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GIVE YOUR NETWORK MANAGEMENT A REAL-TIME EDGE

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In this report, we analyze how businesses are using a network data approach to meet performance challenges in real time, look at the positive results they are gaining from this strategy, and offer recommendations on the steps organizations can take to build a real-time platform for addressing application performance problems.

Get Real (Time) When It Comes to Network Monitoring

For businesses concerned about network management and application performance, being effective means coming up with a way to analyze and act on network data — the solid base on which all network visibility and management rests. And any organization that isn't able to tap into this data could find that their network is ripe for a fall.

Understanding and managing the performance of all applications, services, and content within a modern business is a daunting task. By tapping into real-time network data, an organization can quickly access all the information needed to effectively manage their infrastructure.

With this network data, businesses can take a real-time approach to application and network performance management. High visibility into everything passing over the network and automated processes enables them to address potential performance problems before they happen. In this report, we analyze how businesses use a network data approach to meet performance challenges in real time, and look at the positive results they gain from this strategy.

The Need for Strong and Agile Network Monitoring

The challenges of managing and understanding a modern corporate network grow every day. Businesses today find that traditional approaches to network monitoring fail to provide the level of detail and real-time understanding necessary to optimize the network and application performance.

Voice and video, real-time collaboration, cloud-based infrastructures, and mobile computing all increase network complexity and require quick

“Technology platforms keep evolving too fast for our monitoring tools to be able to manage them all.”

~ Consultant, North American Technology Hardware vendor

action when problems occur; something that older, non-real-time solutions fail to provide. And because of these limitations and sub-par capabilities, organizations find that they are increasingly unable to defeat the challenges their networks face.

In our recent survey into network performance, we asked companies to list the top challenges they face when it comes to understanding and managing network performance. In Figure 1 below, we see the top five challenges (out of 15 possible choices); it's no surprise that the top two center on network operations — poor performance and too much downtime.

Figure 1: Top Challenges to Successful Network Management



More interestingly, following these top challenges are the impacts that sub-par network operations have on customer and employee satisfaction and company profits. If a network administrator doesn't understand what is happening on the network in real time, and doesn't have tools to address issues quickly and effectively, it makes sense that the network can't help the organization grow.

The Real-Time Path to Better Performance

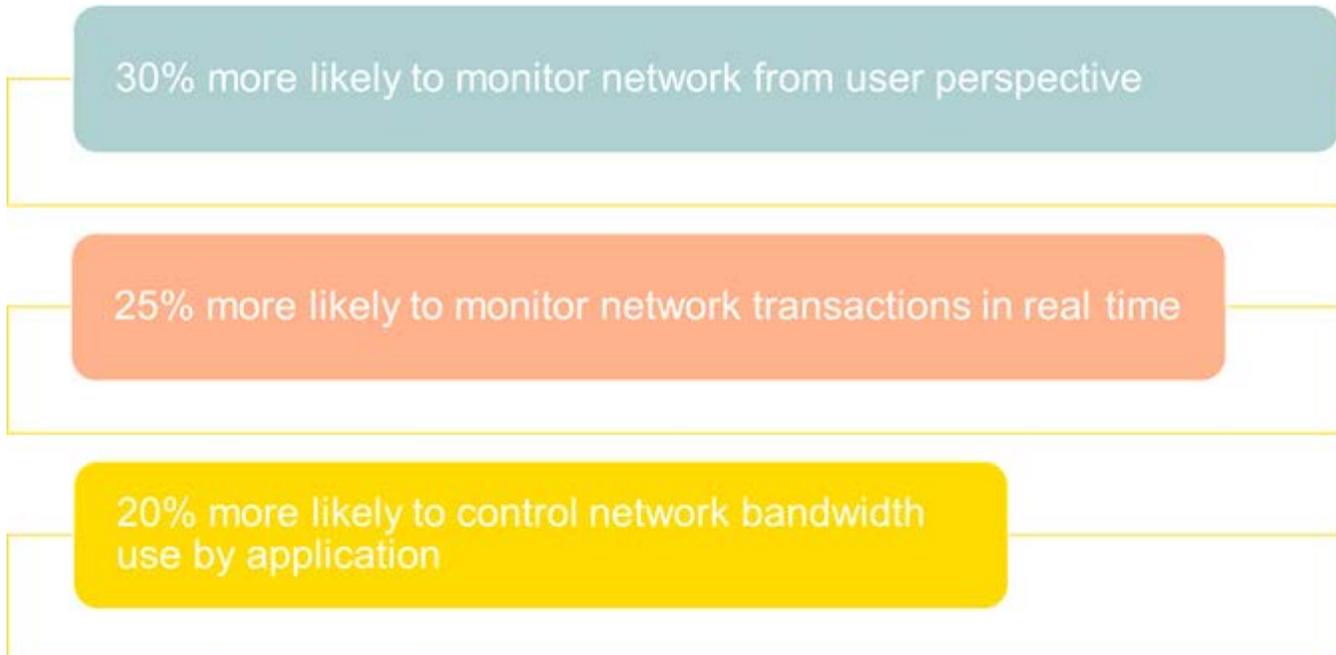
Probably the biggest problem with legacy network analytics tools is their focus on the past. Too many of the traditional tools organizations use to analyze and monitor their networks are based on older data, from logs or stored in network analytics tools.

