

# HP Storage Essentials Suite

Family data sheet



HP Storage Essentials Suite is storage management software for open, heterogeneous, multi-vendor network storage that discovers and graphically visualizes storage in an intuitive, easy format. It monitors performance in real time, automates tasks, simplifies procedures and processes, generates reports when you need them and lowers the costs of your enterprise storage investment.

The HP Storage Essentials Suite of products and HP Standard Edition SRM Software Solution combine server and storage management, enabling you to dramatically simplify your IT environments and significantly reduce operational costs. Using an open, standards-based architecture, HP Storage Essentials Suite delivers a single management interface with integrated heterogeneous functionality for storage area network (SAN) management, storage resource management, provisioning, backup reporting, usage metering and application management. It includes a management console and portfolio of valued-added modules, which share the same web services architecture for simplified management.

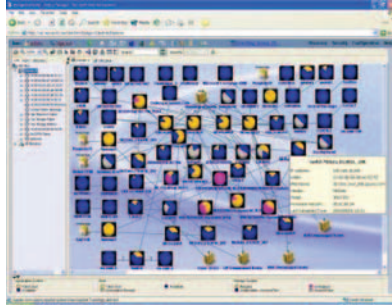
HP Storage Essentials Suite integrates into HP unified server-storage management platform and HP Systems Insight Manager, as well as HP OpenView Operations. It increases administrator efficiency via automation, visualization and simplification to enhance management of storage growth and increased utilization to reduce your storage costs.

## Features and benefits

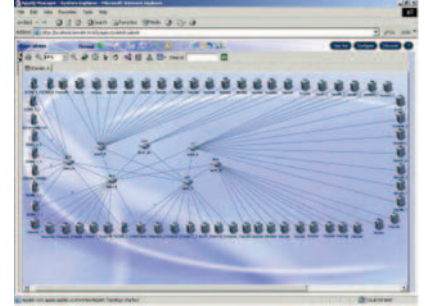
- **Visualization**—Automatically discovers and maps the storage network topology and pictorially displays objects, paths and zones between an application and the LUN on which the corresponding data resides.
- **Reporting**—An extensive library of reports satisfy requirements related to capacity management and

planning, performance management, asset management and chargeback. Reports can be customized and scheduled for automatic e-mail distribution.

- **Zoning and provisioning**—Enables end-to-end zoning and provisioning tasks at the host, switch and disk subsystem layers. Provides a common interface for a multi-vendor storage environment.
- **Capacity management**—Monitors availability and utilization at host, switch and array. Historical trends are extrapolated to forecast future capacity demands and identify areas that are under-utilized.
- **NAS management**—Provides comprehensive Network Attached Storage (NAS) management capabilities for HP ProLiant Storage Server (NAS) and NetApp® network storage solutions. Lets you visualize your distributed NAS solutions while unifying SAN and NAS management.
- **Application viewers**—These allow you to monitor the capacity and performance of SQL and Sybase databases so that you can anticipate and pinpoint the root causes of capacity, performance and availability problems.
- **Backup management and reporting**—Extends HP Storage Essentials Suite with powerful backup resource management and reporting, ensuring health and performance of your data protection infrastructure. Reports on statistics such as backup resources, success/failure, SLAs, backup volume, job size and client history. Supports HP OpenView Data Protector and Veritas Netbackup applications.
- **Standards-based architecture**—These solutions are designed on the Storage Management Initiative Specification (SMI-S), the storage industry standard for heterogeneous storage network management based on the Common Information Model (CIM) and Web-Based Enterprise Management (WBEM). The implementation of these standards helps enable support for multi-vendor storage infrastructures and protects investments in both management solutions and storage hardware.



- Provides graphical trending
- Automatic capacity-threshold warning system
- Leverages usage data to forecast future demand
- Sends annotated events to OpenView Operations
- Enables identification of potential capacity bottlenecks
- Provides inventory for the amount of storage on a device



## HP Storage Essentials Enterprise Edition

HP Storage Essentials Enterprise Edition is ideal for medium to large enterprise storage area networks (SANs). It's the main console for open, heterogeneous and multi-vendor SAN management, and is the base product required for all other HP Storage Essentials modules. HP Storage Essentials Enterprise Edition:

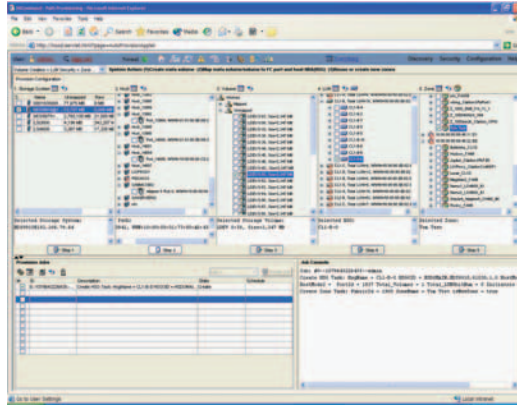
- Is a simple-to-use single management interface that helps you understand, control, plan and manage infrastructure for direct-attached and network-attached storage. Acting as a central management console, it provides storage network status and event monitoring through an easy-to-read topology map that displays devices and the physical and redundant connections between those devices.
- Allows switch-controlled zones to be automatically discovered and mapped, enabling the storage administrator to monitor from a single pane of glass.
- Provides basic array LUN creation, modification and deletion capabilities.
- Provides capacity management to display a complete inventory of your storage, with a centralized view of who is using how much capacity shown by storage device and LUN.

### Key features

- Provides unified server and storage management.
- Provides inventory for the amount of storage on a device or assigned to a host.
- Graphically displays and monitors your entire SAN infrastructure with a simplified integrated toolset.
- Provides graphical trending.
- Leverages usage data to forecast future demand.
- Provides an automatic capacity-threshold warning system that enables identification of potential capacity bottlenecks before they become an issue.

### Key benefits

- Supports the following capabilities:
  - Plan for capacity growth based on forecasts and future trends.
  - Perform just-in-time purchase of additional capacity—hence capacity does not lie around unused once purchased—decreasing total cost of ownership.
- Capacity thresholds automatically warn administrators about host or storage devices running out of capacity to help meet service level agreements (SLAs).
- Sends annotated events to OpenView Operation.



- End-to-end, path provisioning interface
- Device-specific and wizard-based provisioning
- SAN implementation is consistent with architecture
- Respond faster to device-specific issues
- Create internal storage unity
- Reduce deployment risk
- Increase efficiency of storage administrators

## HP Storage Essentials—Provisioning Manager

Provisioning Manager is an optional plug-in that extends the HP Storage Essentials Suite with device-specific and guided path provisioning of SAN resources. By providing a single, intelligent interface from which you can provision heterogeneous storage systems and fabric switches, the Provisioning Manager accelerates and attempts to error-proof your ability to allocate storage in support of business initiatives.

HP Storage Essentials Provisioning Manager provides a centralized interface/wizard for allocating and managing the pools, volumes, LUNs, zones and zone sets in your SAN, helping to reduce the inefficiencies and errors that often occur when using device-specific tools. The module's Path Provisioning feature takes advantage of the suite's auto-discovery, dependency management and capacity management capabilities to offer templates that escort you step-by-step through provisioning operations. Using the built-in job queue and scheduler, you can quickly create hundreds of provisioning jobs and set them up to run during off hours to reduce business impact. This module eliminates the needs to launch device managers for LUN carving, modification and deletion. It also eliminates the need to launch FC switch device management tools for zone configuration setup and ongoing changes.

