

VxRail

Modernize your IT operations
with Dell EMC VxRail



IS YOUR BUSINESS READY FOR WHAT'S NEXT?

In order to succeed in today's digital world, businesses like yours need to deploy and operate an IT environment that takes full advantage of the innovation taking place across the industry – without the complexity of piecing together and supporting a wide range of patchwork.

One of the ways to do this is to introduce hyperconverged infrastructure (HCI) into the environment. Continue reading to find out what Dell EMC VxRail HCI systems can do for your business.



WHAT IS HCI?

HCI continues to be a catalyst for data center modernization and transformed IT operations.

Hyperconverged Infrastructure (HCI) is on the rise and with good reason – not only does an HCI system improve efficiency, increase scalability, and lower costs, it also offers:

- Consistent operations using native integration
- Familiar management tools
- Integrated Lifecycle Management
- APIs for extensibility

How does it work?

HCI integrates compute, storage and networking into a single appliance coupled with data management and consolidation capabilities that can scale-out according to application needs, thereby eliminating the need for a traditional SAN or NAS.

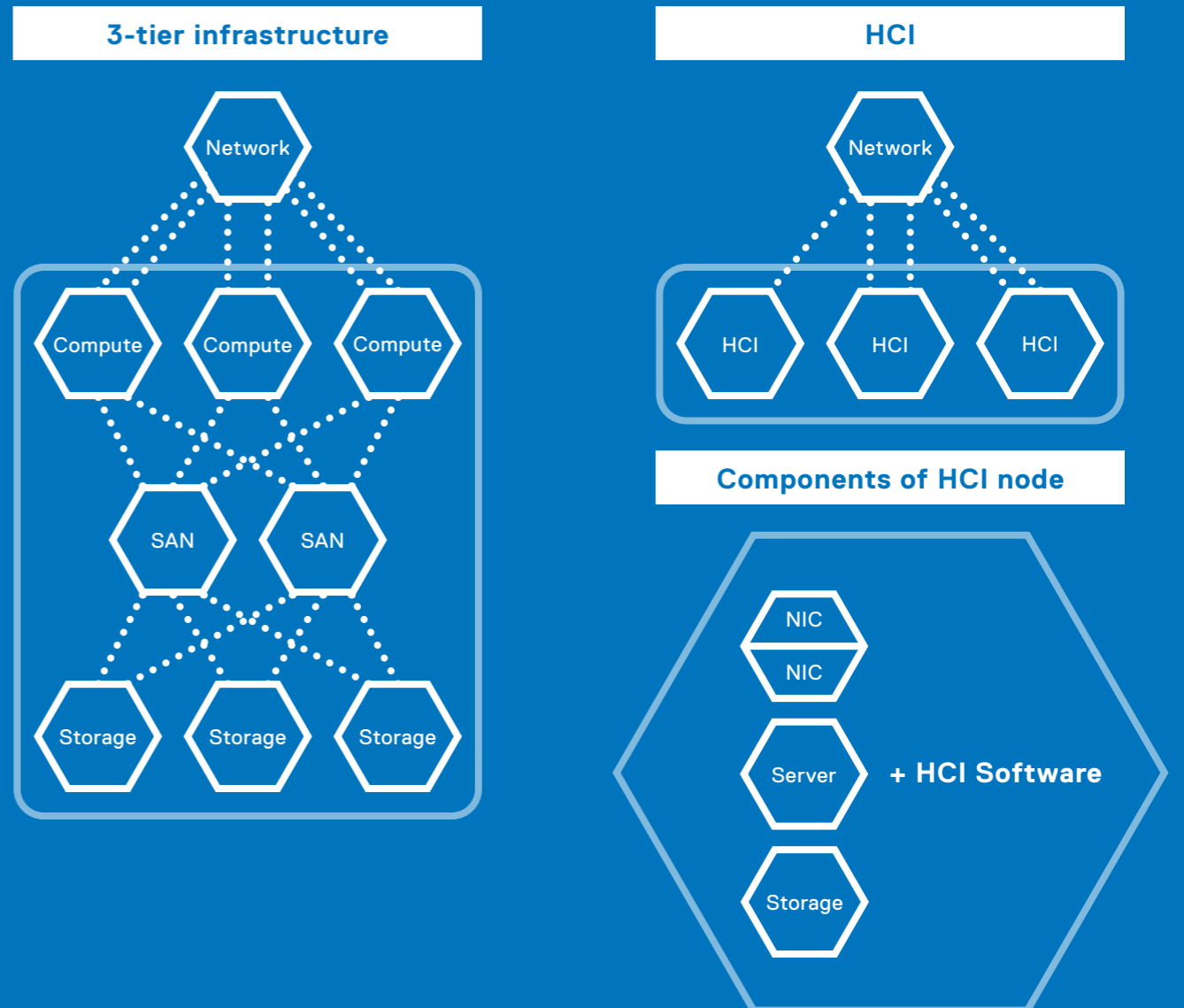


3- tier infrastructure vs. HCI

HCI offers ultimate simplicity, flexibility and agility, essentially collapsing the traditional three-tier server, network, and storage model so that the infrastructure itself is much easier to manage.

Pay-as-you-grow

HCI enables a pay-as-you-grow approach – start with what you need today and expand incrementally rather than purchasing large amounts of compute and storage up front. It also addresses the typical over-provisioning and over-purchasing that occurs when technology is intended to last for multiple year cycles.



WHAT IS VXRAIL?

The VxRail turnkey experience starts with full stack integration of software and hardware control and visibility from top to bottom for a consistent, deeply integrated VMware environment.

Dell EMC VxRail delivers more highly differentiated features and benefits based on proprietary VxRail HCI System Software. This unique combination automates deployment, provides full stack lifecycle management and facilitates critical upstream and downstream integration points that create a truly seamless experience.

Dell EMC VxRail is powered by PowerEdge server platforms and is the only jointly engineered HCI solution with VMware, optimized for VMware vSAN, and designed to enable deep integration across the VMware ecosystem. This leaves you with a powerful curated solution that enables you to:



