**Case Study: Benefits of a Hybrid Telephone System Architecture**

Power 3 was recently awarded a contract for an integrated telecommunications system for a small town in Massachusetts. The project involves replacing the telephone systems at five of the town government buildings and four public schools. The key requirement was that the system had to be fully integrated: meaning that the system would support extension to extension dialing and call transfer both within and between each of the town’s nine buildings, and centralized voice mail. The solution we offered illustrates the flexibility of the Samsung OfficeServ 7000 communications systems and the importance of design philosophy in delivering a cost effective solution.

There are a couple of ways to address a requirement such as this. The first is to install one system to support all nine buildings. This approach would require the deployment of VoIP telephone sets in every location with the possible exception of the building where the system is installed. The alternative, which Power 3 proposed, is to install separate systems in each of the buildings, and integrate them using VoIP technology and Samsung’s SPNet multisite networking software (which also supports centralized voice mail). This solution was deemed best by the town because it provides the fully integrated solution specified, was the most cost effective and offers survivability on a per location basis in the event of any data network problems.

Our solution was the most cost effective because of the flexibility of the Samsung Office 7000 series of communications platforms. The OfficeServ systems are classified as hybrids, simply meaning they can support *any* combination digital, VoIP or analog devices which best suit an organization’s requirements. We could have proposed one central system for the town with all IP telephone sets. This approach would have added significant expense to the project as extensive rewiring and upgrades to the data network infrastructure (routers, POE switches) would be required to support IP phones. The Samsung DS 5000 series digital telephones we recommended do not require any re-cabling or network upgrades as they can reuse the wiring of the *existing* telephone systems. Digital telephones cost less than VoIP phones, which also contributed to financial advantage of our solution.

Voice over IP technology (along with SPNet software) will be used to integrate the nine systems together for the seamless telecommunication network the town required. The hybrid architecture of the OfficeServ product line allowed us to design a system that will utilize VoIP where it will provide value; without the necessity of deploying IP phones which would increase the cost of the project without providing any additional benefits. Installing separate systems for each of the town offices and schools also insures survivability in the event of any problems with the data network or internet, as each building has been designed to have access to the public telephone network.

Power 3 Communications is able to deliver the fully integrated system specified in the most cost effective manner possible by combining our years of experience designing multi-location telecommunications networks with the power and flexibility of Samsung’s OfficeServ 7000 series communications platforms.