

## Determining the Right Fit for Your Business

VoIP transmits voice, fax, and voice-messaging applications via the Internet. That means an analog voice signal must be converted to digital format and compression/translation of that signal into Internet protocol (IP) packets must occur for transmission over the Web.

You might be having some concerns as to whether your network has the bandwidth to handle this type of data transaction. Use this article as a guide to determining if VoIP is right for your business, learn how to overcome bandwidth hurdles, and find the right vendor to help you develop an intelligent plan for successful VoIP deployment.

### Is VoIP Right for You?

How can VoIP positively impact your network and business communications? To help make this determination, answer the following:

- How strong is the integrity of your network?
- How many phone lines do you currently employ, and what does it cost to maintain them?
- How many long distance calls is your staff making per month?
- How mobile are your employees?

That first question is probably the one that concerns you the most. It's true that to ensure a smooth transition to VoIP, you must examine your current VPN and WAN capabilities, and look at current bandwidth availability. And you must compare that to your current data traffic levels, and your estimated needs for voice traffic. You must analyze your Ethernet switch statistics for evidence of packet errors or excessive collisions. Any equipment shortcomings will need to be corrected before moving forward with VoIP.

But the good news is that any qualified VoIP vendor should be able to perform this type of network analysis, and guide you through every step of optimizing your network to handle voice traffic. And you don't have to upgrade your entire network to support a new VoIP system. The best VoIP vendors now offer converged systems that can be deployed as a digital, analog, hybrid or VoIP phone system. This eliminates expensive network upgrades to support the increased bandwidth, security and QoS required for VoIP calls on the LAN and WAN. These vendors also use the latest voice compression algorithms, such as G.711, to greatly reduce the bandwidth requirements required by VoIP.

### Advantages of VoIP

There are many advantages to VoIP that make this effort well worthwhile. With a typical T-1 line, there are 24 channels with approximately 6 channels for data and the rest allocated for voice communications. But for most companies, it's rare that 18 calls are transacting simultaneously. This means that there are resources being wasted. With IP, there are the same amount of channels, but now voice and data are combined, making the most of the 1.544 mbs that is available. With IP, you're simply getting better bandwidth utilization from your system.



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With VoIP, you can greatly reduce long distance charges. Let's say you have a corporate office in Philadelphia, with a remote office in San Diego. A call from headquarters to a client in California can go over your network and originate from the San Diego office, eliminating long distance charges. Charges are also greatly reduced when placing long-distance calls outside of this approach.

VoIP also offers tremendous benefits such as centralized voicemail. Even if there are multiple systems networked together, employees can still access, receive and forward voicemail messages from one, unified system.

Through Presence Management, VoIP offers the ability for employees to define exactly where and how they want to be contacted. An inbound caller will be unaware that their call has been routed automatically to an employee's desktop extension, another employee's extension, an outside number, or their cell phone. Employees can also tailor messages to update callers as to their current status, and how they can best be reached. Presence Management is now available through an advanced Unified Communications (UC) client capable of running on mobile devices. This means that employees can now access the full features and functionality of a corporate PBX from almost any location.

### **Finding the Right Vendor**

When selecting a vendor to deploy your VoIP system, be sure to ask the following questions:

- Are the technicians certified in the manufacturer's VoIP platform that you are considering?
- Are there licensed, experienced, certified service technicians available for service calls?
- Are there samples of work available that are similar to your project?

With the right vendor and the right strategy, VoIP can deliver real competitive advantage to your enterprise. Just make sure that you have done your homework before taking that first step.



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