Team of 4 Manages 53 Site Network

At a Glance

Customer: National Mortgage Lender

Industry: Financial Services

Challenge:

- Small team, large, complex network
- Traditional monitoring tools missed critical data
- Root cause analysis delays reduced productivity

Results:
- Faster insight accelerated root cause analysis
- Team productivity boosted by more than 50%
- VoIP and VDI performance enhanced

It's complicated

A full-service mortgage lender with several thousand employees working from 50+ remote branches depends upon nonstop connectivity for critical business operations. The IT staff at this company has to manage more than 175 circuits including a mix of MPLS and broadband lines, all serviced by an SD-WAN deployment. The small IT team is comprised of 4 full-timers, which have to provide 24x7 support to the remote desktops, hosted applications at the data center and remote WAN locations.

Five years ago, the team struggled to keep up with user complaints, ranging from latency and packet loss to brownouts, with the worst impacting VoIP and VDI users. Their traditional tools, among the most widely deployed in the industry, often showed the problem wasn't the network, but the proof wasn't conclusive. And the team could spend hours if not days trying to determine root cause. That is, until they deployed NetBeez.

"With a small team supporting a large, complex network, our existing tools wouldn't get us to root causes fast enough," said their Network Architect, an employee of 8 years who had seen plenty of growth during his tenure. "We would need a much larger team to simply handle root cause analysis."

Powerful Monitoring Capabilities Key to Success

Given their growth and the resultant increase in help tickets his team was prompted to look for a new solution to augment their existing, deployed tools. The tools were useful, especially when their network was smaller and simpler. Yet being in a constant reactionary mode was taking its toll on engineer productivity. They discovered NetBeez and recognized several key capabilities that would help them stay ahead of network issues, including discovering and fixing problems before users could even notice.

Here are the six key capabilities that were key to success:

1. **Data feed:** They wanted to see problems within seconds versus minutes. With their tools deployed before NetBeez it could take minutes or longer to even detect an issue.

2. **Reporting:** With the ability to view raw data within streams instead of isolated samples they could get a broader longer term view of an issue, and even detect intermittent issues.

3. **Data collection:** The team wanted to collect data from a variety of locations versus a centralized server that runs   device status pings. They could triangulate the problem, even if it was a few hops away in a service provider network. With centralized tools they couldn't isolate a problem fast enough.

4. **Scalability:** They had had issues with reports slowing down considerably for more challenging, data-heavy analyses. It was time-consuming and frustrating when seconds mattered.

5. **Installation:** Their existing tools required specialized IT skills to manage and install. That meant they had to generate and interpret reports and travel for remote installs. If they could get assists from business teams both in installation and report tracking they could quickly move on from issues not tied to the network.

6. **Analytics:** There were many cases that couldn't be properly studied from the standpoint of device status. They wanted to see what the user experience looked like. User data could be far more valuable in detecting a problem than network device data, from both a timing and depth of view perspective. It would also put the team in a position of empathy versus denial, even if it wasn't the network.

"Triangulating a problem could reduce the time spent searching for causal events from hours to minutes. In some instances, we identified issues before the carriers could."

They chose NetBeez after an extensive review of offerings and their trade-offs, including budget. Some tools were several times the costs of others, for example, for slightly enhanced functionality.   In addition to reducing the incidence of downtime, brownouts and jitter/latency they've built better relationships with peer teams and line of business leaders as well as teams at carrier teams.

Key Capabilities	Legacy Tools	NetBeez	Business Impact
DATA FEED	Minutes	**Seconds**	**Faster and proactive detection**
REPORTING	Sampled	**Raw**	**Reduce MTTR**
DATA COLLECTION	Centralized	**Distributed**	**Quickly identify issues**
SCALABILITY	Increase latency with scale	**Scaleout**	**Scales to hundreds without latency**
DEPLOYMENT	Specialized skills required	**Plug And Play**	**Remote offices lack IT**
ANALYTICS	Network device	**User experience**	**Informed decision making**

Successful SD-WAN Deployment

They started deploying SD-WAN a few years ago, primarily in an effort to reduce costs by retiring MPLS/broadband circuits as well as having 'single pane of glass' visibility. NetBeez capabilities perfectly complemented their SD-WAN monitoring capabilities, further enhancing diagnoses and network performance while simultaneously reducing costs.

"Before NetBeez we faced a range of challenges with the tools we used, from latency and even outright delays when we tried to scale reporting, to technical difficulties with installation. We had to deploy tech expertise for remote installs or maintenance with existing solutions, and we had 52 facilities that were remote in terms of distance from HQ... and then we were also deploying SD-WAN. Did I say we have a small team?"

With NetBeez' aid, one engineer could see any issue across their networks in close to real-time and, within a few minutes, understand the root cause. Without NetBeez, they would need at least two more full-time, skilled engineers to keep up with the pace of what they accomplish with the distributed virtual and appliance sensors gathering raw data by the second . They went from having delayed reporting on a fraction of a network device problem to a real-time, comprehensive view. And it has made all the difference. Five years ago the team of four boosted productivity by more than 50% and they're still ahead of the game when it comes to uptime and user satisfaction.

About NetBeez

NetBeez, Inc. is a network performance monitoring company delivering a scalable monitoring solution that continuously simulates user connectivity on Ethernet and WiFi networks. Dedicated hardware sensors or software agents simulate end users and enable proactive identification and troubleshooting of complex network issues, helping to significantly reduce IT's time to resolution. For more information, visit **https://netbeez.net** or follow us on Twitter at **@NetBeez**.