Brief

Deliver better results across the data management lifecycle

HP AppSystem for Microsoft SQL Server 2012 Parallel Data Warehouse

Offering significant advances in performance, scalability, and cost per terabyte, this complete, next-generation data management solution from HP and Microsoft® enables fast deployment, easy integrations, and rapid time-to-value.

Differentiated in every dimension

Maximum TB/ft:

- 2.5x greater TB/rack, with up to 210 TB in ¼ rack
- 6 PB maximum capacity

Leading price/performance for complex workloads:

- 50x faster query performance[1]
- Up to 30% faster scan rate than legacy data warehouse systems[2]
- Greater than 40% lower cost per terabyte than comparable competitive offerings[3]

Enhanced software management:

- HP Support Pack Utility
- Workload management
- Hadoop integration

[1, 3] For substantiation document, click here
[2] Based on HP and Microsoft pre-release testing and configurations.
[4] Casonato, Regina et al. "Information Management in the 21st Century." Gartner. 2 Sept. 2011. download. microsoft.com/download/7/B/8/7B8AC938-2928-4B65-B1B3-0B523DDFCDC7/Big%20Data%20 Gartner%20information_management_in_ the_21st%20Century.pdf

Exciting times for data management

Gartner states that "by 2015, organizations integrating high-value, diverse, new information types and sources in a coherent information management infrastructure will outperform their industry peers financially by more than 20%."[4] But to get the full value of your corporate data, you must consider:

- **Limitations of your current architectures** – Legacy systems such as SMP do not scale well, and large data volumes and requests expose their lack of computing power—resulting in poor performance and unsatisfied business users.

- **Costs** – The need to innovate, acquisition costs, and the requirements of a modern data warehouse (e.g., the ability to cost-effectively scale when necessary) can come with a prohibitively high price tag—as well as a significant learning curve and long retraining and integration efforts.

- **Business intelligence (BI)** – Different types of workers use different BI and analytics tools. To enable all workers to gain the insights they need to do their jobs, you need a data warehouse solution with built-in, familiar, easy-to-use BI and analytics versus adding on complex third-party tools.

To help you overcome these challenges, while also getting the biggest bang for your data management buck, HP and Microsoft worked together to deliver the HP AppSystem for Microsoft SQL Server 2012 Parallel Data Warehouse (HP AppSystem for PDW). This high-performance, massively scalable data management system includes everything you need to deliver better results across the data management lifecycle.

Did you know?

HP AppSystem for Parallel Data Warehouse provides very rapid time-to-value. In many cases, the system is ready for data loading in as little as one week.

Extending the benefits

Deploying HP AppSystem for Parallel Data Warehouse offers you many important benefits, including:

- **Built for any data, any size, any source** – The solution is powered by a fundamental breakthrough on the data processing engine called PolyBase, which enables integrated queries across Hadoop and relational data stores.

- **Next-generation performance at scale** – You can now achieve in-memory performance on datasets of nearly any scale—up to 50 times faster than before—using a primary storage engine that includes a new version of xVelocity columnstore. You can start from small terabyte requirements that linearly scale out to petabytes of data.

- **Cost efficiencies** – Consolidation of control and data racks enables 50% reduction in energy consumption. In addition, up to 15x data compression saves up to 70% of storage requirements (based on Microsoft studies).

Our solution partners

(intel)

Microsoft

- **Greater density per rack** – The system starts at 210 TB for a ¼-rack system with up to 1 PB of raw capacity per rack. You can expand your solution in modular increments up to a full rack.

Why HP and Microsoft?

When it comes to deploying Microsoft SQL Server 2012 Parallel Data Warehouse to handle your data management needs, you can choose from many vendors. But only one partnership offers extensive expertise and deep experience at every step of the way. HP and Microsoft—your best choice for SQL Server and Parallel Data Warehouse today and tomorrow.

Industry leadership
HP and Microsoft have a rich history in developing and successfully delivering data warehousing solutions based on Microsoft SQL Server and HP Converged Infrastructure to the global market. In fact, in 2011, HP was first to market with the HP Enterprise Data Warehouse Appliance optimized for Microsoft SQL Server 2008 R2 Parallel Data Warehouse.

Complete technology solutions
Much more than simply providing the components and basic configurations for your data management workloads, we specifically focus on the best combination of technologies for supporting the intended use-case scenarios.

Innovations for delivering results that matter
Saving you time and money, while also ensuring workload support, the unique HP Utility Support Pack is designed to further reduce complexity, optimize performance, and simplify management of your data management ecosystem. With the Utility Support Pack, you can update 2000 components with a single click and run diagnostics to quickly identify hardware issues caused during shipment or from component failure.

Management you know and trust
With HP ProLiant Gen8 servers as the core building block of our data warehouse appliance, you can use the familiar HP Insight Control capabilities to manage on-premise deployment, health, energy, and remote control—all from a single HP or Microsoft Central Management Console. In addition, native Microsoft BI integration means your workers can use familiar tools like Microsoft Excel to answer questions and make key business decisions more quickly.

Unique collaborative support agreement
To help you avoid unnecessary disruptions and downtime, HP and Microsoft work together to jointly deliver services and support. You can also boost productivity and lower risk by choosing complete lifecycle service and mission-critical support offered 24x7x365 around the world. HP has more than 48,000 Microsoft-trained professionals—with more than 12,000 Microsoft Certified—making HP one of the largest and most specialized forces of consultants and support professionals for Microsoft environments.

As your services needs change...

Your new HP AppSystem for Parallel Data Warehouse comes with HP Proactive Care Services, which provide an additional level of support for your complex IT environments. Geared for converged, virtualized, and cloud-based environments, Proactive Care Services feature proactive advice, recommendations, reporting, and support from HP technology experts.

If your needs grow beyond Proactive Care, you can choose a Personalized Support Option or HP Critical Service. Whatever your service and support requirements, HP and Microsoft have you covered.

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