

# Disaster recovery enables digital learning

Drake University simplifies and strengthens data and application protection with an automated solution that does not require specialized skills



Higher education

United States

## Business needs

Drake University sought to implement a disaster recovery strategy to safeguard the information and applications involved in digital learning. Given the small size and limited disaster-recovery skills of the IT team, the solution needed to be effective and easily manageable without much manual intervention.

## Solutions at a glance

- [Dell EMC Data Protection Suite](#)

## Business results

- Recovers data and applications rapidly and reliably from secondary site
- Streamlines infrastructure portfolio management through vendor consolidation
- Simplifies and automates disaster recovery, using industry-best practices
- Supports enhanced digital learning through cloud-based disaster recovery

# 25sec

Meets the university's recovery point objective of 25 seconds



# <5min

Recovers a virtual machine in less than five minutes



In today's universities, learning takes place as much online as it does on campus. Higher education has become a digital, data-driven experience that expands the reach of inquisitive minds, streamlines administrative tasks and enables exciting new ways to collaborate.

Drake University, recognized as one of the finest institutions of higher learning in the Midwest, can attest to the importance of information technology to the student and faculty experience. This midsize, private university, based in Des Moines, Iowa, enrolls more than 3,300 undergraduates and 1,700 graduate students from 40 states and more than 40 countries. Through six colleges and schools, the university provides students with a choice of more than 70 majors, minors and concentrations, as well as 20 graduate degrees. Drake University offers the resources and benefits of larger institutions by integrating digital services into selected elements of the learning environment.

With online learning systems key to modern education, protecting these workloads is paramount. If a server should go down, students' learning activities would largely come to a halt. As a result, Drake sought to improve its disaster recovery plan. Since the university's IT team was small and had limited disaster-recovery expertise, Drake wanted an automated solution unlike its previous replication solution, which required substantial manual intervention. Because Drake's IT environment is 95 percent virtualized with VMware, the solution also had to work seamlessly with virtual machines.

After evaluating solutions from Dell EMC and Zerto, Drake chose the Dell EMC Data Protection Suite for its ease of deployment, manageability and automation capabilities.

Chris Mielke, Drake's director of infrastructure, explains, "One of the main reasons we went with Dell EMC Data Protection software over Zerto was how easy it was to integrate into our existing infrastructure. With the Data Protection software, we didn't need a virtual appliance on every single virtual-machine host like Zerto required. Because of its robust capabilities and a simpler architecture, Dell EMC just made a lot more sense." With the Dell EMC Data Protection Suite, Drake has a disaster recovery solution that satisfies its data management policies and that can accommodate

virtualized workloads, with the control to recover an individual virtual machine in less than five minutes. The university also gained a solution that its engineers can use without any specialized expertise, and a path for extending capabilities into the cloud for greater flexibility and resilience as well as ongoing digital transformation.

## Replication to a disaster recovery site

Drake deployed Dell EMC Data Protection software to replicate virtual machines from its primary data center in Des Moines, Iowa, to its disaster recovery site in Shakopee, Minnesota, about 300 miles away. The virtual machines run the full range of applications used by students, faculty and staff, including Microsoft SQL Server, Adobe Connect, and authentication services that support access to the Blackboard Learn management system.

The university also uses Dell EMC Data Protection software to back up data locally from physical and virtual servers. These backups are also replicated to the remote site.

*"Dell EMC Data Protection software is extremely flexible and robust when it comes to meeting our disaster recovery needs."*

Chris Mielke  
Director of Infrastructure, Drake University

Within

2 weeks

Data Protection software was implemented



*“One of the big advantages of Dell EMC Data Protection software is that it takes care of the orchestration for us.”*

Chris Mielke

Director of Infrastructure, Drake University

## Orchestration simplifies disaster recovery

By choosing Data Protection software, Drake gained the added value of Dell EMC’s disaster recovery experts who architected the solution according to industry best practices, with orchestration and controls tuned precisely to its disaster recovery requirements and policies. This enabled Drake’s IT staff to ramp up quickly without needing specialized expertise.

“One of the big advantages of Dell EMC Data Protection software is that it takes care of the orchestration for us,” notes Mielke. “If we had to write the orchestration ourselves, it would be a long, tedious process that would have required significant investment in consulting services. Instead, we implemented Data Protection software in a couple of weeks, and our engineers were able to fail over the virtual machines right away even though they had never seen the software before. The whole deployment was a great experience.”

## Full control over data restores

With Dell EMC Data Protection software, Drake now has a solution for continuous protection of workloads and data critical to the education process. Virtual machines are replicated automatically with precise control over which data and files are restored and when. The university also can verify that the solution adheres to its disaster recovery plan.

For example, Drake set a recovery time objective (RTO) for critical systems that go down to resume operation in four hours, along with a recovery point objective (RPO) of 25 seconds. Its previous replication solution provided no way to test whether it could meet those objectives.

“With Dell EMC Data Protection software, we’ve conducted multiple failover tests,” says Mielke. “Not only can we meet our RTO and RPO, we found it takes less than five minutes to recover a virtual machine. It’s been fabulous.”

# Aligns with Drake's roadmap for digital education

A long-time customer of Dell servers and Dell EMC storage, Drake values having a single company as its technology partner. Mielke remarks, "With both Dell and EMC under one roof, it's easier for us to manage our entire infrastructure portfolio rather than working with multiple vendors using a piecemeal approach."

This unified relationship not only meets Drake's current disaster recovery needs, but also provides a path to the future. Says Mielke, "Dell EMC Data Protection software is extremely flexible and robust when it comes to meeting our disaster recovery needs, while being extremely easy to use. Now, as we look ahead toward continued digital transformation, we already see opportunities to use Dell EMC Data Protection software to extend our resilience and disaster recovery capabilities to the cloud. It's one of the best investments we've ever made."

*"Because of its robust capabilities and a simpler architecture, Dell EMC just made a lot more sense."*

Chris Mielke

Director of Infrastructure, Drake University



[Learn more](#) about Dell EMC Solutions



[Contact](#) a Dell EMC Expert



[Connect on social](#)