THE ULTIMATE STORAGE SOLUTION FOR THE ENTERPRISE

The Compaq Private Storage Utility is a complete, professionally managed information infrastructure consisting of rapidly scalable and highly-available storage capacity, customized deployment and management services, flexible, a "pay as you grow" payment structure, and internal accounting and "charge-back" capabilities. The Private Storage Utility is especially relevant to the needs of enterprises, large service providers, and private companies deploying eCommerce applications. The service frees them to focus on core business opportunities -- rapid deployment of new applications, timely management of unpredictable information growth, and redirection of capital into core business expansion – rather than maintenance of their IT infrastructures.

A NEW PARADIGM FOR INFORMATION MANAGEMENT

By providing an innovative option beyond traditional hardware sales and leases, the Private Storage Utility addresses the emerging paradigm shift in data management. Compaq helps companies evaluate, deploy, and manage information using best practices regarding storage design, service levels, uptime requirements, and integration of new technologies with the existing server and storage architecture.

The Compaq Private Storage Utility delivers onsite, secure, managed storage capacity that features:

- Lifecycle services consisting of basic, optional, and custom service packages – tailored to customer requirements.
- A complete storage infrastructure - turn-key, *StorageWorks* products and *SANworks* software that include no-single-point-of-failure, Fibre Channel SAN connectivity and performance, scalability, and multi-vendor operating system support.
- Detailed monthly usage reports regarding capacity management and client utilization – allowing companies to "charge-back" users for actual storage capacity utilization.
- Platform independent remote management, capacity management, and performance management
- A fixed, "pay-as-you-grow" payment structure (price per gigabyte per month) based on the total allocated storage capacity.

CUSTOMER BENEFITS

Increased competitiveness: Companies can focus on their core business and strategic endeavors, rather than recruiting and deploying IT resources to manage their infrastructure.

Flexibility to meet growth and surges in demand: Compaq monitors the customer's storage utilization, and will notify the customer of the need for additional capacity as required.

Off the balance sheet - expense vs. capital: Since the customer does not own or lease the Compaq Private Storage Utility, companies can administer it as a monthly expense, rather than as a capital expenditure.

Simplified, predictable business management: "Pay as you grow" payment structure as well as monthly accounting reports.

Reduced operational expenses: Companies can minimize the need for recruiting and deploying internal IT staff to manage storage.

Secure outsourcing: The outsourcing of overhead associated with storage makes costs more predictable and simplifies planning, while providing the onsite security that enterprise businesses demand.

Recovery of costs: Capacity and utilization reports from Compaq allow the IT department to track usage and "charge-back" the internal storage customers on a capacity-per-user-account basis.

Freedom of choice: Unlike public storage utilities, the Compaq Private Storage Utility delivers onsite storage, assuring customers of day-to-day control over decisions regarding the information infrastructure.

Rapid application deployment: Businesses can readily deploy new applications – without concern for acquisition of additional storage capacity.

Business continuance: The combination of premium 24x7 service, no single-point-of-failure, and platform independent remote management assures the customer of continuous data access and protection.

Worry-free investment protection: New storage products and technologies are included in the Private Storage Utility, as they become appropriate.

MANAGED STORAGE SERVICES *(continued)*

The Compaq Private Storage Utility combines professionally managed services with *StorageWorks* products and *SANworks* software to deliver a three-tier service portfolio.

Basic Managed Storage Capacity Service: Includes all primary storage, interconnects, and software as well as site -assessment and storage architecture design, installation, configuration, startup, storage management, capacity management, performance, management, client reports and warranty/maintenance.

Optional Service Packages: Provide incremental service packages that complement the basic service offering. An Enhanced Response Service and a Backup and Restore Management Service are offered.

Custom Services: Deliver ongoing services and one-time reviews tailored to the specific business environment. These include availability reviews of the IT infrastructure, guaranteed uptime services, data migration services, and other customer-designed services.

MULTI-PLATFORM OPERATING SYSTEM SUPPORT

The Compaq Private Storage Utility supports the following operating systems:

- Windows NT 4.0, Windows 2000, and MSCS clusters
- Sun Solaris v2.6 or later
- Compaq Tru64 UNIX v4.0F or later, and Tru64 Clusters
- Compaq OpenVMS v7.2, 7.2-1 and OpenVMS clusters
- HP-UX v10.20
- IBM AIX v4.2.1, 4.3
- Novell NetWare v4.2, 5.0
- Linux RedHat v6.1

DOCUMENTATION

Business Benefits White Paper
Product Brief

SOLUTION WARRANTY

The Private Storage Utility is supported seven days a week, twenty-four hours a day. The basic response time is 4 hours. An enhanced service offering is available as an option.

