

Getting Your Storage and Data Protection Right with Smart Customization

Dream big and realize high-value business outcomes with customization of storage and data protection solutions at Dell Technologies OEM Solutions

Abstract

This white paper describes smart unique customization capabilities offered by Dell Technologies OEM Solutions to address OEM customers' specialized requirements and deliver improved business results.

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Executive summary

What if off-the-shelf standard storage and data protection products do not meet your go-to-market requirements? At Dell Technologies OEM Solutions, we offer smart customization capabilities across many of our storage and data protection solutions. While many of our customers find Dell Technologies standard, off-the-shelf solutions as the optimal choice, there are other customers with specialized requirements that have achieved significant business value by working with us for customized design solutions.

The push toward processing at the edge has increased demand for custom designs. Dell Technologies OEM Solutions powered by Intel provides customers and partners with dedicated resources to facilitate these customizations. They include customization options across hardware, software, documentation, and packaging. We view our OEM customers as true partners and as such provide them with access to dedicated OEM engineers and program managers, end-to-end hardware and software integration and testing, regulatory approvals, logistics, and certifications across global markets.

As examples of our work, we have re-branded Intel-Powered Dell Technologies hardware with creative colors, finishes, and unique logos to build brand equity for our partners. We also have integrated new communications cards, energy-efficient options, access to formerly hidden API commands, and ruggedized designs for harsh environments, among other changes (Figure 1).



Figure 1: It's more than branding—it's the art of the possible. Some unique customization examples.

We encourage our OEM partners to dream big and imagine the possibilities. You may be surprised how even small modifications can improve your business outcomes and competitive advantages in a meaningful way.

1 Introduction

For most of our OEM partners, the standard, off-the-shelf Dell Technologies storage and data protection products are often the best solutions. For OEM partners with specialized requirements, Intel-Powered Dell Technologies OEM Solutions offers exceptional resources to deliver these high-value modifications. Customization options include removing Dell branding from hardware, software, documentation, and packaging, re-branding Dell solutions with the partner's corporate identify, or other customized capabilities.

While the Dell Technologies brand and reputation for top-tier innovative technologies, a secure global supply chain, the latest Intel technology, and world-class engineering and customer support are highly valued, de-branding or re-branding may make better business sense in certain situations. For example, de-branding may address security concerns with a "no name" product that will meet go-to-market objectives. Alternatively, other OEM partners opt for re-branding to build their own brand equity and consistency across their product portfolio.

Continued adoption of IT solutions at the edge and in remote and branch offices also creates increased value for de-branded or re-branded solutions that are more visible to customers outside of the data center. With more processing occurring locally, whether it be on the factory floor, on an oil rig, or along a gas pipeline, customizing a solution that meets your exact requirements can often be what separates winners from losers. These smart customized solutions may offer specialized power supplies, smaller and easier to use devices, edge-based enclosures, and smart thermal sensors, among other capabilities.

Listening closely to the requirements of our OEM partners over the years often has led to Dell developing tailored solutions and even incorporating them into our standard product lines. We also have refined and streamlined the customization process, which includes capturing partner input and engineering validation. This process speeds time to market and increases efficiency for our OEM partners.

2 Dell Technologies OEM Solutions: Strategic partner with top-tier global resources

Whether an OEM partner is a global company or small-to-medium-size business, the resources of Dell Technologies can extend their capabilities in a meaningful and strategic way. Not only do OEM partners gain the backing of a 160,000-employee strong organization at Dell Technologies, but 1,000 engineers, program managers, analysts, sales and marketing professionals, and other staff focus exclusively on our OEM customers at Dell Technologies OEM Solutions.

Here is a sampling of the advantages of partnering with Dell Technologies OEM Solutions:

- Capitalize on Dell's brand equity with integration into your solution
- Go to market with your branding
- Access to top-tier storage and data protection technologies
- A long history of collaboration with Intel
- World-class global supply chain, distribution, service, and support infrastructure
- Dedicated OEM engineering and program management organization with 30-year plus history
- Re-branding and de-branding options across Dell Technologies storage and data protection hardware, software, documentation, and packaging
- Competitive advantage with fast time-to-market of custom innovation
- End-to-end hardware and software integration, testing, and validation
- Streamlined regulatory approvals and certifications across global markets
- Top-flight technical resources and industry expertise with access to OEM-specific engineers, hardware and software architects, product application engineers, and pre-sales engineers

3 Go-to-market customization aligned with business objectives

When our OEM customers request smart customizations, we evaluate each request to ensure they are technically and practically feasible and suggest modifications if needed as the level of customization capabilities varies by product. Because of our 30 years of experience customizing OEM solutions, we offer a streamlined approach for OEM partners to provide input and collaborate with us, as well as in our design and delivery of customized options.

