Traditionally, information technology (IT) organizations have been forced to operate in silos, with each team in the organization using its own set of tools to monitor and troubleshoot performance issues. The network admin team has its set of tools for monitoring its portion of the open systems interconnection (OSI) stack, while the application team has its tools for monitoring the upper layers of the stack.

When a business user calls in a performance problem to the IT help desk, these sides of the IT organization will pull up their individual tools to show that their part of the infrastructure is operating properly. The network team rolls through its set of tools to ensure the physical, data link, and network layers are working fine. The network team checks off the boxes and sends the problem over the wall to the application team. Meanwhile the application team has looked at the applications and servers to show that the application, presentation, and session layers of the stack are working fine. Consequently, the application team throws the problem back over the wall, pushing it back to the networking team. We all know where this leads—the user's problem is now simply sitting in a no man's land between the two different support teams, with no resolution in sight.
Application-aware network performance monitoring (Network and Application Performance Monitoring) helps to resolve this problem by bringing both sides of the IT department together. Network and Application Performance Monitoring brings together network performance monitoring (NPM) and application performance monitoring (APM) into a single tool: AAMPM = NPM + APM. In other words, application-aware network performance monitoring combines the network performance monitoring with application performance monitoring for a unified approach to infrastructure diagnostics (figure 1).

Figure 1. Components of the application-aware network performance monitoring (Network and Application Performance Monitoring) tool.

With Network and Application Performance Monitoring tools, the IT organization now has a unified tool suite to help solve the user's problem. The Network and Application Performance Monitoring tools do more than help solve problems faster and more efficiently. The tools also enable a wealth of additional fact-based evidence gathering, so the IT department can be more proactive.
Benefits of Network and Application Performance Monitoring Tools

There are a number of key benefits to having unified AANPN tools—not only for the IT organization, but also for the organization as a whole:

Quick identification and resolution of performance issues
The IT administration teams often spend a significant amount of time trying to determine the root cause of a performance problem. When a performance problem is reported, the network and application IT teams each turn to their own tools to review current performance on their respective areas in order to view where their respective areas are performing or not performing. It is no secret that these teams consist of highly skilled technicians and engineers, who report their findings up through the management chain. The cost of engaging this staff and getting to the root cause of a problem can quickly add up. Having a tool that enables the organization to quickly get to the root cause and resolve the problem reduces the mean time to resolution (MTTR) and will provide significant savings in this area.

Republic National Distributing Company, a US-based alcohol distributor, operates a network spanning 23 states and covers three data centers, 40 warehouses, and 20 sales offices. In one case study, the customer reports a 97 percent reduction in time and expense for handling routine problems since deploying the TruView Network and Application Performance Monitoring tool.

Monitoring and optimization of existing infrastructure
Having individual network and application monitoring tools will not provide a holistic, historical view of the IT organization's assets across the infrastructure. Most infrastructures will have some resources that are overburdened while others are barely used at all. A product that can monitor the historical performance of these components will enable the organization to fine-tune the existing infrastructure. The effective monitoring of resources will help optimize the existing infrastructure effectively.

Capacity planning for infrastructure investments
An additional benefit of having tools that effectively monitor the existing infrastructure is that such tools provide the organization the visibility to make fact-based decisions for infrastructure investments. For example, without the proper insight into the infrastructure utilization, an organization might be forced into purchasing additional resources to manage an estimated increased load on the resource. With the right tools, annual spend on upgrades can often be reduced by 10 to 20 percent.

Single tool suite for network and application performance monitoring
Most organizations will have multiple tools for monitoring their networks and applications. They might have tools for protocol analysis, flow analysis, device health and availability, and capacity planning. Having a single tool to perform all of these functions will eliminate the costs for purchasing and maintaining these individual tools. Additionally, the members of the IT organization don’t have to be trained on each individual application. The cost savings here alone can add up to tens of thousands of dollars.

