

How a Government Agency Uses NetBeez to Monitor Voice Services and Resolve Network Latency Issues

Background



This government agency operates an expansive toll road system in a major metropolitan area. The agency relies on voice services to manage operations at call centers, tag stores, and remote administrative offices that are essential for customer service, toll billing, and operational coordination.

Like many public entities, they use a combination of homegrown applications and third-party circuits for connectivity across many plazas and various remote facilities. Maintaining uninterrupted connectivity and voice clarity is critical to ensure smooth day-to-day operations.

Challenges Faced

1. **Unexplained Alerts:** On a Monday morning, NetBeez started sending a surge of alerts indicating ping failures and application unavailability. Other legacy network monitoring employed did not report any anomalies, leading to uncertainty about the root cause.
2. **False Attribution to Circuit Providers:** Initial assumptions pointed to circuit issues with the primary Internet provider. However, failing sites over to the secondary Internet provider cleared the issue in some cases, while others continued to experience problems.
3. **Latent Network Issues:** The traditional network monitoring tool failed to detect subtle but impactful problems such as latency and light packet loss that significantly affected voice service quality.
4. **Voice Disruptions at Call Centers:** The issue primarily impacted voice services in call centers—one of the most voice-dependent functions of the organization—creating major operational concerns.



Solution: Leveraging NetBeez for Insightful Monitoring

NetBeez played a pivotal role in diagnosing and resolving the issue:

- **Proactive Alerting:** NetBeez served as the first indicator of a problem, alerting the team to application failures before user complaints were received.
- **Data-Driven Analysis:** Although other tools failed to detect the issue, historical charts and logs from NetBeez clearly pointed to a single core router.
- **Correlating Connectivity Issues:** Through network mapping, the team found that all affected sites were connected to one malfunctioning core router with multiple failing cards.
- **Informed Resolution:** Based on NetBeez insights, the IT team scheduled a reboot of the core router, resolving the latency and packet loss issues that had gone undetected by other tools.

Benefits Realized

1. **Early Detection:** NetBeez's anomaly detection capabilities provided a critical early warning system for network issues, enabling faster response and containment.
2. **Increased Network Visibility:** NetBeez uncovered subtle issues that standard monitoring tools missed, such as minor packet loss and latency.
3. **Improved Voice Quality:** The root cause of voice disruption was identified and resolved, restoring the quality and reliability of call center communications.
4. **Operational Continuity:** With quick diagnosis and resolution, the organization avoided prolonged outages and maintained customer service operations.



Expanded NetBeez Use Case

Originally deployed to monitor a homegrown tolling and billing application, NetBeez has since become a key tool in the agency's broader network monitoring strategy:

- **Monitoring Critical Apps:** Continues to monitor the performance of in-house applications to pinpoint network-related issues.
- **Systemwide Network Oversight:** NetBeez now helps monitor all network segments across plazas, call centers, and administrative facilities.
- **Agent Deployment and Maintenance:** With support from NetBeez staff, the team revitalized their deployment and ensured consistent agent uptime.

Team Structure and Scalability & Conclusion

The IT team comprises approximately nine members split between field technicians and network engineers/architects. This small team leverages NetBeez to increase efficiency and reduce time-to-resolution, especially during events like weather-related emergencies.

Conclusion

This national public transportation agency's use of NetBeez exemplifies how real-time, end-to-end visibility can empower small IT teams to proactively manage complex network environments. By surfacing nuanced issues that other tools overlook, NetBeez plays an essential role in maintaining operational reliability, particularly for voice services critical to customer support and administration.

Do you want to learn more about NetBeez and monitoring WiFi networks from the client's perspective? Schedule a demo via phone or email or request a trial online at <https://netbeez.net>

