

Changing the Economics of Data Warehousing

Migrate from Teradata and Save



Data is the lifeblood of the enterprise, and companies analyze it to gain insight to leverage customer interactions, optimize business processes, and create competitive advantage. As the load on data warehouses grows, traditional approaches like those based on Teradata solutions require expensive capacity upgrades that can overwhelm already strained budgets. Economic, regulatory, and globalization pressures complicate these challenges, pushing IT managers to look for ways to drive down costs without sacrificing accessibility and performance, or business priorities. The Data Warehouse Appliance from Sun and Greenplum provides a new deployment approach that helps reduce operational expenses and supports the dynamic provisioning of nodes to scale to hundreds of terabytes. The result is a powerful data warehouse system that can exceed business expectations without breaking IT budgets.



Highlights

- Move to the Sun and Greenplum solution and take advantage of the industry's first cost-effective, super-capacity data warehouse appliance
- Save money with prices as low as \$17.5K per terabyte
- Experience superior performance with a massively parallel and clustered solution that can add data at over 500 GB per hour
- Scale solutions easily by dynamically provisioning additional nodes into the system
- Maximize uptime with a high availability architecture
- Move to an integrated, plug-and-play data warehouse appliance that reduces infrastructure complexity and simplifies management
- Ease the transition to new technology with services from Sun and its partners, and save up to 15 percent with trade-in programs

The Data Warehouse Appliance Powered by Sun and Greenplum

The Data Warehouse Appliance Powered by Sun and Greenplum is the industry's first cost-effective, super-capacity data warehouse appliance. Purpose-built for high-performance, large-scale data warehousing, the Data Warehouse Appliance integrates best-in-class database, server, and storage components into one easy-to-use, plug-and-play system.

At the heart of the Data Warehouse Appliance is the Sun Fire™ X4500 server. Powered by Next-Generation AMD Opteron™ processors, the Sun Fire X4500 server represents a revolution in data warehousing server architecture. With 24 TB of on board, high density storage, the Data Warehouse Appliance delivers industry leading compute power, storage density, and near zero latency access to data in a single, integrated solution. Utilizing the massively parallel processing architecture provided by Greenplum Database, the Data Warehouse Appliance distributes data across all disks in the system, enabling query-in-storage processing for today's demanding data warehouse applications.

Create a cost-effective environment

Today's data centers are budget constrained, and IT executives continue to look for ways to drive down costs even when adding storage capacity. Energy and space efficient, the Data Warehouse Appliance provides up to 100 TB of usable data storage in two racks while consuming only 110 KW per TB — far less than systems from other vendors. With acquisition costs as low as \$17.5K per TB, and the ability to easily and dynamically provision more nodes to scale to meet demand, the Data Warehouse Appliance provides superior price/performance. In addition, an integrated approach makes designing applications easier, helping reduce IT resource costs.

Take advantage of superior performance

Getting access to more data faster makes a data warehouse more valuable to a business. The engineering behind the Data Warehouse Appliance offers dramatic performance and throughput advancements over Teradata solutions. Massively parallel processing leverages a high-performance interconnect, enabling database clustering across multiple servers. In addition, all database operations are parallelized across the cluster by the Greenplum Database distribution.

Furthermore, high-performance loading onto an extremely fast storage system enables data to be added to the database at over 500 GB per hour, while the parallel-aware Greenplum Query-In-Storage query optimizer moves processing to where data resides, eliminating data flow bottlenecks. By taking advantage of these technology advancements, organizations can give more users faster access to vital business information.

Scale to meet demand

Corporate data repositories are growing at a phenomenal pace, and data warehouse infrastructures must be able to scale and provide access to information to more users every day. To help this effort, the Data Warehouse Appliance Powered by Sun and Greenplum is available in three sizes to fit the needs of various business environments. The DW20 provides up to 20 TB of data storage, while the DW40 provides up to 40 TB, both in a single rack. Larger deployments can take advantage of the DW100, providing up to 100 TB of data storage that can easily expand to accommodate even greater capacity demands.

The Data Warehouse Appliance is designed to handle the rapid growth demands of today's data warehouse environments. Organizations can dynamically provision more nodes into the system to easily scale to hundreds of terabytes of storage. In addition, use of the Solaris™ ZFS in the Data Warehouse Appliance provides virtually unlimited file system sizes to enable immense data capacity.

Maximize uptime

Finding ways to minimize data warehouse downtime is key to getting the right information to the right people at the right time. The Data Warehouse Appliance utilizes a powerful Greenplum Database high availability architecture to ensure the solution continues to run in the event of a hardware or software failure. This robust design combines with sophisticated failover and mirroring capabilities to foster continuous uptime.

Simplify system management

Managing vast quantities of servers and storage systems poses challenges to any IT organization. Moving from complex networks of Teradata systems to a consolidated, easy-to-use, plug-and-play data warehouse appliance reduces infrastructure complexity and eases the management burden. In addition, all systems within the Data Warehouse Appliance run the Solaris 10 Operating System, enabling standardization on a single operating system, further reducing administrative tasks.

The Data Warehouse Appliance Powered by Sun and Greenplum incorporates additional comprehensive database management and monitoring utilities that aid appliance management. An integrated Lights Out Manager provides full local or remote access for setup, maintenance, and on-going monitoring and management of a single system. These tools work in concert with Greenplum administrative tools that provide real-time performance monitoring and streamlined management functions.

Learn More

For more information, visit sun.com/bidw or greenplum.com, or contact your local sales representative.

Ease the transition

Day to day operations leave little time for migration tasks. Sun and its partners provide a portfolio of services that accelerate the transition to the Data Warehouse Appliance. With extensive knowledge and proven delivery methodologies, Sun and its partners can help enterprises reduce costs and improve utilization for business intelligence environments.

Sun programs help reduce the cost of moving to new data warehouse appliance technology. The Sun Upgrade Advantage Program offers scalable trade-in allowances of up to 15 percent for Teradata servers when purchasing Sun Fire X4500 data servers. Sun even covers shipping from the customer dock and manages the environmentally safe disposal of Teradata equipment. Visit sun.com/tradein to learn how to take advantage of this opportunity and receive an even better return on investment.

Sun and Greenplum — transforming the economics of data warehousing

Sun provides the people and technologies that fuel the most demanding and efficient businesses. Greenplum provides high-performance software that helps companies manage massive amounts of data and turn it into useful information. Together Sun and Greenplum help companies create innovative, high-performance solutions that transform the economics of data warehousing, improve data analysis, and mitigate business risks.