For our storage and data protection portfolio, OEM Solutions offers OEM Standard, OEM-Ready, and OEM Custom options across many of our storage and data protection products (Figure 2):

	Dell EMC PowerVault	Dell EMC PowerScale	Dell EMC Unity XT	Dell EMC PowerStore	Dell EMC PowerMax	Dell EMC ECS	Dell EMC VxRail	Dell EMC PowerFlex	Dell EMC PowerProtect
OEM Standard	✓	✓	✓	✓	✓	✓	✓	✓	✓
OEM-Ready	✓	✓							
OEM Custom*	Hardware and Software			Hardware					

Figure 2: Unique go-to-market options

- OEM Standard:** These are Dell off-the-shelf hardware and software products shipped directly from our manufacturing facilities to support fast time-to-market objectives. As an OEM customer, Dell solicits your input in the standard design of our global tier-one products. In addition, certain OEM Standard offerings, such as Dell EMC Unity XT unified storage, also support de-branded and re-branded hardware and software. Unity XT software also offers different language options.
- OEM-Ready:** This option de-brands or removes Dell logos and identifiers from hardware, user interfaces, documentation, and packaging. With OEM-Ready products, global regulatory certificates are also updated, where possible, to enhance our customers’ go-to-market requirements. With OEM-Ready options, the solution’s operating systems can support de-branding or re-branding of the user interface. During the manufacturing process, we can execute on the removal of Dell branding from the hardware. De-branded OEM-Ready solutions ship directly from our manufacturing facilities, allowing for a quick time to market. For re-branded systems, customers communicate their branding preference details via Dell’s customization Intake process. Examples of our OEM-Ready products include Dell EMC PowerScale and Dell EMC PowerVault.
- OEM Custom:** OEM Solutions support numerous unique customization options beyond customized branding options. Custom options are just that—they are customized to meet your specific requirements. This can include adding sensors to a product, refitting hardware with custom bracketry, cables, backplanes, non-standard cards, and allowing for new packaged solution modifications. All custom options require Dell to directly receive input from customers that are fed into Dell’s customization Intake process. The time it takes from receiving customized requirements to delivering the final solution can be anywhere from a few weeks to months, depending on the customization requirement.

With ongoing input from OEM partners, we continue to expand the library of options and services available to our OEM customers across our Intel-Powered storage and data protection portfolio. See Figures 3 and 4 for examples of standard, de-branded and re-branded software user interfaces and hardware Dell Technologies offers today.

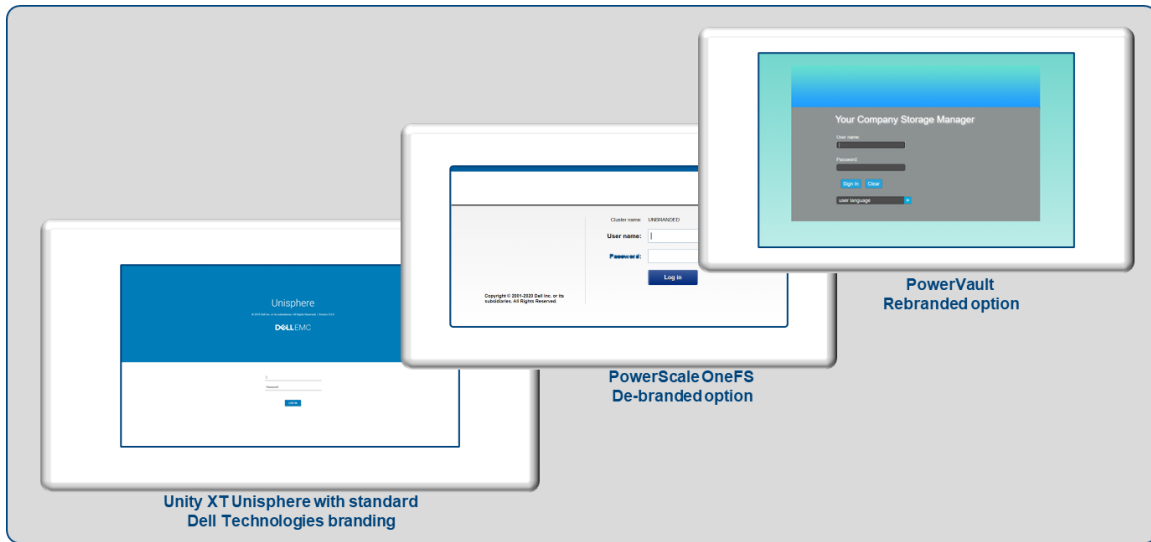


Figure 3: User interface branding options: Unity XT standard interface, PowerScale de-branded option, and a re-branded PowerVault option