Free up IT resources with automated full stack end-to-end lifecycle management.



Start small and grow, scaling capacity and performance easily and non-disruptively.



Choose from multiple compute, memory, storage, network and graphics options to cover a wide variety of applications and workloads.



Accelerate data center modernization, deploy a hybrid cloud, or create a developer ready Kubernetes platform.



WHY VXRAIL?

Accomplishments, endorsements and distinctions that demonstrate the Dell Technologies commitment to helping you innovate, grow and develop your business.

Dell Technologies HCI is #1 in the market.

Dell Technologies has been #1 in HCI Systems for 16 consecutive quarters*, proving that if you're looking to raise the bar for reliability, performance and operational simplicity in a cost-effective infrastructure solution, you need look no further than Dell EMC VxRail.



Dell Technologies was named Customers' Choice in the May 2021 Gartner Peer Insights "Voice of the Customer" in HCI for the second straight year.**

Gartner Peer Insights is a free peer review and ratings platform designed for enterprise IT decision makers. It recognizes the vendors that are the most highly rated by their customers through the Customers' Choice Distinction. Ratings are based on user interest and adoption as well as overall satisfaction.

Dell EMC VxRail is TechTarget's 2020 Storage Product of the Year.

In the hyper-converged and composable storage category, Dell EMC VxRail E Series with Intel Optane persistent memory was named the Gold Award winner by TechTarget's Storage Magazine and Search Storage.

51%

lower five-year cost of operations*

92%

less unplanned downtime*

452%

five-year ROI***

10 months

to payback*

* IDC WW Quarterly Converged Systems Tracker, Vendor Revenue (US\$M) Q1 2021, June 2021

** The Gartner Peer Insights Customers' Choice badge is a trademark and service mark of Gartner, Inc., and/or its affiliates, and is used herein with permission. All rights reserved. Gartner Peer Insights Customers' Choice constitute the subjective opinions of individual end-user reviews, ratings, and data applied against a documented methodology; they neither represent the views of, nor constitute an endorsement by, Gartner or its affiliates. Gartner, Gartner Peer Insights 'Voice of the Customer' Hyperconverged Infrastructure, Peer Contributors May 2021

*** Source: IDC Business Value Snapshot: The Business Value of Dell EMC VxRail and VMware Cloud Foundation on VxRail. IDC, 2020.