ORDERING INFORMATION

To order the Compaq Private Storage Utility, contact your local Compaq Sales Office.

SPECIFICATIONS

Basic service package – Managed Storage Capacity service

All Compaq Private Storage Utility configurations include:

Compaq *StorageWorks* Systems

Either the ESA12000 or SP24000 configuration(s), depending on capacity requirements. Both systems feature:

- No single point of failure.
- Fibre Channel SAN connectivity and performance.
- Multi-vendor operating system support.
- Scalability: additional capacity can be added as needed, in a timely and non-disruptive manner.
- The ability to increase storage capacity in increments of 144 gigabytes.
- A minimum storage capacity of 576 gigabytes, with no maximum storage capacity.
- Maximum capacity per square foot – for consumption of minimal floor space.

ESA12000 Configuration: Fibre-channel storage system containing two HSG80 controller pairs and (48) 36-gigabyte drives for a total capacity of up to 1.75 terabytes. Dimensions: 78.76 in (2,000 mm) H x 23.62 in (600 mm) W x 36.1 in (917 mm) D,   763 lbs (346 kg) maximum weight.

SP24000 Configuration: Fibre-channel storage system containing four HSG80 controller pairs and (96) 36 gigabyte disk drives for a total capacity of up to 3.5 terabytes. Dimensions: 78.5 in H x 23.63 in W x 44.13 in D, 1240 lbs maximum weight.

Compaq Software

The Private Storage Utility includes storage management software for its management and reporting tasks. Compaq *SANworks* Storage Resource Manager and Compaq *StorageWorks* Command Console provide continuous communication with the Compaq Offsite Management Center for 24 by 7 management of capacity utilization, system functionality, and storage availability.

Services

- *Assessment and Design*: On-site requirements gathering and assessment. Creation of detailed logical and physical SAN design (blueprint). Design and configuration validation in accordance with customer requirements.
- *Site Preparation Review*: This review details information about the customer, their requirements and pertinent site information required to complete installation planning activities. Includes a physical review of the site and a written report of what is necessary to ready the site for the Private Storage Utility.
- *Installation, Configuration, and Startup*: Includes installation and testing of hardware and software, configuration of storage software, and the design, creation and configuration of RAIDsets and LUNs. Connections are established with the customer's existing infrastructure (power, network, etc.), to the Compaq Operations Management Center for off-site management.
- *Remote Management*—offloads data management activities to Compaq's Operations Management Center.
- *Capacity Management*: The customer is notified when storage capacity reaches a predefined maximum, and, if desired, additional storage capacity is activated at the customer's site.
- Performance Management: The storage is monitored for performance and tuned as necessary.
- *Client Reporting and Management*: The customer receives detailed monthly reports regarding:
    - Used storage, allowing the customer to charge for storage on a user-account basis
    - Capacity management
- *Warranty / Maintenance Service:* Provides hardware and software support with coverage seven days a week, twenty-four hours a day. Basic response time is 4 hours for hardware and 2 hours for software. Assures customer of a committed response time and continuous effort until issues are resolved.

SPECIFICATIONS *(continued)*

Optional service packages

Any of the following optional services may be added to the Basic Service Package:

- *Enhanced Response Service*: Provides enhanced service response time ensuring a 2 hour warranty response.
- *Backup/Restore Management Service:* Creates and manages automated backup within the Private Storage Utility and ensures timely recovery of data in the event of data loss. Provides detailed backup design, installation, testing and deployment of backup environment. Includes modeling of initial backup job with Legato NetWorker software, monitoring of backup jobs, review of backup logs, and complete volume level restores. The backup software is Legato NetWorker; the hardware is either the Compaq TL895 or the Compaq ESL9326D automation product (depending on capacity requirements).

Custom Services

These have been designed for customers who require one-time reviews and/or on-going service:

- *Availability Review* : Provides an in-depth analysis of the entire IT environment and provides recommendations regarding availability customized to the needs and objectives of the customer. The Availability Review is based on six IT platform operation domains; Hardware, Operating System Software, Network, Environment, Software Application dependencies and IT Management procedures, reflecting availability percentages, downtime and its associated cost. A comprehensive review provides a professionally analyzed picture of the risk areas, recommendations for risk reduction, along with information to assist the customer in implementation prioritization.
- *Data Migration Service*: Migrates data from existing storage to the Private Storage Utility.
- *Guaranteed Uptime Service*: Provides enhanced data availability commitment.
- *Customer Defined Service:* May be a combination of existing services, or a new, customized service.