoing prefix is **888**. The outgoing prefix is deleted according to the called number change rule in outgoing calls.

An internal number is a string of 1 to 30 digits.

Phone Type	User Type	Internal Number Example
Fax machine or analog phone	POTS user	6001
IP phone	SIP user	6002
Analog phone 1 (connected to the EGW1530B through the IAD)	SIP user	6003
Analog phone 2 (connected to the EGW1530B through the IAD)	SIP user	6004
...	...	...

b Starting Configuration

1. On the **SIP Server** page, disable the UC mode and click **Next**.

2. Click **Next** to access the analog phone configuration page. Registration groups do not need to be configured when the EGW1530B functions as the IP PBX.

3. Based on the data plan in step **a** , configure internal numbers of POTS users, leave the registration groups and external numbers blank, and click **Next**.

4. Click **Add** in the right part of the **IP Phone** page. Based on the data plan in step **a** , configure internal numbers of SIP users, leave the registration groups and external numbers blank, and click **Next**.

5. Click **Finish** to finish EGW1530B configuration.

6. Configure the IAD. The following describes how to configure IAD208E(M).

    1. Open Internet Explorer and enter the IAD IP address (default: **192.168.100.1**) in the address box.

    2. Enter the user name (default: **root**) and password (default: **admin**) and click **Log In** to access the web management page.

    3. Choose **Basic Configuration** > **Network Parameter** and select the static IP mode. Set the IAD IP address to **192.168.1.***x* (default IP address of the LAN port on the EGW1530B: **192.168.1.1**), set the subnet mask to **255.255.255.0**, and set the IP address of the default gateway to **192.168.1.1**.

    4. Choose **SIP Service Configuration** > **SIP Server** and set the IP address of the SIP server to the IP address of the LAN port on the EGW1530B (for example, **192.168.1.1**).

    5. Choose **SIP Service Configuration** > **FXS User** and set **User ID** (indicating user numbers) based on the data plan in step **a** .

⑦ Configure an IP phone. The following describes how to configure an eSpace 78*xx* IP phone. For details about other models, see the appropriate administrator guide.

1. Enter the IP address of the IP phone in the address box of Internet Explorer(You can click **OK** on the IP phone to view the IP address of the IP phone).
2. Enter the user name and password (default values: **admin**) of the administrator and click **Log In** to access the web management page.
3. Click the **Account** tab. Set **Register Name** to the user number of the IP phone based on the data plan in step **a** . Set **SIP Server** to **192.168.1.1** (default IP address of the LAN port on the EGW1530B).
4. Click **Submit** to finish IP phone configuration.

   You can choose **Voice > Phone Allocation > IP Phone** in the web management system of the EGW1530B to view the registration status of the IP phone.

⑧ Verify the configuration according to the chapter **Verifying Configuration** in this document.

Starting Configuration —— IMS/NGN Access Gateway

a Planning SIP Server Data

Item	Description
Type of the SIP server address	The address can be an IP address and or a domain name. Obtain the type from the network carrier.
SIP server address	IP address or domain name of the SIP server. Obtain the address from the network carrier. For example, the value can be **191.1.1.1** or **m04.huawei.com**.
SIP server type	The options are **NGN** and **IMS**. Obtain the type from the network carrier.
Heartbeat detection interval	Interval for the EGW1530B to send heartbeat messages to the active SIP server, in seconds. The value ranges from 10 to 900. The default value **60** is recommended.
Registration interval	Interval for the registration group to send registration messages for users in this group to the SIP server, in seconds. The value ranges from 0 to 14400. The default value **360** is recommended.

b Planning the Registration Group

Assume that the EGW1530B connects to the IMS, and the registration group type is user-by-user registration.

To obtain the registration group type, trunk registration user ID, trunk registration user name, IMS domain name, external numbers, Authentication and Password, contact the network carrier. When the SIP server type is NGN, leave the IMS domain name blank.

Registration Group ID	Registration Group Type	Trunk Registration User ID	Trunk Registration User Name	IMS Domain Name
0	User-by-user registration	+8657187654321	+8657187654321@abc.def.com	abc.def.com
1	User-by-user registration	+8657187654322	+8657187654322@abc.def.com	abc.def.com
2	User-by-user registration	+8657187654323	+8657187654323@abc.def.com	abc.def.com
...	...	...	...	...

