

TAKING HOME YOUR HOSTED VoIP PHONE

CenturyLink® Hosted VoIP service allows you to take your phone home for up to 6 months at a time. After the 6-month period, you either need to return the phone to the office, or contact your account manager to have that location made permanent. Any time you move your phone or change locations, you should update your 911 address using the end user Hosted VoIP portal via <http://centurylink.com/voip>.

NOTE: When you take your phone off of the CenturyLink-provided network, it becomes a best-effort service. Service level agreements, quality of service (QoS), and the ability to connect to the Hosted VoIP platform are not supported. Troubleshooting is limited to providing phone and router/firewall settings; it is your responsibility to configure those settings. For more information, please review the terms listed on page 2.

CONFIGURING YOUR PHONE

MANUAL CONFIGURATION

If your phone boots up and does not show your office extension on the screen:

1. Press **MENU** button.
2. Press **3** for Settings.
3. Press **2** for Advanced.
4. Enter **456** for the password then press **ENTER**.
5. Press **1** for Admin Settings.
6. Press **1** for Network Configuration.
7. Highlight the "..." Next to Provisioning Server and press **SELECT**.
8. Arrow down and make sure **HTTP** is selected under Server Type.
9. Under Server Address, enter
"xsp.ctivoice.com/dms/PolyTemplate" (no quotes and this address is case sensitive).
10. Press the **BACK** button.
11. Select **SAVE** and **REBOOT**.

VERIFYING THE VLAN SETTING

When you move your phone to or from your office, you will most likely need to change the VLAN settings. The best indication of this is receiving a URL error on the phone after bootup.

1. Press **MENU** button.
2. Press **3** for Settings.
3. Press **2** for Advanced.
4. Enter **456** for the password then press **ENTER**.
5. Press **1** for Admin Settings.
6. Press **1** for Network Configuration.
7. Arrow down and highlight the "..." Next to Ethernet Menu and press **SELECT**.
8. Arrow down and highlight the "..." Next to VLAN Menu and press **SELECT**.
9. Press **EDIT** and enter the VLAN ID:
 - **OFFICE:** 10
 - **HOME:** Remove the VLAN ID
10. Press the **OK** button.
11. Press the **BACK** button.
12. Press the **BACK** button again.
13. Press the **SELECT** button to Save Config.
14. Press the **BACK** button.
15. Press **3** to Reboot the phone.
16. Are you sure? Press the **YES** button.

CONFIGURING YOUR ROUTER

TROUBLESHOOTING TIPS

1. Some routers allow for plug and play setup of VoIP phones, but not all routers are built the same. Due to the number of routers available with other providers, CenturyLink does not test, certify, or provide configurations for these devices.
2. You should always back up your router configuration before making changes. CenturyLink repair cannot assist with this activity.
3. If your router supports SIP ALG, try turning that feature off.
4. NAT, or Network Address Translation, usually causes problems with voice over IP. For consumer-grade routers, we recommend that NAT be turned off.
5. DMZ is a feature on most routers where it will direct all traffic from the internet to a particular device on the network. Try pointing your DMZ to your Hosted VoIP phone.
6. Features like Busy Lamp Field and Shared Call Appearances might not function properly depending on your Internet provider's router settings.

PORT & IP INFORMATION

Open ports 5060 and 5061 for SIP from all CenturyLink session border controllers (SBCs).

PUBLICIP/SBC ADDRESSES (IPv4)

Chicago	216.206.64.7
Highlands Ranch	216.206.66.7

Open RTP ports below from all CenturyLink SBC addresses only:
2222-2317
3000-3000

If a firewall feature is configured in the router, it must allow the following traffic to pass. The IP address of the CenturyLink session border controller (SBC) varies and can be provided by the CenturyLink provisioner working the order.

The following must be allowed between all Hosted VoIP phones and the CenturyLink SBC (in both directions):

- Allow TCP ports 5060 and 5061 (for SIP)
- Allow UDP ports 5060 and 5061 (for SIP)
- Allow TCP ports 2427 and 2727 (for MGCP)
- Allow UDP ports 2427 and 2727 (for MGCP)
- Allow UDP ports 16384-32767 (for RTP)¹
- Allow TCP port 123 and UDP port 123 (for NTP)
- Allow TCP port 69 and UDP port 69 (for TFTP)
- Allow TCP port 80 and UDP port 80 (for HTTP)
- Allow TCP port 2208 and UDP port 2208 (for HTTP)
- Allow TCP port 443 and UDP port 443 (for HTTP)

¹ Some firewalls will dynamically open and close UDP ports for RTP as required and do not need the entire range of UDP ports for RTP opened all the time.