Case Study: Global Call Center implements a single Network and Application Performance Monitoring tool, TruView, greatly reducing troubleshooting and MTTR. The customer recalls that “Historically, the different teams only looked at their tools, but once I showed them the dashboards and the ability to look at the applications, servers and as well as the network, their eyes were glued to the screen—they couldn’t believe what they were seeing.”
TruView Tool Suite

TruView is an easy-to-use, unified tool suite that brings together network performance monitoring, application performance monitoring, and voice over Internet protocol (VoIP) performance monitoring into a single suite. The tool suite resides on a single, high-performance appliance connected to the network. The network appliance has been developed and built by the engineers at NETSCOUT, who have been trusted by the industry for 50 years.

Rack to reporting in 15 minutes! Automatic discovery of all network assets and self-learning automatic configuration.

TruView provides a holistic view of performance by monitoring and correlating five aspects of IT infrastructure and applications: end-user response time, retrospective packet analysis, network traffic analysis, device performance monitoring, and VoIP quality of experience (figure 2).
Why TruView?

NETSCOUT’s TruView is a unified tool suite that lets the IT organization quickly identify and correlate performance problems for quick resolution. The user interface is elegantly designed, allowing technical teams to see graphical maps of the functioning of sites, the network, applications, and VoIP areas. This screenshot (figure 3) shows the out-of-the-box map of an organization’s site.

The other information in the system is similarly displayed across consistent, easy-to-navigate screens, which have the same interface regardless of the type of data being viewed. All of the data between areas of the suite is time correlated when presented to the user. This is one of the many aspects of TruView that makes it stand out against the competition. Other tools leverage a suite of products with a single pane of glass on top, but when the user needs to deep dive they’re left to figure out which tool they should navigate to solve their issue. This makes training and administration cumbersome and time consuming.

Other strengths of TruView include:

- Automatically discovers services and infrastructure that delivers them
- Establishes intelligent, self-learning performance baselines
- Unparalleled visibility, with 1 minute data kept for 1 year of capacity planning
- Monitors performance of all network participants
- Provides real-time usage reports and retrospective analysis
- Provides a scalable system for the largest of organizations
NETSCOUT'S TruView also prepares your organization for the future. The days of having a few data centers firmly under the control of the organization's IT department are, at best, a fleeting memory of IT managers. The availability of cloud technologies across all technology stacks (IaaS, PaaS, and SaaS) and the ever-growing list of "as-a-service" offerings being brought into an organization are multiplying almost daily. Examples of the types of services include:

- Line-of-business applications, e.g., a human resources (HR) sourcing application that can be purchased with a credit card by the HR manager
- Bring-your-own-device (BYOD) practices and all the associated IT infrastructure baggage that comes with them—wireless traffic, dropbox account, and video streaming
- In the future, the network, storage, and other services will be virtual

As CISCO states, the new "borderless enterprise is a globally connected ecosystem that spans time zones and firewalls." The borderless enterprise operates 24 hours a day, seven days a week. The IT organization needs a tool that will support it in supporting the borderless enterprise. NETSCOUT'S TruView solution will help the organization stay on top and ahead of these challenges. The industry-leading features make TruView one of the only solutions that helps manage these challenges with its auto-detection, intelligent configuration, and integrated, holistic view of network, application, and VoIP performance.

**Becoming a Proactive IT Organization**

IT organizations are in a constant struggle to keep up with the rapidly growing complexity of their infrastructures, with no letup in sight. The teams work tirelessly to support the user teams, but are sometimes limited by the tools available to them. Historically, the individual areas of the IT organization—network, web, database, security, and application admins—have had their own tools for monitoring the performance of their respective areas. In many organizations, no one team has a holistic view of the performance across the IT infrastructure.

The TruView application suite and appliance is a significant step in helping the IT organization overcome these challenges. TruView gives the organization a unified tool that provides immediate benefits to both the IT group and the company as a whole. With TruView, an IT organization can eliminate multiple, disparate monitoring solutions across departments and work together to solve its customers' needs—thus moving from an organization that is seen as siloed and ineffective to one that proactively manages and optimizes all areas of the infrastructure.

All members of the IT organization—from the trenches to the C-suite—can benefit from an industry-leading solution like TruView to help them meet their goals.

To read more, visit the [TruView product page](#).