VxRail users are realizing exceptional productivity and business advantages as highlighted in a recently completed IDC study: “The Business Value of Dell EMC VxRail and VMware Cloud Foundation on Dell EMC VxRail.”

Participants in an IDC study from December 2020 described achieving strong value with Dell EMC VxRail by establishing a cost-effective, efficient, and agile IT infrastructure that enables automated operations capable of stretching from their data centers to cloud and edge environments. IDC calculated that the interviewed Dell Technologies customers will achieve benefits worth an annual average of \$2.64 million per organization (\$128,700 per 100 users)* by:



Optimizing IT infrastructure costs by running business-critical workloads on a consolidated, high-performing platform that also delivers improved application reliability, functionality, and performance.



Delivering more value for IT teams, freeing up their time by reducing day-to-day operational work through functionalities such as one-touch deployments, automated patching and updates.



Minimizing costs and risks associated with unplanned outages and data loss by bringing down the frequency and duration of unplanned downtime events and improving their ability to back up, protect, and recover data and virtual machines (VMs).



Generating value for the business by ensuring that IT can support business expansion efforts, support more effective and productive development activity, and provide a better user experience.



* IDC: The Business Value of Dell EMC VxRail and VMware Cloud Foundation on Dell EMC VxRail, December 2020.

WHO USES VXRAIL?

VxRail provides a simple, cost effective hyperconverged solution that solves a wide range of your challenges and supports almost any use case, including tier-one applications and mixed workloads. VxRail enables faster, better, and simpler delivery of virtual desktops, business-critical applications, and remote office infrastructure.

Explore common VxRail use cases and scenarios on the following pages.



MODERNIZE THE DATA CENTER

Gain greater control of your workloads by deploying modern hyperconverged infrastructure across on-premises data centers, edge, and co-locations.

