

UCSD Takes Charge of its Multi-Cloud Environment with Nutanix Beam

Achieving Cloud Cost Control and Enhancing Cloud Security for Improved Instruction and Research

INDUSTRY

Higher Education

BENEFITS

- Deployed Nutanix Beam SaaS solution to provide visibility into usage costs across a multi-cloud academic and research campus
- Applied automated compliance checks and one-click security mitigation to improve compliance with government and academic requirements
- Streamlined and automated administrative tasks

SOLUTION

Nutanix Beam

BUSINESS BENEFITS

Serving almost 40,000 students from across the world, University of California, San Diego is a leading public university. Public cloud services play a vital role in supporting research and instruction at the institution, but the IT team lacked insight into how and where these services were being used, their costs, and their levels of security and compliance. The University deployed Nutanix Beam to gain visibility and control over its cloud usage and improve compliance with government and academic regulations. The solution gives faculty and researchers the freedom to continue to take advantage of the agility and flexibility of cloud, while managing costs, minimizing risks, and streamlining administrative tasks.

“Nutanix Beam has paid for itself by providing the insight we need to control costs. In one instance, we uncovered an API on a development environment that did not need to be running, and shut it off, saving thousands of dollars per month.”

- Declan Fleming, Enterprise Architect for Cloud, UCSD

CHALLENGE

UCSD is an innovative, forward-looking institution that is aggressively moving its key IT operations to the cloud. With 1100 AWS accounts on campus—100 of which are major accounts for researchers, instructors, and administrators—IT faced serious challenges in understanding, optimizing, and managing costs of these fast-growing services. “When I came to UCSD it was essentially the wild, wild west,” said Gabriel Edwards, Product Manager and Cloud Services Manager, Workplace Technology Services at UCSD. “Everybody had their own AWS account, some of which were tied to their personal accounts and credit cards and expensed to their department. There was minimal oversight.” The UCSD IT staff needed a solution that could help ensure consistency, security, and efficient cost tracking for its hundreds of cloud accounts.

SOLUTION

To ensure that users could continue to enjoy the freedom to adopt the cloud solutions they needed in a standardized, compliant way, the IT staff began bringing cloud accounts under the umbrella of an AWS enterprise agreement. “Cloud users basically join our club, and they don’t have to deal with billing every month,” said Edwards. “We do direct billing to their ledger, and they can continue to use AWS. The downside is that it creates a huge administrative overhead.”

Beam gives the UCSD IT team the capabilities it needs to address the administrative overhead—and do much more. It enables deep visibility and rich analytics detailing cloud consumption patterns, along with one-click cost optimization across cloud environments. “The dashboard is clean and easy to use, and the regular summary emails are a huge help in enabling us to spot potential anomalies,” said Declan Fleming, Enterprise Architect for Cloud at UCSD. “Beam provided the tools we need to inspect and aggregate information, so we can make sense of it.”

CUSTOMER OUTCOME

The single-dashboard visibility and automation provided by Beam enables UCSD to better understand and control all its cloud expenditures—while saving staff time and effort so they can focus on other tasks. “Our invoices for AWS accounts go to a central clearing-house, which creates a complex, detailed spreadsheet,” said Fleming. “In the past, an IT administrator would have to examine it manually and rationalize costs against the AWS billing console. It was time-consuming, and the process could fall months behind, creating irregular billing for campus departments. Beam can handle that process for us, saving hours of time.”

One unexpected benefit is the rich compliance and security capabilities included with Beam. As a public university, UCSD collaborates with institutions around the globe, making compliance with government regulations like FERPA and HIPAA essential. Beam’s pre-built security and compliance checks provide one-click remediation for cloud vulnerabilities. “We were after cost governance, and we accidentally got security governance with it,” said Fleming. “We also like the ability to customize our security capabilities with Python scripting.”

NEXT STEPS

With its solution in place, UCSD is exploring ways to further tailor its multi-cloud environment to better align with specific compliance needs. “We like Beam’s ability to customize our security capabilities with Python scripting,” said Fleming.



T. 855.NUTANIX (855.688.2649) | F. 408.916.4039
info@nutanix.com | www.nutanix.com | [@nutanix](https://twitter.com/nutanix)