TECHNICAL REQUIREMENTS

LAN CONFIGURATION SPECIFICATIONS

In order to ensure optimum Quality of Service (QoS) for your Business VoiceEdge solution, Comcast Business recommends adhering to the following requirements. Any deviation from these specifications could affect your QoS. If there are any configurations not listed in this document, please use the manufacturer's specifications. Professional Services charges shall apply if Comcast Business is engaged to troubleshoot customer managed equipment and/or on site wiring.

LAN SWITCH REQUIREMENTS

- LAN ports must sync to FULL DUPLEX. It is recommended that the switch be configured for AUTO duplex and AUTO speed to sync properly with IP Phones.
- PoE switches are strongly recommended but not required.
- Voice VLANs are not required.
- VLAN prioritization is recommended but not required.

WIRING

- Certified Category 5 UTP cable or better should be used for all copper connections. Category 5e UTP is recommended.
- Not more than four RJ-45 connection points in the transmission path.
- Total max length of 100 meters
  - For distances over 75 meters, no more than 10% of the total distance can be made up of flexible multi-strand cable such as patch cords. The remaining length must be solid-strand Category 5 or 5e.
- All wiring should adhere to the TIA/EIA 568B Standard.
- Each cable run should support only 1 terminating jack on each end. Splitting pairs is not recommended.

POWER

- IP Phones can be powered with external power or with Power over Ethernet (PoE). External power is provided through a separate power supply.
- Power over Ethernet (PoE) uses 802.3af or 802.3at.
- Not all switches can provide power to all ports at the same time. Verify with the switch manufacturer the supported power classes and number of active PoE ports supported. Each IP Phone may be a different power class.
- An uninterruptible power supply and surge protector is recommended for the switch, firewall, router, and other critical network equipment to ensure that your phones will continue to work in the event of a power outage.

IP ADDRESSING

DHCP Server
- There should only be one DHCP server per LAN segment.

Fax
- Comcast Business recommends using Business Voice basic lines for reliable fax communications. Fax over RTP (e.g. G.711) is not recommended and should not be considered reliable for fax traffic, troubleshooting can only be performed to ensure RTP voice traffic quality. Comcast Business does not support T.38 fax. Comcast Business also does not recommend analog postage machines or credit cards over RTP.

Business VoiceEdge™

COMCAST
BUSINESS