

VoIP Network Assessment **“DNA for VoIP”**

The VoIP Deployment Challenge

Consider the facts:

“85% of today’s router-based data networks are not ready for successful voice deployment.”

Gartner Group

Your data network was originally designed to support e-mails, file transfers and deliver Web pages, not carry high-quality voice transmissions. Voice traffic is very time-sensitive and can’t be queued like e-mail or Web traffic. Delays up to a half hour for an e-mail or file transfer are generally not a problem, but delays of only a few hundred milliseconds can ruin a VoIP call, producing choppy conversations or dropped calls.

Before you know how much a VoIP deployment will cost and how successful it will be, you need to understand if your data network can carry high-quality voice transmissions. The odds are that a network upgrade will be needed to successfully deploy VoIP.

To ensure your VoIP deployment is successful and on budget, you need to find answers to these important questions before deploying VoIP:

- What type of VoIP MOS (Mean Opinion Score) call quality can I expect from my current data network for each business site?
- Is network delay, loss or jitter the main problem impacting VoIP call quality, and how do I fix it?
- How many concurrent VoIP calls can my network carry without impacting existing data services?

Knowing this information before deploying VoIP will ensure your success, but what is the most accurate and cost-effective method to obtain it?

DNA for VoIP Benefits:

- > Diagnose your network before deploying VoIP
- > Eliminate deployment risks
- > Simplify VoIP Success!

Remote **DNA for VoIP** deployment solution

The fastest and most cost-effective way to determine your network’s VoIP readiness is to conduct a Remote Network Assessment - **“DNA for VoIP”**.

The assessment quickly diagnoses all your network issues so that by the time you begin your VoIP deployment, you have a converged network that will carry high-quality voice transmissions.

Organizations that skip this important deployment step experience poor call quality, dissatisfied users, cost overruns for upgrading and delayed deployments.

Compare in Figure 1 (on the following page) the typical outcome of VoIP deployments that include a VoIP Assessment vs. ones that skip this important step:

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	with DNA for VoIP Assessment	w/o DNA for VoIP Assessment
Success Rate:	Greater than 95%	Less than 50%
Deployment Costs:	Low	High
Upgrade Costs:	Known exactly	Estimated
User Satisfaction:	High	Low

Figure 1 VoIP Deployment Comparison

How our Remote **DNA for VoIP** deployment works

The goal of the Remote Directrium Network Assessment for VoIP deployment is to determine how well VoIP will sound on your network and diagnose any technical issues that could negatively impact call quality.

Our unique VoIP assessment solution is very simple to conduct and separates us from our competition since it does not require onsite consultants to setup and run the assessment. We simply ask a site employee to download a small piece of software called a "traffic agent" onto one or two existing PCs or

servers per site. Then the assessment is run remotely by our engineers without interrupting your operations.

The assessment determines call quality using traffic agents to send actual VoIP traffic across your network. It measures the resulting MOS call quality, network delay, jitter and loss for calls between any of your business sites.

"Through 2008, 75 percent of enterprises that do not perform a pre-implementation analysis of their IP network will not achieve a successful VoIP implementation."

Gartner Group

Figure 2 is a diagram of a typical VoIP Assessment scenario using our solution:

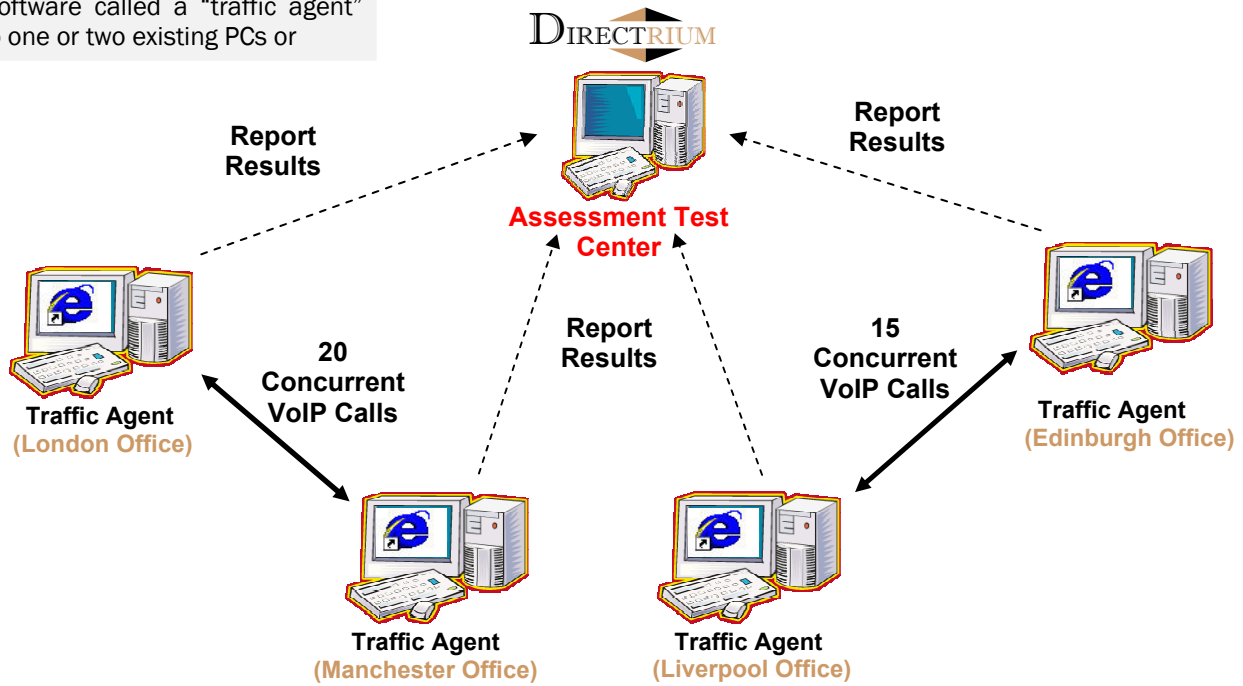


Figure 2 Typical **DNA for VoIP**



Figure 2 illustrates a VoIP assessment testing the wide-area network (WAN) connections between the London and Manchester offices and between the Liverpool and Edinburgh offices. The assessment is measuring the WAN performance of 20 concurrent VoIP calls between London and Manchester and 15 concurrent VoIP calls between Liverpool and Edinburgh. The VoIP calls are run continuously for the duration of the assessment to measure call quality during different times of the day and week. At the end of each VoIP call, the results are reported back from the traffic agents to the test center and logged in a database. These results are used to create a detailed report summarizing the results of the VoIP assessment.

At the end of the assessment our clients know the exact state of their VoIP network readiness:

- The MOS call quality score between all business sites
- How many concurrent VoIP calls each WAN will support between sites
- The amount of network delay, loss and jitter for each WAN and LAN connection and how to eliminate these problems

With this information determined before you deploy VoIP, your initial deployment will exceed user expectations and reduce your deployment risks and costs.

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Conclusion

Your network was not originally designed to carry high-quality voice transmissions. To deploy VoIP successfully you need to conduct a VoIP network assessment first. If you skip this important step your probability of difficult network challenges is greater than fifty percent.

Eliminate deployment risk, cost overruns for upgrading networks and dissatisfied users by conducting a **DNA for VoIP**. Your business will thank you for it.

DIRECTING TRANSFORMATION.
INSPIRED CHOICES.