

SUCCESS STORY Education



Monash University is transforming higher education with a cloud-only initiative supported by NetApp® ONTAP® Cloud with the Kumolus Cloud Management Platform for Amazon Web Services (AWS).

## Monash University Takes Higher Education to the Cloud

What does digital transformation look like for higher education? Imagine a world where smart campuses analyze student habits to optimize network access and schedule classes. Where heating, cooling, and power are controlled not by people but by data. Australia's Monash University is doing all of this and more with a visionary cloud-only IT strategy enabled by NetApp and Kumolus.

Saved

25%

of storage costs in AWS compared to standard AWS EBS

Cut time to provision environments from MONTHS > MINUTES

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# "NetApp and Kumolus are fully on board with the speed at which we need to operate. We really feel like they've got our back."

Brock Cremer Infrastructure Services Delivery Manager, Monash University

Monash University is Australia's largest university, with more than 80,000 students, staff, and faculty at campuses across four continents. Ranked in the top 1% of universities worldwide, the university is on an audacious mission to inspire and equip its students to be agents of change. To empower its students to change the world, the university must stay on the cutting-edge of innovation

"Our users expect instantaneous access to information through web and mobile technologies," explains Brock Cremer, infrastructure services delivery manager at Monash University. "We knew we had to modernize our environment to deliver modern solutions to our staff and students."

In 2013, the university launched Beyond 2015, a multi-year, cloudfirst strategy focused on leveraging industry-leading cloud services from AWS. With real estate at a premium and data cent costs rising, Monash's cloud-first strategy soon became cloud only: all on-premises hardware purchases would require CIO approval.

"We're very good at teaching and learning. But we're not in the data center business," adds Cremer. "Our data center was taking up valuable space and resources that we could use to teach the next generation of scientists and leaders, which is our number-one reason for existing."

## CLOUD AGILITY ON A MASSIVE SCALE

With a substantial number of corporate and academic environments moving to AWS, Monash needed a way to manage its cloud resources for a wide variety of users on a massive scale. It chose the Kumolus Cloud Management Platform for drag-and-drop, full-stack AWS provisioning, governance, and automation.

"We have a significant number of people working in infrastructure services, and getting them up to speed with infrastructure as code wasn't going to happen overnight," says Cremer. "Kumolus helps us quickly provision and manage resources in AWS without having to train people in code."

To manage its rapidly growing cloud storage footprint, Monash selected NetApp ONTAP Cloud, which provides cloud-native storage management through a virtualized FAS in AWS. Kumolus collaborated with NetApp to integrate its cloud management platform with ONTAP Cloud to provide the best of all worlds: drag-and-drop provisioning with Kumolus, infinite elasticity and scalability with AWS, and enterprise-class data management with NetApp.

"ONTAP Cloud allowed us to transition to the cloud seamlessly," says Cremer. "It enabled us to easily migrate our data and bring the benefits of our onsite NetApp data management and data protection to AWS."



Using ONTAP Cloud to replicate from its on-premises NetApp FAS systems to AWS, Monash was able to move out of its last on-site data center in just four months. Storage for all new corporate workloads in AWS is provided using ONTAP Cloud.

## MODERNIZATION WITH THE CLICK OF A BUTTON

Thanks to ONTAP Cloud's native deduplication and compression, Cremer and his team have been able to reduce data requirements and AWS storage spend AWS by 25%. That's money Cremer can use to fund innovation and strategic initiatives.

"We can use these cost savings to look into new cloud technologies, like virtual desktops and roaming profiles that can give students a consistent experience wherever they are in the world," explains Cremer.

Drag-and-drop provisioning enabled by Kumolus has cut down on the time required to train Monash's large IT team and makes sure that every environment meets documented and approved standards for compliance and security. Patches and fixes can be deployed easily, saving time, money, and resources.

"With a click of a button, we can deploy a server and a full-stack environment," says Cremer. "Then we can get back to our objective of helping transform the business."

Monash is also training users to control their own environments using the Kumolus management interface. Application developers can now self-service their own environments to deploy a standard environment that meets backup and compliance requirements. The autogrowth functionality of ONTAP Cloud eliminates the need to submit IT tickets to expand volumes. Volumes can be thinly provisioned, growing as needed.

Faster, self-service provisioning of resources means that
Monash can access petabytes
of storage capacity in a matter
of minutes. Monash can spin
up and tear down environments
quickly and retain data indefinitely
to fuel future discoveries.

The modernization of its infrastructure has also enabled the university to leverage the Internet of Things and big data analytics to make its campus "smart."

"Modern devices give a tremendous potential to better understand our students. ONTAP Cloud lets us bring that data together in Amazon to learn from it and make our campus better."

Brock Cremer
Infrastructure Services Delivery Manager, Monash University



"For example, we're trying to work out the facility usage habits of students—what classes they attend or where they hang out—to save on heating, cooling, and power costs," explains Cremer. "Modern devices give a tremendous potential to better understand our students. ONTAP Cloud lets us bring that data together in Amazon to learn from it and make our campus better."

#### **AGENTS OF CHANGE**

Monash knows that modernization isn't a one-time thing. It's a continuous process. As the digital landscape evolves, Monash feels confident that it has the partners and strategy to inspire and equip its students to change the world.

"We need to be very, very quick," says Cremer. "NetApp and Kumolus are fully on board with the speed at which we need to operate. We

know we can make a decision, and they're going to rally behind us. We really feel like they've got our back."

#### SOLUTION COMPONENTS

#### **NETAPP PRODUCTS**

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Kumolus Cloud Management Platform

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