



## White Paper

### The Care and Management of IP Telephony Applications



See, Act, Deliver

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## Contents

The Care and Management of IP Telephony Applications .....	1
The Need for IP Telephony Management .....	2
Proactive and Scalable Management .....	3

*This paper investigates the issues of managing IP telephony applications.*

### The Need for IP Telephony Management

IP telephony isn't just another network application. It is highly sensitive, especially to issues such as delay and packet loss. In most data networks, if a data packet or e-mail packet is a few seconds late, it's generally not critical. If voice packets are off by only 30 to 100 thousandths of a second, callers hear a quality problem and start to complain.

Even if IP telephony runs over a network that also handles data traffic, that doesn't mean that IP voice traffic can be managed with tools designed to manage data networks. True IP telephony management solutions are built from the ground up to support IP telephony rather than tacking on VoIP support to data management products. IP telephony management should consider the end-user experience. It needs to monitor actual IP calls and alert the IT team to any issues and trends in true real-time. Furthermore, call quality problems can be hard to diagnose. If two minutes of a 30-minute call are bad, you need real-time notification as well as the forensics to trace the problem, diagnose the root cause and fix it. Simply seeing the average performance of a call won't highlight specific problems and provide the granularity needed for proper diagnosis or repair.

### Complete VoIP Monitoring and Management

Call quality is just one of the management elements that must be addressed to ensure a smooth IP telephony deployment. Because Voice over IP (VoIP) adds more complexity to a data network, IT teams should look for management solutions that have a complete "systems" approach. IP telephony management solutions need to ensure reliability across the enterprise so that all users get the same 99.999 percent uptime as they do for traditional, PBX phones. In addition, an IP telephony management solution should track IP telephony assets for better asset control and even for E911 support. And, enterprise IP telephony management solutions should provide remote management support and some basic security functions such as spam blocking for VoIP phones.

Another factor to consider is "Entropy of the Network." No IT network is a static environment. Even if it is working perfectly on "day one" of deployment, the network is constantly evolving and changing. In a converged voice and data network, new devices, switches and IP phones are constantly being added, software is upgraded, new applications are installed, etc. While a VoIP network might run well on day one, somewhere along the line, something is going to break the network. It might be when a software patch or the 'Nth' handset is installed. The question is not if it will happen, but when. Again, monitoring and management solutions are needed to identify and trace problems as entropy increases.

## Proactive and Scalable Management

*Management and security products have to be seamlessly integrated into IP telephony networks for peak performance.*

Finally, VoIP network management shouldn't be an afterthought. Over the years, data network managers have learned that management and security products have to be seamlessly integrated into the network for peak performance—not tacked on afterwards. The same is true with IP telephony. IP telephony management should ideally be designed into a VoIP network architecture right from the start. Or at the very least, added before implementations scale beyond a pilot phase. The good news is that using management during the pilot phase of a deployment will help scale the network, providing maximum quality of service as phones are deployed.

Clear and reliable IP phone services are essential for the day-to-day running of almost any type of enterprise. With proper management, IP telephony not only can do a lot more than traditional phones (and at a lower cost), it can achieve the quality and reliability enterprise users have come to expect in traditional phone systems. Providing enterprises with the ability to manage the reliability and quality of the VoIP services along with tracking their VoIP assets and operational support is what IP telephony management all about.

### About Qovia, Inc.

Qovia significantly eases the complexity of planning, monitoring and managing enterprise Internet phone networks. Providing dynamic discovery of VoIP resources and unmatched, minute-by-minute visibility into how IP telephony networks are performing, the Qovia IP Telephony Manager aggregates and analyzes IP telephony information to deliver timely call-by-call quality. Its intuitive dashboard shows a VoIP-centric view of critical IP telephony resources, allowing IT organizations to meet business objectives. Customers can use Qovia to increase the reliability and utilization of their IP telephony investments, increase end-user satisfaction and better manage the bottom line. Qovia was founded in 2002 and is backed by Canaan Partners; BlueRun Ventures (formerly Nokia Venture Partners); Anthem Capital; and the State of Maryland. The company, which has earned nearly two dozen industry awards, can be found online at [www.qovia.com](http://www.qovia.com).

## For More Information

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