

## Highlights

- Reduce the costs and backup windows associated with growing volumes of data by locating and migrating static data to a protected and user-accessible repository
- Improve worker productivity by implementing a fully indexed and searchable repository of corporate information
- Protect information with the ability to issue simultaneous and multiple copies of data and place them on a variety of platforms and in different locations
- Migrate data from energy-inefficient SANs to more efficient technologies — taking advantage of a green data storage infrastructure
- Automate management of data across Oracle storage tiers for maximum cost effectiveness

**BridgeHead and Oracle — scalable and easily managed storage infrastructure**

## Oracle and BridgeHead Software – Medical Image Management Solutions for Healthcare

*A number of factors are causing exponential growth in healthcare data. Increases in regulatory requirements, improved technology in imaging systems resulting in denser and hence larger files, the move toward the electronic patient record, and the need for reliable disaster recovery strategies all create major storage management challenges for IT. A robust and scalable archival solution is needed to help control the explosive data growth, reduce backup windows, protect data, and reduce costs. Together, Oracle and BridgeHead Software offer a cost-effective healthcare data management solution on tiered storage — providing a seamless integration with PACS and medical records systems to preserve, protect, and provide centralized access to healthcare data.*

### Preserve

Healthcare organizations are forced, by regulations and compliance requirements, to keep data for longer periods of time than any other industry. The majority of this data (perhaps as much as 75% to 80%) is static - it will never change or cannot change. This leads to expanding backup windows and recovery times and poor performance. Static and aged data stored on primary storage, that will most likely never be accessed again, only exacerbates the issue. The BridgeHead archiving solution identifies and moves static and aged data into an archive on more appropriate storage technologies — reducing backup windows, recovery times, costs, and performance bottlenecks. BridgeHead further helps healthcare IT reduce storage and management requisites with BridgeHead's PACStore for PACS and FileStore for scanned patient data. These two solutions help optimize storage investments by automatically moving data onto appropriate storage media based on availability needs and user created policies. The most current and active data stays on the most highly available primary storage while static data is moved to alternative lower cost media in line with compliance and protection requisites. Both BridgeHead PACStore and BridgeHead FileStore reduce the burden imposed by long-term retention and along with it the need for expensive tier1 storage.

### Protect

Enterprise backups need not be difficult or constrained by platform, data format, or physical location. BridgeHead's HT Backup offers a flexible backup solution that supports a diverse set of clients, servers, and storage media devices. With automated and unattended backup of PCs, workstations, departmental servers, and enterprise systems, HT Backup is designed for highly efficient network-wide backups to high capacity peripheral systems. The distributed nature of BridgeHead's software allows for a many-to-many relationship between primary data sources and suitable secondary storage devices.

A multi-tier architecture allows for exceptional scalability, performance, fault tolerance, and flexibility. Separating backup control from data movement allows functionality to be distributed across the network and helps ensure that the systems controlling backups do not become obstacles to performance or scalability. Additionally, a central control point provides a common repository for administering backups, viewing logs, and generating backup statistics.



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## Provide Access

With the BridgeHead FileStore archiving solution, archive data copies can be stored on a combination of different media types, such as disk for quick access and tape for offsite data protection. Each piece of content added to the archive can be managed in several locations, each with its own retention categories. All data in the archive is centrally managed and both full text and metadata is indexed for quick access — transforming previously distributed and unorganized data into searchable information. All BridgeHead products are seamless and unnoticeable to the end user. Users are not aware that archiving is occurring, they do not require training, and as far as they are concerned the data is exactly where they left it. Healthcare IT can now easily protect medical data, simplify management of repeated backups, enable clinicians to easily search across systems, and help solve critical compliance and ediscovery activities.

## Manageable storage infrastructure

Together, Oracle and BridgeHead provide a solution for managing storage infrastructures. With Oracle servers, storage appliances, tape drives, modular library systems, virtual tape library (VTL) systems, and system software, IT management can create scalable solutions that meet the demands of small or large infrastructures. By utilizing Oracle hardware, IT can take advantage of low cost systems and scale computing power at reduced power, space, and cooling requirements. The Oracle and BridgeHead architecture leverages components such as the Oracle Sun Fire X4270 M2 servers running Windows 2008, Oracle ZFS Storage 7000 Series, and Oracle StorageTek™ SL500 modular library systems. The Oracle ZFS Storage 7000 Series integrates industry standard compute and storage components in an open architecture and runs the Solaris™

Operating System (Solaris OS) and Solaris. ZFS™ file system supplying over ten 9s of data reliability. For applications that need storage density and high bandwidth requirements, the Oracle ZFS Storage 7000 series delivers extraordinary storage density and data throughput with a built-in, high-performance, dual Intel Westmere EX processors, at about half the cost and with up to 50% power savings compared to traditional servers and storage arrays.

Oracle Fire server features, such as Oracle's Integrated Lights Out Management (ILOM), running state-of-the-art remote automation, and integration with management tools like Oracle™ xVM Ops Center software help simplify datacenter management software, help simplify datacenter management and integration into existing datacenter infrastructures.

The Oracle ZFS Storage 7000 Series also features one of the most advanced file systems, Solaris ZFS, which delivers ground-breaking capabilities by automating administrative tasks, protecting data from silent corruption, and providing scalability as well as high data throughput.

The Sun StorageTek SL500 modular library system provides scalable and highly reliable enterprise class tape automation solutions — meeting mid- to high-end IT needs. With the ability to scale from 30 to 575 linear tape open (LTO) slots, the StorageTek SL500 modular library system has a maximum capacity of more than 460 TB of uncompressed data — more than 40% more capacity than other libraries in this class and allowing up to 18 tape drives with a native throughput rate of more than

than 7 TB per hour. In addition, the StorageTek SL500 modular library system is complemented by the Sun StorageTek Virtual Tape Library Plus (VTL Plus) system, which integrates seamlessly with physical tape. As a result, datacenters gain a no-compromise solution that balances the performance, reliability, and ease of management of VTL to enable tape consolidation with the low cost, cartridge removability, and long-term retention capabilities of the StorageTek SL500 modular library system. Managed by a set of policies on the VTL, this tiered storage solution helps reduce labor costs for virtual and physical tape management

## BridgeHead and Oracle — scalable and easily managed storage infrastructure

BridgeHead's backup and archive solutions offer a distributed yet simple method to efficiently manage healthcare information. BridgeHead solutions on Oracle systems help healthcare IT deliver a highly scalable solution that is easy to manage, proactively controls quality and performance, and enables organizations to reduce cost and increase ROI for backup and archive infrastructures.

### CONTACT US

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