

# Top University Delivered Always-On Connectivity

A leading research university experienced 100% availability and robust DDoS protection for its public-facing DNS



Handled 1 billion queries per day



Gained DNS reliability



Enabled seamless connectivity

## Protecting the backbone of a digital-first campus

At this leading research university, which offers doctorates in several disciplines, connectivity isn't just an expectation — it's a necessity. Students, faculty, and staff rely on uninterrupted access for coursework, research, and daily operations. With [Akamai Edge DNS](#), the school's network services team overcame the formidable challenge of enabling seamless and secure internet access in the face of growing traffic and online threats.

## Meeting demands for an always-on network

In today's fast-paced digital environment, students expect always-on connectivity — and their parents invest heavily in education, so reliable network infrastructure is as essential as classroom resources. Plus, admissions, fundraising, and live-streamed commencement events depend on reliable DNS services. But as the school transitioned to a cloud-first strategy, the costs of maintaining reliability skyrocketed.

Adding to the challenge, [DNS](#) — the backbone of internet connectivity — was becoming a growing concern. Although the university hadn't faced any major outages, rising cyberthreats, politically motivated [distributed denial-of-service \(DDoS\)](#) attacks, and the risk of downtime loomed large.

"DNS is inherently vulnerable, and we needed a solution that could protect us without breaking the bank," explained the Assistant Director of Network Services.



Leading Research University

### Location

United States

### Industry

[Public Sector](#)

### Solution

[Edge DNS](#)



## Finding peace of mind with Edge DNS

Years ago, a DDoS attack targeted the school, threatening to disrupt critical services. The university mitigated the risk with Akamai Prolexic, which it subscribed to via the [Northern Crossroads \(NoX\)](#) consortium — a trusted resource for regional higher education institutions.

Seeking an affordable, scalable, and secure solution for robust DNS security, the university turned again to the NoX. “The NoX makes high-quality DNS protection accessible even on a limited budget,” he continued.

The university adopted Edge DNS with its security features and automation capabilities more than five years ago. “One of the great things about Edge DNS is that you set it and it runs itself,” the Assistant Director said.

Edge DNS allowed the network services team to automate repetitive tasks like DNS record updates and zone management, and to rest easy knowing that the solution includes built-in protection against DDoS attacks and DNS vulnerabilities. “Akamai has seen the biggest threats and attacks, and provides us the extra security we need. I sleep well at night knowing Akamai has our back,” the Assistant Director added.

## Handling growing traffic with ease

With Edge DNS, the university handled the growing DNS traffic — which recently surpassed one billion queries per day — without performance concerns. “DNS is the central nervous system of everything,” the Assistant Director emphasized, underscoring its critical role in the campus infrastructure.

Edge DNS also enabled the team to monitor traffic patterns, quickly analyze potential issues, and receive instant alerts. The centralized control center provides a single pane of glass for full visibility, which helped the team differentiate between real threats and routine traffic spikes. “We get the insights and alerts needed to proactively identify potential threats and rule out benign issues,” the Assistant Director continued.



Until you’ve experienced an outage, you take DNS for granted. With Edge DNS, we have the visibility, security, and peace of mind to keep our university connected 24/7.

— Assistant Director of Network Services



## A trusted partner for the future

Beyond its technical benefits, the university valued Akamai's top-tier customer support. "Support is a dying breed in tech, but Akamai's team is always professional," he said, recalling how a DNS zone transfer issue was resolved swiftly.

And when it comes to future challenges? The network services team is confident that Edge DNS will continue to meet its needs. "If we need to shift our on-prem DNS strategy, I have full confidence that Akamai will handle whatever we throw at it."

For other institutions considering a secure, scalable DNS solution, the Assistant Director's advice is clear. "Edge DNS is like Porsche in the car industry — premium, reliable, and built for performance. With Akamai, there's nothing but upside."

To that end, he underscored that his university's leadership has never questioned the investment in Edge DNS. "I don't have to justify the cost of Edge DNS. Everyone knows Akamai is a premier provider and Edge DNS is an unbeatable value for a service with uninterrupted access," the Assistant Director concluded.