The Path Provisioning interface guides you end-to-end through the selection of storage system, host, volume, LUN and zone, and includes a job queue and scheduler for rapid job creation. Individual fabric switches and storage systems can be provisioned in

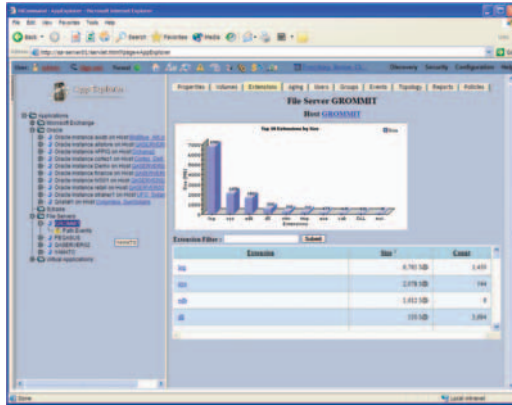
context directly from the topology or from anywhere else in the HP Storage Essential Suite where the devices appear.

### Key features

- End-to-end, path provisioning interface
- Rules and filtering technology
- Job queue and scheduler with built-in calendar
- Device-specific and wizard-based provisioning
- Role-based security
- CIM-built, J2EE architecture

### Key benefits

- Has a centralized interface for allocating and managing the pools, volumes, LUNs, zones and zone sets in the SAN.
- Reduces the amount of time it takes to provision SAN resources in support of business applications.
- Improves quality of service delivered to business units.
- Lowers training costs and ongoing total cost of ownership (TCO).
- Reduces common errors that occur when using many multi-vendor device-specific tools for provisioning.
- SAN implementation can be consistent with architecture.
- Increases application availability by ensuring dual paths across the SAN infrastructure.
- Increases efficiency of storage administrators.
- Responds faster to device-specific issues.
- Vastly improves SAN security.
- Decreases deployment risk.



- Identify aged files that can be deleted or archived to free up disk space
- Create complete catalog of all file and files server volumes
- Align file server use with business unit needs
- Prevent capacity shortages from impacting file server availability
- Perform faster root-cause analysis
- Identify user-space requirements

## HP Storage Essentials— File System Viewer

The File System Viewer is an optional plug-in that extends HP Storage Essentials Suite with scalable, file-level storage resource management (SRM) capabilities. Whether your file servers are hosted on direct-attached storage (DAS), network-attached storage (NAS) or storage area networks (SAN), the File System Viewer provides the file system scanning, analysis and reporting features you need to reclaim wasted disk space, verify file server availability, monitor user consumption and classify unstructured data for ILM initiatives.

The File System Viewer automatically discovers your file systems, logical volumes and user shares, and conducts high performance scans to collect age, size and type statistics on every file. Detailed reports categorize files according to file extensions (including .mp3, .log, .tmp, .pst) and sizes, and dates created, last accessed and last modified, so you can quickly identify recyclable disk space and critical files that should be replicated.

HP Storage Essentials File System Viewer reports on logical volumes, files, user shares and user and group disk-space consumption. File type analysis quickly identifies inappropriate or unnecessary files that can be deleted or archived to reclaim disk space.

### Better together with information lifecycle management (ILM) initiatives

To classify data for ILM initiatives, administrators can use the File System Viewer to sort files by file extension, date created and date last modified with just a few mouse clicks. From the information gathered, the administrator can quickly begin to classify data for ILM purposes and remove files not related to the business, as well as better correlate file server and storage usage with the associated business units. This saves the administrator time since they will be able to do much of this work without ever having to open and interpret individual files. This results in storage resources that

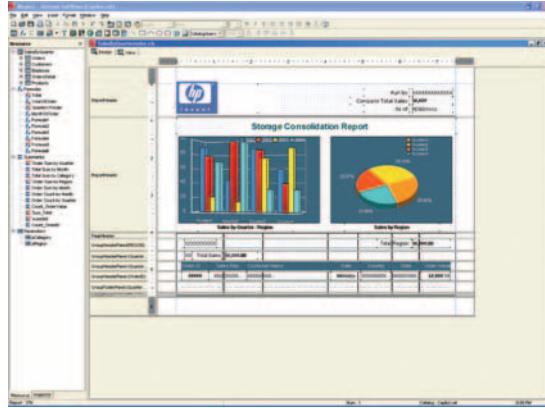
align with the business need. Your organization is more confident that its storage assets are primarily for your business storage needs.

### Key features

- Automated resource discovery and high performance file scans
- File age and file type analysis
- User and group consumption analysis and chargeback reporting
- Capacity and management planning
- SAN topology visualization, monitoring and reporting
- Event and policy engines
- Role-based security and organizational groupings

### Key benefits

- Creates a complete catalog of all file server volumes and files.
- Lowers the impact on file server and network performance.
- Identifies aged files that can be deleted or archived to free up disk space.
- Knows how much disk space and tape media to allocate for incremental backups.
- Identifies inappropriate or unnecessary files that can be deleted or archived to free up disk space.
- Identifies user space requirements.
- Aligns file server use with business unit needs.
- Prevents capacity shortages from impacting file server availability.
- Performs faster root cause analysis of file server performance and availability problems.
- Meets C-level and business unit requirements for auditing and reporting.
- Prevents capacity shortages from impacting file server availability.
- Controls access to file server and dependent SAN resources from one point.



- Enhance ability to share complex information
- Facilitate building complex reports
- Deliver reports faster
- Increase reporting power and control
- Reduce training requirements
- Provide convenient, one-click access to all reports
- Simplify the building of SQL queries
- Share the same reports across different users in multi-national enterprises

## HP Storage Essentials— Report Designer

Report Designer is an optional plug-in that extends HP Storage Essentials Suite with powerful custom reporting capabilities that satisfy your unique audit, service level management, planning and communications needs. Based on the same flexible Java reporting technology used by the standard Reporter component of the HP Storage Essentials Enterprise Edition, Report Designer makes it easy to design, build and deliver custom reports that empower business and IT users with actionable business intelligence.

Report Designer provides an intuitive design environment that facilitates creation of sophisticated reports for storage consolidation, capacity planning, ILM, asset management, chargeback, SLA management and other IT initiatives. Tables, cross-tabs, charts, invoices, forms and sub-reports can be quickly designed using intuitive interfaces and tools. A visual environment enables you to view reports as they are being developed, while the Report Inspector provides one-click access to properties for all report objects.

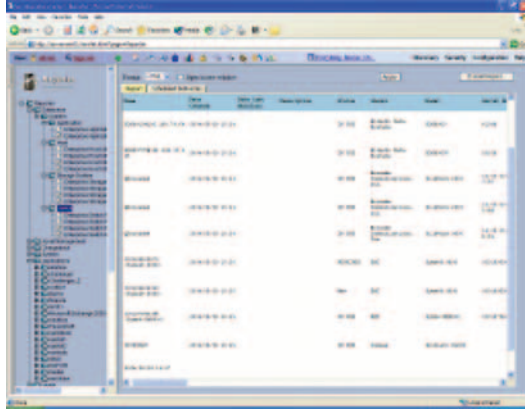
With built-in report templates and the ability to customize or create new templates, you can quickly build production-quality reports for distribution across a single department or the entire enterprise. Report Designer's visual design environment and intuitive tools enable you to create custom reports that meet specific business and IT needs. New custom reports are accessible from the standard Reporter component of HP Storage Essentials Enterprise Edition, and inherit all the features of the out-of-the-box reports.

