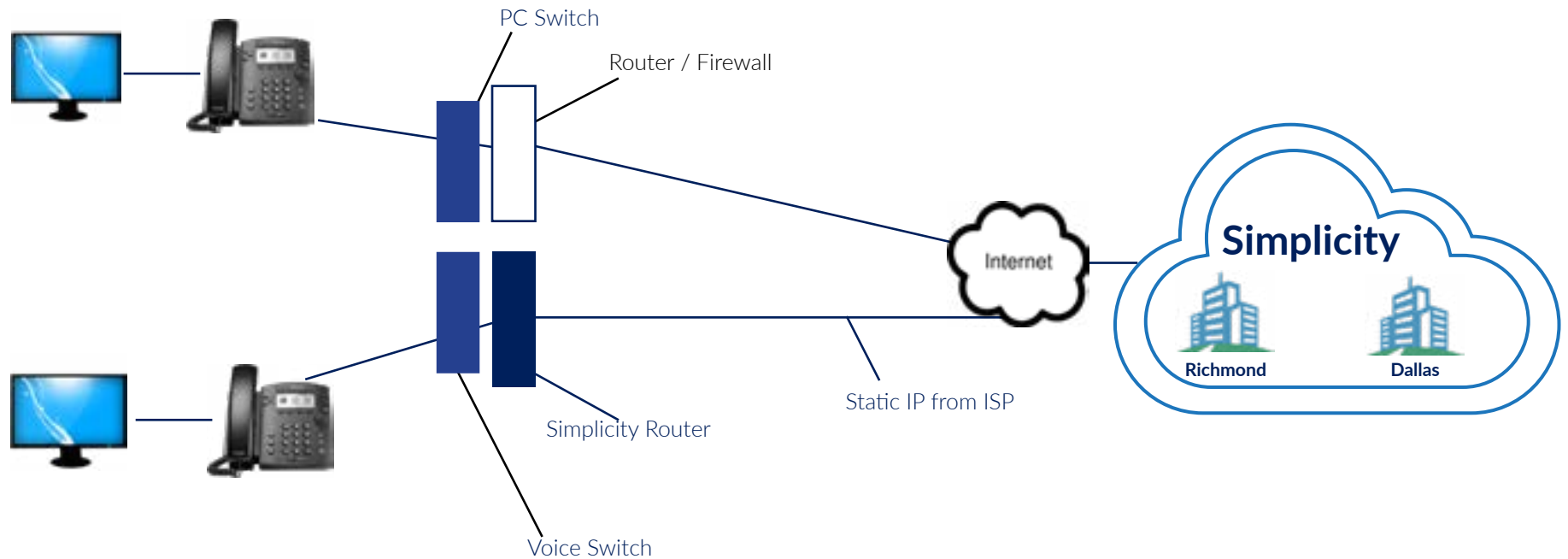


Sample Install 1 - VLAN

A Virtual LAN (VLAN) is a logical, not physical separation of the voice and data networks, and may be used to achieve enterprise class voice quality and reliability. VLANs allow network administrators to virtually segment their networks over a single cable run. This can leverage existing infrastructure, and eliminate the cost associated with running new cable to each workstation. A VLAN requires a switch which supports IEEE Standard 802.1Q.



Installation Notes

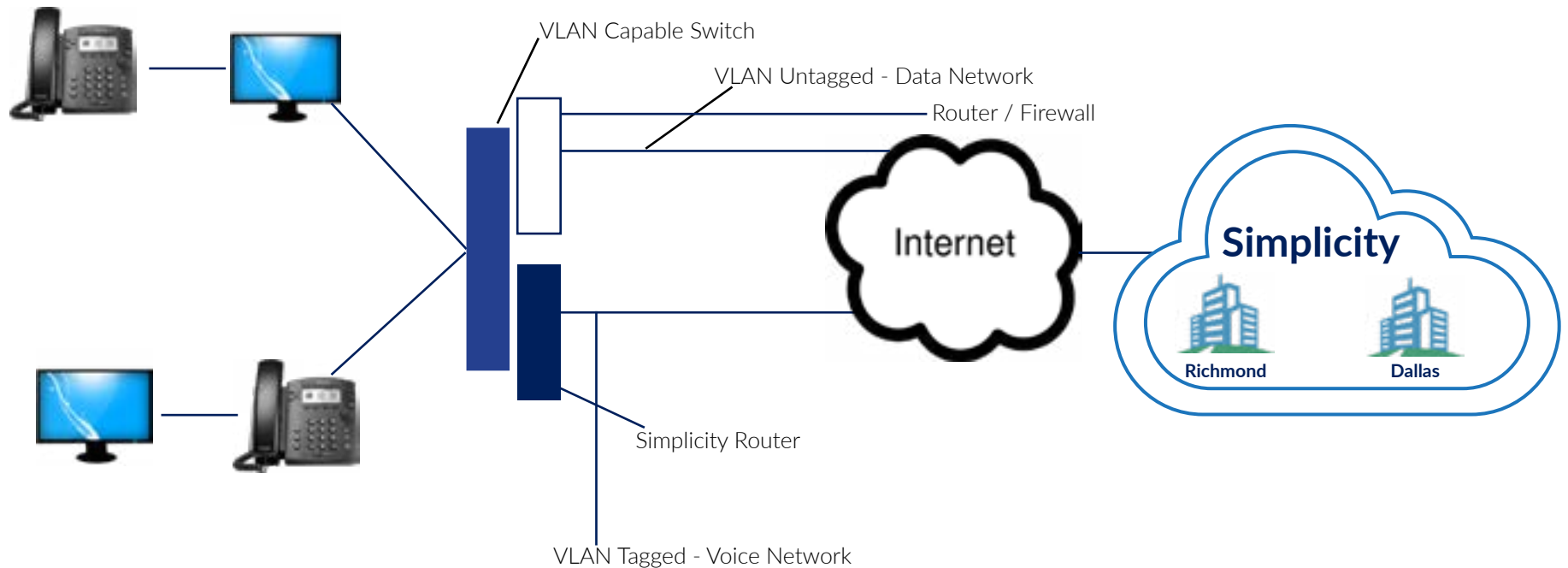
Note #1 – When planning your installation, you must decide between Power over Ethernet (PoE) or traditional AC outlets. This choice will dictate type of switch and phone accessories.

