The University of North Carolina at Chapel Hill

Scalability & Speed Enable Delivery of Progressive Network Services

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About
Founded in 1789 as America's first public university, the University of North Carolina at Chapel Hill is renowned for its academic excellence and rich history of achievements, consistently ranking as a top, "public ivy." UNC offers a diverse and engaging educational environment with opportunities for innovative programs, research, and international study.

Industry:
- Higher Education

Size:
- 13,108 Faculty & Staff
- 19,743 Undergraduate Students
- 11,796 Graduate & Professional Students

The Challenge: Constant Reactive Firefighting

Ryan Turner and his team at the University of North Carolina at Chapel Hill wanted to manage their complicated network more efficiently. With thousands of devices, tens of thousands of colleagues and students, and countless network paths, Ryan's team was in a constant reactive state of firefighting. To solve network outages and challenges, they spent their days painfully hunting for the root causes with primitive processes.

" When problems occurred, we struggled to find the source location. We had to rely on packet captures as well as logging on switches and looking at counters to find the source of problems. We had to manage a slow and ineffective hunting exercise. This needed to change."

- Ryan Turner, *Director of Networking*

The Goal: Target Root Cause and Resolve Issues Immediately

The networking team wanted to find a technology that could show network data at a high level of granularity, scale with their constantly growing environment, and streamline network troubleshooting across their large environment.

Specifically, the technology had to be able to:
- Scale with a large and complex network
- Display data at a granular level across a broad timeframe
- Highlight essential information to help the team prioritize their efforts
- Eliminate the dependence on institutional knowledge of the network for troubleshooting issues
- Quickly isolate network problems, simplify network troubleshooting, and conduct root cause analysis
- Analyze large data sets quickly

" We needed a tool that would show us what is important. We have a network filled with noise. We needed a tool that would help my team target our efforts, quickly find the root cause of the issue, and resolve it immediately. "

- Ryan Turner, *Director of Networking.*

The Choice: Clear Actionable Network Data at Superior Scale

The University of North Carolina at Chapel Hill team selected AKIPS as their network monitoring solution because AKIPS:

1. Filters essential issues to the top amidst the noisy network environment, enabling targeted efforts for swift resolution of network outages.

2. Collects, retains, and analyzes minute-by-minute data over extended periods, providing valuable context crucial for informed diagnosis and efficient issue resolution.

3. Reduces the team's reliance on long-term staff institutional knowledge by making the network more accessible and understandable to all employees.

4. Offers superior scalability and can run on a single server, allowing it to operate inexpensively and grow as the network expands without service degradation.

5. Comes equipped with API keys, enabling deployment customization and driving extensibility with bespoke integrations and dashboard enhancements.

The Outcome: Drastic Reduction of MTTD and MTTR

After deploying AKIPS, the team dramatically reduced the time required to isolate and resolve network outages, fulfilling its promise to decrease Mean Time to Repair (MTTR) and Mean Time to Detection (MTTD). AKIPS's ability to quickly sift through data and provide context and insights allowed the university to center its entire network management strategy around the tool, making the network more understandable and less dependent on the institutional knowledge of long-term staff.

This accessibility extended to all staff, democratizing the ability to efficiently manage and troubleshoot network issues. Furthermore, the customizability of AKIPS enabled the university's DevOps group to develop tailored tools that improved operational efficiency, showcasing the university's innovative approach to network management. This transformation streamlined daily operations and allowed the team to focus on more strategic, forward-looking initiatives rather than constant firefighting.

" What makes AKIPS special is how quickly it can go through data collected over an extended period, and then tell us exactly what is happening on our network. It allows us to see context around the data and act on it. There are lots of tools out there that say they reduce MTTD and MTTR. AKIPS does it. "

Ryan Turner
Director of Networking,
The University of North Carolina
at Chapel Hill

" I don't think I would feel comfortable managing our massive and complex network without AKIPS. We have centered our entire network management around it. Because of AKIPS we are focused on offering progressive network services to our customers across the university."

For more information, visit **www.akips.com**, or email us at **sales@akips.com**