### Key features

- Report wizards
- Report inspector
- Component-based report design
- GUI query editor
- Full charting capability
- Multiple output formats
- Built-in and custom functions
- Dynamic sort parameter
- Role-based security
- Automatic report delivery
- Transparent report upgrade
- Multiple language support

### Key benefits

- Provides convenient, one-click access to all reports.
- Reduces training requirements.
- Delivers reports faster.
- Diminishes mistakes.
- Facilitates building complex reports.
- Simplifies the building of SQL queries.
- Enhances ability to share complex information.
- Shares reports with almost any end user.
- Addresses even the most sophisticated and demanding reports needs.
- Increases reporting power and control.
- Restricts report access to authorized individuals.
- Shares information on storage infrastructure with IT and business constituents.
- Reduces ongoing maintenance and TCO.
- Shares the same reports across different users in multi-national enterprises.



- Global reports reflect the latest data from the distributed enterprise
- Communicate the business value of IT
- Share reports with almost any end user
- Control what remote sites are managed
- Multiple output formats
- Easy creation of Aggregators and Satellites

## HP Storage Essentials—Global Reporter

Global Reporter is an optional plug-in that extends HP Storage Essentials Suite with powerful roll-up reporting capabilities that provide aggregated views of distributed data center storage. Acting as a manager of managers, the software is designed for enterprises that implement multiple instances of the HP Storage Essentials. The module summarizes key storage statistics from different elements in your storage infrastructure, so you can more efficiently manage enterprise-wide storage operations and implement strategic IT initiatives such as capacity planning and data center consolidation.

To satisfy the consolidated reporting needs of your global enterprise, Global Reporter enables you to designate one or more HP Storage Essentials management servers as Aggregators for other Storage Essentials management servers (Satellites). Any management server can act as a report Aggregator, and Satellite management servers can themselves be Aggregators for their own Satellites. To support global reporting, a new schema is created in the embedded Oracle® database of each Storage Essentials management server that acts as an Aggregator. You can configure the date and time when each Aggregator is automatically refreshed or manually refresh Aggregators on demand.

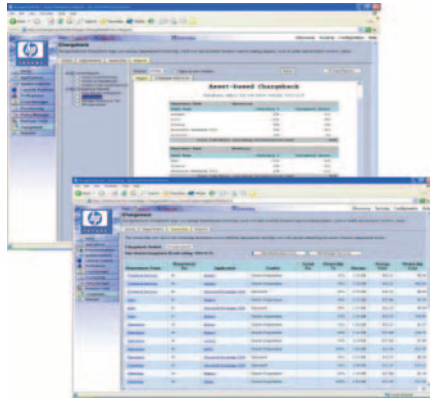
Multiple instances of HP Storage Essentials Suite can be rolled up into one or more Aggregators for centralized management of the global enterprise. Global reports are accessible from the Reporter component of HP Storage Essentials Enterprise Edition, and inherit all the features of the standard out-of-the-box reports.

### Key features

- Easy creation of Aggregators and Satellites
- Automated database linking
- Automated and manual refresh
- Canned global reports
- Custom reporting with transparent report upgrade
- Multiple output formats
- Role-based security
- Automatic report delivery

### Key benefits

- Controls what remote sites are managed and what information is reported.
- Provide ongoing administration and TCO.
- Global reports reflect the latest data from the distributed enterprise.
- Shares multi-vendor storage infrastructure information needed to make strategic decisions.
- Communicates the business value of IT.
- Provides global report capability.
- Shares reports with almost any end user.
- Restricts report access to authorized individuals.
- Shares information on storage infrastructure with IT and business constituents.



- Provide foundation for tiered storage and ILM initiatives
- Account for the full costs of storage services
- Create a single, centralized repository for storage asset information
- Distribute reports automatically to IT staff and line of business users
- Automate calculation of storage charges and billing
- Integrate with third-party asset management tools using database schema views, J2EE APIs and CLIs

## HP Storage Essentials—Chargeback Manager

The Chargeback Manager is an optional plug-in that extends HP Storage Essentials Suite with asset management and accounting capabilities that enable you to associate storage infrastructure costs with business initiatives. Whether you are a service provider offering storage services to external customers or an internal IT organization building a tiered storage utility for your lines of business, the Chargeback Manager accelerates and attempts to error-proof your ability to meter utilization, control storage costs, increase revenue and differentiate your service offering to better meet customer demands.

Chargeback Manager leverages the HP Storage Essentials unified database of application, host, fabric switch and storage system connectivity information to offer two options for managing the costs of storage services. Asset-based chargeback calculates costs based on a department's ownership percentage and depreciated value of its assigned storage assets. Storage-based chargeback calculates costs based on the actual amount of storage used by each business application, the tier of storage it is using and a department's asset ownership percentage. You can also leverage the predefined and custom asset records and reports to centrally manage the cradle-to-grave lifecycle of your storage assets.

HP Storage Essentials Chargeback Manager meters storage utilization and generates reports that enable you to associate costs with storage services. The storage-based chargeback option enables you to define storage tiers, and calculates costs based on the actual amount of tiered storage capacity used by your business applications.

Like all other HP Storage Essentials value-add modules, the Chargeback Manager automatically extends the

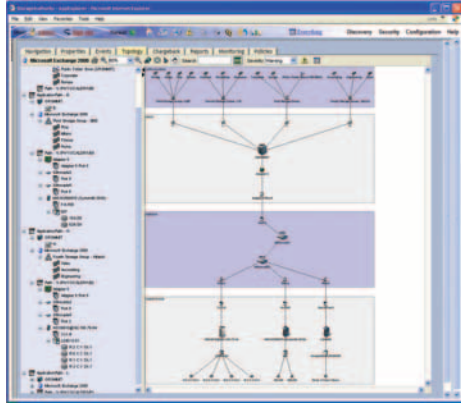
Storage Essentials Enterprise Edition's standard reports with new chargeback and asset management reports—all of which inherit the standard report features, including export to multiple formats, role-based security and automatic e-mail delivery and scheduling functions.

### Key features

- Asset-based chargebacks
- Storage-based chargebacks
- Department definitions
- Infrastructure costs
- Tiered storage definitions
- Asset management
- Extended "out-of-the-box" reports
- Multiple output formats
- Automatic report delivery
- Role-based security

### Key benefits

- Automates calculation of storage charges and billing.
- Automates usage metering, calculation of storage charges and billing based on storage consumption.
- Aligns storage supply chain with lines of business.
- Accounts for full costs of storage services.
- Charges for both quality and quantity of storage used.
- Provides foundation for tiered storage and ILM initiatives.
- Creates single, centralized repository for storage asset information.
- Integrates with third-party asset management tools using database schema views, J2EE APIs and CLIs.
- Reduces effort and errors associated with manually creating, updating and distributing reports.
- Shares reports with almost any end user.
- Distributes reports automatically to IT staff and line of business users.
- Centrally controls access to chargeback and asset data.



