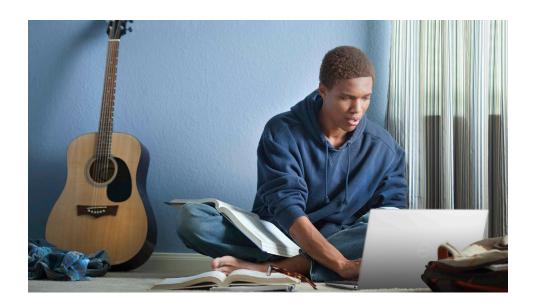**DELL**Technologies

vmware®

CLOUD SOLUTIONS

Delivering a consistent cloud experience for higher education in a multi-cloud world

Even before the events of 2020 unfolded, cloud was the platform of choice for innovation, enabling universities and colleges to deliver modern campus experiences, all while being fiscally prudent with institutional funding.

Today, remote learning has made cloud a necessity to deliver the types of solutions and services that facilitate seamless virtual interactivity between instructors and students.

With such rapid progress, however, comes complexity. All of these new as-a-service offerings, IoT applications, and cloud-native workloads are leading to diverse and often siloed multi-cloud ecosystems. IT assets are no longer confined to a single data center but rather span multiple environments, including on-premises private cloud, one or more public clouds, and compute at the edge. These complexities lead to new challenges for universities and colleges, including policy enforcement, security, cost control, and effective management of service levels.

Addressing these challenges requires a multi-cloud operating strategy that delivers a consistent cloud experience across environments, from edge to core to cloud. Dell Technologies and VMware can help simplify operations and improve cloud economics through a consistent management experience. With Dell Technologies Cloud, you can enjoy the benefits of single-vendor support and the versatility and control of a fully integrated cloud platform.

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Take control of your cloud

Transition to a consistent cloud experience

Managing legacy IT environments while introducing multiple clouds using an ad hoc approach can put a drain on resources and slow institutional outcomes. A recent IDC study recommends transitioning to a seamless, consistent cloud experience by implementing a phased, multi-year approach.[1] This approach needs to address the entire IT ecosystem—including the technologies, processes, and the types of skills required. According to the study, a consistent cloud experience is executed by:

- Modernizing your legacy IT infrastructure

- Integrating consistent and familiar tools

- Extending secure and reliable operations both in-house and externally

- Balancing CapEx and OpEx investments

Shift from CapEx to OpEx with Dell Technologies APEX Flex on Demand

Get more choice, flexibility, and predictability in how you consume IT infrastructure. Despite constrained institutional IT budgets, you can leverage innovative new technologies to build safer and smarter campuses, rely on real-time intelligence for facilities management and campus public-safety officers, achieve greater informed decision making, and do so much more. With APEX Flex on Demand, gain access to the industry's broadest end-to-end portfolio of consumption-based and as-a-service solutions, including a range of flexible payment solutions, value-added services, and integrated full-stack solutions.

Why Dell Technologies APEX Cloud Services?

CONSISTENT INFRASTRUCTURE

Achieve greater operational dexterity to accelerate innovation by simplifying workload migrations and avoiding application rework with a consistent infrastructure.

CONSISTENT OPERATIONS

Eliminate silos and cut operations costs by up to 52% with tools that give you greater efficiency and consistent control of all your clouds.[1]
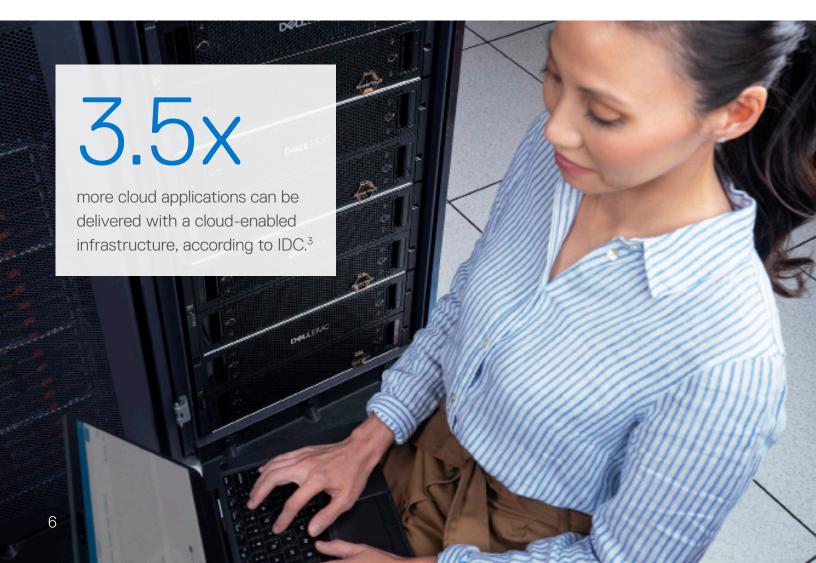
CONSISTENT SERVICES

Plan and execute your cloud strategy with our expert help and flexible, consumption-based pricing for greater stability and smoother transitions.

