



Ready, Fire, Aim! Preparing for VoIP

Voice over Internet Protocol (VoIP) is rapidly and fundamentally changing the way organizations communicate. As this migration unfolds, it typically falls to IT to make the business case for VoIP. Whether to migrate at all and, if so, how best to accomplish a successful and problem-free implementation.

Watch a VoIP demo (Flash, 1.1 MB)

Determining whether or not a sound business case exists for full or partial migration to VoIP requires a thorough understanding of call traffic patterns within the organization. “A thorough check of the network and telecom-usage patterns is a beautiful thing,” says Kevin Lopez, national manager of telecommunications for accounting services firm Grant Thornton. “It will help you know what kind of trunking and bandwidth you need, see what you are going to do and where you are going to do it.”

Lopez says he learned this lesson the hard way. Grant Thornton did not perform a comprehensive voice-traffic study before implementing VoIP. It wasn't until after deployment that Lopez discovered a large percentage of long-distance calls were between employees. While that was good news—it meant a 40% reduction in long-distance expense—had Lopez known about that calling pattern beforehand, he could have provisioned bandwidth more efficiently.

A traffic study will help pinpoint areas of the organization that have so little traffic that the cost of migrating those areas to VoIP outweigh the potential benefits. An in-depth traffic analysis can reveal areas where VoIP implementation may not be warranted—an important input into the business case analysis.

On the other hand, it is important to understand that traffic that is moved to VoIP will place new and heavy demands on the network.

Voice is real-time data. As such, it needs an uninterrupted channel that must be prioritized so calls are not dropped or interrupted. “Voice communications require uptime reliability to five 9s. In other words, uptime of 99.999%, an uptime level that has not necessarily been a previous requirement for data,” says Mary Shacklett of Enterprise Networks and Servers magazine. “Users are already accustomed to it as a result of years of reliable service from traditional telephony.” There must be enough bandwidth to provide extremely high quality of service (QoS) while not interfering with other applications running on the network. Especially in the voice world, QoS is of paramount importance.

Again, this is where **up-front planning and traffic analysis is essential**. By thoroughly and completely analyzing current traffic, IT is in a much better position to determine bandwidth and other requirements before call traffic is moved to VoIP and placed on the network. Upgrading to VoIP without this type of initial evaluation is extremely risky.

SAI provides a toolset and process for VoIP-related traffic analysis. If you are involved in analyzing the business case for VoIP and would like better information for decision-making in this area, we would be happy to answer any questions. To learn more, complete our contact form or call us at (800) 775-0025, ext. 4516.

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