FLORIDA ATLANTIC UNIVERSITY | PROBLEM SOLVED

In a competitive recruitment environment, Florida Atlantic University counts on NetApp® AFF to deliver the infrastructure stability that it needs to attract top students and faculty.

Using Technology to Improve Registration, Recruiting, and Research

Florida Atlantic University (FAU) is no ordinary university. When it opened its doors in 1964, FAU was the first of a new breed of American universities to break with tradition to invent more innovative ways of delivering higher education. By harnessing the power of technology, FAU offers excellence in education and drives visionary research for its 30,000 students and 7,000 faculty.

Average latency dropped from

20ms ▶ 5ms

11,000

IOPS support a smooth student registration experience

✉ NETAPP.COM/CONTACT

NetApp®

> "We are one of the few research universities to include big data in our strategic plans. Where will we store this data? How will we access it efficiently and in a timely manner? That's one of the biggest challenges that we will face in the next few years, and we know that we can tackle it with the help of NetApp."

Dr. Mehran Basiratmand
Chief Technology Officer, FAU

LEADING TECHNOLOGY ENABLES STUDENT AND FACULTY SUCCESS

From the beginning, FAU had a bold vision to harness broadcast technology to beam classes to students wherever they might be. The goal was to make higher education accessible to students throughout the state.

Today, as FAU continues to fulfill that vision, demand for the university's video lecture recordings is higher than ever. To meet that demand, NetApp AFF provides the performance and availability for FAU to stream hundreds of thousands of hours of lectures across a multitude of courses in its 170 different degree programs.

"Our lecture capture service is running faster and better, so we can provide a smooth streaming process for our students," says Dr. Mehran Basiratmand, chief technology officer. "And as we move to bigger high-definition video, NetApp AFF will help us continue to provide our students with the materials that they need to be successful. This allows students, for instance, to watch videos wherever, whenever they choose—even in a coffee shop with their study groups."

Streaming is a bonus for existing students, but FAU also uses NetApp to help recruit top students and faculty.

"Institutions are equally competitive to recruit the most qualified students. This starts with having a stable environment, whether it's networking, technology, or availability of courses," Basiratmand says. "Likewise, building a culture of researchers is paramount. We continue to provide our faculty with an area where they can conduct research and have access to resources. Building a solid infrastructure, with data storage being a big portion of that, clearly facilitates better recruitment."

OPTIMIZING PERFORMANCE REMOVES BARRIERS TO REGISTRATION

Like a retailer gearing up for the busy holiday season, FAU must meet the needs of its students, who are eager to sign up for classes. With 30,000 students, 7,000 faculty

BUSINESS BENEFITS

NetApp AFF and ONTAP enabled Florida Atlantic University to:

- Process student registration at crunch time without any need to throttle batch processing or analytics work of other business processes.

- Improve its reputation as a research university by attracting top faculty, staff, and researchers with its big data processing power.

- Plan for a future in which it can easily shift data from one cloud provider to another without worrying about exit strategies or exit costs.

and staff, 60 academic departments and six campuses, registration is crunch time for FAU.

n NetApp®

For a single week during spring and fall registration, tens of thousands of students log in to the university's student information system (SIS) to register. These seasonal spikes place an intense load on the university's systems that previously could be managed only by restricting registration access to predesignated groups. Resources were reallocated from other parts of the IT infrastructure, shutting down data warehouse processes, including reporting and analytics. Meanwhile, some students had to wait to sign up for rapidly filling classes.

"At a university, nothing is more important than the student experience," says Basiratmand. "Because we are competing with the top institutions in the United States, we must provide a good user experience to attract and retain the country's most qualified students. This requires a responsive registration system that can handle high traffic volumes."

FAU chose NetApp AFF for its entire registration database, accelerating access and dramatically improving the student experience by eliminating registration bottlenecks.

During the transition, FAU worked with NetApp Professional Services to modernize the university's storage without affecting users. FAU migrated mission-critical virtual machines to the new NetApp ONTAP® data management software and solid-state drives and flash. This upgrade improved storage for lecture captures and for the essential student information system.