Achieve greater operational dexterity to accelerate innovation

The roadmap to cloud consistency begins with modernizing IT. With Dell Technologies infrastructure solutions, you can establish a nondisruptive IT environment spanning on-premises and public cloud environments to seamlessly deliver the optimal scalability, throughput, capacity, and computational performance best for each use case, workload, and application. Modernizing IT with Dell Technologies and VMware helps accelerate the adoption of cloud applications and new ways of learning, ensuring that your students get the most from their on-campus and remote learning experiences.

3.5x

more cloud applications can be delivered with a cloud-enabled infrastructure, according to IDC.[3]

Modernize campus IT with a consistent infrastructure

Get the agility, speed, and scalability you need to improve student and faculty experiences across your cloud environments. By modernizing IT, you can achieve real business and academic outcomes.

Optimized application placement

Dell Technologies delivers on the promise of the software-defined data center with hybrid solutions that utilize a single control plane. This unified management platform makes it easy to avoid vendor lock-in and allows institutional needs to dictate the environment where your virtual machines, containers, workloads, or applications (legacy or cloud-native) will reside.

Cutting-edge capabilities

With Dell Technologies—the #1 in cloud infrastructure[2]—achieve the needed throughput, capacity, and compute power for your most demanding workloads, applications, and use cases. Efficient, intelligent systems like VxRail hyperconverged infrastructure (HCI) eliminate human error through the pervasive use of automation and enable you to scale seamlessly as your workloads demand.

Flexible cloud consumption

Dell Technologies eliminates barriers to new technology adoption and capability expansion with a broad range of financing, leasing, and flexible consumption solutions that reduce capital expenses, free up budgets, and provide benefits like elastic capacity, pay as you grow, and even metered usage.

Powerful data management

By leveraging Dell Technologies data center-class compute at the edge, you can harness the growing volume of data and capture greater value from your campus IoT applications running at the edge. This includes video analytics and sensors for public safety, parking management, campus athletics and special events, facilities management and operations, classroom control and security systems, and more.

Seamless transition to remote learning

The shift to remote learning has led to a dramatic uptick in the number of devices at the network edge, adding to management complexities and creating a larger attack surface. With our industry-leading infrastructure solutions and services, you can maintain a secure environment while improving efficiencies and automating workload balancing to enhance the remote learning experience. Together, VMware software and Dell Technologies infrastructure solutions enable students and faculty to access any educational app running on any device rendered from any cloud.

Simplify IT operations for greater efficiency and control

With cloud solutions from Dell Technologies, you can expect a consistent experience that unifies your private, edge, and public clouds with a common set of tools, providing uniform policies, greater operational efficiency, and simplified management.

⊘ **Tight integration with VMware**
Simplify management across your multi-cloud environment using the industry's #1 cloud software stack.[2] VMware Cloud Foundation on VxRail is the simplest path to hybrid cloud and automated infrastructure. Working with a complete portfolio of storage; data protection; and consulting, deployment, and financial services, VCF on VxRail runs, manages, automates, and secures your entire application portfolio across multiple clouds.

⊘ **Comprehensive capabilities**
Dell Technologies and VMware deliver comprehensive, customized solutions that help universities and colleges achieve their objectives faster with seamless points of integration across your digital landscape.

⊘ **Cost-efficient measures**
Realize cost savings by managing your data center and cloud operations from one place, using the familiar and agile VMware console. Avoid overpaying for cloud services by leveraging CloudHealth® by VMware—a multi-cloud management platform, enabling you to cost-compare workloads running on various clouds.

⊘ **Consistent IT policies**
Dell Technologies eliminates the need for shadow IT by providing an infrastructure that meets the needs of developers on demand and utilizes VMware Cloud Foundation to ensure consistent, secure policies are in place for the entirety of your IT implementations.
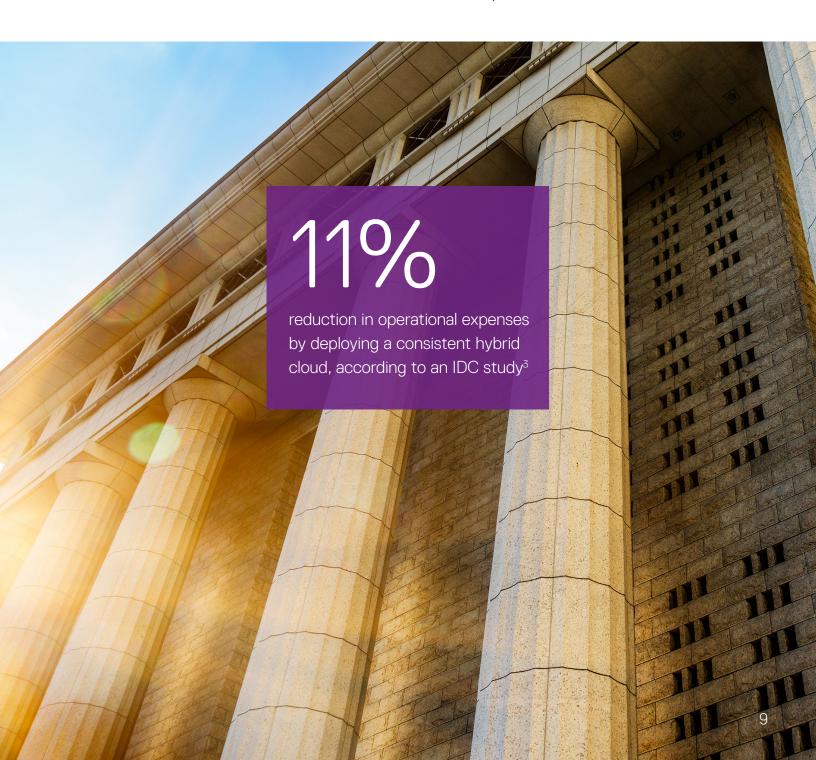
⊘ **Widely prevalent skills**
Continued IT success requires having ready access to the right personnel and the right skills. When selecting a technology platform, it's critical that you select one with a large pool of workers knowledgeable in both technology and higher education. Standardizing on Dell Technologies and VMware assures access to that broad community of IT professionals.