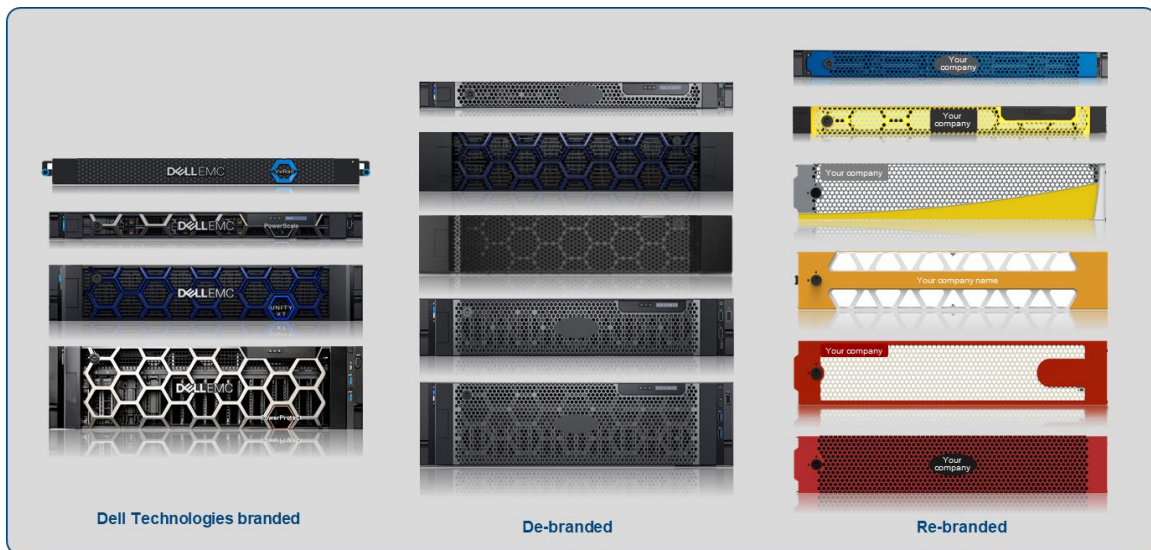


Figure 4: Examples of bezel branding options: Dell Technologies branding, de-branding, and re-branded custom options

4 The art of the possible—imagine the possibilities

One of the advantages of OEMs partnering with Dell Technologies is the option to customize our products to help build your brand and better align product features with your strategic go-to-market objectives. Using the Dell YourID website, you can create and customize Dell solutions with your branding in an easy-to-follow self-service process. You can also collaborate directly with experienced Dell Technologies engineers and technical architects to design a unique solution just for you.

Below are some examples of the OEM custom options we have delivered to our partners in response to their unique requests. These are unique customization options and will give you an idea of what's possible.

- **Branding and Personalization:** With Dell storage and data protection hardware, there are options to re-brand the physical bezels and chassis, as well as add color, textured finishes, and unique badges, as shown previously in Figures 3 and 4. Dell storage software also can be personalized. For example, BIOS and splash screens can be rebranded.
- **Adding PCIe Cards to a VxRail:** A global oil and gas service provider requested that its Dell EMC VxRail solution include end-to-end InfiniBand connectivity for optimized high performance and low latency operations. This is typically not supported on a standard VxRail deployment. OEM Solution engineers collaborated with the VxRail team and were able to support adding various PCIe cards, including an InfiniBand PCIe card, as long as PCIe communication did not interfere with VxRail operations.
- **Ruggedized Short-Depth Form Factor VxRail:** Several OEM partners, including those serving the marine and defense, manufacturing, and industrial automation customers, wanted to deploy VxRail systems in edge locations. These sites faced space constraints and harsh environmental conditions, such as fluctuating temperatures and high dust levels. As a result of OEM Solutions and VxRail team collaborations, Dell Technologies created a shorter-depth, ruggedized version of VxRail to address these requirements. The project led to development of the VxRail D Series, a standard durable and ruggedized solution powered by the latest Intel technology that offers military and marine certifications and delivers the full power of VxRail for workloads in environmentally challenging or space-constrained environments (Figure 5).



