

# DELL EMC PowerOne

Autonomous Infrastructure to accelerate the shift from traditional operations to Cloud outcomes

## ESSENTIALS



### All-in-One System

#1 Cloud Infrastructure from Dell Technologies \*



### Autonomous Operations

98% Reduction in Manual Tasks \*\*



Flexible Consumption With CAPEX and OPEX options

## Introducing Dell EMC PowerOne

Dell EMC PowerOne combines compute, storage, networking, and data protection exclusively from across Dell EMC's Power portfolio in a fully-engineered and highly-automated system to transform your data center. With all-in-one simplicity, autonomous operations, and flexible consumption options, PowerOne can accelerate your organization's shift from traditional operations to modern cloud outcomes.

## Autonomous Infrastructure to Power Transformation

Meet the Cloud era on your terms with the unique autonomous infrastructure capabilities of PowerOne. Deploy robust, workload-ready vSphere clusters with just a few clicks and reduce manual tasks by 98%\*, saving time and money while enabling you to focus on new initiatives that serve the entire business.

### Built-in Automation for the Modern Data Center

**PowerOne delivers advanced automation throughout the entire lifecycle**

- ✓ **Launch Assist** – Guidance to initialize the system, optimize for VMware platforms, and simplify the configuration and deployment of vSphere clusters tailored to the exact needs of your workloads
- ✓ **Lifecycle Assist** – Automates time consuming and labor-intensive lifecycle management tasks, lowering risks and enabling you to focus on future innovation while maintaining reliable and secure infrastructure
- ✓ **Expansion Assist** – Ease the process of expanding system components and lower the risk of adopting of new technologies

# PowerOne: Best-in-Class Technology, Automated

The Dell EMC Power portfolio, fully-engineered and highly automated

An intelligent controller is built-in and factory integrated with every PowerOne system, harnessing the unique value of PowerOne's best-in-class technology components and enhancing features by adding intelligence to automation.

| PowerMax Storage  | PowerEdge MX Compute                                  | PowerOne System Fabric   |
|---|---|--|
| Zero Touch SAN Fabric Configuration                             | Dynamically Provision Compute Resources into Clusters | Intent based automated deployment and provisioning of PowerOne System Fabric |
| Discover and Inventory Available Storage Resources              | Manage and Automate Lifecycle of Components           | System Fabric Visibility and Lifecycle Management                            |
| Dynamically Create LUNs and Storage Volumes for use in Clusters | Automated Chassis Expansion                           | 98% Reduction of network configuration steps                                 |
| Intelligent Load Balancing Algorithms for Storage Fabric        | Telemetry Aggregation                                 |  |

## The PowerOne Advantage

Dell EMC is #1 in Cloud Infrastructure\*\*, with thousands of successful deployments of technology solutions for businesses in every vertical around the world, Dell EMC now brings this unmatched experience and engineering expertise to you in PowerOne.

### Reduce Risk

Factory-built and pre-validated, PowerOne saves you time and greatly reduces risk by converging all components ahead of time, so you don't have to.

### Save Time

With the PowerOne Controller, Launch Assist, and the PowerOne API, you can accelerate deployment and speed your time to production.

### Save Money

PowerOne delivers lifecycle management, end-to-end system monitoring, and automated expansion processes to make ongoing operations efficient and safe, saving the costs that come with outages, maintenance, and lengthy upgrade processes.



# Technical Specifications

| Component  | Details  |
|--|--|
| <b>COMPUTE</b>   | <b>Chassis: MX7000</b><br><b>Compute sleds:</b> PowerEdge MX740c (two-socket) and MX840c (four-socket)   |
| <b>MAXIMUM NUMBER OF SERVERS PER SYSTEM</b>  | <b>MX7000 chassis:</b> 10<br><b>Compute Domain:</b> 80<br><b>Compute Pod:</b> 240  |
| <b>NETWORKING</b>  | <b>LAN:</b><br>Leaf: <ul style="list-style-type: none"> <li>• Dell EMC Networking S5232F-ON (leaf switches)</li> </ul> <b>Dell EMC MX7000 Networking IO Modules (IOM):</b> <ul style="list-style-type: none"> <li>• Dell EMC PowerEdge MX9116 Fabric Switching Engine (FSE)</li> <li>• Dell EMC PowerEdge MX7116 Fabric Expanding Module (FEM)</li> </ul> <b>SAN:</b> Connectrix MDS 9148T and 9396T   |
| <b>STORAGE</b><br>(Note: mixing multiple storage types in one system is supported) | <b>Dell EMC Storage</b><br>PowerMax Family (2000E, 2000P, 8000E, 8000P)  |
| <b>VIRTUALIZATION</b>  | <b>VMware:</b> vSphere, NSX (for management cluster), ESXi, vCenter Server<br>Note: Bare metal deployments are also supported  |
| <b>DATA PROTECTION</b>   | <b>For PowerOne Controller:</b> Dell EMC NetWorker, with optional Data Domain<br><b>For Workload Clusters:</b> Dell EMC Data Domain, Dell EMC Avamar, and Dell EMC NetWorker   |
| <b>SYSTEM MANAGEMENT</b>   | <b>PowerOne Controller:</b> Provides intelligent automation and orchestration of PowerOne System components. Exposed through the PowerOne API and its front end: the PowerOne Navigator Web UI.<br><b>Compute:</b> Two OOB management S4148T-ON switches. Designed for future scale out to encompass additional S4148T-ON OOB switches and S5232F-ON aggregation switches.<br><b>Software:</b> core management software includes VMware vSphere and vCenter, Dell EMC PowerOne API, Dell EMC PowerOne Navigator UI, and component level element managers |
| <b>CABINET</b>   | <b>Intelligent Physical Infrastructure Cabinet from Dell EMC</b>   |



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about Dell EMC  
PowerOne



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\*Based on IDC WW Quarterly Trackers for Converged Systems, Cloud IT Infrastructure, Enterprise Storage Systems, Server and Purpose-Built Backup Appliance Systems, Q1 2019, Vendor Revenue. \*\*Based on internal Dell EMC testing, Sept 2019. Actual results may vary.  
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