



ST. JOHN'S UNIVERSITY IMPLEMENTS VMWARE vCLOUD AIR DISASTER RECOVERY SOLUTION IN JUST 10 WEEKS



INDUSTRY
EDUCATION

LOCATION
NEW YORK, NY

KEY CHALLENGES

- Quickly deploy a new disaster recovery solution to support critical ERP system.
- Integrate Oracle database on Solaris operating system in the DR solution.
- Accommodate 12 supporting services into the ERP architecture.

SOLUTION

Using the VMware vCloud Air suite of services, RackWare cloud automation technology, and VMware Professional Services consultants, St. John's University deployed and tested a new DR system for its critical Banner ERP system in just ten weeks.

BUSINESS BENEFITS

- Fast recovery from a disaster and no loss of access to ERP services
- No need for expensive secondary DR site
- Extremely fast 10-week deployment that met prioritized university goal

St. John's University is renowned for its outstanding academics and internships, focus on student life, and inspiring study abroad opportunities. As part of its commitment to offering unmatched learning experiences supported by best-in-class technologies, the university's IT team set out to implement a new disaster recovery (DR) solution for its critical enterprise resource planning (ERP) system, which included integrating an Oracle database and Solaris operating system into the solution.

The IT experts at St. John's worked with VMware consultants to rollout the VMware vCloud® Air™ suite of services and RackWare cloud automation technology. St. John's deployed and tested the state-of-the-art DR solution in just ten weeks.

Founded in 1870, St. John's University is a Catholic and Vincentian university with students from nearly 50 states and close to 120 foreign countries. The university offers more than 100 associate, bachelor's, master's, and doctoral degrees in the arts, business, education, law, pharmacy, the sciences, and specialized professional programs. St. John's has three residential New York City campuses; an academic center in Oakdale, New York; and international campuses in Rome and Paris.

The Challenge

St. John's University uses Banner by Ellucian, a leading higher education ERP application, for student services, financial aid, accounts receivable, finance, human resources, alumni services, and other essential university activities. Uninterrupted operation of these services is essential to keeping everyday university activities running smoothly. And while the university had an existing DR recovery plan in place, the IT team recognized they could further aid the university's goals and improve operations by taking advantage of the latest DR advances.

"Given the critical nature of services we support for students, alumni, faculty, and administrators, we wanted our DR strategy to fully reflect the university's focus on innovation," says Joseph Tufano, vice president of Information technology and chief information officer at St. John's University. "We also wanted to implement any new systems quickly, so we could focus on other strategic projects."

“We completed the project in ten weeks. Normally, a project like this would take four to six months.”

JOSEPH TUFANO
VICE PRESIDENT OF
INFORMATION TECHNOLOGY AND
CHIEF INFORMATION OFFICER
ST. JOHN'S UNIVERSITY

VMWARE FOOTPRINT

- VMware vCloud Air Disaster Recovery
- VMware vCloud Air Virtual Private Cloud
- VMware vSphere
- VMware vSphere Replication
- VMware Professional Services

APPLICATIONS VIRTUALIZED

- Banner® by Ellucian
- Banner Document Management
- Banner Workflow
- Ellucian Luminis Platform
- Ellucian CRM Recruit

PLATFORM

- VMware vSphere
- Oracle database
- Solaris operating system

While the front-end services for the Banner ERP system were hosted on a VMware vSphere® virtualization platform, the back-end Oracle database resided in a Solaris environment, presenting a challenge to virtualizing and automating disaster recovery. In addition, St. John's needed to integrate 12 supporting application services into the overall Banner ERP architecture. This included a range of internal services along with external connections to services, such as TouchNet® for credit card processing. These services were hosted in a mix of virtual and physical environments on about 30 servers.

The Solution

Tufano started his search for a solution by evaluating one provider whose self-service offering proved insufficient. “They didn't offer disaster recovery as a product. It was really self-service, and I was getting concerned about its feasibility,” says Tufano. Anne Rocco Pacione, executive director, enterprise infrastructure at St. John's University then suggested taking a look at other VMware solutions since the university had prior success with VMware.

As part of the pre-sales process, Tufano and his team worked with VMware to devise the best approach to integrating the Solaris environment into the solution. “We really wanted a partner with broad infrastructure knowledge,” explains Tufano. “We immediately saw VMware's technical commitment. It became obvious they could help us pull all the pieces together in a way that made the most sense.”

By working together, the St. John's and VMware Professional Services teams deployed and tested VMware vCloud Air Disaster Recovery in just ten weeks. Built on the vCloud Air suite of services, along with RackWare cloud automation, the solution provides native cloud-based DR capabilities for vSphere environments. It uses VMware vSphere Replication™ asynchronous replication capabilities at the hypervisor layer. The team scheduled replication of St. John's virtual infrastructure to the vCloud Air recovery-as-a-service (RaaS) environment every four hours.

To provide DR for the back-end Oracle database that resided in the Solaris environment, vCloud Air Disaster Recovery was connected to a set of physical servers in the VMware vCloud Air Virtual Private Cloud multitenant compute service. The service leverages RackWare technology to replicate the physical Windows servers in St. John's on-premises environment to the vCloud Air platform. A combination of Oracle data pump technology and rsync scripts on intermediate servers help replicate the Oracle database residing on the Solaris platform to a Linux environment within vCloud Air Virtual Private Cloud. Load balancing and domain services are built directly within vCloud Air Virtual Private Cloud.

Business Benefits

With the new systems in place, the St. John's IT team has been able to achieve its vision for a DR solution offering state-of-the-art data protection and continuity preparedness across the board.

Rapid Recovery

The solution enables rapid recovery for St. John's ERP system in the case of a disaster. This prevents the loss of business-critical data and minimizes potential downtime, so students, faculty, and staff quickly regain access to important services if systems go down. The vCloud Air service-level agreement (SLA) provides a return to operations of four hours for the university's virtualized environment.

Cost Savings

By leveraging the vCloud Air environment, St. John's can help ensure availability of essential systems and services, while avoiding the CapEx, complexity, and additional staff required to build and maintain a secondary DR data center.

Fast Deployment

The combination of the IT team's skill and clarity of purpose, along with a commitment to focused execution from VMware, were key to the rapid deployment. "Our onsite VMware consultant was exceptional and did whatever was needed. Together, we kept the project moving ahead on our tight timeline. The consultant was a fantastic resource and always knew where to go within VMware if extra help was required," says Tufano.

The accelerated pace enabled the IT team to achieve the priority of putting a cutting-edge DR system in place to ensure resiliency and continuity of university operations. "We completed the project in ten weeks. Normally, a project like this would take four to six months," says Tufano.

Ease of Use and Integration with Existing Toolsets

"The vCloud Air solution shares the vSphere approach," explains Tufano. The environment is familiar to the IT team, making the system easy to use, and it is compatible with existing toolsets based on the vSphere environment. This helps the university continue to extend the capabilities of its ERP system by easily adding internal and external services.

Adds Maura Woods, associate vice president, enterprise applications at the university, "Our functional users were able to test from machines we had connected to our DR environment and it was transparent to them as everything worked the same as on-premise. VMware made it easy for us to schedule subsequent tests as we continued to refine and document our processes and procedures."

Looking Ahead

St. John's has virtualized about 45 percent of its infrastructure, but the IT team is planning to increase the virtualization footprint to around 70 percent to 80 percent in the near future. St. John's is also evaluating the possibility of moving more of its on-premises production workloads to the vCloud Air public cloud environment, or even making a complete move to the cloud in the future.