More business agility

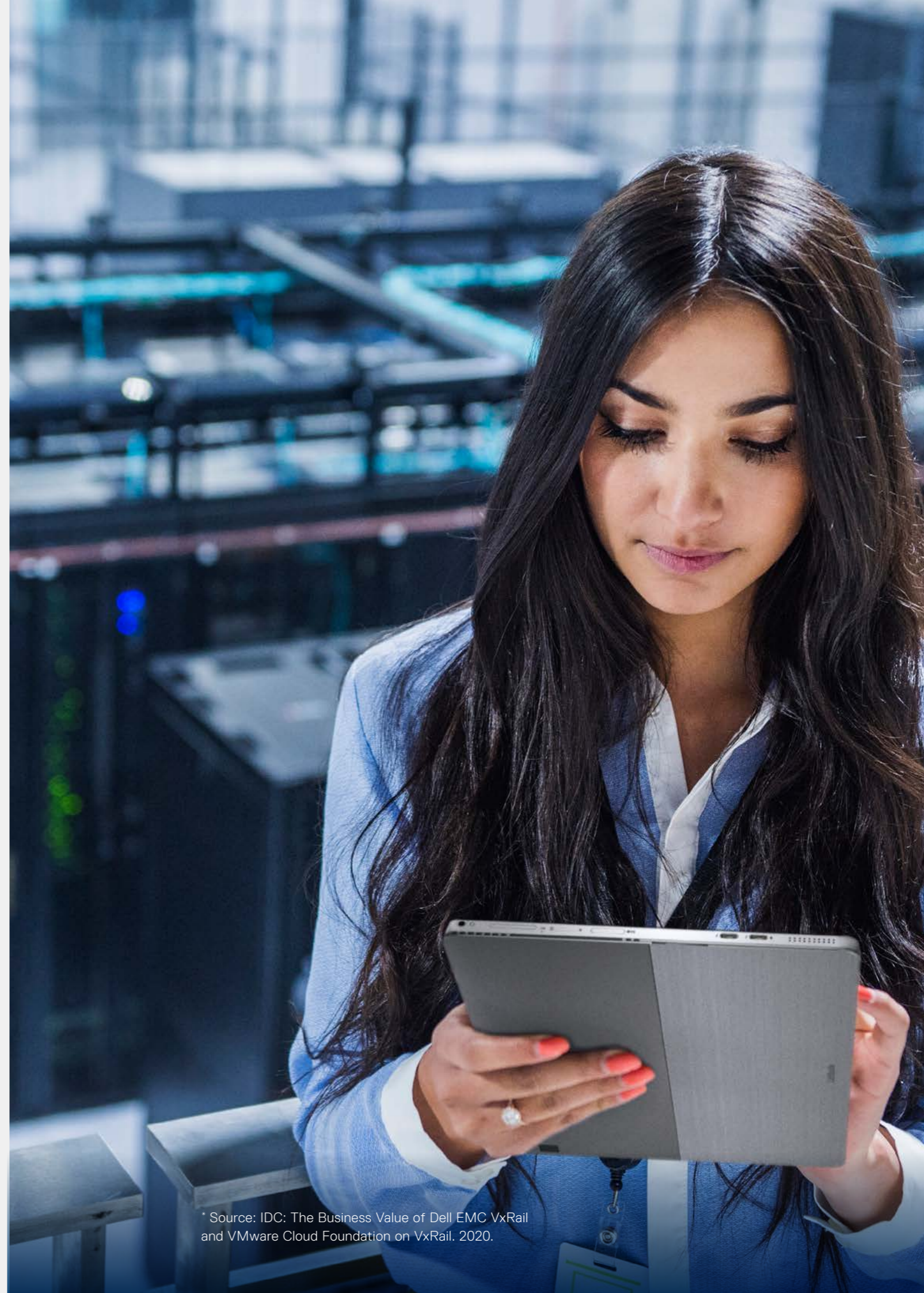
71% faster deployment of new storage.*

Faster business development

114% more new applications per year.*

Higher performance

32% faster execution of business transactions.*



* Source: IDC: The Business Value of Dell EMC VxRail and VMware Cloud Foundation on VxRail. 2020.

THE EASIEST AND FASTEST WAY TO DRIVE BUSINESS CRITICAL SOLUTIONS

VxRail offers high performing solutions to drive business critical applications, such as:

In-memory intensive database applications like SAP HANA.

Graphic intensive VDI and high-end 2D/3D visualization, including SOLIDWORKS® and Adobe Creative Cloud®.

Artificial intelligence and machine learning.

Storage-dense applications like video, big data and analytics.



