

OVERVIEW & REQUIREMENTS

This guide covers configuring the **Polycom VVX 450** business media phone to register with the PBX **5.3.4** — by manual configuration or by auto provisioning.

Identify Your Phone Model

Check the label on the **back of the phone** for the exact model. Different Polycom models can have significantly different requirements and setup procedures — confirming the model before you start avoids failed registrations.

Phone Firmware

The phone must be running firmware **6.0.0**, and the Polycom firmware pack must be downloaded and extracted to the **tftp** folder on the server. See the Polycom firmware installation documentation for details.

DHCP Server

A fully configured and operational **DHCP server** is required on the network.



CHECK YOUR PBX VERSION

Log in to the PBX and navigate to **Settings › About**. The top of the page shows a code similar to:

Edition: Business, Release: 5.3.4 (041373f), Running: 1.4.24-gc-75ee203

Release denotes the exact version of your PBX. This guide targets release **5.3.4**.

VERIFY: After any registration method in this guide, dial ***123** from the phone to confirm it is registered.

INSTALLATION

Connect the phone to power and the data network, then apply factory settings if the phone has been used before.

Power Adapter

- Connect the DC plug on the power adapter to the **DC port** on the phone, and plug the other end into an electrical outlet.
- Connect an Ethernet cable between the **Internet** port on the phone and a network port on your router or switch to access the LAN.

Power over Ethernet (PoE)

- Using a regular Ethernet cable, the phone can be powered directly from a **PoE-compliant** router or switch.
- Connect the Ethernet cable between the **Internet** port on the phone and an available port on the in-line power router or switch.

NOTE: When using PoE, do not connect the AC adapter. Make sure the Ethernet cable and the router or switch are PoE compliant.

RESET TO FACTORY SETTINGS

Not required for out-of-the-box phones — but a **must** if the phone has already been used.

- 1 Press the **Home** button.
- 2 Go to **Settings** and press **Select**.
- 3 Go to **Advanced** and press **Select**.
- 4 Enter the password (default **456**) and press **Enter**.
- 5 Go to **Administration Settings** and press **Select**.
- 6 Go to **Reset to Defaults** and press **Select**.
- 7 Go to **Reset To Factory** and press **Select**.
- 8 Confirm by pressing **Yes**.

MANUAL CONFIGURATION — UAD & EXTENSION

Set the UAD, create an extension on the PBX, then register the phone (next page).

Log In to the Web Interface

- Open a browser and enter the PBX IP address to reach the administration login screen. Example: `http://192.168.1.10`
- Log in with your **e-mail address** and **password**.

UAD Settings

- 1 Navigate to **Settings › UAD**.
- 2 Make sure the Polycom UAD is enabled — click the **edit** icon for your Polycom phone to check.
- 3 Set **Status: Active**, **Auto provisioning: No**, **DHCP: Yes**.
- 4 Click **Save**.

Create the Extension

- 1 Navigate to **Extensions** and click **Add Extension**.
- 2 Select the Polycom phone model from the **UAD** select box.
- 3 Select **Location: Local** (registered on the LAN) or **Remote** (registered from remote networks, WAN, Internet).
- 4 Click **Next step**.

REQUIRED FIELDS

- **Name** — a name for the extension. Example: **John Smith**.
- **E-mail** — the address associated with this extension; it receives all system notification messages. Example:
`john.smith@yourdomain.com`

Click **Save**. The extension number and secret are sent to this e-mail address.

REGISTERING THE PHONE — MANUAL

A — From the Phone's Web Interface

Find the phone's IP address:

- 1 Press **Home** > **Settings** > **Status** > **Network** > **TCP/IP Parameters**
- 2 The address is shown under **IP**: e.g. **192.168.8.198**

Configure the line:

- 1 Enter the phone's IP in a browser. At factory defaults the password is **456**.
- 2 Under **VIEWS**, select **Simple Setup**.
- 3 Expand the **SIP Server** group. Enter the PBX IP into **Address** and **5060** into **Port**.
- 4 Expand **IP Line Identification**. Enter the extension into **Address** and **Authentication User ID**, and the extension secret into **Authentication Password**.
- 5 Press **Save**. The phone should register in a couple of seconds — if not, reboot it.

NOTE: Web interface settings can vary by device and firmware.

B — On the Device

Line configuration:

- 1 Press **Home** > **Settings** > **Advanced**, enter the password (default **456**), press **Enter**.
- 2 Press **Select** to enter **Administration Settings**
- 3 Go to **Line Configuration** > **Line 1**.
- 4 Go to **Address**, press **Edit**, enter the extension number (e.g. **1003**), press **Ok**.
- 5 Go to **Authentication** > **User ID**., press **Edit**, enter the extension number, press **Ok**.
- 6 Go to **Password**, press **Edit**, enter the extension secret (e.g. **%3DfChBz59**), press **Ok**.
- 7 Press **Back** three times, then **Select** on **Save Config**.