ALTERNATE CARRIER CONNECTIVITY TERMS AND CONDITIONS (Contract Addendum Sample)

Sample contract addendum supporting remote users (up to 4 allowed) who are set up permanently to use CenturyLink Hosted VoIP service over another carrier's network. These are also sample terms and conditions for if a user takes their phone off our network even for the temporary time period (up to 6 months).

- 1. CUSTOMER USE OF ALTERNATE CARRIER TO PROVIDE CONNECTIVITY FOR SERVICE.** Customer intends to purchase connectivity (Internet access / local access) from a carrier other than CenturyLink ("Alternate Carrier"), instead of purchasing Approved Connectivity as defined in the Service Exhibit or Service Provisions, at the following locations where the Service will be provided:

SERVICE LOCATIONS

Insert Customer Location

Customer agrees that none of the locations listed above are locations with CenturyLink Approved Connectivity as defined in the Service Exhibit ("Approved Connectivity Location").

- 2. CENTURYLINK RESPONSIBILITIES.** Customer agrees that CenturyLink will provide Service over connectivity from the Alternate Carrier under the following conditions:

- 2.1** CenturyLink will only troubleshoot voice quality/connectivity issues at locations where CenturyLink Approved Connectivity is used. If Customer experiences Service performance issues at any of the locations listed in Section 1, CenturyLink's sole obligation will be to provide basic firewall settings and IP phone or software client configurations to Customer. CenturyLink will not troubleshoot voice quality/connectivity issues at the locations listed in Section 1 above.

- 2.2** CenturyLink does not guarantee the quality of Service or that Service will perform as described in the Service Exhibit at the locations listed in Section 1 above. This includes, but is not limited to, placing and receiving calls (including 911 calls), transmission of data, use of optional features, and use of IP phones, soft phones and/or portals.

- 2.3** Regardless of any provisions to the contrary in the Agreement, CenturyLink shall have no liability whatsoever for Service issues related to or caused by failure of Alternate Carrier's connectivity at the locations listed in Section 1. Customer is not entitled to any SLA remedies for Service performance issues at the locations listed in Section 1.

- 3. CUSTOMER RESPONSIBILITIES.**

- 3.1** Customer will be responsible for troubleshooting all QoS and connectivity issues for the sites listed in Section 1.

- 3.2** If Customer experiences Service performance issues at a site listed in Section 1, Customer will bring the IP phone to an Approved Connectivity Location for testing. If the IP phone works properly at the Approved Connectivity Location, CenturyLink will have no further obligation to perform testing or repair of the Service or IP handset, and will have fulfilled its obligation to Customer with regard to Service and IP handset performance.

- 4. ADDITIONAL SERVICE LIMITATIONS, INCLUDING 911 CALLING.** The parties agree that the following additional limitations, including limitations related to 911 calling, will apply to Service at Customer locations listed in Section 1. Customer will notify its End Users of these additional limitations.

"Where Customer does not use Approved Connectivity to transport CenturyLink QCC Hosted VoIP Service to or from a Customer location, and the connectivity selected by Customer does not have QoS, Customer may experience call quality issues and/or failure of calls to complete at that location, including calls to 911 emergency services. CenturyLink recommends Customer and its End Users always have an alternative means of accessing 911 services."

- 5. MISCELLANEOUS.** References in the Agreement to "Qwest Communications Corporation" or "Qwest Communications Company, LLC" are replaced with "CenturyLink Communications, LLC f/k/a Qwest Communications Company, LLC". References in the Agreement to "QCC" are replaced with "CenturyLink QCC". References in the Agreement to "Qwest", are replaced with "CenturyLink". References in the Agreement to "Qwest Total Advantage® Agreement" are replaced with "CenturyLink® Total Advantage® Agreement". References in the Agreement to "Qwest Total Advantage® Express Agreement" are replaced with "CenturyLink® Total Advantage® Express Agreement". References in the Agreement to "Qwest Loyal Advantage® Agreement" are replaced with "CenturyLink® Loyal Advantage® Agreement". References in the Agreement to "QTA" are replacement with "Agreement". This Addendum will be effective on the date the last party signs it (the "Addendum Effective Date") and will become part of the Agreement. All other terms and conditions in the Agreement will remain in full force and effect and be binding upon the parties. This Addendum and the Agreement set forth the entire understanding between the parties as to the subject matter herein, and in the event there are any inconsistencies between the documents, the order of precedence in descending order of control will be: this Addendum and the Agreement. Using CenturyLink's electronic signature process for the Addendum is acceptable.