DePaul University

CASE STUDY

DEPAUL UNIVERSITY TEAMED UP WITH SUMMIT TO BUILD A FLEXIBLE, FUTURE-PROOF IT BACKBONE — EMPOWERING GLOBAL LEARNING, CRUSHING SHADOW TECH CHAOS, AND KEEPING STUDENTS CONNECTED WHEREVER EDUCATION HAPPENS.

A CASE STUDY BY

SUMMIT

COMPANY:
DePaul University

COMPANY DESCRIPTION:
DePaul is the largest Catholic university in the United States and the largest private, nonprofit university in the Midwest.

INDUSTRY:
Higher Education

SUMMIT PRODUCTS:
Colocation, Disaster Recovery, Private Cloud

WHAT DOES UNIVERSITY COLOCATION LOOK LIKE WHEN EDUCATION HAPPENS EVERYWHERE?

This is the question DePaul University began facing back in 2011, and it's only become more pressing as students use technology, run discipline-specific applications, produce data, and consume bandwidth at an exponentially growing rate. The transition in education is difficult for anyone to keep up with. It's harder still for a university that works on long-term planning cycles.

"We're a reflection of the world around us," says Josh Luttig, Director of Infrastructure at DePaul. "As every field adopts more technology, we need to be teaching to that."

DePaul's IT team needed total flexibility to stay responsive to ad hoc needs and technology trends. This just wasn't possible without purpose-built data center space.

"The facilities we had to work with were mediocre as far as modern data centers go," says Josh. "There were power, cooling, access, and structural challenges, not to mention that updating our existing space would've required a massive capital investment when future computing needs were uncertain."

DESIGNING A FLEXIBLE IT INFRASTRUCTURE MODEL FOR A CHANGING FUTURE

As those tensions ratcheted up, the IT team began scoping out a solution: Colocation for the university's IT infrastructure.

DePaul partnered with Summit in 2012. Together, we created a flexible system that allows DePaul to spin up environments and increase capacity on demand. Now, when a department needs resources, they want to come to IT first, reducing the risk of shadow technologies and putting IT back in the driver's seat.

> *What we could build was not equivalent to what we could lease from [Summit]. The [Summit] option was qualitatively better and also happened to be less expensive than what we would have built ourselves.*
>
> — Director of Infrastructure, DePaul University

CREATING A DATA CENTER COLOCATION PROJECT PLAN FOR DEPAUL'S CRITICAL SYSTEMS

If something happened in Chicago that knocked the DePaul campus offline, there was no backup. Most of the university's applications and data lived on campus, giving them no way to recover in the event of a disaster.

Everyone agreed that the university going offline wasn't an option.

DePaul came to Summit looking for a backup environment — a way to extend support for critical systems outside of the campus footprint. It was Summit's SLAs and performance that made the team ready to move mission-critical systems there as quickly as possible.

Summit is known for its strategic, consultative approach — focusing as much on "why" as "how." With DePaul, the team took that even further, helping the university consider data center Colocation's benefits and outlining what a migration could look like.

With buy-in from IT leadership and the university itself, DePaul carefully moved each application over to the new environment. Some applications were simply migrated over, while others were updated or refactored to take advantage of the new hot-hot site capabilities. They also set up a dark fiber infrastructure connecting their campuses to data center sites for maximum control over bandwidth and traffic segmentation.

KEEPING UP WITH COLOCATION TRENDS ON FIXED BUDGETS

A university's infrastructure needs to support more than just the students. It provides for faculty, staff, alumni, partners, and plenty of other stakeholders, all of whom have needs that constantly evolve.

Yet, like most universities, DePaul does not have unlimited resources. And as a city-centric university, they don't have access to unlimited physical space, either.

They needed a flexible environment to support the evolving goals of the university, as well as the large and small ad-hoc projects, requests, and needs along the way.

With applications moved to Summit's secure data center and their on-campus facility now serving as a secondary, backup facility, the DePaul team had room to stretch in multiple directions:

- Time to think strategically about how the infrastructure should grow, instead of how to keep servers running
- Funds freed up now that every expansion didn't require major CapEx outlays
- Ability to prioritize initiatives based on merit and importance to the university

When requests come in, DePaul's IT team now has a whole range of options available for how to deploy across the data centers — hot-hot, hot-standby, production in Colo with test on campus, mirror data, and more. They can apply what makes sense for each application and use case.

Centralized IT had always been a goal, but finding a trusted partner for Colocation made it possible. DePaul's IT team finally had the tools to do the job it wanted all along — removing barriers to create academic freedom.

SHOWING THE ADVANTAGES OF COLOCATION IN A WORLD OF SHADOW TECH

At a university, learning comes first. If students or faculty need a tool or an application to make learning happen, they're going to get it. Today, they may even get it without ever coming to IT, thanks to the wide variety of SaaS solutions that require nothing more than a credit card.

This is great in some ways — people can move fast to get what they need. Still, DePaul runs on data. It was one of the first universities to phase out test scores as an admissions criteria, because the data said it wasn't a predictor of student success.

SaaS deployments and shadow technologies have spread university data to dozens of different applications — and to dozens of different accounts for the same application. To centralize that data, the IT team had to give departments new reasons not to whip out their credit cards and go it alone.

When DePaul realized that nearly every department had their own Qualtrics account, for example, they centralized them, consolidating licensing fees and setting up an enterprise-wide licensing agreement.

By adapting from a controller of resources to a conduit, DePaul has been able to keep delivering utility and stay on top of the university's technology.

PLANNING FOR THE FUTURE OF UNIVERSITY COLOCATION

Flexibility was first on DePaul's list of Colocation requirements, and this flexibility had to extend into an uncertain future.

As technology has evolved, the university has been able to stay at the forefront of private education by staying one step ahead of these new requirements. Summit has provided the platform to make it possible, even serving as DePaul's ISP. Running on the Summit network gives DePaul the flexibility to add bandwidth and redundancy, and to directly connect data center resources to cloud providers. As connectivity has become more critical, both teams have kept their eyes on the opportunities public cloud might provide.

DePaul's IT team has effectively built a Private Cloud running in Summit's data center. They've done this with a focus on two goals: keeping up with dramatically changing demands on all sides and providing an environment that lets learning happen anywhere.

DePaul's job is to stay focused on those two outcomes — assessing what's next and staying one step ahead. Summit's job is to keep the university flexible and scalable — staying responsive to its colocation needs and giving it the option to switch spend to cloud within the same contract. Together, we keep DePaul's students streaming, downloading, working, and learning at an ever-faster pace.