

SMITHVILLE CLOUD VOICE NETWORK DEPLOYMENT CONSIDERATIONS

Smithville delivers the highest quality voice service possible to your business, but the structure of your local area network or LAN (the part of your network inside of your building that connects your phones, computers, and servers) is extremely important in ensuring that your Cloud Voice service remains high quality.

When multiple data and voice applications are running regularly on your LAN, the data can interfere with voice traffic. It is highly recommended that protocols be put in place on your network that prioritize or separate the voice traffic from the data traffic.

Bandwidth Considerations

Voice traffic will compete with your network's data traffic. This condition will be amplified when there isn't enough bandwidth.

Make sure you have plenty of bandwidth to run both voice and data at the same time. We advise evaluating your bandwidth usage at your highest rate when you'll also be using phones. Ensure that even at these peak times, you still have bandwidth available on your network to allow for additional voice traffic.

Separate your network traffic with either physical or logical networks. A separate data jack for each new phone that connects to its own voice-specific network switch will accomplish this best. If not, consider packet classification, QoS or payload compression for logical separation.

Jitter or Latency Issues

Packet transport delays like jitter and latency within your network can cause voice quality issues.

The Industry's acceptable end-to-end delay for VoIP packets is 150 to 200 ms.

Prevent packet loss by increasing buffer space and consider implementing congestion avoidance protocols like WRED (Weighted Random Early Detection).