

# VMware Cloud on Dell EMC

## VDI and published applications for manufacturing powered by VMware Cloud on Dell EMC

### VMWARE CLOUD ON DELL EMC AT A GLANCE

- Lower costs to automation/intelligent manufacturing by delivering enterprise-grade VDI run on managed IaaS in your manufacturing facilities
- Eliminate the burden of managing infrastructure by consuming modern cloud-scale infrastructure as a managed service in manufacturing facilities
- Cloud consumption of on-premise infrastructure that allows manufacturing organizations to automatically scale and pay-as-they-go while controlling resource management costs
- Implement a comprehensive and consistent security model that protects organizations' intellectual property, trade secrets, and security of endpoints in manufacturing facilities

The need for agility throughout the manufacturing process with a globally distributed workforce is driving organizations to be able to embrace Virtual Desktop Infrastructure (VDI) as it goes through its digital transformation process. In the manufacturing environment, VDI and managed cloud services can aid in the adding of new facilities, increasing floor space, enabling new employees, and securely delivering local access to applications that drive modern manufacturing processes.

### Key benefits

- Achieve rapid time to value with cloud infrastructure to quickly scale capacity and speed up deployment of manufacturing systems.
- Eliminate infrastructure management overhead and local IT while supporting VDI and published application workloads that drive the supply chain, freeing up resources to increase productivity.
- Leverage existing VMware tools and skillsets to deliver consistent operations and security for your VDI and manufacturing infrastructure.
- Full support of key Horizon technical capabilities, including Cloud Pod Architecture (CPA), Instant Clone and Just-in-time Management Platform (JMP)
- VMware Cloud on Dell EMC, consumed as a managed service, optimizes resource cost with predictable OpEx through an as-a-Service Consumption.

### Manufacturing's digital transformation

The manufacturing industry is on the cutting edge of change when it comes to digital transformation. While traditional manufacturing involved the use of massive amounts of human capital in highly centralized locations, rapid developments in technology including artificial intelligence (AI), automation, IoT and human-machine interaction now fuel modern manufacturing.

The manufacturing industry is going through a massive transformation driven by rapid developments in technology. Automation, AI, IoT, machine learning, and highly distributed production lines are now the new normal of modern manufacturing. To stay ahead in today's ultra-competitive environment, companies must enable and secure a globally distributed workforce consisting of employees, contractors, and partners to be more agile from design to distribution. With VDI powered by VMware Cloud on Dell EMC, organizations can deliver manufacturing capabilities enabling agility, consistency, and security with predictable as-a-Service consumption and economics.

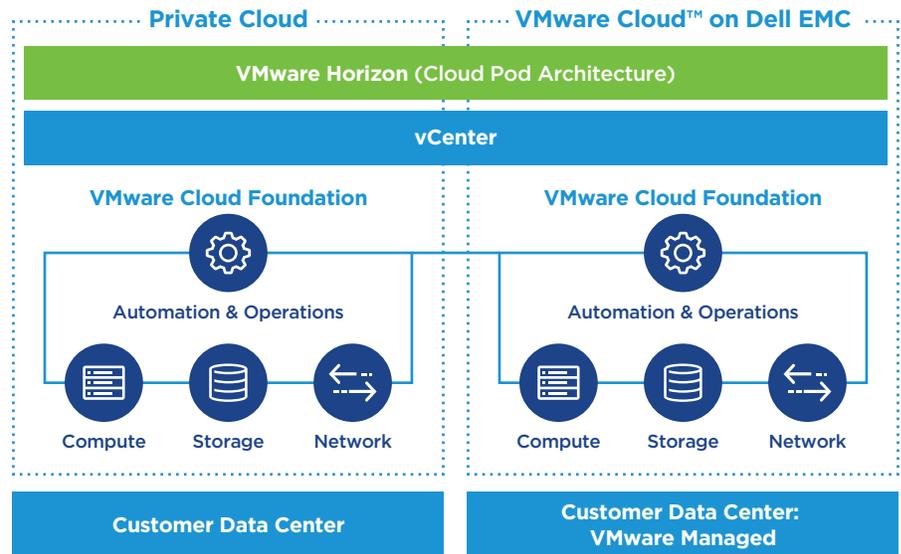


FIGURE 1: Hybrid cloud architecture

## Benefits of VMware Cloud on Dell EMC running VDI for manufacturing

### Protecting trade secrets and intellectual property

Manufacturing is one of the most highly targeted verticals for cyber-attacks. Trade Secrets and other intellectual property are a constant target for competitors, nation-state actors, and other entities looking to gain an advantage. Local endpoints in manufacturing environments contain a wealth of secrets, documents, and designs that make them a prime target for attackers – these same endpoints are often the most vulnerable, especially in remote locations. Using VDI with secure on-premises cloud-scale infrastructure provides the necessary security to keep those classified documents available to personnel and processes that require them at the endpoint while enabling intrinsic and consistent security.