The new system has made registration a breeze and has provided a smooth experience for students during the intense periods.

"We chose NetApp for three reasons. One, NetApp has some of the most qualified and skilled individuals in the storage market. Two, the technology is ahead of many of its competitors. Three, stable storage is critical for us. With NetApp, downtime and other types of unavailability are rare," says Basiratmand. "Today, we no

> "The most important asset of any organization is data. With NetApp's reputation for stable storage without downtime or availability issues, NetApp is the one that I trust to keep our researchers' data safe."

Dr. Mehran Basiratmand
Chief Technology Officer, FAU

longer worry about reallocating resources during registration. It just performs."

PREDICTIVE MODELING MEASURES UNIVERSITY PERFORMANCE
Like many state universities, FAU focuses on performance metrics that measure student success. The

ABOUT FLORIDA ATLANTIC UNIVERSITY

Florida Atlantic University, established in 1961, officially opened its doors in 1964 as the fifth public university in Florida. Today, the university, with an annual economic impact of $6.3 billion, serves more than 30,000 undergraduate and graduate students at sites throughout its six-county service region in southeast Florida. FAU's world-class teaching and research faculty serves students through 10 colleges: the Dorothy F. Schmidt College of Arts and Letters, the College of Business, the College for Design and Social Inquiry, the College of Education, the College of Engineering and Computer Science, the Graduate College, the Harriet

L. Wilkes Honors College, the Charles E. Schmidt College of Medicine, the Christine E. Lynn College of Nursing, and the Charles E. Schmidt College of Science. FAU is ranked as a High Research Activity institution by the Carnegie Foundation for the Advancement of Teaching. The university places special emphasis on the rapid development of critical areas that form the basis of its strategic plan: healthy aging, biotech, coastal and marine issues, neuroscience, regenerative medicine, informatics, lifespan, and the environment. These areas provide opportunities for faculty and students to build on FAU's strengths in research and scholarship.

■ NetApp®

Florida Board of Governors, which oversees the state university system, ranks university performance based on 10 metrics, including average GPA, course completion, student retention, and wages of undergraduates after graduation. Final scores affect state funding to the university.

In 2016, FAU was ranked the top-performing public university in the state, resulting in a substantial increase in funding. Predictive modeling helps FAU monitor its performance against key metrics that indicate how well FAU serves its student population. With NetApp AFF powering its analytics engine, FAU is accelerating access to actionable insights about its performance.

A STRATEGIC PLAN FOR BIG DATA AND THE CLOUD

To support the university's goal to become a top destination for researchers, FAU plans to optimize big data through the Internet of Things and through other sensors. This optimization will enable marine biologists, mechanical engineers, and ocean engineering researchers to draw insights from more data than ever before.

"We are one of the few research universities to include big data in our strategic plans," Basiratmand says. "Where will we store this data? How will we access it efficiently and in a timely manner? That's one of the biggest challenges that we will face in the next few years, and we know that we can tackle it with the help of NetApp."

For university research teams, the need for reliable, low-cost, and faster storage will continue to grow. Basiratmand trusts NetApp to meet this need: "The most important asset of any organization is data. With NetApp's reputation for stable storage without downtime or availability issues, NetApp is the one that I trust to keep our researchers' data safe."

Basiratmand is also excited about expanding the university's cloud strategy by using the NetApp Data Fabric to seamlessly move data between cloud providers, avoiding vendor lock-in and reducing long-term costs. FAU's cloud strategy focuses on using the cloud specifically for computational power and storage.

"ONTAP is the cloud broker that we have been waiting for," says Basiratmand. "ONTAP holds tremendous promise for us, giving us the ability to move data in and out of various cloud providers without the concern for an exit strategy or exit costs. NetApp will play an important role in helping us continue our legacy of innovation today and tomorrow."

SOLUTION COMPONENTS

NETAPP PRODUCTS

NetApp All Flash FAS

NetApp ONTAP

LEARN MORE

netapp.com/us/products/storage-systems/all-flash-array/aff-a-series.aspx

✉ **NETAPP.COM/CONTACT**   +1 877 263 8277

💬 in 🐦 f ▶ 👥