



Configuring the Polycom VVX 500 for SIP Registration

This guide shows you the steps to configure a SIP phone to register with Twilio. If you have any feedback on the following guide please email us at:

sip.interconnectionguides@twilio.com

General Notes

- Please see separate instructions on creating Programmable Voice - SIP domains. This guide assumes these steps have already been done.
- User-credentials are required to register phones. IP ACLs alone are not sufficient. Your AuthorizationName should match the username on the SIP endpoint and both of those should match a user credential that you entered on Twilio's console.
- A SIP URI is: sip:username@SIPDomain or sip:phonenumber@SIPDomain
- When this document refers to **TwilioSIPDomain** it represents: **yourdomain.sip.region.twilio.com** where you have selected **yourdomain** on Twilio's console (globally unique) and **region** which is initially US1 (North-Virginia) only and other regions later.

Polycom VVX 500

Part Number	3111-44500-001 Rev:A
UC Software Version	4.0.1.13922

1. Attach a LAN/Ethernet cable to the phone. DHCP is enabled by default and assuming DHCP server is available, it will provide an IP address. To retrieve the IP address from the phone press the HOME button (see home symbol) and via the touch screen navigate to:

Home > Settings > Status -> Network... > TCP/IP Parameters

2. Open a web browser and enter the IP address.

NOTE: If page doesn't load then try prepending https:// You may have to accept the

security certificate warning and agree to proceed despite being untrusted.

3. You will be prompted to enter credentials (factory default is)

Username: admin

Password: 456

4. Click the *Simple Setup Tab*
 - a. Time Synchronization: select an appropriate *SNTP server*
 - b. Time Synchronization: select your *time zone*
 - c. Save. Phone may reboot.

Note: The SIP Server/SIP Outbound Proxy/SIP Line Identification fields are made available if you want to provide defaults. If fields are left blank in the Line settings then they will pull from the defaults on this page. We find it more clear to leave the fields for Simple Setup blank and set these fields under the Line settings.

The screenshot displays the Polycom VVX 500 web interface. At the top, the logo and model name 'POLYCOM | VVX 500' are visible. Below this is a navigation menu with options: Home, Simple Setup, Preferences, Settings, Diagnostics, and Utilities. The current page is 'Simple Setup', as indicated by the breadcrumb 'You are here: Simple Setup' and the active tab in the left sidebar. The main content area is titled 'Simple Setup' and contains several sections: 'Language' with 'Phone Language' set to 'English (Internal)' and 'Web Utility Language' set to 'Add'; 'Time Synchronization' with 'SNTP Server' set to 'north-america.pool.ntp.org' and 'Time Zone' set to '(GMT -8:00) Pacific Time (US & Canada)'; and three expandable sections for 'SIP Server', 'SIP Outbound Proxy', and 'SIP Line Identification'. At the bottom of the page, there are four buttons: 'Cancel', 'Reset to Default', 'View Modifications', and 'Save'.

5. Navigate to:

Settings > Lines > Line X where X is the number of the line. (your choice)

Identification

- a. **Display Name:** This is the callerId the other party sees when you call. Can be whatever you want.
- b. **Address:** "SIP Address" also known as "SIP URI" written in form **username@TwilioSIPDomain**. The **username** component in the address must match the User ID below.
- c. **Authentication User ID:** This must match the **username** of the credentialList that you configured for your **TwilioSIPDomain**.
- d. **Authentication Password:** This is the **password** corresponding to the **username** in the credentialList that you configured for your **TwilioSIPDomain**.
- e. **Label:** What is shown on your phone's display for the name of the line. Can be whatever you want. If blank will take the Authentication User ID.

Outbound Proxy

- f. **Address:** Enter **TwilioSIPDomain**
- g. **Port:** 5060 or 5061 for TLS security


Server 1

- i. **Address:** TwilioSIPDomain
- ii. **Port:** 5060 or 5061 for TLS security
- iii. **Expire:** 3600 (1 hour)
- iv. **Subscription Expires:** 3600 (1 hour)
- v. **Register:** Yes
- vi. Click Save

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Home Simple Setup Preferences Settings Diagnostics Utilities

You are here: Settings > Lines > Line 5



Line 5

Views

- Line 1
- Line 2
- Line 3
- Line 4
- Line 5**
- Line 6
- Line 7
- Line 8
- Line 9
- Line 10
- Line 11
- Line 12

Line 5

Identification

Display Name: SipRegTim
Address: timbeyers@sipregtim.sip
Authentication User ID: timbeyers
Authentication Password: ****
Label:
Type: Private Shared
Third Party Name:
Number of Line Keys: 1
Calls Per Line: 24
Ring Type: Silent Ring

Outbound Proxy

Address: sipregtim.sip.us1.twilio.c
Port: 5060
Transport: DNSNaptr

Server 1

Address: sipregtim.sip.us1.twilio.c
Port: 5060
Transport: DNSNaptr
Expires (s): 3600
Register: Yes No
Retry Timeout (ms): 0
Retry Maximum Count: 3
Line Seize Timeout (s): 30

Server 2

Call Diversion

Message Center

Note:
* Fields require a phone reboot/restart.

Cancel Reset to Default View Modifications Save

6. Navigate to:


Settings > Network > NAT

a. Keep-Alive Interval: 20s. Save.

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Home Simple Setup Preferences Settings Diagnostics Utilities

You are here: Settings > Network > NAT



NAT

- * IP Address
- * Signalling Port
- * Media Port Start
- Keep-Alive Interval (s)

Note:
* Fields require a phone reboot/restart.

VIEWS

- QoS
- RTP
- NAT**
- TCP
- TLS
- Ethernet

Cancel Reset to Default View Modifications Save

7. You're Done! Congrats! Your phone's display should show a GREEN check mark next to the line you just created if the registration was successful. If it's RED, verify that your credentials all match.

For troubleshooting see:

Diagnosics > View Logs