Brochure

HP ProLiant DL980 Universal DB Solution

Deliver database flexibility and choice
through a common foundation

IT departments are under continuous pressure to add value to the business, improve existing infrastructures, enable growth opportunities, and reduce overhead.

At the same time, exploding transactional data growth is driving database performance and availability needs to entirely new levels. The demand for high-speed, lower-latency, and increased volumes of transactional data is prompting the adoption of new storage technologies—from disk to solid-state.

Brought about by the creation of new high-value applications, customers are discovering that the Oracle Exadata 'one-size-fits-all' approach—one operating system, one database, one vendor—does not fit the bill. Rather, Exadata leads to high cost, vendor lock-in, and requires extensive tuning.

In response, IT departments are looking for an 'appliance-like' solution that provides a common foundation yet offers flexibility with choice of OS and database. Better performance and lower costs are just the beginning of where the value of the DL980 Universal DB Solution—optimized for the HP ProLiant DL980 server—begins.

Common foundation

HP ProLiant DL980—an HP scale-up, resilient, x86 server based on the PREMA Architecture—is designed to take full advantage of the latest 10-core Intel® Xeon® processor E7-4800/2800 product families with Intel® QuickPath Interconnect (QPI) technology. Working in concert, they form the foundation for unparalleled transactional performance, scalability, and energy efficiency, plus significantly lower TCO.

The Node Controller chipset design of the HP PREMA Architecture features Smart CPU Caching that reduces overhead, frees up memory bandwidth, and eliminates performance bottlenecks. With its Resilient System Fabric, PREMA delivers improved system availability, minimized down time, improved system reliability, and performance—in addition to the HP ProLiant innovations, such as iLO3 and Thermal Logic, which customers have come to expect.

Delivering top-of-the-line performance, the Intel Xeon processor E7-4800/2800 product families ensure record-breaking performance for mission-critical challenges and scalability to enable an entire in-memory database or to run queries in real time. Extending the mainframe-inspired RAS features of the previous generation, the Intel Xeon processor E7-4800/2800 product families provide reliability, security, and availability to meet the most demanding workloads.

With all major Linux operating systems and Windows supported, the platform collaborates with the OS and software stack to obtain the full benefits of the RAS feature set included in the Intel Xeon processor E7-4800/2800 product families.

Complete flexibility

With OLTP demands growing, workload-optimized disk and flash storage is a requirement.

For small or entry-level databases, HP PCIe IO Accelerator—PCI express-based flash memory for extremely high IOPS—can host an entire database (maximum ~6TB) internal to a single server. The resulting substantial improvement in latency and seek times practically eliminates the bottleneck represented by traditional storage, allowing the HP scale-up x86 server to rise to its full performance potential.

For performance and growth, the HP VMA3200 series is HP's most scalable and highest-performing flash memory array. They are designed for customers who need low-latency response times, very high I/O performance, and large capacity. Solid state memory technology provides these storage products with no-moving-parts reliability and low power and cooling requirements, and eliminates the seek-bound limitations of rotating disk storage.

For 'cold' storage (archive/backup) or mixed workloads, HP P10000 3PAR and P9500 tiered solid state storage arrays deliver top scalability and availability, excellent optimized speed, and tiered storage software for SAN-based solutions shared by multiple servers.

Common foundation
Common flexibility
Uncompromised choice

Uncompromised choice

With its support of leading Linux distributions—Red Hat® Enterprise Linux®, Novell® SUSE® Linux Enterprise Server, or Oracle Linux—the HP ProLiant DL980 Universal DB Solution with HP VMA-series Memory Arrays offers uncompromised options, both for optimal Oracle RDBMS environments—10g, 11g, or 12g—and for alternatives such as Postgres Plus Advanced Server from EnterpriseDB, or Adaptive Server Enterprise from SAP Sybase.

Customers with a strong HP and Windows affinity should consider the HP ProLiant DL980 Universal DB Solution with HP VMA-series Memory Arrays. It is a Windows-based, enterprise-class, scalable architecture optimized for Microsoft® SQL Server 2012 and for the EnterpriseDB Postgres Plus Advanced Server, SAP Sybase Adaptive Server Enterprise, or an Oracle RDBMS environment. For Oracle RDBMS environments, Microsoft® Windows Server® 2008 R2 is a tier 1 platform for Oracle that delivers outstanding scalability.

Without Exadata support for Microsoft SQL Server or Oracle 10g RDBMS, any solution that requires a Windows Server-based environment or support for a legacy Oracle 10g database will find that the DL980 Universal DB Solution offers unmatched value versus Exadata. Delivered as the HP Enterprise Transaction Processing Reference Architecture for Microsoft Windows Server 2008 R2 and Microsoft SQL server 2012, it is an integrated, balanced, and pre-tested solution for tier 1 OLTP workloads providing superior price and performance.

No matter what the choice, the HP ProLiant DL980 Universal DB Solution delivers pre-configured, tested solutions with unparalleled performance and significantly lower cost compared to Oracle Exadata solutions—without vendor lock-in.

HP Financial Services

HP Financial Services provide innovative financing and financial asset management programs to help you cost-effectively acquire, manage, and ultimately retire your HP solutions. For more information, contact your local HP representative or visit **hp.com/go/hpfinancialservices**.

HP Services

When technology works, business works. The challenge of virtually every IT organization is similar—to develop and maintain an agile, efficient server infrastructure that delivers the service levels your business needs.

HP Technology Services offer a comprehensive portfolio of HP Care Pack Services to help design, deploy, manage, and support your IT environment, enabling cost-effective upgrades to standard warranty with easy-to-buy, easy-to-use support packages.

Minimum recommended HP Care Pack offerings:
• 3-year, 4-hour response on site 24-hour x 7-day coverage, hardware support
• Server installation and start up service

Related HP Care Pack Service offerings:
• 3-year, Support Plus 24: 24-hour x 7-day coverage, integrated hardware and software
• OS support
• 3-year, Proactive Select delivers flexibly-priced consultancy—purchase service credits and obtain expertise when needed

HP Care Pack Services can help you:
• Reduce deployment time and manage ProLiant server solutions smoothly and efficiently
• Increase server uptime and performance and maximize availability to your business
• Detect, diagnose, and repair problems to quickly save time, money, and resources

For more information, visit **hp.com/services/proliant** or **hp.com/go/proliant/carepack**.

For more information

To take advantage of the performance, flexibility, and uncompromised choice of the HP ProLiant DL980 Universal DB Solution, please contact your local HP representative today.