Welcome to CenturyLink Engage!

The following guidelines describe how to configure your network to support an optimal experience with your CenturyLink Engage voice and collaboration services.

**Internet Bandwidth**

1. CenturyLink Engage is a cloud-based voice service that requires an Internet connection. This can be provided through CenturyLink network services or Internet access from other providers.

2. Your Internet connection must be sized to allow for both your data needs and simultaneous voice calls. Typically, each package ordered requires an additional 100-300 kbps of bandwidth for the CenturyLink Engage features. Insufficient bandwidth can cause inferior call quality.

**Local Area Network (LAN)**

1. CenturyLink Engage IP phones and Analog Terminal Adapters (ATAs) operate as a Session Initiation Protocol (SIP) device on the network and utilize a Local Area Network connection, just like a computer, versus traditional telephone jack wiring.

2. Supports Power over Ethernet to power the IP Phone and a power outlet is available to use the provided power brick and cord.

3. Capacity sized to support the quantity of IP Phones ordered plus the required data needs in the office. This includes any network switches used.

4. Ethernet/data network wall jacks are available at locations where the IP Phones will be used. IP Phones can share the same network connection with a computer by utilizing the switch built into the phone, a practice called “daisy chaining.”

5. Supports Dynamic Host Exchange Protocol (DHCP) to provide a network IP Address to the phone.

6. Supports Domain Name Service (DNS) or DNS Relay to allow the IP Phones to register to the cloud communication platform. DNS SRV and DNS A type records must be supported.

7. Customer firewall must allow HTTP (TCP port 80) and HTTPS (TCP port 443) traffic for SIP devices to communicate with external configuration servers.

8. Customer firewall must allow SIP and RTP for IP Phones and ATA’s to place and receive calls.

9. Network switches support Virtual Local Area Networks (VLAN’s) to provide a dedicated, separate path for voice versus data traffic.
Wide Area Network

1. Customer router should be configured to mark all SIP and RTP packets to and from the call control platforms as high priority using Differentiated Services Code Point (DSCP) to ensure these packets take priority over lower priority packets for all traffic.

2. Customer router/firewall must not manipulate the SIP or RTP packets at the application layer. If any CPE devices can function as a SIP Access Layer Gateway (ALG), the ALG functionality should be disabled.

3. Customer router Network Address Translation (NAT) bind timer should be set to at least 30 seconds.