FULL POWER FOR WORKLOADS AT THE EDGE

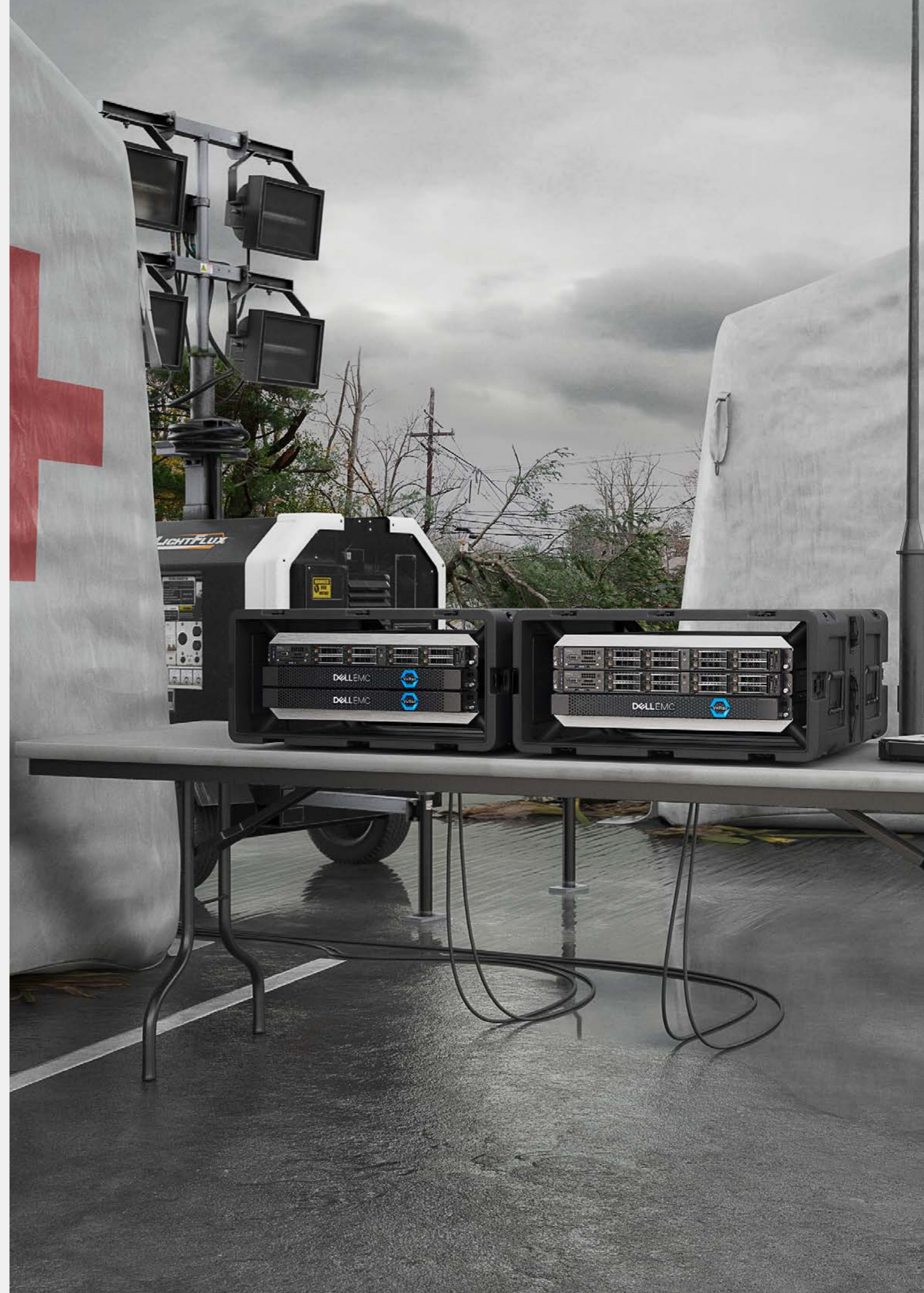
No matter where you are, you get the full power of automation and orchestration with VxRail HCI System Software and a 24x7 single point of support.

Dell EMC VxRail D Series offers simplicity, agility, and lifecycle management in a ruggedized, compact form factor.

The rugged form factor is built to withstand extreme conditions and harsh terrains, allowing for traditional and modern applications at the extreme edge.



Temperature resilient, shock resistant, and fully mobile for tactical edge deployments where size, weight, and transportability are key.



SIMPLIFY, STREAMLINE AND AUTOMATE HYBRID CLOUD OPERATIONS

VMware Cloud Foundation on VxRail delivers a simple and direct path to modern apps and the hybrid cloud. Deploy, host, and manage traditional and cloud-native workloads across core, edge, and cloud environments.



Enables flexible and simple modern cloud deployment with hybrid cloud.



Consistent infrastructure in one complete, automated platform.



Integrated with VMware Cloud Foundation SDDC Manager.



Automate Kubernetes infrastructure deployment with VMware Cloud Foundation and Tanzu.