### Real-time insights

Powering VDI with VMware Cloud on Dell EMC in manufacturing environments allows organizations to take advantage of what would normally be perishable insights in traditional hub and spoke data center architectures. For those workloads and processes that require real-time decision making, running VDI at the edge using on-premises cloud infrastructure allows for real-time analysis of events that would otherwise be lost in transit back to a centralized data center.

### Controlling costs

Manufacturing is driven by two tenets. Get products to market faster in the most cost-effective model possible. Running VDI on on-premises cloud-scale infrastructure allows organizations to take advantage of predictable OpEx costs models that have traditionally been reserved for the public cloud. With VDI operating on-premises on a subscription-based infrastructure, workloads and data can reside in proximity to the personnel and processes that need them, allowing real-time scaling for even more predictable cost control.

## RESOURCES

Learn more about VMware Cloud on Dell EMC at the [VMware Cloud on Dell EMC website](#)

Get started with [VMware Cloud on Dell EMC Getting Started](#)

Review additional information with the [VMware Cloud on Dell EMC Horizon Integration Guide](#)

### Application management

Running VDI on VMware Cloud on Dell EMC allows organizations to securely deliver desktops and published applications to end-users and locations from a single platform. Organizations can coherently deploy applications across their manufacturing locations with consistent operational and security models. For those legacy, yet mission-critical applications stuck on traditional IT infrastructure, VDI provides a path for those applications to be virtualized and delivered through an on-premises cloud.

### Reduced operational complexity

Since VMware Cloud on Dell EMC is a fully managed service, organizations can drastically simplify the management of IT infrastructure for manufacturing. VMC on Dell EMC simplifies operations from ordering the physical infrastructure itself, deployment, patching, and upgrades of hardware and software, monitoring and remediation while providing a global view of all your manufacturing infrastructure across the organization.

### Mission-critical and legacy app support

Many mission-critical manufacturing apps are sensitive to latency, storage, and compute resources. These workloads require compute and storage capabilities on the factory floor rather than relying on a centralized data center to meet those needs. VMware Cloud on Dell EMC provides as-a-Service infrastructure modernization to support artificial intelligence, automation, IoT, and human-machine interaction applications. For legacy manufacturing applications, VMware Cloud on Dell EMC provides industry-proven virtualization that allows them to take advantage of cloud infrastructure without having to refactor.

### Consistent infrastructure, operations, and security

VMware Cloud on Dell EMC integrates VMware's industry-standard compute, storage, and networking software with enterprise-class Dell EMC hardware, empowering you to drive any VDI or manufacturing workload using familiar VMware tools and skillsets. Additionally, VMware Cloud on Dell EMC provides intrinsic security like encryption for data at rest and in transit, micro-segmentation, and ability to keep data in specific geographic regions to meet any sovereignty requirements.

### Accelerated innovation

The infrastructure provided by VMware Cloud on Dell EMC is completely managed by VMware, whether it is deployed in your datacenter or edge locations. This empowers your IT admins to focus on developing the best infrastructure for your business goals, including continued support of legacy applications and creating the flexible, automated infrastructure required by modern applications. This unique approach empowers you to focus on business innovation and differentiation, while VMware operates the entire infrastructure end-to-end.

### Predictable cost

Historically, the acquisition of IT infrastructure was treated as a capital expenditure that had to be refreshed based on hardware supportability, application performance, and other factors. This required IT professionals to go through costly procurement cycles, taking away focus from operations. Since VMware Cloud on Dell EMC is a subscription service, there is no hardware to purchase, so organizations can take advantage of predictable OpEx cost models and resource transparency for on-premise manufacturing site infrastructure just like in the public cloud.

Learn more at: <https://www.vmware.com/products/vmc-on-dell-emc.html>.