Call server configuration:

- 1 Press **Home** > **Settings** > **Advanced**, enter the password, press **Enter**, then **Select** into **Administration Settings**
- 2 Go to **Call Server Configuration** > **SIP** > **Server 1**
- 3 Press **Edit** on **Address**, enter the PBX IP (e.g. **192.168.8.185**), press **Ok**.
- 4 Press **Back** three times, then **Select** on **Save Config**.

VERIFY: Dial ***123** to confirm registration.

REGISTERING WITH DNS SRV

A **DNS SRV** record specifies the location of the PBX, so the phone registers by hostname instead of IP address.

NOTE: Your DNS server must be configured correctly for this to work. Your service provider can set this up for you.

Check DNS SRV Is Enabled on the PBX

- 1 Contact your PBX administrator to confirm **DNS SRV** is enabled — or check yourself if you have access.
- 2 Open a browser and enter the PBX IP address (e.g. `http://192.168.1.10`), then log in with your e-mail address and password.
- 3 Navigate to **Settings > Servers** and click the server's **edit** button.
- 4 In the **Auto Provisioning** group, make sure **Use DNS SRV when possible** is set to **Yes**. If it is **No** or **N/A**, set it to **Yes** and click **Save**.

NOTE: After changing this setting, you must re-save all extensions configured for Auto Provisioning.

Configure the Line

- 1 Press **Menu**, scroll to **Settings > Advanced**, enter the password (default **456**), press **Enter**.
- 2 Press **Select** to enter **Admin Settings**.
- 3 Go to **Line Configuration > Line 1 > Server 1**.
- 4 Press **Edit** on the **Address** line and enter the hostname. Example: `abc.yourdomain.com` — replace with your own PBX hostname.
- 5 Go to **Authentication**, press **Edit** on **User ID**, enter the extension number (e.g. **1003**), press **Ok**.
- 6 Go to **Password**, press **Edit**, enter the extension secret from the extension's e-mail (e.g. `%3DfChBz59`), press **Ok**.
- 7 Press **Back** twice, then **Select** on **Save Configuration**.

Make sure the DNS server automatically routes the registration request to the PBX, which may actually be under another domain name.

VERIFY: Auto provisioning runs during the phone reboot; the phone picks up its configuration file from the PBX. Dial ***123** to confirm registration.

AUTO PROVISIONING

UAD Settings

- 1 Log in to the PBX web interface (e.g. `http://192.168.1.10`).
- 2 Navigate to **Settings** > **UAD** and click the **edit** icon for your Polycom phone.
- 3 Set **Status: Active**, **Auto provisioning: Yes**, **DHCP: Yes**.
- 4 Click **Save**.

Create the Extension

- 1 **Extensions** > **Add Extension**; select the Polycom model from **UAD**, choose **Local** or **Remote**, click **Next step**.
- **Name** — e.g. John Smith.
- **E-mail** — e.g. `john.smith@yourdomain.com`
- **Auto Provisioning** — set to **Yes**.
- **MAC Address** — e.g. 0004F2123456 (on the back of the phone).

Click **Save**.

DHCP (OPTION 66)

- Configure your DHCP router to use **option 66** to hand phones the auto provisioning URL. See your router documentation or network administrator.
- Provisioning runs at first boot or on a user-initiated reboot; the DHCP server tells the phone where to pick up its configuration file. Dial ***123** to verify.

TFTP or HTTP & HTTPS (No DHCP)

Without DHCP you can still auto provision. First set a **static IP** on the phone (see the Polycom user guide), then:

- 1 Browse to the phone's IP (e.g. `https://192.168.1.22`). Enter the password (factory default **456**) and press **Submit**.
- 2 Go to **Settings** in the upper navigation menu and choose **Provisioning Server**.
- 3 Choose the **Server Type: HTTP, HTTPS, or Trivial FTP**, and press **Select** — **HTTP is recommended**.
- 4 For HTTP/HTTPS, enter the hostname or IP followed by `/prov` into **Server Address** and press **Ok**. Enter your HTTP username into **Server User** and your HTTP password into **Server Password**.
- 5 For TFTP, enter the hostname or IP into **Server Address**.
- 6 Click **Save** and confirm by choosing **Yes**, then wait while the phone reboots.

SERVER TYPE	SERVER ADDRESS EXAMPLE
HTTP (hostname)	<code>abc.yourdomain.com/prov</code>
HTTPS (hostname)	<code>abc.yourdomain.com/prov</code>
HTTP (IP)	<code>192.168.1.10/prov</code>
HTTPS (IP)	<code>192.168.1.10/prov</code>
TFTP (hostname)	<code>abc.yourdomain.com</code>
TFTP (IP)	<code>192.168.1.10</code>

VERIFY: Provisioning runs during reboot; the phone picks up its configuration file from the PBX. Dial ***123** to confirm registration.