

Overview

The HP Storage Essentials Enterprise Edition SRM software suite is an award-winning tool that simplifies heterogeneous management of storage infrastructures. HP Storage Essentials Enterprise Edition SRM provides several capabilities to manage storage operations with high performance, availability and predictability. These include storage discovery, capacity management, customized reporting, provisioning, business application and backup monitoring, and end-to-end performance management. The integrated portfolio of SRM management solutions increases staff efficiency, optimizes storage, automates and simplifies tasks, and replaces traditional, manually intensive tools such as spreadsheets, Visio and whiteboards used to manage storage assets.

HP Storage Essentials is a key enabler of HP Business Service Automation strategy, which allows enterprises to manage and automate their entire IT service including applications, servers, network and storage infrastructure.

HP SRM Enterprise Edition software serves as the base management console for the suite. The heterogeneous SRM Software provides auto-discovery of your physical and virtual storage, infrastructure and server environments from a variety of vendors including HP, EMC, HDS, IBM, Netapp, SUN, Brocade, Cisco, Mcddata, and more...Physical device discovery include hosts, HBAs, switches, tape, physical servers and virtual servers VMware and storage systems. Easily auto-discover popular business applications including Oracle database, Microsoft SQL Server, Microsoft Exchange Server, Sybase database and InterSystems Cache' database. To enable end-to-end storage automation, HP Storage Essentials SRM software integrates with HP Operations Orchestration run book automation platform to automate manual and error-prone IT management processes including storage, and with HP Universal Configuration Management Database (UCMDB)-you can perform impact analysis modeling and reporting of requested changes to storage environments and automated change tracking and compliance reporting for storage devices. The software takes advantage of the latest in industry standards such as SMI-S, WBEM, WMI, JBoss and J2EE. This ensures our solution is extensible and will support the most demanding heterogeneous and multi-vendor IT environments.

Easily Expand the Storage Management Capabilities of Storage Essentials SRM software with easy to Integrate and Optional Storage Essentials SRM Software plug-in and Integrations software

HP Storage Essentials SRM Provisioning Manager software accelerates ITs ability to bring new revenue-generating projects and applications on-line and expand the capacity of existing applications by providing interactive and guided path provisioning of heterogeneous storage systems and fabric switches. The software enables device-specific and step-by-step guided path provisioning of storage area network (SAN) resources.

HP Storage Essentials SRM Exchange Viewer and Database Viewer software help storage administrators visualize all application-to-spindle infrastructure dependencies for a database environment. With the software's powerful capacity, performance, fault management and filtered topology views - database infrastructure dependency management is simplified ensuring your enterprise databases are meeting your availability and performance objectives. These Viewers monitor the capacity and performance and application to storage device dependencies of Oracle database, Microsoft Exchange Server, Microsoft SQL Server, Sybase database, and InterSystems Cache' database.

HP Storage Essentials SRM File System Viewer software provides high performance, highly scalable file-level scanning, analysis, reporting, and policy-based management capabilities to reclaim wasted disk space, respond faster to file server out-of-space conditions, and classify unstructured data in support of Information Lifecycle Management (ILM) initiatives. 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 capability you need to reclaim wasted disk space, ensure file server availability, monitor user consumption, and classify unstructured data for ILM initiatives.

HP Storage Essentials SRM Chargeback Manager software extends HP Storage Essentials Software 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 enhances your ability to meter utilization, control storage costs, increase revenue, and differentiate your service offering to better meet customer demands.