Figure 5: Ruggedized VxRail D Series for edge locations and harsh environments

- **PowerMax Green Initiative:** A large government agency wanted its Dell EMC PowerMax storage system to incorporate smart environmental sensors in the power distribution unit (PDU) for monitoring of environmental fluctuations and improved energy efficiency. OEM Solutions engineering installed a different rack that would fit a PDU designed with a smart sensor for the PowerMax deployment. Dell Technologies OEM Solutions also de-branded the PowerMax, the PDU, and smart sensors.
- **Unity XT API Command Access:** A large software developer with a global presence requested to access an API command in the Dell EMC Unity XT solution that had only been accessible to Dell engineering. Exposing this command would save the customer infrastructure integration costs and time, as well as speed time to market of their solutions. Dell made the command accessible to the partner and now makes it available as part of the standard Unity OE (Operating Environment). Dell's API team is now examining all Dell Engineering-specific API commands to evaluate if revealing additional commands would provide value to OEM partners.
- **Far Edge Data Protection Appliance:** An OEM software-as-a-service partner sought to install hundreds of data protection appliances in remote branch offices. The requirements were specific: proven technology, up to four terabytes of capacity, and a fixed scope deployment. OEM Solutions met these requirements by loading PowerProtect Data Domain Virtual Edition (DDVE) and Avamar onto a PowerEdge Server running VMware ESXi Hypervisor with two to four terabytes of capacity. This provided the partner with an affordable, attractive data protection solution for remote office/branch office (ROBO) environments.
- **Edge in a Box:** Need a resilient VxRail solution in a secure, self-contained and wall mounted enclosure that is branded with your company logo? OEM Solutions can deliver this by deploying 3x 1U Intel Xeon-based VxRail nodes, two Dell switches, and a UPS in a single, secure, and self-contained 6U enclosure that is customer branded and wall mounted (Figure 6).

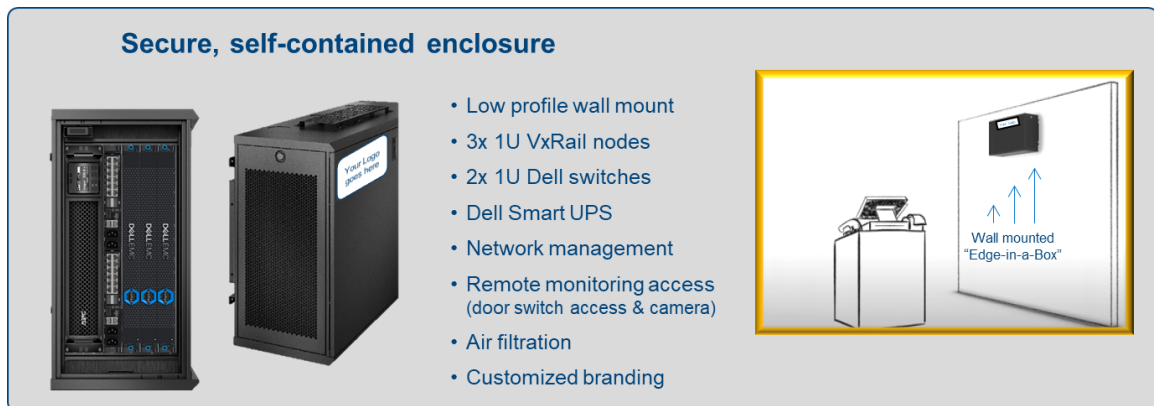


Figure 6: Re-branded “Edge in a Box”: A VxRail D series in a secure, self-contained, wall-mounted enclosure

5 Clearing the path to better business outcomes

Intrigued? If so, we encourage you to contact your sales representative or go to <https://www.delltechnologies.com/en-us/oem/storage.htm> to learn more and connect with our dedicated OEM team.

By putting our experienced OEM-dedicated engineering and business resources to work, we can help you identify or pursue new, high-value business opportunities that previously may have been blocked by time, cost, or technical challenges. You may be surprised how often and easily we can respond to your custom requests and even incorporate your requirements into future roadmaps for Dell Technologies products.

With Dell Technologies OEM Solutions as your partner, and the power of Intel technology, you gain a stronger position to innovate, accelerate time to market, and increase your competitive advantage. Ultimately those capabilities translate into better value and outcomes for your business and customers.