- Discovers messaging servers, databases and storage groups
- SAN dependency and path management
- “Closed-loop” capacity management
- Real-time performance monitoring
- Role-based security
- Policies, events, reports

## HP Storage Essentials—Exchange Viewer

The Exchange Viewer is an optional plug-in that extends HP Storage Essentials Suite with application-to-spindle management of Microsoft Exchange Server. With its powerful capacity, performance and dependency management capabilities, the Exchange Viewer provides the availability and performance of Exchange messaging and collaboration services in SAN environments.

The Exchange Viewer automatically discovers Exchange Server instances, storage groups and message stores, and graphically depicts their dependencies on the SAN. The path that each Exchange resource takes through mount points, Windows® hosts, volume management software, HBAs, fabric switches and storage systems is represented in a single, integrated view. These powerful path management capabilities, combined with real-time performance monitoring features, enable you to predict the impact of planned and unplanned SAN downtime on your messaging environment and determine where in the SAN “stack” performance is being impacted.

The Exchange Viewer also extends the full range of capacity management, role-based security, event management, reporting and policy-based automation capabilities of HP Storage Essentials Suite to Exchange Server environments.

The HP Storage Essentials Exchange Viewer monitors the performance from message stores through the SAN to storage system disks. The Exchange Viewer discovers and highlights messaging dependencies on Windows hosts, HBAs, fabric switches and storage systems.

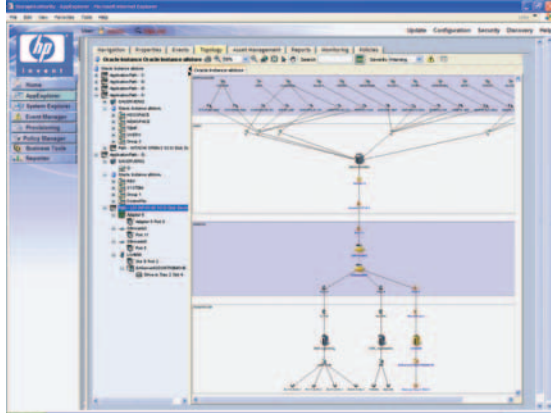
Storage Essentials application discovery features allow, for example, a DBA to understand how database tables are affected by the storage infrastructure, pinpointing all the components needed for daily operations or to recover from a system crash.

### Key features

- Discovery and SAN dependency management
- Application explorer with topology visualization
- Capacity management and planning
- Performance monitoring and reporting
- Event and policy engines
- Role-based security and organizational groupings

### Key benefits

- Verifies that SAN implementation is consistent with design.
- Eliminates need to manually determine dependencies.
- Predicts what Exchange data will be impacted by SAN configuration changes.
- Prevents planned SAN downtime from impacting Exchange availability.
- Increases utilization of existing storage resources.
- Identifies candidates for consolidation.
- Prevents capacity shortages from impacting Exchange Server availability.
- Avoids unnecessary capital expenditures.
- Performs faster root cause analysis of Exchange Server performance problems.
- Improves efficiency and coordination of help desk and server, storage and messaging administrators.
- Meets C-level and business unit requirements for auditing and reporting.
- Automates responses.
- Controls access to Exchange storage from central point.
- Reduces risk of security breach due to error or malicious intent.



- Meet service-level agreements (SLAs) for Oracle, Sybase and MS SQL Server performance
- Role-based security and organizational groupings
- Eliminate need to manually inventory database assets
- Prevent planned SAN downtime from impacting database availability
- Control access to database storage from central point

## HP Storage Essentials— Database Viewer

The Database Viewer module is an optional plug-in that extends HP Storage Essentials Suite with application-to-spindle management of Oracle, Sybase and Microsoft SQL Server databases. With its powerful capacity, performance and dependency management capabilities, the Storage Essentials Database Viewer helps improve the availability and performance of Oracle, Sybase and Microsoft SQL Server databases and applications in SAN environments.

The Storage Essentials Database Viewer automatically discovers Oracle databases, tablespaces and files; Sybase databases, devices and files; and MS SQL Server databases, file groups and files; and graphically depicts their dependencies on the SAN. The path that each Oracle, Sybase or MS SQL Server element takes through mount points, host servers, volume management software, HBAs, fabric switches and storage systems is represented in a single, integrated view.

These powerful path management capabilities, combined with real-time performance monitoring features, enable you to predict the impact of planned and unplanned SAN downtime on Oracle, Sybase or MS SQL Server applications and determine where in the SAN “stack” performance is affected. Storage Essentials Database Viewer also extends the full range of capacity management, role-based security, event management, reporting and policy-based automation capabilities to Oracle, Sybase and MS SQL Server environments.

HP Storage Essentials Viewer simultaneously monitors the performance of all SAN resources in Oracle’s storage “supply chain.” The Database Viewer discovers and highlights database dependencies on heterogeneous hosts, HBAs, fabric switches and storage systems.

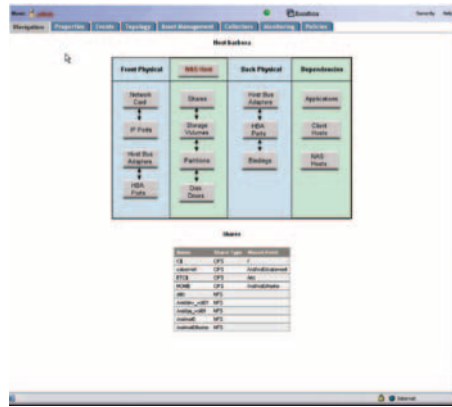
Storage Essentials application discovery features to allow, for example, a DBA to understand how database tables are affected by the storage infrastructure, pinpointing all the components needed for daily operations or to recover from a system crash.

### Key features (Oracle, Sybase and MS SQL Server)

- Discovery and SAN dependency management
- Application Explorer with topology visualization
- Capacity management, planning and reporting
- Performance monitoring
- Event and policy management
- Role-based security and organizational groupings

### Key benefits (Oracle, Sybase and MS SQL Server)

- Verifies that SAN implementation is consistent with design.
- Eliminates the need to manually inventory assets.
- Predicts what data will be impacted by SAN configuration changes.
- Prevents planned SAN downtime from impacting database availability.
- Database paths have no single points of failure.
- Identifies SAN devices to recover first after disaster to speed Oracle database recovery.
- Increases database utilization of existing storage resources.
- Identifies candidates for consolidation.
- Prevent capacity shortages from impacting database availability.
- Avoids unnecessary capital expenditures.
- Performs faster root-cause analysis of database performance problems.
- Improves efficiency and coordination of help desk and server, storage and database administrators.
- Meets SLAs for database performance.
- Meets C-level and business unit requirements for auditing and reporting.
- Prevents capacity shortages from impacting database availability.
- Controls access to database storage from a central point.
- Reduces security risks due to errors or malicious intent.



- Auto-discovers HP ProLiant Storage Servers (NAS), NetApp filers, file systems
- Displays IP and FC connectivity in context in same topology
- Shows dependencies of hosts on NetApp file systems
- Provides complete capacity, performance, event management

## HP Storage Essentials—NAS Manager

NAS Manager is an optional plug-in that extends HP Storage Essentials Suite with comprehensive management for network storage solutions. By enabling you to visualize your distributed storage and centrally manage capacity, performance, health and dependencies, NAS Manager provides a common platform for managing your DAS, NAS and SAN infrastructure, enabling you to meet storage service levels and improve operational efficiency.