47% reduced TCO compared to a similar public cloud solution.²

² IDC White Paper, sponsored by Dell EMC, Benefits of the Consistent Hybrid Cloud: A Total Cost of Ownership Analysis of the Dell Technologies Cloud, April 2019. Results based on U.S. costs of the Dell Technologies Cloud deploying common cloud environment workloads over a five-year period v. a leading native public cloud service provider. Actual results will vary. <https://www.dell.com/en-us/solutions/cloud/dell-technologies-cloud.htm#cobrand=intel&overlay=/collaterals/unauth/analyst-reports/products/dell-technologies-cloud/idc-cost-benefits-analysis-of-dell-technologies-cloud-solution.pdf>

SUMMARY OF IDEAL SCENARIOS FOR VXRAIL

- New data center builds
- Server and storage refreshes
- Deploying new workload or project
- Workload consolidation
- Growth pains of existing traditional infrastructure
- Budgetary challenges – need to reduce TCO
- Resource constraints or limited staff of skilled specialists
- Performance challenges with legacy and virtual applications
- Hybrid/multi-cloud deployments
- Need to influence innovation within organization

WHAT DO OTHER VXRAIL USERS SAY?



Read through our customer stories to see how VxRail faces and solves real-life challenges.

AALTO UNIVERSITY

VDI allows research to continue despite campus closure during COVID-19.

The biggest challenge that Aalto University in Helsinki, Finland faced during the COVID-19 lockdown in Europe was supporting the entire university's research needs remotely. They needed to provide specialist academic applications outside the traditional campus IT labs so students could access their software on any device at any time.

The IT team investigated virtual desktop infrastructure (VDI) solutions from several providers, before eventually choosing one based on Dell EMC VxRail and VMware Horizon.

With consistent support from a Dell EMC Resident Expert, who's on hand for two days a month to resolve any issues and look after both system maintenance and upgrades, the university is now virtualizing 400 applications for 1,000 concurrent users.

“We've proved that we can deliver research-critical applications to our students without dedicated IT labs and done so in a compliant and cost-effective way with our VxRail VDI.”

Hannes Päivänsalo, Head of IT Operations at Aalto University

NEW BELGIUM BREWING

VxRail fuels world-class craft beer brewing.

New Belgium Brewing was looking to achieve superior system performance and greater business contribution from IT. They first implemented a four-node cluster of VxRail at their co-located data center in Denver, replacing a hybrid virtualized and physical infrastructure that was unreliable and presented clustering problems.

This upgrade quickly generated remarkable cost, space and energy savings. It also greatly improved the performance of critical applications like Microsoft SQL Server and Microsoft Dynamics ERP and CRM systems. Close to 200 SQL Server databases and 100 virtualized servers now run on a single VxRail system.

Adam Little, senior systems administrator at New Belgium Brewing, says, “Compared to our former three-tier architecture, the performance of Dell EMC VxRail is incredible. Business stakeholders asked for their applications to be moved to the Denver data center because of the great VxRail performance.”

New Belgium Brewing continues to boost system performance and manageability by deploying VxRail at its other data center locations.

“We have an authentic relationship with Dell Technologies, they care about our values and what we stand for. They’re a true partner in addressing our business needs.”

Adam Little, Senior Systems Administrator at New Belgium Brewing

FIND YOUR VXRAIL

The Dell EMC VxRail family of systems offers a range of platforms. Explore them all here and find the one best suited to your needs.



E SERIES

Go Everywhere 1U/1Node with an all NVMe option and T4 GPUs for a wide range of use cases including artificial intelligence and machine learning. Also available in a single socket server powered by 2nd Generation AMD EPYC™ processor with up to 64 cores.



P SERIES

Performance optimized for high-end use cases with business-critical, performance-intensive applications and/or in-memory databases. Also available in a single socket powered by 2nd Generation AMD EPYC™ processor with up to 64 cores.



V SERIES

Virtualization-extended, graphics-ready platform for specialized use cases such as high-end 2D/3D visualization.



D SERIES

Durable, ruggedized, short depth, 1U/1Node. Designed to withstand extreme conditions such as intense heat and cold, shock, vibration, dust, humidity, and EMI. Available in MIL-STD certified configurations.



S SERIES

Storage-dense configurations targeted at specialized use cases that require higher storage capacity at the server level such as Big Data, analytics, or collaboration applications.



G SERIES

General-purpose and compute dense, multi-node form factor, ideal for widely deployed general purpose applications and VDI workloads (not requiring GPU cards).

Contact your Dell Technologies
Account Manager today to
start your IT modernization.





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