Eliminate silos and cut costs with consistent operations

With the power of VMware software and Dell Technologies infrastructure, Dell Technologies APEX Cloud Services are designed to make multi-cloud environments easier to operate giving you consistent control of all your clouds in order to eliminate silos and reduce operational costs.

11%

reduction in operational expenses by deploying a consistent hybrid cloud, according to an IDC study[3]

Reduce risk for greater stability and smoother transitions

Cloud solutions from Dell Technologies provide you with world-class infrastructure and management as well as a comprehensive portfolio of services that ease acquisition, deployment, and operation, enhancing SLAs, improving security, and protecting your data from loss and corruption.

86%

faster data recovery, 64% faster data backups, and 51% more productive data-protection teams realized by organizations that modernize IT for cloud consistency, according to IDC[3]

Boost hybrid cloud security and efficiency with consistent services

Leverage Dell Technologies and VMware security services to protect the personal information of your students, faculty, staff and alumni while also complying with regulations. Rely on our expert cloud consulting and technology services for the planning, development, delivery, governance, protection, and brokering of your multi-cloud strategy.

Resilient architectures

With universities and colleges being prime targets for cyberattacks coupled with the increase in attack surface due to remote learning, it's more critical than ever to leverage the latest in cybersecurity. Intrinsic security in Dell Technologies and VMware supply chains, development cycles, and software helps protect your assets and enables you more effectively to detect, respond to, and recover from cyberattacks. Dell Technologies delivers world-class infrastructure, management, and services that enhance cyber-resilience and privacy protection by streamlining security hardening, patching, and updates and that prepare your organization for rapid recovery.

Secure data

Dell Technologies and VMware data-protection solutions safeguard traditional, emerging, and cloud-native workloads across multi-cloud environments, reducing the risk of data loss or corruption wherever data resides.

Uneventful transitions and easy implementations

Dell Technologies Services offer comprehensive IT capabilities, including cloud consulting and technology services, along with pay-per-use cloud consumption models to streamline the adoption and administration of a hybrid cloud experience and to maximize the overall user experience and simplify IT transformation for your institution.

DELLTechnologies

vmware®

A consistent hybrid cloud for today's multi-cloud world

Find out more about how you can leverage a consistent hybrid cloud to simplify your multi-cloud world, thereby unleashing the power of your data and deploying modern institutional services and applications that benefit your academic community. Look to Dell Technologies and VMware for consistency across infrastructure, software, operations, and services to accelerate your campus digital transformation that supports the strategic academic, operational, and business goals of today and the years to come.

Learn More about our solutions for higher education.

Contact one of our higher education experts.

Connect with us.

1. IDC white paper, sponsored by Dell EMC and Intel: "The Power of the Hybrid Cloud Strategy - Addressing the Breadth of Enterprise Workload Requirements, May 2019." dellemc.com/en-us/solutions/cloud/dell-technologies-cloud.htm#cobrand=intel&overlay=/collaterals/unauth/analyst-reports/solutions/idc-the-power-of-hybrid-cloud-addressing-the-breadth-of-enterprise-workload-requirements.pdf

2. IDC Worldwide Quarterly Cloud IT Infrastructure Tracker, "Q4 2018, March 2019. Based on vendor revenue from sales of infrastructure products (server, storage, and Ethernet switches) for cloud IT."

3. IDC InfoBrief, sponsored by Dell EMC and Intel: "The IT Roadmap from Modernization to Innovation with Consistent Hybrid Cloud," September 2019. dellemc.com/en-us/collaterals/unauth/analyst-reports/solutions/idc_it_roadmap_from_modernization_to_innovation_with_consistent_hybrid_cloud.pdf