

## Top Reasons

# Customers deploy DellEMC PowerMax for Oracle

# 10

Easily Consolidate and Optimize Your Oracle Database Infrastructure

## 1 Supreme Performance for Oracle Environments

PowerMax removes storage performance bottlenecks for Oracle Database environments once and for all. With up to 15M IOPS and under 350 GB/s throughput, it transforms the way database teams design and build Oracle solutions. The end-to-end NVMe array provides sub-100 microsecond latencies at scale and virtually eliminates Oracle storage tuning requirements so you can meet even the most stringent SLAs and free up time for database administrators (DBAs) to focus on strategic initiatives.

## 2 Accelerated Oracle Analytics for Unmatched Business Agility

Siloed data makes it extremely difficult to find, cleanse, and integrate data for analytics, hampering the ability to obtain high-value, time-sensitive insights. The ultra-fast performance of PowerMax enables you to accelerate IOPS-hungry transactional workloads AND dramatically accelerate complex, bandwidth-heavy Business Intelligence (BI) queries while running both Oracle transactional and Oracle Analytics workloads on the same array. Easily consolidate and localize data to combat data mart sprawls while gaining real-time business insights.

## 3 Cloud-Scale Oracle Consolidation

PowerMax provides massive scale in every dimension—performance (millions of IOPS), capacity (4.5 PB), connectivity (hundreds of ports), LUNs/devices (64,000) and data copies (millions of snapshots)—all while incorporating end-to-end NVMe technology. Consolidate and simplify production and non-production Oracle databases at massive scale across online transaction processing (OLTP), online analytical processing (OLAP), enterprise data warehousing (EDW), and Big Data applications. Protect production database performance from the impact of other workloads, with Quality of Service (QoS) tools, ensuring key workloads always get assigned performance. Independent scaling of storage and compute in support of cloud environments provides the option to leverage Dell Technologies Cloud and VMware solutions with deployment guidance for pre-tested storage, compute and networking infrastructure that's validated with VMware Cloud Foundation.

## 4 Fast, Efficient Oracle Copies with Integrated Copy Data Management

Database copy management is no longer a source of contention between application owners, DBAs, and IT administrators. PowerMax leverages SnapVX space-efficient snapshots that allow thousands of database copies to be created using minimal storage capacity and no loss of performance. Integrated copy data management (iCDM) tools provide simple creation, management, orchestration, and automation of any-size Oracle database copies for testing or application development. DBAs can create and manage their own database copies to suit requirements as business demands shift.

## 5 Optimize Productivity with Integrated Oracle Performance Analyzer

Understand and tune Oracle workload performance with the Database Storage Analyzer (DSA), allowing storage admins and DBAs to quickly troubleshoot performance anomalies and define where workloads can be stored while understanding the impact to application performance. DSA bridges the gap between DBAs and storage infrastructure administrators by providing end-to-end performance analysis with database relevant statistics (e.g., top wait events for storage devices, tablespaces, objects, indexes, and partitions for Oracle). Analysis and design recommendations from DSA are widely leveraged by DBAs and IT administrators alike.

## 6 Outstanding Data Efficiency for Oracle Workloads

PowerMax brings capacity efficiency capabilities through thin provisioning and excellent SnapVX tools which simplify deployment planning. Combining those with inline compression and deduplication delivers significant data reduction efficiencies. The inline data reduction operations are transparent and carried out in hardware, so there are no performance penalties. Customers receive 3.5:1 storage efficiency guarantees while simultaneously enjoying ultra-fast performance across any and all consolidated workloads without compromise.

## 7 Optimize and Easily Manage Oracle Backups

Dell EMC PowerProtect Storage Direct for PowerMax dramatically reduces the Oracle database backup window by completely eliminating backup servers and the requirement to send backups over the network. Your Oracle DBAs can back up databases directly from Oracle RMAN with data sent directly from PowerMax to a Dell EMC Data Domain protection storage system. PowerProtect Storage Direct completely eliminates impact on application and database servers. PowerProtect brings performance advantages with up to 20 times faster backups, up to 10 times faster recovery, and with reduced cost and complexity.

## 8 Mission-Critical Oracle Deployments with Enterprise Data Protection

PowerMax is engineered for industry-leading six nines (99.9999%) availability in a single array. It uses advanced fault isolation, robust data integrity, and non-disruptive upgrades and migrations to ensure Oracle databases are protected and remain online and available at all times. With SnapVX, the modern space-efficient copy technology of PowerMax, your DBAs can create thousands of local copies that can be used for database protection and recovery. For mission-critical availability, PowerMax offers SRDF, the gold standard in external remote replication and availability of data.

## 9 Proven Security for Business Environments

PowerMax comes with proven security features that meet corporate governance and compliance requirements, prevent accidental or malicious intrusion and are compatible with all data services. Key features for Oracle environments include end-to-end data encryption with internal and external key management, secure snaps, tamper-proof audit logs, and secure access controls.

## 10 Continue to Modernize Oracle with a Future-Proof Infrastructure

PowerMax storage solutions for Oracle, with the industry's fastest end-to-end NVMe array, offers future-proof investment for Oracle deployments. It protects today with non-disruptive upgrade paths to next-generation Storage Class Memory (SCM) drives. More importantly, PowerMaxOS includes an intelligent built-in machine learning engine that constantly analyzes all host IOs and automatically places data on the most optimal media type (flash or SCM) with zero management overhead. Oracle deployments benefit from innovations in next-generation storage media because the PowerMaxOS machine-learning engine continues to optimally place data between the fastest media available now and the next generation media of the future.

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