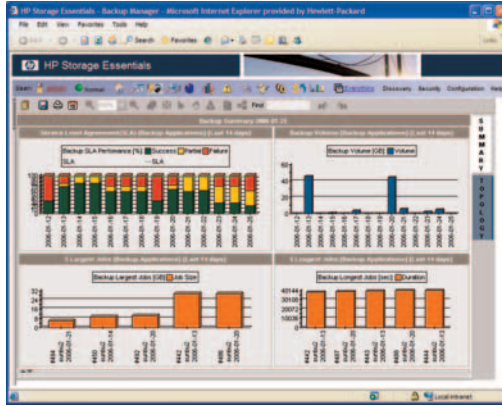
NAS Manager automatically discovers your storage assets; collects a wide range of capacity, performance and configuration details; and maps your topology. IP network connections to devices as well as fibre channel connections to SAN fabric switches and storage systems for NAS gateway configurations are represented in a single, integrated view. Powerful path and dependency management capabilities enable you to quickly predict the impact of NAS events on your business, while the real-time performance monitoring and current and historical capacity management features enable you to improve performance and utilization. NAS Manager also extends the full range of role-based security, reporting, policy-based automation and event management capabilities of HP Storage Essentials to your NAS storage.

### Key features

- NAS device discovery and metadata collection
- Topology visualization with path and dependency management
- Capacity management and planning
- Performance monitoring and trending
- Reports
- Event and policy engines
- Security and groupings

### Key benefits

- Eliminates the need to manually track NAS assets.
- Improves accuracy of NAS asset management.
- Predicts impact of configuration changes or downtime of lines of business.
- Identifies which NAS devices to recover first after disaster to speed business recovery.
- Improves utilization of existing resources.
- Prevents capacity shortages from impacting NAS availability.
- Performs faster root-cause analysis of NAS performance problems.
- Improves efficiency and coordination of help desk, server and storage staff.
- Meets service level agreements for storage performance.
- Meets C-level and business unit requirements for auditing and reporting.
- Prevents capacity shortages from impacting NAS availability.
- Automates responses to critical NAS events.
- Complies with storage security requirements.



- Backup job success and failure analysis and SLA performance for HP Data Protector and VERITAS-NetBackup
- Protection dashboard summarizes distributed backup health
- Backup topology shows relationships between backup resources and SAN elements
- Media pool and backup resource analysis speeds capacity planning

## HP Storage Essentials—Backup Manager

HP Storage Essentials Backup Manager is an optional plug-in that extends powerful backup resource management, monitoring and reporting to improve the health and performance of your data protection infrastructure. Backup Manager reports on statistics such as backup resources, success/failure, SLA, backup volume, job size and client history. It also maps backup dependencies on SAN resources, and extends topology to tape libraries and drives and backup servers.

### Features and benefits

- Automatically discovers your distributed backup environment, including clients, master servers, media servers, tape libraries, drives and media.
- Delivers an instant picture of your backup topology so you can visualize resource dependencies.
- Reports and alerts on backup successes and failures, unprotected assets, root causes of backup failures and performance against SLAs.

Unlike backup reporting point tools—which only collect logical backup application information—Backup Manager leverages the physical resource management capabilities of HP Storage Essentials Suite to present the full picture of your tape-based and disk-to-disk backup configurations in a single, unified view. The module also inherits the full range of role-based security, capacity forecasting, performance analysis, reporting and policy-based automation capabilities of HP Storage Essentials. The module currently supports HP Data Protector and Symantec NetBackup, with future support coming soon with other leading backup and recovery applications.

### Backup resource discovery and metadata collection

- Provides a single, centralized platform for visualizing, monitoring and managing all DAS, NAS, SAN and backup infrastructure.
- Discovers all distributed backup resources, including backup clients, master servers, media servers, tape libraries and drives.
- Collects and displays detailed asset and capacity information, including library and drive statistics and media pool membership, state, retention and use.
- Eliminates need to manually track backup assets.

### Protection Explorer for backup topology visualization and path management

- Maps backup resources in the context of the IP network and shows connections between backup clients (hosts), master servers, media servers, tape libraries and drives.
- Scaling and Panning Window tools enable you to zoom in or zoom out and rapidly navigate large backup environments.
- Drag Nodes and Save View features enable you to layout your backup topology for easy visualization and navigation.
- Predicts impact of network or host changes or downtime on backup activities.
- Identifies root causes of backup failures and performance.

**Supported storage infrastructure**

**Storage Systems**

- HP StorageWorks XP disk arrays (XP12000, XP10000, XP1024, XP512, XP128, XP48)
- HP StorageWorks Enterprise Virtual Array (EVA) EVA3000/4000/5000/6000/8000
- HP Modular Storage Array (MSA) MSA1000, MSA1500
- HP EMA 12000, EMA 16000 (HSG80)
- HP ProLiant Storage Server (NAS), ML and DL Storage Servers
- HP EFS Clustered Gateway
- HP All in One (AiO) 400 and 600
- EMC DMX800, 1000, 2000, 3000
- EMC Clariion CX 100, 300, 400, 600, 700
- EMC Clariion FC-4700
- EMC Symmetrix 4.8, 5.0, 5.5
- HDS Lightning 9900, 9910, 9960, 9970, 9980V
- HDS Thunder 9200, 9500, 9520V, 9530V, 9570V, 9580V, 9585V
- Tagmastore USP SANRISE H12000 (100, 600, 1100) (Japan)  
Tagmastore NSC-55, WMS-100  
Tagmastore AMS&WMS NAS, 100, 200, 500  
Tagmastore AMS 200, 500, 1000
- IBM ESS 800, F20, (2105-F20)
- IBM DS4100 (FASiT 100), DS4300 (FASiT 600, FASiT 600 Turbo), DS4400 (FASiT 700), DS4500 (FASiT 900), DS4800, DS6000, ESS800, DS6800, DS8000, DS8100, DS8300
- Sun StorEdge 6130, 6140, 6540, 6920, 6940, 9900, 9990, 3510, 3511
- Sun StorEdge NAS 5210, 5310, 5320
- NetApp Data on Tap 6.5 thru 7.0.x, 7.0.x, 7.1.x
- Engenio E2600 series, E4600, E5600, E6000
- StorageTek FLX240, FLX280, FLX380, D280, D178, D240
- StorageTek NAS 5210, 5310, 5320
- XIOTech (Magnitude 3D)
- 3Par Data Systems