Overview

HP Storage Essentials SRM Report Optimizer software formerly SRM Report Designer Software is a new optional plug-in that extends HP Storage Essentials SRM suite with easy to use and powerful, custom, ad hoc and interactive reporting capabilities that satisfy your unique audit, service-level management, compliance and communications needs. SRM Report Optimizer helps IT and end users perform query and analysis on thousands of storage objects with 80 standard report templates. It allows end users to interact with heterogeneous storage and infrastructure information to answer ad hoc questions with minimal knowledge of underlying data sources and structures. An intuitive drag-and-drop interface makes it easy to quickly analyze data and answer questions or design and deliver custom reports that empower business and end users with actionable business intelligence for better business outcomes. HP Storage Essentials SRM Report Optimizer can also be extended to give you enterprise-wide control over distributed data center operations. . The software's powerful rollup reporting capabilities provide aggregated views of distributed data center storage. Designed for enterprises that implement multiple instances of the HP Storage Essentials SRM Software, the module summarizes key storage statistics from the 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.

HP Storage Essentials SRM NAS Manager software provides comprehensive Network Attached Storage (NAS) management capabilities for HP ProLiant Storage Server, NetApp® NAS and SUN StorEdge NAS network storage solutions. Visualize your distributed HP NAS solutions and NetApp filers and centrally manage their capacity, performance, events, and dependencies to ensure NAS availability and performance and unify SAN and NAS management. Why manage NAS and SAN infrastructure independently? It helps you integrate your entire NAS and SAN infrastructure and better understand the impact of configuration changes and file sharing activities as well as improve capacity utilization, availability and root cause performance analysis on your NAS infrastructure as well as manage NAS and SAN from a unified interface.

HP Storage Essentials SRM Backup Manager software helps you visualize and monitor the entire backup environment with powerful backup resource management, reporting, device health and performance of your data protection infrastructure. Report on various statistics such as backup resources, success/failure of events and processes, and monitor SLAs, backup volume, job size, and client history. The software maps backup dependencies to SAN resources and extend topology to tape libraries and drives and backup servers as well as monitor drive performance for HP Data Protector and Veritas NetBackup software.

HP Storage Essentials SRM Performance Pack software combined with Storage Essentials SRM Enterprise Edition Software monitors performance along the complete path of business applications through underlying storage area networks (SAN) components, including host server, host bus adapter (HBA), fabric switch and HP Enterprise Virtual Array and HP XP array A unified and simplified interface helps HP storage administrators increase efficiency, troubleshoot performance bottlenecks faster, and quickly visualize the big performance picture of their EVA and XP storage, hosts, applications, and SAN infrastructure. The performance management module comes in two flavors - *HP Storage Essentials SRM Performance Pack* software focused on HP EVA array performance management and the *HP Storage Essentials Performance Pack Enterprise* software, focused on HP XP array performance management.

HP Storage Essentials SRM Software Integrations- facilitates the integration of HP best-practice based software solutions and IT services with heterogeneous storage and infrastructure that can be managed, changed, optimized, orchestrated and controlled automatically throughout the storage lifecycle.

The integration of HP Storage Essentials SRM software and HP Operations Orchestration (OO) software is delivered through a new Storage Essentials Accelerator Pack which is included with Operations Orchestration. The Storage Essentials SRM Accelerator Pack contains a selection of pre-configured workflows and operations-all based on Storage Essentials SRM Software. The solution enables the entire set of Storage Essentials SRM software commands for usage as operations in storage-related workflows. Workflows in the Storage Essentials SRM Accelerator Pack can be customized through the Operations Orchestration Studio interface, which offers an intuitive visual design for workflows. In addition workflows can be customized to include non-Storage Essentials SRM operations offered by an extensive selection of Accelerator Packs for other-HP and non-HP-IT management software products.

HP Universal Configuration Management Database (UCMDB) software now offers SAN storage Service Context for the enterprise via integration with SRM Storage Essentials Storage Resource Management software suite. This integration provides a rich catalog of all heterogeneous storage infrastructure Configuration Items (CI's) which are fed into the HP UCMDB. The integration between the HP

Overview

UCMDB and HP Storage Essentials SRM software augments core configuration item data held within the HP UCMDB with comprehensive configuration information stored in Storage Essentials SRM software, making this information available to enterprise applications holding incident and problem information. For example, HP Service Manager or HP Business Availability Center.

