

Understanding the challenge and reward of VoIP Migration

Several factors may have drawn you to consider migrating your enterprise to a VoIP communications network. The reduction in cost-per-port and operational costs make VoIP an attractive option, not to mention its scalability and wide range of available applications. However, there is an unknown variable that may be causing you concern. The challenge of migrating your organization to a VoIP network can be a technical hurdle that is difficult to forecast in terms of time, cost, and overall impact for your business. Just how long will an implementation last, can it be done in phases, and will there be a short-term cost in operational stability in order to achieve a long-term benefit in the future?

This article will help you to answer these questions, and provide you with a framework for understanding the different options to successfully pursue a VoIP deployment (additional articles in the series will drill-down into technical details for your internal resources, and also provide some insights for the end-user perspective). It should provide a toolset so you understand the factors that you (and your staff) need to consider when selecting a VoIP vendor and planning a VoIP migration strategy.

Fully converged network deployment

There are two primary options to consider in VoIP migration. The first is whether to completely replace your existing network with a fully converged voice and data system immediately. The upside of this approach is the majority of the cost, labor and time investment is up front. Plus, your organization can start enjoying the full-featured, robust functionality of a VoIP deployment as soon as possible. However, when you are considering this route, there are several pitfalls that need to be analyzed and avoided. First, do not assume your data network will handle voice traffic with only a few modifications. This puts a tremendous strain on your internal IT resources and your VoIP vendor to maintain the system in the long term, and will probably result in frequent network downtime. Post-installation issues can also result in significant non-budgeted expenses, including the need for additional equipment purchases, the cost of additional IT troubleshooting time, and lost employee productivity.

The key to avoiding this scenario lies in the proper selection of a VoIP vendor. A qualified vendor will analyze network performance data and be able to estimate future VoIP traffic loads. They will help your IT staff to optimize your network for voice traffic, and make recommendations to enhance reliability and quality of service. With the right vendor, deploying a completely converged network can be executed seamlessly.



Phased network deployment

The other option when deploying a VoIP network is to perform the execution in phases. You can slowly turn off legacy functionality as VoIP services come online. This way, you can "test and tune" the network as you go along. You can start with an internal voice VPN for Web-based site-to-site calling and develop a private dial plan for intra-company calls. This will simplify internal calls, and reduce any long distance charges if you have a branch office.

You may also want to consider deploying VoIP to a branch office first, as they usually do not generate a large amount of traffic. This can make an ideal testing ground for new applications, and the branch office will benefit most from VoIP's toll-bypass capabilities.

The next step would be to bring online enhanced applications, such as company-wide voice messaging and instant messaging, as these types of features can interconnect with existing systems. You can start turning off selected features of your legacy system as they are replaced by a VoIP counterpart, thus reducing licensing fees.

You can deploy VoIP in phases, even within a single building. You can set up a network on a single floor, wing or department and then link to your existing PBX infrastructure through an H.323 gateway. Through limited-scale usage, you can measure the metrics necessary to determine if your entire network is ready to make the jump to VoIP.

Find the right partner

We cannot stress enough the importance of vendor selection. The bandwidth requirements of a large-scale VoIP network can be high. Plus, there are many integration issues to be considered if you are taking a phased approach. Your VoIP vendor must perform the analysis and testing necessary to