

Building a Thriving API Ecosystem for Accelerating Digital Transformation

How Boston University used SnapLogic API Management (APIM) to meet the needs of their community

HEADQUARTERS

Boston, MA, USA

INDUSTRY

Higher Education

USE CASE

Create data services, secure and govern data pipelines

CHALLENGE

- Chart a path to cloud-first future without disrupting day-to-day operations
- Meet the needs of 40k+ campus community members in the pandemic

SOLUTION

- Provide security and governance for data services APIs through SnapLogic API Management (APIM)
- Provide distinct QoS (Quality of Service) and data with SnapLogic API Management

BUSINESS RESULT

- Built production-ready, delightful community experiences in just days during the pandemic
- Saved time and effort in supporting API Developers with self-service features in the APIM Developer Portal

Boston University Backstory

Founded in 1839, Boston University is one of the largest private universities in the United States. Boston University has a massive scale with over 10,000 faculty and staff, 17 schools and colleges, more than 300 programs of study and over 35,000 students.

The Challenge

The Integration team in Boston University's central IT department provides solutions for university wide data and application integration and manages over 150 integrations across on-premises and cloud systems. Being a large institution with many legacy technologies, including mainframes, the IT team has to chart a path to its cloud-first future without disrupting day-to-day university operations. Additionally, the central IT team must meet the needs of large schools within the university who often have specific requirements and in-house IT teams who are looking to fulfill those requirements. "We are looking to support increased agility in moving to new applications and infrastructure as our landscape evolves. We are looking to support best-in-class platforms, proven integration patterns and modern architectural practices such as APIs", said the Assistant Director of Integration.

The Solution

To meet the needs of the larger BU community, the central IT team needed a set of common data services that could meet the needs of multiple teams rather than creating a bespoke solution and integration for each team and use case. This common framework of data services simplifies the maintenance and helps BU teams benefit quickly from these evolving APIs.

Boston University chose SnapLogic API Management (APIM) to create a set of common data services to efficiently meet community's needs. It also provides security and access control so that the team could protect the backend infrastructure. As the APIs evolve, the automated documentation provides an easy way for API owners to keep the API consumers up-to-date.

The Boston University IT team secures these data service APIs with policies such as:

- API Key Authenticator by assigning and controlling individual keys per client
- Authorize by Role so that specific APIs are restricted to specific roles and the APIs provide distinct outputs based on the role of the entity requesting data
- Client Throttling to stop errand process or a DoS (Denial of Service) attack

In the pandemic, the BU team had to pivot a lot to support the BU staff to bring things online and provide a safe learning environment for the students. To enable that, the BU team worked on a campus density mapping project to support protocols and processes such as building occupancy limits for safety of staff and students. The IT team collaborated with several teams and leveraged data coming from Wi-Fi from the networking team to estimate the occupancy levels of campus buildings. The data was extracted by a SaaS mapping application which called data APIs every 2 minutes, 24x7. The team also leveraged Authorized by Role and Throttling policies to create a public view for students that guided them with occupancy levels of libraries and other campus buildings even before they left their dorm rooms, for example, and a more detailed administrator view for authorities.

The Business Result

SnapLogic API Management aligns with the BU team's vision of creating common data services that help them meet the needs of their community.



SnapLogic APIM provides security and control for our pipelines and services. Discovery and documentation and automation associated with it helps facilitate the citizen integrators, making it easy for them to understand services that we provide.”

ASSISTANT DIRECTOR OF INTEGRATION
at Boston University

BU's use of SnapLogic's Ultra Pipelines along with API Management allows them to distribute load and support low-latency applications. Additionally, through role enforcement the IT team was able to provide different levels of information and Quality-of-Service (QoS) to students and administrators.

SnapLogic Intelligent Integration Platform along with its API Management functionality was crucial for BU's IT team in pivoting to the new pandemic realities when they were required to spin up new production-ready customer experiences for the community in just a few days. SnapLogic platform didn't just allow the team to innovate but do it with speed.

SnapLogic powers the automated enterprise. The company's self-service, AI-powered integration platform helps organizations connect applications and data sources, automate common workflows and business processes, and deliver exceptional experiences for customers, partners, and employees. Thousands of enterprises around the world rely on the SnapLogic platform to integrate, automate, and transform their business. Learn more at snaplogic.com.