HP Storage Essentials SRM XP Provider allows Storage Essentials SRM Enterprise Edition software to connect directly to HP XP Arrays without the use of HP StorageWorks XP Command View or Command View XP Advanced Edition Software. This simplifies management by providing a single pane of glass view that spans hosts, applications, infrastructure, tape and HP XP arrays with other heterogeneous storage devices including: EMC, HDS, Netapps, IBM and more. The Storage Essentials SRM XP Provider is included with HP Enterprise Edition SRM Media kit.

HP Storage Essentials SRM Application Integration software for SAP Adaptive Computing Controller environments helps customers with SAP ACC installations seamlessly move and visualize SAN attached storage and infrastructure resources between physical servers when SAP application services are required for more storage. This is an ideal setting for SAP test environments so configuration changes can be tested prior to SAP production. The HP Storage Essentials SRM Application Integration Software for SAP ACC is included with Enterprise Edition SRM Media kit.

HP Storage Essentials SRM software integrates with HP Operations Manager for Windows and Unix via Smart Plug-ins (SPI), as well as with the HP Service Desk.

HP Storage Essentials Performance Edition

For customers that desire performance management for HP Arrays (XP and EVA), Storage Essentials also provides another performance focused packaging - Storage Essentials Performance Edition - that enables easy attach and sale/implementation with HP arrays. Storage Essentials Performance Edition comes in two two bundles - SE performance edition 150 MAPs and SE Performance Edition 300 MAPs. SE Performance Edition 150 MAPs is targeted at HP EVA Arrays and includes support for 150 MAPs (managed ports), 1 MAL (application instance like database, Exchange) and 1 (EVA focused) SE array performance pack. SE Performance Edition 300 MAPs is targeted at HP XP arrays and includes support for 300 MAPs (managed ports), 1 MAL (application instance like database, Exchange) and 1 (XP focused) SE array performance pack.

For more information, refer to the following URL : www.hp.com/go/SEPE

What's New

Storage Essentials SRM software support for:

- HP Storage Essentials SRM Report Optimizer software replaced HP Storage Essentials SRM global reporter
- HP Storage Essentials Performance Edition replaces HP Storage Essentials Standard Edition
- HP Storage Essentials Performance Pack Enterprise software to manage performance on HP XP array

Models	Tier 1 (Standard Ordering Tier)		
Product name	Product description	Product number	E-Delivery product number (E-Media and E-LTUs)
Software Media			
HP Storage Essentials Storage Resource Management Media	v6.1 Media kit, physical delivery (CDs and DVD) or Electronic download (E-Delivery).	T4283B	T4283BAE
HP Storage Essentials Storage Resource Management Report Optimizer Media Kit 6.1	v6.1 Media kit, physical delivery (CDs and DVD) or Electronic download (E-Delivery). (Required to deploy SRM Report Optimizer)	T9421BA	T9421BAE
Licensed by Number of MAPs			

