How to Perform VoIP quality issue troubleshooting

Troubleshooting VoIP Quality Issues

Quality VoIP calls require a quality IP network that can deliver voice packets within the minimum requirements around jitter, packet loss, and latency. Network monitoring systems and specifically network traffic monitoring systems can help the IT professional better understand the impact of network performance on VoIP call quality. At a minimum, you need to analyse at the end points (both call origination point and call destination point), however, measuring at additional points within the call path will help further narrow the potential problem areas.

- Ping time has to be less than 200 ms (from customers internet connection to SIP server) There is a different setup available for satellite customer
- Ensure that speed is minimum of 32 kbps available for G729 and minimum 70 Kbps for G711a
- Ensure packet length time should be 20 ms.
- If you are on mobile wireless broadband or satellite connection, 'High' jitter should be selected.
- Check VoIP quality with all other connection disconnected

How to Correct VoIP echo

The number one cause of echo is from voice traveling out from the earpiece or speaker back into the mouthpiece or what is referred to as acoustic echo.

- Hold your hand over the mouthpiece. If the echo subsides then turn down the volume of the phone.
- **NOTE:** You should actually keep the volume turned fairly low regardless, as VoIP connections are extra sensitive and you will experience better quality by doing so.
- Remove any splitters or separate caller ID devices. In many cases this can cause echo that you hear on your end.
- Try using another phone cord, as some phone cables can be of poor quality.
- If you are using a cordless phone try to replace it with a corded phone.