THE PROJECT

University of California, Merced (UC Merced), like many universities, formerly operated an on-premise Learning Management System (LMS) for faculty and student use for all classes. The Internet2 NET+ Canvas offering, previously validated by a group of Internet2 member universities, is a ready-to-deploy solution from technology company Instructure that was instantly available to UC Merced to move from their datacenter-based LMS to a fully secure cloud-based system. UC Merced’s robust 10Gb network connection allows full access to the Internet2 Network, which connects directly to the NET+ Canvas solution, providing many user-friendly features that faculty and students are accustomed to in an LMS, such as assignments, quizzes, discussion groups, grading and course content tools. On the back-end, it also comes with easy-to-use migration tools, web services integrations, mobile access support, analytics and ePortfolio, along with additional features exclusively for the Internet2 community, such as SAML federated identity and integration with other NET+ services.

The university also implemented NET+ CrashPlan, a cross-platform, multi-destination continuous backup solution from Code42. NET+ CrashPlan enables a single admin to support the backup needs of thousands of users, while allowing faculty and staff to quickly and easily restore their own desktop or laptop data. Because it’s cross-platform—including Windows, Mac and Linux—every staff and faculty desktop or laptop computer is protected when an individual account is activated. Once initiated, it runs silently and automatically in the background with no user effort or intervention required.

UC Merced was able to swiftly deploy these solutions because of its Internet2 membership.

“A clear advantage to using Internet2 NET+ is how quickly we were able to sign up for the offerings and get them implemented on campus,” said Ann Kovalchick, Associate Vice Chancellor of Information Technology and Chief Information Officer at UC Merced. “We were able to secure the two services and begin the implementation and integration of those services within just a few days instead of what might normally have taken a few months.”

SOLUTION SUMMARY

After experiencing a major hardware failure on campus that affected key on-campus servers and IT systems, including its Learning Management System, the University of California, Merced capitalized on the unfortunate event by upgrading its infrastructure and improving its backup capabilities. UC Merced was able to leverage the Internet2 NET+ program to rapidly deploy two peer-validated and enterprise-ready LMS and data backup cloud solutions: NET+ Canvas and NET+ CrashPlan. By working with Internet2 and NET+ service providers, these two key solutions were quickly implemented to supplement or replace the affected on-campus legacy systems, giving UC Merced a more resilient infrastructure that meets both current and future needs.

COLLABORATORS

• UC Merced
  www.ucmerced.edu

PRODUCTS & SERVICES:

• Internet2 NET+ Canvas
  www.internet2.edu/products-services/cloud-services-applications/canvas/

• Internet2 NET+ CrashPlan
  www.internet2.edu/products-services/cloud-services-applications/crashplan-proe/

COMMUNITY RESOURCES

• Internet2 NET+
  www.internet2.edu/vision-initiatives/initiatives/internet2-netplus/

• Internet2 NET+ CloudProud™
  www.internet2.edu/products-services/cloud-services-applications/cloudproud/
THE PROBLEM

When a critical piece of the UC Merced technical environment suffered a catastrophic hardware failure, UC Merced’s on-campus LMS “came to a dead stop, and that was unacceptable,” according to Kovalchick. Because the LMS was housed in a datacenter on campus, a hardware failure could impact both the primary and backup systems, creating risks larger than those of cloud-based solutions with built-in redundancies.

Canvas had already been selected by a faculty-led review in the Academic Senate so Kovalchick knew it was a desired service. UC Merced had been considering these services, but with the outage they needed them quickly in order to ensure both continuity for faculty and students using the LMS and the immediate security and measure of confidence that comes with a backup service like CrashPlan. Enter Internet2 NET+.

THE SOLUTION

The Internet2 NET+ initiative is a research and education (R&E) community-driven program that provides a broad range of secure, agile and reliable cloud services to higher education. The process of becoming a NET+ validated service requires providers to undergo a rigorous peer-driven evaluation process, driven by Internet2’s R&E institutions, who ultimately invest in offerings that are tailored for their own community—resulting in services that maximize deployment efficiencies and minimize business and legal challenges, financial costs and technology risks.

These features of the Internet2 NET+ program were what Kovalchick had in mind when she contacted Internet2 to help. “I knew that Internet2 understood the higher education environment, had validated these services, and had a process for expediting the procurement process with service providers,” said Kovalchick. “Integrating Canvas and CrashPlan through Internet2 NET+ eased the burden in an already stressful and time-sensitive situation.”

THE RESULTS

“In short, our ability to deliver these mission critical services is now more reliable,” said Kovalchick. “We can direct our efforts to support and enrich the services and user experience, not the care and feeding of the infrastructure. And the additional features of Canvas and CrashPlan are a bonus.”

Now that Canvas is deployed, faculty and students have several more elements that their previous LMS didn’t offer. And, it’s hosted in the cloud, not on-premises, meaning the LMS comes with continuous availability that provides a more reliable user experience. With CrashPlan, UC Merced now provides a worry-free backup solution that can be managed directly at the desktop level by individual end-users and is uniquely suited to meet the data protection and recovery needs of higher education institutions.

“UC Merced’s story emphasizes an important value of being part of the Internet2 community,” said Shelton Waggener, senior vice president at Internet2. “When the IT team contacted Internet2 with an urgent need, we were able to move quickly and efficiently due to the tremendous work previously completed by peer community institutions. Working together, the 270 higher education members of Internet2 are creating a large and growing portfolio of peer-vetted cloud solutions. When member institutions have serious issues that need immediate results, they can leverage Internet2’s large catalogue of top-tier, customized NET+ cloud solutions, without the hassle and hang-ups of the commercial onboarding process. That’s what UC Merced needed in this case and it enabled them to solve the issue and mitigate future risks in one quick step.”

ABOUT UC MERCED

• UC Merced Information Technology http://it.ucmerced.edu
• UCMerced.edu www.ucmerced.edu

This case study does not constitute an endorsement by UC Merced of Canvas or CrashPlan.