Overview

HP Storage Essentials Enterprise Storage Resource Management Enterprise Edition 50 MAP LTU	Discovery topology, event mgmt, monitoring, performance, capacity usage, policies, provisioning, thresholds, reports, HP Software Integration support, and GUI, CLI - base functionality.	T4284AA	T4284AAE
HP Storage Essentials Storage Resource Management Provisioning Manager 50 MAP LTU	Application to spindle provisioning automation wizard.	T4285AA	T4285AAE
HP Storage Essentials Storage Resource Management Chargeback Manager 50 MAP LTU	Chargeback and billing usage reporting.	T4286AA	T4286AAE
Licensed by number of MALs			
HP Storage Essentials Storage Resource Management Exchange Viewer 1 MAL LTU	Microsoft Exchange path rendering from database, storage groups through disk subsystem.	T4288AA	T4288AAE
¹ HP Storage Essentials Storage Resource Management Database Viewer 1 MAL LTU	Oracle table spaces & database, host through spindle rendering as well as support for MS SQL, Sybase and InterSystems Cache` - a consolidated database viewer.	T4289AA	T4289AAE
Licensed by number of TBs			
HP Storage Essentials Storage Resource Management File System Viewer 1TB LTU	High performance, highly scaleable file-level scanning, analysis, reporting, and policy-based management capabilities to reclaim wasted disk space.	T4292AA	T4292AAE
HP Storage Essentials Storage Resource Management NAS Manager 1TB LTU	Visualize HP NAS and NetAPP NAS and SUN StorEdge NAS network storage solutions. Big picture topology view, centrally manage capacity, performance, event and dependencies to ensure NAS availability and performance.	T4294AA	T4294AAE
HP Storage Essentials Storage Resource Management Backup Manager 1TB LTU	Monitor and visualize the entire backup, backup resource management, end-to-end path dependency, reporting, device health and performance of backup and infrastructure. Supports HP Data Protector and Symantec NetBackup.	T4295AA	T4295AAE
Licensed by number of Concurrent Users			
HP Storage Essentials Storage Resource Management Report Optimizer 1 Concurrent User LTU	This software replaces SRM Report Designer software. Easy to design, create, and deliver custom reports that empower business and IT users with actionable business intelligence to make informed decisions. Add some verbiage about global reporting here..	T9422AA	T9422AAE
Licensed by number of Arrays			
HP Storage Essentials Storage Resource Management Performance Pack 1 Array LTU	Provides a big picture holistic performance view of the entire EVA SAN environment - business applications, hosts, HBA ports, switch ports, storage system port counters and HP EVA.	T5422AA	T5422AAE

Overview

HP Storage Essentials Storage Resource Management Performance Pack Enterprise 1 Array LTU	Provides a big picture holistic performance view of the entire HP XP array SAN environment - business applications, hosts, HBA ports, switch ports, storage system port counters and HP XP.	T4663AA	T4663AAE
Models			
Tier 2 (Higher Quantity Purchase Tier Only)			
Product name	Product description	Product number Physical CDs/DVD	E-Delivery product number (E-Media and E-LTUs)
Licensed by the Number of MAPs			
HP Storage Essentials Enterprise Storage Resource Management Enterprise Edition 50 MAP LTU	Discovery topology, event mgmt, monitoring, performance, capacity usage, policies, provisioning, thresholds, reports, HP Software Integration support, and GUI, CLI - base functionality (Use this part number for minimal quantity purchases of (800) MAPs or greater)	T4284AG	T4284AGE
HP Storage Essentials Storage Resource Management Provisioning Manager 50 MAP LTU	Application to spindle provisioning automation wizard. (Use this part number for minimal quantity purchases of (800) MAPs or greater)	T4285AG	T4285AGE
HP Storage Essentials Storage Resource Management Chargeback Manager 50 MAP LTU	Chargeback and billing usage reporting (Use this part number for minimal quantity purchases of (800) MAPs or greater)	T4286AG	T4286AGE
Licensed by the Number of MALs			
HP Storage Essentials Storage Resource Management Exchange Viewer 1 MAL LTU	Microsoft Exchange path rendering from database, storage groups through disk subsystem. (Use this part number for minimal quantity purchases of (20) MALs or greater)	T4288AG	T4288AGE
HP Storage Essentials Storage Resource Management Database Viewer 1 MAL LTU	Oracle table spaces & database, host through spindle rendering as well as support for MS SQL, Sybase and InterSystems Cache` - a consolidated database viewer. (Use this part number for quantity purchases greater than quantity (20) MALs only)	T4289AG	T4289AGE
Licensed by the Number of TBs			
HP Storage Essentials Storage Resource Management File System Viewer 1TB LTU	High performance, highly scaleable file-level scanning, analysis, reporting, and policy-based management capabilities to reclaim wasted disk space. (Use this part number for quantity purchases greater than quantity (20) TBs only)	T4292AG	T4292AGE
HP Storage Essentials Storage Resource Management NAS	Visualize HP NAS and NetAPP NAS and SUN StorEdge NAS network storage solutions. Big picture topology view, centrally manage capacity, performance, event	T4294AG	T4294AGE