Analog phones, fax machines, IP phones, and IADs can be connected to the EGW1530B. You are advised to connect fax machines to the EGW1530B through the PHONE port.

📖 NOTE

● The ID of the registration group corresponding to an external number of a user must be the same as that of the the trunk registration user ID. If the trunk registration user ID starts with +, you need to change + to 00 when you configure an external number.

● Internal numbers can be customized.

User	User Type	Internal Number Example	Registration Group ID	External Number Example
Fax machine or analog phone	POTS user	6001	0	008657187654321
IP phone	SIP user	6002	1	008657187654322
Analog phone 1 (connected to the EGW1530B through the IAD)	SIP user	6003	2	008657187654323
Analog phone 2 (connected to the EGW1530B through the IAD)	SIP user	6004	3	008657187654324
...	...	...	...	...

d Starting Configuration

❶ On the **SIP Server** page, disable the UC mode and click **Add**. Configure the SIP server based on the data plan in step **a** and click **Next**.

❷ Configure the registration group based on the data plan in step **b** and click **Next**.

❸ Configure the POTS user's internal and external numbers based on the data plan in step **c** and click **Next**.

❹ Click **Add** in the right part of the **IP Phone** page. Configure the SIP users' internal and external numbers based on the data plan in step **c** and click **Next**.

❺ Click **Finish** to finish EGW1530B configuration.

❻ Configure the IAD. The following describes how to configure IAD208E(M).

1. Open Internet Explorer and enter the IAD IP address (default: **192.168.100.1**) in the address box.

2. Enter the user name (default: **root**) and password (default: **admin**) and click **Log In** to access the web management page.

3. Choose **Basic Configuration** > **Network Parameter** and select the static IP mode. Set the IAD IP address to **192.168.1.**x (default IP address of the LAN port on the EGW1530B: **192.168.1.1**), set the subnet mask to **255.255.255.0**, and set the IP address of the default gateway to **192.168.1.1**.

4. Choose **SIP Service Configuration** > **SIP Server** and set the IP address of the SIP server to the IP address of the LAN port on the EGW1530B (for example, **192.168.1.1**).

5. Choose **SIP Service Configuration** > **FXS User** and set **User ID** (indicating user numbers) based on the data plan in step **c** .

❼ Configure an IP phone. The following describes how to configure an eSpace 78xx IP phone.

1. Enter the IP address of the IP phone in the address box of Internet Explorer (You can click **OK** on the IP phone to view the IP address of the IP phone).

2. Enter the user name and password (default values: **admin**) of the administrator and click **Log In** to access the web management page.
3. Click the **Account** tab. Set **Register Name** to the user number of the IP phone based on the data plan in step **c** . Set **SIP Server** to **192.168.1.1** (default IP address of the LAN port on the EGW1530B).
4. Click **Submit** to finish IP phone configuration.

   You can choose **Voice > Phone Allocation > IP Phone** in the web management system of the EGW1530B to view the registration status of the IP phone.

8 Verify the configuration according to the chapter **Verifying Configuration** in this document.

Starting Configuration —— Local Gateway in a Branch in the UC

a Planning Server Information

When the EGW1530B functions as the local gateway in a branch in the UC solution, the SIP server on the central node at the headquarters allocates all user numbers and synchronizes them to the EGW1530B. You do not need to configure user numbers on the EGW1530B.

Before configuration, collect user quantity in the branch and apply for number allocation to the enterprise IT administrator.

The default outgoing prefix of the EGW1530B is **888**. The outgoing prefix is deleted according to the called number change rule in outgoing calls.

Server Type	Planned Item	Remarks
Data synchronization server	IP address	Contact the enterprise IT administrator to obtain the IP address of the data synchronization server.
	Port number	Contact the enterprise IT administrator to obtain the port number of the data synchronization server. If the port number fails to be obtained, use the default value **8098**.
	Key for data synchronization	The EGW1530B compares its data synchronization key with that of the data synchronization server. If the keys are the same, the data synchronization server synchronizes data to the EGW1530B; otherwise, the EGW1530B rejects the data synchronization. The key is a string of 1 to 22 characters including digits, letters, or special characters. You can negotiate with the enterprise IT administrator about the key format.
SIP server	SIP server address	The address can be an IP address and or a domain name. Obtain the address from the enterprise IT administrator.
	SIP server type	The options are IMS or NGN. Obtain the type from the enterprise IT administrator. When the SIP server is eSpace U1960, select NGN. When the SIP server is eSpace U2900, select IMS.
	Heartbeat detection interval	Interval for the EGW1530B to send heartbeat messages to the active and standby SIP servers, in seconds. The value ranges from 30 to 150. The default value **90** is recommended.
	Registration interval	Interval for the registration group to send registration messages for users in this group to the SIP server, in seconds. The value ranges from 0 to 14400. The default value **360** is recommended.

| **b** | Starting Configuration |

❶ On the **SIP server** page, enable the UC mode. Configure the data synchronization server based on the data plan in step **a** .

