

# IT Network Assessment

Proper Management Performance Optimization Security

Six key benefits of a rigorous network assessment. From greater agility to enhanced security, the benefits of a high-performance computing environment are easy to visualize. What can be harder to see is the value of taking a good, hard look at network health and laying out a clear road map for improvement.

## 1) See what's going on with your IT infrastructure.

An in-depth analysis of your current IT infrastructure—from topology maps to local traffic pattern analysis—can help ensure you're making informed decisions about network maintenance and upgrades. Armed with accurate evaluations of current infrastructure assets, such as maintenance status, capabilities and weaknesses, your team can improve survivability of optimal systems, and phase out those that aren't passing muster

#### 2) Create a strategic road map for your IT systems and people.

After gaining visibility into the current state, your team can zero in on opportunities for network consolidation, simplification, auto2mation and possible cost reduction. You'll be able to move forward with a clear road map to a modern, software-defined and virtu2alized infrastructure.

#### 3) Improve security.

It's difficult to defend against cyberattacks without full visibility into your network, including an understanding of how peo ple, processes and other technologies interact with it. A strong network assessment uncovers those behaviors and interactions, empowering a proactive and preventative security strategy that protects against global threats as well as end-user vulnerabilities.

#### 4) Uncover serious cost-savings potential.

In a traditional, legacy computing environment, capacity is provisioned based on estimated peak resource requirements. This redsults in periods where expensive resources are sitting idle, and other periods where capacity is not enough. A network assessment opens the door to designing a new network architecture that includes cloud computing. In the cloud, you can access as much or as little capacity as you need and dynamically scale to meet actual demand, only paying for what you use.

### 5) Identify protocol enhancements like network segmentation.

Assessments can expose vulnerabilities in your current operations—and, in turn, uncover opportunities for improvement. For indistance, when users access data on a flat network, a data breach can spread quickly across the enterprise. Network segmentation reduces the attack surface, and can simplify your organization's compliance reporting.

## 6) Assess network bandwidth demands.

Bandwidth is not limitless, and your network has a finite amount of bandwidth your users must share. Monitoring how bandwidth is used and distributed will help you determine if the network needs to be expanded, or if individual applications and devices need to be addressed. A clear insight into bandwidth usage will help you understand where congestion is occurring, which applications should be prioritized, and which applications should not be prioritized. You may even find you can improve performance simply by managing traffic flow more appropriately. Comparing your wired and wireless connections to identify bottlenecks is a key part of assessing bandwidth demand. To gain a full understanding of where you should focus your attention, you may need to employ professional network assessment tools.