Note #2 – In order to assure quality, the Ethernet should run for the phone should be Category 5e or better cable with all 8 wires properly terminated to female RJ45 jacks on either end of the run.

Note #3 – It is important that there are two separate switches, one for voice and one for data. Any mixing of the data and voice networks will likely result in voice quality issues.

Sample Install 2 - VLAN

A Virtual LAN (VLAN) is a logical, not physical separation of the voice and data networks, and may be used to achieve enterprise class voice quality and reliability. VLANs allow network administrators to virtually segment their networks over a single cable run. This can leverage existing infrastructure, and eliminate the cost associated with running new cable to each workstation. A VLAN requires a switch which supports IEEE Standard 802.1Q.



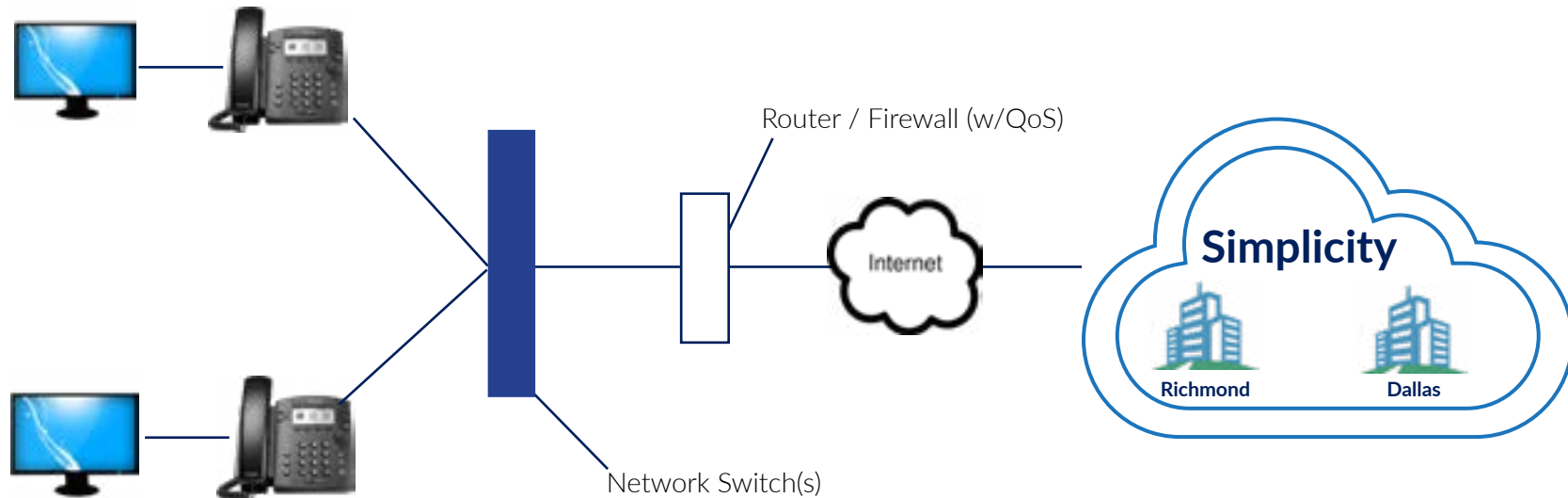
Installation Notes

Note #1 - When planning your installation, you must decide between Power over Ethernet (PoE) or traditional AC outlets. This choice will dictate type of switch and phone accessories.

Note #2 - There are a few edge cases where this installation model is inferior to physically separating the voice and data networks. With proper configuration users are certain to experience enterprise quality and reliability when segmenting the traffic using VLANs.

Sample Install 3 - One (1) Ethernet Run w/ QoS on Router

This installation model is technically feasible. However, it is not recommended for multi-phone installations. Shared LAN Quality of Service algorithms work, but a misconfiguration or extraordinary usage will likely cause voice quality issues. However, this model is often fine for one or two phone installs such as mobile workers or small satellite offices.



Installation Notes

Note #1 – The router should be configured to prioritize VoIP traffic. Please consult your router manufacturers user manual on how to configure QoS.

Note #2 – Switches should be utilized and configured to specifications so that network performance is optimized. It is not uncommon to find hubs or switches that were installed by end-users after the initial network installation. If they are misconfigured, they may cause voice quality issues that might not be evident on the current data network.

Note #3 – Cabling should be tested to make certain they meet the proper specifications.