❷ Click **Add**. Configure the SIP server based on the data plan in step **a** and click **Next**.

❸ Click **Finish**.

You can choose **Voice** > **Phone Allocation** in the web management system of the EGW1530B to view the synchronized user number.

📖 NOTE

When configuring the IP phone, set SIP server 1, SIP server 2, and SIP server 3 to the active SIP server in the central node, standby SIP server in the central node, and IP address of the LAN port on the EGW1530B.

❹ Verify the configuration according to the chapter **Verifying Configuration** in this document.

Verifying Configuration

| **a** | Verifying Network Access |

You can visit a website (for example, http://enterprise.huawei.com) and verify the network function. If the access is successful, the network function is correctly configured.

| **b** | Verifying the Audio Function |

● Independent IP PBX

- Intra-office users dial each other's internal numbers using phones that have numbers configured.
- An intra-office user under the EGW1530B to dial the outgoing prefix (888) and the number (for example, mobile phone number) of an outer-office user.
- An outer-office user dials the number that the PSTN network carrier assigns to the FXO port of the EGW1530B. After hearing the announcement played by the switchboard, the outer-office user dials the extension number (that is, the internal number).

● IMS/NGN access gateway

- Intra-office users dial each other's internal numbers using phones that have numbers configured.
- Calls are made between an analog phone or IP phone under the EGW1530B and a network-side number (for example, a mobile phone number).

● Local gateway in a branch in the UC solution

- Intra-office users dial each other's internal numbers using phones that have numbers configured.
- An intra-office user under the EGW1530B to dial the outgoing prefix (888) and the number (for example, mobile phone number) of an outer-office user.
- An outer-office user dials the number that the PSTN network carrier assigns to the FXO port of the EGW1530B. After hearing the announcement played by the switchboard, the outer-office user dials the extension number (that is, the internal number).

In the preceding scenarios, verify that the calls are connected successfully. If a call fails, check the configuration and cable connection.

Seeking Technical Support and Obtaining Documentation

● Technical support

Contact the device supplier to obtain technical support.

● Documentation

Obtain documentation from the CD-ROM delivered with the device or choose **SUPPORT** > **Products** > **UC&C** > **UC** > **UC** in http://enterprise.huawei.com to obtain documentation.

Declaration on Hazardous Substances in Electronic Information

Parts	Hazardous Substances					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Mechanical part	×	○	○	○	○	○
Board/circuit module	×	○	○	○	○	○
Signal cable	×	○	○	○	○	○
Cable connector	×	○	○	○	○	○
Power adapter	×	○	○	○	○	○
Auxiliary equipment	×	○	○	○	○	○

○：Indicates that the concentration of the hazardous substance contained in all the homogeneous materials of this part is below the limit requirement of the SJ/T 11363−2006 standard.

×：Indicates that the concentration of the hazardous substance contained in all the homogeneous materials of this part is above the limit requirement.

📖 NOTE

1. Mechanical part such as shell: The steel, aluminum or copper materials contain lead.
2. Board and circuit module:
   ● The PCB pad contains lead.
   ● Ceramic capacitor or feedthrough capacitor or mica capacitor on the board: The ceramic chip contains lead.
   ● The resistor inside the clock oscillator is immune from lead.
   ● The high temperature type solder, used for the connector inside the transformer, contains more than 85% lead.
   ● The luminescence glass of chip inductor contains lead.
   ● The high temperature type solder used for the transistor chip contains lead.
   ● The glass of resistance layer and protection layer is immune from lead.
   ● The pin and solder of the components such as the IC and power unit contain lead.
3. Signal cables: The alloy materials such as the steel, aluminum, and copper materials contain lead.
4. Cable connector: For most connectors, the metal shell, terminal and pin contain lead.
5. Power adapter: The interior contains lead.
6.The circuit board of the auxiliary equipment contains lead. Same as point one and point two.