

Transform Your SAP Landscapes with Dell PowerMax



SAP® landscapes are mission-critical environments that require high performance and protection to be able to consolidate production data and beyond. Dell PowerMax is designed with end-to-end NVMe and combines the world’s most secure mission-critical storage¹ with proven and uncompromising data protection capabilities.

The Most Trusted Platform for SAP Workloads



Powerful Architecture

- Active/active multi-node NVMe architecture
- Scale-up to 18PBe, scale-out to 16 nodes
- End-to-end NVMe design
- Global, inline deduplication and compression
- No single points-of-failure

Simple Operation

- Automation and Orchestration of copy data workflows with iCDM
- Automation and integration with REST APIs
- Cloud-based monitoring, analytics, and alerts with CloudIQ
- Massive consolidate for block, file, mainframe, IBM i, and virtualized storage
- Investment protection with [Future-Proof Program guarantees](#)

Trusted Innovation

- Built-in Machine Learning engine for optimal performance with no management overhead
- Proven six-nines of data availability
- Industry’s gold standard in replication with unmatched BC/DR
- End-to-end data encryption, FIPS 140-3 validated
- Policy-based secure immutable snapshots
- U.S. DoD Approved Products List certified

Redefine SAP Landscapes for High Performance and Business Agility with Dell PowerMax

Modern data centers are now characterized by large sets of fast-moving data, highly virtualized systems, fluid workloads, proprietary feature-rich SAP applications, and custom applications.

This is all surrounded by teams of software developers and QA specialists who are working with highly agile development models and customizing business software for desktop, web, and mobile systems. All flash data platforms change the playing field for the consumers of IT enterprise resources. PowerMax drastically changes long-standing assumptions associated with the traditional SAP challenges of:

- Landscape complexity and growth unpredictable software-development cycles
- Business-application performance
- Lifecycle management
- Data protection

Reduce Landscape Complexity & Manage Growth at Scale

A typical SAP solution landscape can be large and complex. As a business grows over time and new functions are added to the landscape, the infrastructure often requires changes such as adding additional storage for performance and capacity. However, adding more hard disks and tracking your growing storage with spreadsheets is just not sustainable.

With [Dell PowerMax](#) you can:

- Consolidate SAP solution landscapes onto the world’s most secure mission-critical storage, built with extremely low latencies of under 60 microseconds². It is designed to handle the most demanding and mission-critical workloads with unmatched high availability and advanced cyber resiliency.
- Reduce the energy costs of an ever-growing data footprint while reducing the data managed from highly efficient data reduction intelligence.
- Instantly provision more copies of more datasets to more applications -- yet consume almost zero net-new storage within that process. You can also deliver those copies of data at 100 percent of the speed of the parent datasets while ensuring that all copies will never negatively impact or degrade the performance of the parent production datasets.
- Dramatically simplify the design, provisioning, and management of storage used by SAP systems.
- Through CloudIQ you can remotely track the health of your storage infrastructure from any browser or mobile device, report on historical trends, plan for future growth, identify potential risks and utilize actionable insights to expedite resolutions.

Improve Development Quality and Productivity

PowerMax can radically reduce the amount of storage required for your overall SAP system landscape, offering powerful snapshot capabilities that allow developers to have their own environments, whether they are working on upgrades, new features, or urgent fixes. With SnapVX technology, these individual environments are created instantaneously at near-zero cost and near-zero performance impact on the production systems, all with snapshot policy automation.

In addition, each environment includes a complete dataset (that consumes near-zero space) to help improve developer efficiency and code quality. With this approach, parallel-development projects can proceed without painstaking coordination, which helps unlock each developer's full potential and productivity.

Accelerate Performance for Transactional & Analytical Processes

Traditional SAP systems are designed to optimize performance for online transaction processing (OLTP) business apps and functions, such as order to cash and procure to pay. Conversely, IT organizations operate under the traditional assumption that batch processing, such as online-analytical-processing (OLAP) business processes, period-end closing, and batch input, runs much slower due to large datasets and cache limitations at various tiers.

PowerMax delivers reliable, predictable, and highly consistent sub-60 microseconds read latency for diverse I/O types and application-access patterns. Bring the power of end-to-end NVMe to long-running batch processes, complex Extract, Transform and Load (ETL) processes, and intricate interface operations by accelerating these frequent and critical SAP operations. As a result, businesses can see dramatic reductions in processing and wait times.

Simplify Lifecycle Management

Scheduled system outages for maintenance and refreshes can eat into productive time. For example, a typical SAP system landscape refresh or restore of production data to the quality assurance system (QAS) can take days, and BDLS runs (a post-copy process step) can take hours, if not days, for some large businesses. PowerMax enables you to provision SAP systems at previously unseen, lightning-fast speeds, while also reducing operational complexity and cost.

Copy Data Management (CDM) snapshot-related operations happen instantaneously, and long-running BDLS runs can finish three-to-five times faster. All this is achieved with zero changes to the database configuration, zero tuning and zero optimizations to any SAP system or application buffers. The faster that SAP dev/test and QA systems are back online, the faster regression tests can resume, and the quicker the business can respond.

Provide Enterprise-Grade All-Flash Powered Availability and Protection

SAP systems are mission-critical to businesses; therefore, data availability and protection are also mission-critical. As datasets grow ever larger, so do the challenges of ensuring data integrity and protecting against data loss. Traditional data-protection methodologies make use of tape or disk backups and lack the level of granularity, flexibility, and agility that businesses require. In addition, different SAP systems require different recovery-point objectives (RPOs) and recovery time objectives (RTOs).

PowerMax is equipped with robust and proven data-replication technologies, and they are tightly integrated with the rich Dell portfolio of data-protection technologies. These features enable a shift from a traditional backup-and-recovery model to a high-availability, business-continuity model including active/active remote replication across data centers. PowerMax offers synchronous, asynchronous, and active/active replication technologies with SRDF, the Gold Standard replication technology in the market, while its integration with Dell PowerProtect eliminates impact on backup and application servers as well as reduces overall complexity.

Get Faster Results

The Dell PowerMax Ready Bundle for SAP Landscapes delivers compute, networking, and storage in a single solution to reduce the time it takes to realize the benefits of a modern SAP infrastructure. The Dell PowerMax systems maximize application performance with the latest Intel® multi-core XEON processors, while highly intelligent PowerMax arrays deliver advanced storage technologies like global inline compression and deduplication, thin provisioning, SRDF/Metro SmartDR and VMware® vSphere® HighAvailability (HA) to enable continuous availability and live migration within an SAP virtual infrastructure deployment.

Footnote:

1. Based on Dell's internal analysis of cybersecurity capabilities of Dell PowerMax versus cybersecurity capabilities of competitive mainstream arrays supporting open systems and mainframe storage, March 2022
2. Based on Dell's internal testing using the Random Read Hit (8K) benchmark for Dell PowerMax 8500, March 2022. Actual response times will vary.