Overview

Manager 1TB LTU	and dependencies to ensure NAS availability and performance. (Use this part number for quantity purchases greater than quantity (20) TBs only)		
HP Storage Essentials Storage Resource Management Backup Manager 1TB LTU	Monitor and visualize the entire backup, backup resource management, end-to-end path dependency, reporting, device health and performance of backup and infrastructure. Supports HP Data Protector and Symantec NetBackup. (Use this part number for quantity purchases greater than quantity (20) TBs only)	T4295AG	T4295AGE
Licensed by the number of Concurrent Users			
HP Storage Essentials Storage Resource Management Report Optimizer 1 Concurrent User LTU	This software replaces SRM Report Designer software. Easy to design, build, and deliver custom reports that empower business and IT users with actionable business intelligence to make informed decisions. Add verbiage about global reporting capabilities here (Use this part number for quantity purchases greater than quantity (5) Concurrent Users only)	T9422AG	T9422AGE
Licensed by the Number of Arrays			
HP Storage Essentials Storage Resource Management Performance Pack 1 Array LTU	Provides a a big picture holistic performance view of the entire EVA SAN environment including business applications running on Oracle, Sybase, Intersystems Cache`, MS Exchange and SQL, hosts, HBA ports, switch ports, storage system port counters and HP EVA. (Use this part number for quantity purchases greater than (10) Arrays only) HP EVA only.	T5422AG	T5422AGE
HP Storage Essentials Storage Resource Management Performance Pack Enterprise 1 Array LTU	Provides a a big picture holistic performance view of the entire XP SAN environment including business applications running on Oracle, Sybase, Intersystems Cache`, MS Exchange and SQL, hosts, HBA ports, switch ports, storage system port counters and HP XP array. (Use this part number for quantity purchases greater than (10) Arrays only) HP XP only.	T4664AA	T4664AAE

NOTES:

1. For a new Storage Essentials SRM Software installation, you must order at least 1 Storage Essentials SRM Media Kit and at least one Storage Essentials SRM Enterprise Edition 50 MAP LTU
2. You can only use Tier 2 for quantity purchases only. The minimum quantity purchase for the number of MAPs (800), and/or MALs (20), and/or TBs (20), and/or Concurrent Users (5) and/or by Arrays (10).
3. You cannot combine Tier-1 quantities to achieve Tier-2 quantity results. For example, you need 400 MAPs now, but in six months an additional 400 MAPs are required. In the first case, you would order quantity (8) LTU, and six months later you would order another (8) LTU. Or you could order (16) LTU upfront to take advantage of Tier 2 benefits starting at 800 MAPs for pre-determined growth.
4. SRM Report Optimizer Software requires its own media kit and dedicated management server.

Product Highlights

Storage Essentials SRM License to use (LTU) Definitions:

- "MAP" means a managed access port
- "MAL" means a managed application license specific to a software application such as used for Microsoft Exchange Server Viewer and Database Viewer (Oracle database, Sybase, Microsoft SQL and InterSystems Cache)
- "TB" means terabytes which designates the amount of physical capacity that can be managed
- "Concurrent User" or "CC User" means the Software is licensed by the amount of users that simultaneously use the Software at any one point in time. The Software can be installed on any number of computers, provided that the actual usage of the Software does not exceed the number of licenses purchased.
- "Array" means a collection of data items that are given a single name and distinguished by numbers

HP Storage Essentials SRM Enterprise Edition software/HP Storage Essentials SRM Provisioning Manager software/HP Storage Essentials SRM Chargeback Manager software

These products are licensed by MAP. The following details how to determine the number of MAP licenses required:

- **Interconnect devices:** For a fully populated switch (i.e., all blades are installed and all ports in all blades have GBIC/SFPs installed), all ports are counted towards MAPs total. If no interconnect devices add up the number of GBIC/SFPs installed in the FC switch and that is the MAPs total.

