

Quick Facts

Government
Departments Served:
Approximately 30

Employees Served: 5000

Network Devices: 500 - 600

NetBrain Use Case: Visualization and Troubleshooting

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That's the beauty of NetBrain; it is aware of and shows all the possible ways to interconnect your sites.

IT Infrastructure Operations Manager at Middle East Government IT Organization

About the Customer

This NetBrain customer provides backend IT application delivery services for the government of a state in the Middle East. They support approximately 30 departments including municipalities, courts, finance, local customs offices and many more, with branches spread across close to 1,000 square miles. In essence, they are the managed service provider for all local government entities. While their network was not especially complex, it was geographically distributed and not standardized. Departments (some of which had up to 20 individual branches) had built their IT infrastructure piecemeal resulting in a confusing mix of tools and technologies; some used MPLS, some used site-to-site IPsec channels, etc. With just five network engineers on staff, management and troubleshooting resources were limited.

The Challenge

The customer lacked real-time visibility and scale for their dispersed network infrastructure, including accurate and comprehensive network documentation, which negatively impacted troubleshooting and other daily operations. When a new IT Infrastructure Operations Manager joined in 2009, it took them six months to fully understand the network. The limited documentation that was available was badly out of date and lacked configuration details like subnets, VLANs and individual department branches. The few monitoring and configuration management tools they had at their disposal were not helpful as they were largely out of date and did not reflect the true operational status of the network. IT leadership knew that creating even the most rudimentary documentation manually took one to three weeks per department and keeping it up to date to aid in regular maintenance and troubleshooting would require far more resources than his small team possessed. He needed a smarter approach that was more aligned to the needs of his constituents and he needed a level of visibility that was more aligned with the needs of the business and all of its application delivery goals.

The Solution

This government IT department needed a more modern and automated NetOps function which could scale as his network did without adding the typical laborintensive overhead. They needed a data-driven digital twin of their network that not only understood what was connected to what, but also understood the traffic flow and intended behaviors of the network, and one that was maintained automatically. He knew that the right digital twin could instantly provide precise and contextual troubleshooting details to any network engineer with the touch of a button.

Their technicians needed to eliminate the time-consuming and repetitive work needed to generate the required visualization and documentation which directly supported their remedial needs each day. And since their multi-vendor infrastructure includes Cisco, Fortinet, Sonicwall and a host of other manufacturers' equipment, the chosen solution needed to be multi-cloud and multi-vendor. Leadership was familiar with NetBrain from past roles with other organizations and consequently arranged for a NetBrain demo for their teams. The demo focused on the real-time aspects of its digital twin and provided a wealth of demonstrations for how that information could be used to shorten their support cycles and reduce escalations.

NetBrain proved to be everything they were hoping for and they deployed the solution over a matter of weeks. The IT Infrastructure Operations Manager in charge of infrastructure service delivery rated the NetBrain onboarding experience as "one of the best in his career" and went further by adding "support was highly professional and the few minor issues they did encounter were resolved by the NetBrain team quickly."

NetBrain enabled their engineers to create the context needed to expedite service ticket troubleshooting, confident that the information now at their fingertips was accurate and insightful. And they enjoyed the ability to export their service ticket resolution details through NetBrain's ability to export into Visio and Word with just a few clicks, something previously unimaginable.

NetBrain quickly became the essential core of the department's tech stack and their primary solution for network operations. Every member of the IT team uses NetBrain as their NetOps console for problem troubleshooting, traffic path management, and other scalable management tasks. With NetBrain, validating the topology, connectivity and performance attributes along with identifying neighbors in the vicinity of a specific device is much faster. The department estimates that they are now doing 20% more work in the same amount of time allowing the infrastructure to scale without the need to bring in additional resources.

In addition, NetBrain's efficiency allows NetOps teams to spend more of their time on forward-looking IT improvement projects that create higher business value. "It's like a glove," said one manager.

"You simply put it on and start using the power of NetBrain without having to learn anything new, eliminating the complexity typically seen with other network management and automation solutions."

The Results

This IT department now has a complete real-time digital twin which automatically maintains its own accuracy through automation. It dynamically creates accurate network visibility and context documentation needed when handling each service ticket and reduces escalations by more than half. "This was our core requirement, and it just works as expected," said one manager. "It can show Layer 2, Layer 3 diagrams, it can show us the EtherChannels, it can show bidirectional traffic flows in real-time, and it can show us the actual ports status and IP address usage at any moment in time. Anything you want, it can show in real-time. Keeping everything up to date (manually) used to require a huge effort. Now it's just effortless. Just a couple of clicks and each engineer has what they need to resolve service tickets. NetBrain has become the single source of truth for the entire infrastructure."

Leadership estimates that NetBrain has saved their team at least two hours per person per day and overall they are at least 80% more efficient. They are still addressing the same volume of service tickets, but are doing so in less time.



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This allows the team to have time for more strategic improvement projects beyond day-to-day operations. Overall issue resolution times (MTTR) have greatly improved – network engineers can diagnose problems directly from the end-user or client all the way to the information service. Onboarding new engineers to support the entire infrastructure now takes days rather than the months it previously took to learn all of the tools previously required to do only part of what NetBrain provides today. This dramatic gain in efficiency translates into smoother operations and fewer problems for all government departments and ultimately better service to their constituents. The savings is clear.

What the Future Holds

This customer plans to utilize more of the automation capabilities found in NetBrain Next-Gen. As they take on the task of managing application service delivery, security enforcement and upgrading existing change management processes, NetBrain will provide even more strategic value. And with the newest features introduced with NetBrain Next-Gen, specifically the Chatbot and Dashboard capabilities, the network operations team expects to gain users from many other related operational teams. They know that NetBrain will remain an essential tool for whatever the future holds for them.

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It's a pleasure to be a customer of NetBrain – the benefits, implementation, support, everything has been top–level and I cannot complain about anything.

IT Infrastructure Operations Manager at Middle East Government IT Organization

About NetBrain Technologies

Founded in 2004, NetBrain is the market leader for NetOps automation, providing network operators and engineers with dynamic visibility across their hybrid networks and low-code/no-code automation for key tasks across IT workflows. Today, more than 2,500 of the world's largest enterprises and managed service providers use NetBrain to automate network problem diagnosis, generate real-time documentation, accelerate troubleshooting, and enforce enterprise architectural rules.