While this can be valuable from a broad viewpoint of understanding the entire network, it's disastrous when it comes to building quick and effective platforms to find and address issues before they become a major problem.

When leading businesses are able to look at network data in real time, they can actually monitor and understand the living pulse of their network. With this live data flow, smart companies have visibility into what healthy networks and applications look like and can quickly detect when something is going wrong.

In Figure 2 below, we see how leading businesses (defined as the top 40% when it comes to network performance, reliability, and end-user satisfaction) adopted technical capabilities associated with monitoring and understanding the real-time data of a network.

Figure 2: How Leaders Analyze Networks



Not surprisingly, leading organizations understand the importance of managing and analyzing network usage from an end-user perspective.

After all, you don't run a network to simply have a network, you run one to deliver applications and services to users and customers. These companies more likely to have the ability to control the impact of specific applications on network performance. When combined with real-time visibility, this gives them greater automatic control of the network.

Most significantly, these businesses are invested in having a real-time view of network activity. With this capability, these companies have high visibility into the pulse of their network, and are able to address application and network issues before they become a problem for end users.

With this increased visibility and capability to detect and understand network and application issues, these leading organizations also gain a consequent increase in network and application performance and reliability. In Table 1 below, we see the performance and reliability success metrics of businesses doing real-time network data analysis compared to those not doing so.

Table 1: Key Benefits for Real-Time Network Analytics

When compared to all others, businesses with Real-Time Network Analytics are:

20%	More likely to reduce data center resource requirements
40%	More likely to see improved application control
15%	More likely to reduce IT expenses
2.2x	More likely to reduce downtime and outages

With the increased real-time view these companies have into their network activities, they are 2.2 times more likely to reduce downtime and other potential network issues, keeping applications available and users



satisfied. They were also 40% more likely to have greater application control, as they use real-time intelligence to better manage how applications use network resources. And with these improved efficiencies, organizations using real-time network analytics saw a significant reduction in IT costs and resource demands.

Key Takeaways

Imagine your job was to manage automobile traffic for a major city and you had to ensure good traffic flow, prevent gridlock, and route traffic around accidents and other barriers. Would you invest in a system that only told you about past traffic trends and events? Or would you invest in a system that provided a real-time view of actual traffic flow, and showed you problems as they happened? Or even let you know a problem could occur before it happened?

Network administrators need the same kind of visibility for network traffic. Smart organizations understand the need to understand what is actually happening on the network in the moment. By monitoring and utilizing data in real time, these businesses:

- ▶ **Prevent network and application problems before they happen, and before they affect end users and reduce their productivity;**
- ▶ **Increase network and application reliability.** Understanding network traffic in real time enables these companies to avoid the type of problematic issues that causes networks downtime for minutes or even hours, and;
- ▶ **Increase user satisfaction.** Networks should be invisible to users. With the ability to react to network issues in real time, leading businesses reduce complaints and keep end users happy.

In the end, having a high-availability and high-performing network isn't a high-wire act. It's simply a matter of having visibility into your live network pulse and the ability to do something right when necessary.



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