**Storage Switches**

- HP StorageWorks SAN Switch (B-series): 4/8, 2/8V, 2/8, 2/16v, 2/16N, 2/16, 4/32, 4/64, Core Switch 2/64, SAN Director 4/256 and 2/128
- HP StorageWorks (M-series): Director 2/140, 2/64; Edge Switch 2/32, 2/24, 2/12
- HP StorageWorks (M-series) Director 2/64, 2/140, Edge Switch 2/16, 2/24, 2/32, 4Gb SAN Switch for HP p-Class Blade
- HP StorageWorks (C-series): MDS 9120, 9124, 9140, 9216, 9506, 9509, 9513, MDS 9020 FabricWare
- HP StorageWorks MSA SAN Switch 2/8
- HP StorageWorks MPR 400
- HP StorageWorks 4Gb SAN Switch for HP p-class and c-class Blade
- Brocade and OEM equivalent: SilkWorm 2xx0, 38xx, 32xx, 3900, 4100, 4900, 7500, 200E, 48000 (SP1A)
- Brocade 4Gb SAN Switch for HP p-Class BladeSystem
- McData 4Gb SAN Switch for HP p-Class BladeSystem
- Brocade and OEM equivalent: Director 12000, 24000, 6400
- Brocade SilkWorm 200E
- McData and OEM equivalents ES-1000, ES-3016, ES-3032, ES-3200 series, ES-4300, ES-4500 series
- McData and OEM equivalents Director ED-6140, ED-6064, ED-5000
- Cisco and OEM equivalents 9509, 9506, 9216, 9120, 9124, 9513, 9140
- CNT FC/9000-64 (1Gbps), FC/9000-128 (1Gbps), FC9000-64 (2Gbps), FC/9000-128 (2Gbps)
- QLogic Sandbox 1-8 X64746, (1Gb 8 port), 1-16 SG-XSW16-32P (1Gb 16 port), 2-8 SG-W8-2GB (2Gb 16 port), 2-16 SG-XSW16-2Gb (2Gb 16 port)
- QLogic 5200
- QLogic Sanbox Director 2-64 SG-SXW64-BASE (2Gbps 64 Port)
- EMC Connectrix DS-16M, DS-24M2, DS-32M2
- EMC Connectrix Director ED-1032, ED-64M, ED-140M
- Sun StorEdge 2 GB Network FC Switch 8-port, 16-port, 64-port

**Software prerequisites**

- HP Systems Insight Manager 5.10 or higher
- Oracle 9.2.0.16.0 with patch (provided)
- JBoss application server (installed with the management server software)
- Jetty web server
- Device Managers for each managed device (arrays, switches, tape libraries, etc.)
- Microsoft Internet Explorer, Netscape Navigator, Mozilla or Firefox
- For Windows, latest Windows updates. For Linux refer to operating systems requirements.

**Application/database support**

Database	Version	Platform
Oracle	8.1.7	Windows 2000 and 2003; Solaris 8, 9, 10
Oracle	9i	Windows 2000 and 2003; Solaris, AIX 5.2, AIX 5.3; HPUX 11.0, 11i; Linux AS3.0 TruCluster 5.1b-2, 5.1b-3, 5.1b-4
Oracle	10g	Windows 2000 and 2003
	v10.1.0.2, 10.1.0.3	Solaris, AIX 5.2, AIX 5.3; HPUX 11.0, 11i; Linux AS3.0, SuSE 9, Trucluster 5.1b-3
Sybase	ASE 12.5.0, 12.5.1, 12.5.2	Windows 2000 and 2003
MS-SQL Server	2000	Solaris 8 and 9
MS-Exchange	2000 (SP1, SP2, SP3)	Windows 2000 and 2003; Itanium Windows
MS-Exchange	2003 (SP2)	Windows

<b>OS requirements</b>	<p><b>Host:</b></p> <ul style="list-style-type: none"> <li>• HP-UX 11.0, 11.11, 11.23, 11.31 (32-bit and 64-bit for all)</li> <li>• Microsoft Windows 2000 (SP2 and greater)</li> <li>• Microsoft Windows 2003 (32-bit) Standard and Enterprise</li> <li>• Linux Red Hat AS 3.0, 4.0 (x86, x64, IA64)</li> <li>• Linux SuSE 9.0 (x86, x64, IA64)</li> <li>• Solaris 8, 9, 10 (32-bit and 64-bit for all)</li> <li>• AIX 5.1, 5.2, 5.3 (32-bit and 64-bit for all)</li> <li>• SGI IRIX 6.5.20, 6.5.21, 6.5.22, 6.5.24f</li> <li>• OpenVMS 7.3-2, 8.2 (Alpha); 8.2-1 (IA64)</li> <li>• Tru64 5.1b-1, 5.1b-2, 5.1b-3</li> </ul>
<b>Web client</b>	Microsoft Internet Explorer, Netscape Navigator, Mozilla or Firefox
<b>Software licensing</b>	HP Storage Essentials software installation is not customer installable and requires an HP professional service representative or an HP Certified Trained Partner to install the software. HP Storage Essentials applications require evaluation or permanent license keys to operate. When you receive your entitlement certificates for evaluation or permanent licenses, you must first register these licenses prior to using the Storage Essentials product. Your entitlement certificate will reflect the Storage Essentials products and licenses selected/purchased. Evaluation licenses allow the entire Storage Essentials product suite to operate for the time period stated on the evaluation entitlement certificate (typically 60 days).
<b>Software warranty</b>	Warranty code 3U; duration of limited warranty: 90 days from the day of purchase, replacement of defective media
<b>Hardware prerequisites</b>	<p>All Storage Essentials products require a dedicated management server to host the applications and provide the repository for information storage.</p> <p><b>On separate central management server from HP SIM (dedicated):</b></p> <ul style="list-style-type: none"> <li>• Processor: <ul style="list-style-type: none"> <li>– Dual Intel® Xeon™ (or AMD equivalent) 3.4 GHz or higher (recommended) or Microsoft Windows 2000 SP4 (Datacenter or Advanced Server) or Windows 2003 SP1 (32 bit only on X86, Enterprise Edition or Datacenter); MS 2003 R2 or Linux RHEL 4 ES and AS 4.0 (U1 or latest) (Intel 32-bit), SLES 9.0 (SP3 or latest) (Intel 32-bit)</li> </ul> </li> <li>• Memory: <ul style="list-style-type: none"> <li>– Minimum: 4 GB (for smaller configurations monitoring 20 or fewer devices; HP SIM management server requires 2 GB minimum)</li> <li>– Recommended: 6 GB; to address beyond 4GB, need Physical Address Extension (PAE) and Windows 2000 Advanced Server and Windows 2000 Datacenter Server (SP4), Windows Server 2003, Enterprise Edition and Windows Server 2003, Datacenter (32-bit only, SP1)</li> </ul> </li> <li>• Disk space: 150 GB (recommended)</li> </ul> <p><b>On combined central management server with HP SIM (shared):</b></p> <ul style="list-style-type: none"> <li>• Processor: <ul style="list-style-type: none"> <li>– Dual Intel Xeon (or AMD equivalent) 3.4 GHz or higher Microsoft Windows 2000 SP4 (Datacenter or Advanced Server) or Microsoft Windows 2003 SP1 (32 bit only, Extension Enterprise Edition or Advanced Server) recommended</li> </ul> </li> <li>• Memory: <ul style="list-style-type: none"> <li>– Beyond 4 GB, need PAE (Physical Address Extension) and Microsoft Windows 2000 SP4 (Datacenter or Advanced Server) or Microsoft Windows 2003 SP1 (32 bit only, Extension Enterprise Edition or Advanced Server); Linux RHEL 4 and AS 4.0 or SLES SP3 (32-bit only on X86 or X64)</li> <li>– Minimum: 6 GB (for smaller configurations monitoring 20 or fewer devices; includes 2 GB requirements for combination with HP SIM)</li> <li>– Recommended: 8 GB</li> </ul> </li> <li>• Disk space: 150 GB (recommended)</li> </ul>
<b>Distribution Media</b>	CD ROM or HP E-Delivery (electronic delivery)

