

# NACR NETWORK QUALITY ASSURANCE REVIEW

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## **A CRITICAL STEP IN THE SUCCESSFUL DEPLOYMENT OF YOUR VOIP SOLUTION**

Convergence technology and the integration of voice into data networks (VoIP) presents exciting new possibilities for organizations and their ability to communicate far and wide — and to do it more cost-effectively than ever. Today's solutions from NACR and Avaya enable reliable VoIP with high Quality of Service (QoS) and all the tools that are critical to enterprise communications.

But before deploying a VoIP solution, it's crucial to realize that the performance and stability of an existing data network may not automatically extend to a real-time application such as voice. While voice traffic consumes relatively low bandwidth, it has stringent demands for low latency and requires regular arrival of data packets.

As the largest Platinum and Diamond certified Avaya BusinessPartner worldwide, NACR offers a comprehensive array of solutions and support services for IP technology deployments. And with our comprehensive Quality Assurance Review, we have the expertise to help maximize your communications network to better meet the needs of your organization.

## **A PROCESS THAT MAXIMIZES QUALITY AND MINIMIZES RISK**

A Quality Assurance Review from NACR ensures that all technical obstacles are resolved and your data network is capable of supporting voice that meets your quality standards before the actual implementation of your VoIP solution. NACR utilizes a comprehensive five-step process to:

- Evaluate your existing or planned data network for its ability to support voice traffic
- Make recommendations for any hardware investments and QoS settings that will help to assure quality

- Test the readiness of the network by simulating VoIP calls over a variety of network load conditions and measuring their quality
- Document the results and certify that your network is voice-ready
- Network troubleshooting support during implementation—a service that you can contract post-cutover, if future changes in your data network environment have an unexpected impact on your voice application

Implementing these steps as part of your VoIP deployment, the NACR Quality Assurance Review clears the way for you to realize the advantages of converged technology from the moment your new solution is up and running. Troubleshooting the network before the solution goes live lets you concentrate on your business rather than your network.

## **ASSESSING WHAT YOU HAVE, RECOMMENDING WHAT YOU NEED**

The first step in the NACR review is a Network Survey. Here, NACR gathers and compiles detailed information about your existing or planned network infrastructure, including a hardware list, software versions, hardware configurations, and a network map. Next, our engineers create a customized Quality Assurance Report incorporating recommendations, guidelines, and best practices for your specific data network topology, as well as general recommendations addressing the critical factors that affect VoIP quality.

## *NACR Network Quality Assurance Review*

### **THE TRUE TEST: SIMULATING VOICE TRAFFIC ON YOUR NETWORK**

Once your network is tuned according to NACR's recommendations, the most critical step of the Quality Assurance Review occurs — the Voice Readiness Evaluation. Here, our engineers test the readiness of your network by using specialized software to:

- Generate simulated voice traffic between pairs of computers acting as IP endpoints
- Generate simulated data traffic, providing more comprehensive test conditions
- Evaluate the resulting performance by calculating the Mean Opinion Score of the voice call
- Stipulate appropriate VoIP codecs to test the actual planned deployment
- Test voice quality during data peaks and valleys
- Use traffic insertion to project the network capacity for voice traffic between various endpoints at an acceptable QoS

Once this process is complete, NACR compiles documentation including the Network Survey questionnaire; a final network topology diagram, with details on network hardware and connectivity; and the results of the traffic insertion testing. A copy of your network certification documentation is filed on your behalf with Avaya Global Services, which is required to receive subsequent Avaya support and to purchase an Avaya maintenance agreement on your IP-enabled solution.

### **THE TEAM TO CHOOSE FOR YOUR IP TECHNOLOGY SOLUTION**

NACR's convergence team comprises experts in the network field, with experience in discovery, design, implementation, and troubleshooting of VoIP applications running over traditional data networks. Our highly trained sales and service engineers hold certifications in Avaya IP Telephony, Cisco data networking, Microsoft, and 3Com, and have years of experience assisting customers with IP telephony.

Coupled with our superior products and applications, world-class facilities, and implementation and service expertise, the dedicated convergence team makes NACR your smart choice for VoIP and all of your communications requirements.

For more information, please call us at **1.888.321.NACR (6227)** or visit online at **nacr.com** or e-mail us at **qar@nacr.com**.