For ordering information, please see QuickSpecs: [www.hp.com/go/QuickSpecs](http://www.hp.com/go/QuickSpecs)



- Unified server and storage management
- Visualize all storage infrastructure via a single tool-set
- Manage more storage capacity per administrator
- Holistic view from application to device
- Integrated SAN and NAS management
- Visualize and monitor backup for the entire SAN

## HP Storage Essentials— Standard Edition SRM Software

HP Storage Essentials Standard Edition SRM Software Solution allows your IT staff to see the big picture. It reduces SAN complexity with an automated SRM tool to affordably manage small to medium HP Storage-based SANs. Standard Edition SRM Software supports Windows and Linux servers and HP EVA, HP MSA disk arrays, HP NAS, HP Tape, HBAs and fabric devices. A single, unified server and storage toolset automates storage processes and tasks with auto discovery, visualization and topology views. The standards-based software solution integrates with HP Systems Insight Manager and includes HP Storage Essentials Enterprise Edition SRM Software and selected Storage Essentials plug-in licensing.

HP Standard Edition SRM Software is an affordable and easy-to-order SRM solution for midsize businesses. It improves SAN capacity, increases IT staff efficiency and simplifies end-to-end troubleshooting and reporting from a single, Web-based, secure console.

### Key features

- Reduces storage management complexity.
- Automates SAN discovery, visualization and topology mapping.
- Integrates with HP Storage Essentials Enterprise Edition Software Suite.
- Increases IT staff efficiency and simplifies SAN troubleshooting.

- Holistic view of storage from the application level provides quicker problem resolution.
- Provides high-performance, scalable file-level scanning, analysis and reporting.
- Common interface simplifies SAN and NAS management.

### Key benefits

- Integrated and unified management toolset reduces SAN complexity by automating complex and manual tasks.
- Extensive topology mapping and SAN device visualization for quick SAN infrastructure device identification.
- Monitors and controls health, performance and storage utilization and reporting for all key infrastructure, including servers, storage, tape, NAS, HBAs, switches and backup from a single interface.
- Integrates with HP Essentials Software and HP Storage Essentials Enterprise Edition software and advanced software plug-ins when larger heterogeneous SAN management is required.
- Complete and easy-to-order Storage Resource Management solution for HP EVA, HP MSA and HP NAS environments.
- Holistic view of storage from the application level provides quicker problem resolution.
- High performance file-level scanning, analysis and reporting helps reclaim wasted space and ensure file server availability.
- One interface simplifies NAS and SAN management.

<b>Supported Fibre Channel and SCSI storage devices</b>	<ul style="list-style-type: none"> <li>• HP StorageWorks Enterprise Virtual Array (EVA) EVA3000/4000/5000/6000/8000</li> <li>• HP Modular Storage Array (MSA) MSA1000, MSA1500</li> <li>• HP ProLiant Storage Server (NAS)</li> <li>• HP EML E-Series Tape Libraries (245e, 103e)</li> </ul>																													
<b>Supported interconnect devices—switches</b>	<ul style="list-style-type: none"> <li>• HP StorageWorks (B-series) Core Switch 2/64, 2/64 Power Pak; SAN Switch 4/32, 2/32 Power Pak, 2/16, 2/16 Power Pak, 2/16 EL, 2/8 EL, 2/8 Power Pak, SAN Switch 4/8, 4/16, SAN Director 4/256</li> <li>• HP StorageWorks (M-series) Director 2/140, 2/64; Edge Switch 2/32, 2/24, 2/12, M4400, M4700</li> <li>• HP StorageWorks (C-series) MDS 9509 Director, MDS 9506, 9509, 9513 Director, MDS 9020, 9216, 9216i, 9216A Fabric Switch, MDS 9120, 9124 Fabric Switch, 9140 Fabric Switch</li> <li>• Brocade and OEM equivalent: SilkWorm 38xx, 32xx, 3900, 4100, 6400, 200E, 7500, 12000, 24000, 48000</li> <li>• Brocade 4Gb SAN Switch for HP p-Class BladeSystem</li> <li>• McData 4Gb SAN Switch for HP p-Class BladeSystem</li> <li>• Emulex LPe1105-HP 4gb FC HBA for HP c-Class BladeSystem</li> <li>• HP QLogic QMH2462 4Gb FC HBA for HP c-Class BladeSystem</li> <li>• Brocade and OEM equivalent: Director 12000, 24000, 6400</li> <li>• Brocade SilkWorm 200E</li> <li>• McData and OEM equivalents ES-3016, ES-3032, ES-3200 series, ES-4500 series, M4400, M4700</li> <li>• McData and OEM equivalents Director ED-6140, ED-6064, ED-5000</li> <li>• Cisco and OEM equivalents 9020, 9509, 9506, 9513, 9216, 9120, 9124, 9140, 9216A</li> </ul> <p><i>NOTE: Although Director class or large switches can be discovered by Standard Edition, a configuration comprising of larger switches may not be supported if MAP count exceeds 150 MAPs.</i></p>																													
<b>Hardware prerequisites</b>	<p><b>On combined management server with HP SIM:</b></p> <ul style="list-style-type: none"> <li>• Processor: Dual Intel Xeon or AMD equivalent (32-bit OS only) 3.4 GHz or higher (recommended)</li> <li>• OS: Windows 2000 Advanced Server and Windows 2000 Datacenter Server (SP4) or Windows 2003 Enterprise Edition and Windows Server 2003, Datacenter Edition (32-bit only, SP1); WS 2003 R2 (32-bit only)</li> <li>• Memory: <ul style="list-style-type: none"> <li>– To address beyond 4GB, need PAE and Windows 2000 Datacenter or Windows 2000 Advanced Server (SP4) or Windows 2003 Enterprise Edition or Windows 2003 Datacenter (SP1), 2003 R2 (32-bit)</li> <li>– Minimum: 6 GB (For smaller configurations monitoring 20 or fewer devices; includes 2 GB requirements for combination with HP SIM)</li> <li>– Recommended: 8 GB</li> </ul> </li> <li>• Disk space: 150 GB (recommended)</li> </ul> <p><i>NOTE: Linux Management Server (CMS) is not supported on Standard Edition but is supported on Enterprise Edition.</i></p>																													
<b>Distribution media</b>	<ul style="list-style-type: none"> <li>• CD ROM (physical CDs) or E-Delivery (Electronic distribution of bits)</li> </ul>																													
<b>Software prerequisites</b>	<ul style="list-style-type: none"> <li>• HP Systems Insight Manager 5.1 or greater</li> <li>• Oracle 9.2.0.6.0 with patch (provided)</li> <li>• Device Managers for each managed device (arrays, switches, tape libraries, etc.)</li> <li>• Microsoft Internet Explorer, Netscape Navigator or Mozilla</li> <li>• For Windows, latest Windows updates</li> </ul>																													
<b>Application/database support</b>	<table border="1"> <thead> <tr> <th>Database</th> <th>Version</th> <th>Platform</th> </tr> </thead> <tbody> <tr> <td>Oracle</td> <td>8.1.7</td> <td>Windows NT, 2000 and 2003</td> </tr> <tr> <td>Oracle</td> <td>9i</td> <td>Windows 2000 and 2003; Linux AS3.0</td> </tr> <tr> <td>Oracle</td> <td>10g</td> <td>Windows 2000 and 2003</td> </tr> <tr> <td></td> <td>v10.1.0.2, 10.1.0.3</td> <td>Linux AS3.0</td> </tr> <tr> <td>Sybase</td> <td>ASE 12.5.0, 12.5.1, 12.5.2</td> <td>Windows 2000</td> </tr> <tr> <td>MS-SQL Server</td> <td>2000</td> <td>Windows 2000 and 2003; Itanium Windows</td> </tr> <tr> <td>MS-Exchange</td> <td>2000 (SP1, SP2, SP3)</td> <td>Windows</td> </tr> <tr> <td>MS-Exchange</td> <td>2003 (SP2) Windows</td> <td></td> </tr> </tbody> </table>	Database	Version	Platform	Oracle	8.1.7	Windows NT, 2000 and 2003	Oracle	9i	Windows 2000 and 2003; Linux AS3.0	Oracle	10g	Windows 2000 and 2003		v10.1.0.2, 10.1.0.3	Linux AS3.0	Sybase	ASE 12.5.0, 12.5.1, 12.5.2	Windows 2000	MS-SQL Server	2000	Windows 2000 and 2003; Itanium Windows	MS-Exchange	2000 (SP1, SP2, SP3)	Windows	MS-Exchange	2003 (SP2) Windows			
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<b>Operating system requirements</b>	<p><b>Managed host:</b></p> <ul style="list-style-type: none"> <li>• Microsoft Windows 2000 (SP4)</li> <li>• Microsoft Windows 2003 (x86, x64, IA64) Standard and Enterprise Edition</li> <li>• Linux Red Hat AS/ES 3.0, 4.0 (X86, X64, IA64)</li> <li>• Linux SuSE 9.0 (x86, X64, IA64)</li> </ul>		<p><b>Management Server:</b></p> <ul style="list-style-type: none"> <li>• Windows: Windows 2000 Advanced Server and Windows 2000 Datacenter Server (SP4), Windows Server 2003, Enterprise Edition and Windows Server 2003, Datacenter Edition (Intel or AMD equivalent 32-bit only, SP1), 2003 R2; WS 2003 R2 (32-bit only)</li> <li>• JAVA: 1.5</li> </ul>																											
<b>Web client</b>	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer (5.5 or higher)</li> <li>• Netscape Navigator (7.x Windows)</li> <li>• Mozilla (1.7+)</li> <li>• Firefox (1.5.0.1+, Windows, Red Hat, SuSE)</li> </ul>																													
<b>Software installation licensing</b>	<p>HP Storage Essentials software installation is not customer installable and requires a mandatory HP Installation and Start UP Service delivered by a HP professional service representative or an HP Certified Trained Partner to install HP Storage Essentials software. HP Storage Essentials applications require evaluation or permanent license keys to operate. When you receive your entitlement certificates for evaluation or permanent licenses, you must first register these licenses prior to using the Storage Essentials product. Your entitlement certificate will reflect the Storage Essentials products and licenses selected/purchased. Evaluation licenses allow the entire Storage Essentials product suite to operate for the time period stated on the evaluation entitlement certificate (typically 60 days).</p>																													
<b>What's included</b>	<ul style="list-style-type: none"> <li>• HP Storage Essentials Standard Edition SRM Media Kit or E-Media Kit</li> <li>• HP Storage Essentials Standard Edition SRM LTU or E-LTU</li> <li>• Combined SRM license to use (LTU) includes a maximum of 150 MAPs, 4TBs File System Viewer, 4TBs of NAS Manager and 1 MAL of either the Exchange or Database Viewer, 1 Password request document</li> <li>• Additional add on LTU is available for the File System Viewer, NAS Manager, Exchange Viewer or Database Viewer</li> <li>• Additional optional plug in LTU is available for Backup Manager</li> </ul>																													

For ordering information, please see QuickSpecs: [www.hp.com/go/QuickSpecs](http://www.hp.com/go/QuickSpecs)

## Warranty and included services

HP warrants only that the software media will be free of physical defects for a period of 90 days from delivery. For more information about HP Global Limited Warranty and Technical Support, visit: [www.hp.com/products/storageworks/warranty](http://www.hp.com/products/storageworks/warranty).

## HP Care Pack Services

HP Care Pack Services offer upgraded service levels to extend and expand your standard product warranty with easy-to-buy, easy-to-use support packages that help you make the most of your hardware and software investments. They let you choose the support levels that meet your business requirements, from basic to mission-critical. They help you contain total cost of ownership.

HP Care Pack warranty extensions can be purchased along with HP products to cost-effectively upgrade or extend your warranty. For many products, post-warranty HP Care Pack Services are available when your original warranty has expired. For more information on these services, contact your local HP representative, authorized HP business partner, or visit: [www.hp.com/services/storage\\_carepacks](http://www.hp.com/services/storage_carepacks).

## Additional HP support services

HP Services provides a broad spectrum of services to commercial and enterprise customers, including performance and availability services such as proactive mission-critical services. It also provides support management services for deployment of the entire IT infrastructure, including HP and multi-vendor environments. For more information on these services, contact your HP representative, authorized HP business partner, or visit: [www.hp.com/hps/storage](http://www.hp.com/hps/storage).

## Education services

HP offers a variety of training methods to fit your needs, including traditional instructor-led courses at one of our 120 training centers worldwide; onsite training customized to your needs, in your facility; or even Remotely Assisted Instruction Learning that combines the best of traditional classroom training (including its live instructor and labs) with the best of online training (no traveling required). And, if you like learning on your own schedule and at your own pace, make use of e-learning opportunities on the award-winning HP IT Resource Center, a learning community with extensive on-demand resources that can be accessed 24x7. For more information on these services, contact your HP

## HP Services

HP Services has end-to-end, excellent expertise in delivering solutions that help you improve your business agility. From initial assessment and design to technical integration and ongoing support, HP Services can be your single point of contact and accountability.

HP related services:

- **HP Storage Essentials Solution Service**—helps you to install, integrate and improve the efficiency and performance of your storage area management solution. It offers three service levels, allowing you to tailor deployment to meet the specific needs of your storage environment. The service offers flexibility by providing a range of choices, from basic through advanced, for deployment of the HP Storage Essentials suite.
- **Other HP Storage Management Services** include:
  - Backup and Recovery Solution Service
  - Data Replication Solution Service
  - Disaster Tolerant Management Service
  - Electronic Vaulting Service for Enterprises
- **HP Care Pack Services**—a comprehensive portfolio of services for maintaining the highest levels of IT availability.
  - Critical Service
  - Proactive 24 service
  - Support Plus 24 service
- **Instant Support Enterprise Edition (ISEE)**—remote monitoring and support solution for your IT datacenter.
- **Business Continuity Services**—protect and decrease disruption to IT infrastructure and associated business processes against site outages, disasters and environmental events.

For further information on HP storage services, please visit: <http://www.hp.com/hps/storage>

representative, authorized HP business partner, or visit: <http://education.hp.com/curr-storsan.htm>.

## Financial services

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## For more information

For more information about the HP Storage Essentials Enterprise Edition, visit: [www.hp.com/go/storageessentials](http://www.hp.com/go/storageessentials).

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