Hosts and Infrastructure:

- A non-Storage Area Network (SAN) attached server (no HBA) that has the agent installed/discovered will count as 1 MAP
- A SAN attached server that has the agent installed/discovered will count each Fibre Channel (FC) port as a MAP (a dual ported HBA will count as 2 MAPs)
- A Fibre Channel switch with 64 Fibre channel active ports counts as 64 MAPs
- IDE or SCSI ports are not counted in MAP calculations unless they are used to connect to fabric switches or storage systems
- A Windows server with no CIM Extension installed, but that has been discovered via WMI will count as 1 MAP
- For NPIV only the physical ports are counted. For example, a customer has 10 HP BladeSystem c-Class blades with one Host Buss Adapter (HBA) each dual ported and connected to a Brocade NPIV port will count as 12 MAPs (10*2+1).
- In the hosted virtual environment, ESX server HBA ports are counted as MAPs. For example, 5 ESX servers with 2 dual ported HBAs counts as 10 MAPs (5*2=10)
- Each Vmware Virtual Server discovered with HP Storage Essentials will count towards one MAP. Vmware hypervisors (for example VMware ESX servers) will be treated as physical servers

Storage subsystems:

- All discovered storage array controller ports count (for example SMI-S is used to find the arrays). If the array has 8 ports, it will count 8 MAPs. The number of MAPs in a storage system includes all physical connections independent of protocol (including Fibre Channel, ESCON, SCSI and/or FICON, Ethernet, or Gigabyte Ethernet).

HP Storage Essentials SRM Exchange Viewer software/HP Storage Essentials SRM Database Viewer software

These products are licensed by MAL. The following details how to determine the number of MAL licenses required:

Standalone Applications:

- Exchange, Sybase, Oracle, Cache Intersystems, MS SQL - 1 MAL per application instance
- 1 Exchange Application instance = An Exchange Server that hosts many mailboxes
- 1 Oracle Application instance = 1 Oracle Instance (SID) serving an Oracle database
- 1 MSSQL Application Instance - 1 MSSQL Instance which may contain many MSSQL database underneath

Product Highlights

Clustered Applications:

- Exchange, Oracle and MSSQL failover clusters - 1 MAL per application instance. For example to manage an Exchange Instance running on a 3 node failover cluster, we need 1 MAL. 1 Exchange Application Instance = An Exchange Server that hosts many mailboxes.
- Oracle RAC - 1 MAL per RAC instance. For example a 10 instance Oracle RAC serving a single database, we need 10 MALs.

HP Storage Essentials SRM File System Viewer software

TB License Definition and Usage:

For File System Viewer licensing is calculated based on the scanned space of the volumes. Scanned space is the aggregation of file sizes, which have been successfully scanned by SRM File System Viewer Software. Scanned space of each volume is aggregated to calculate the number of TB required to satisfying the minimum 1 TB license to use (LTU). If you have a 20 GB volume, you need a 1 TB LTU or if there were 10TBs used by the file system (actual files taking space) then you need to order a quantity of (10) 1 TB LTUs or if there were 200Kb of files scanned then the count is 200Kb and in this case a minimum 1 TB LTU is required.

HP Storage Essentials SRM NAS Manager software

Licensing is based upon the number of raw NAS TBs managed.

HP Storage Essentials SRM Backup Manager software

- Licensing is based on the maximum number of TBs backed up in a 1-day period including partial, incremental, and full backups for Veritas NetBackup or HP Data Protector. Licensing is based on total backed up capacity in one day.

SRM Backup Manager ordering example:

- A customer has a 10TB Database and performs a full backup on a daily basis. The total 1-day backed up capacity is 10TBs. In this example, the customer would need to order quantity (10) T4295AA 1TB LTU. However this order assumes database growth is static. To accommodate future capacity growth and reduce the risk of being out of licensing compliance. This customer agreed to a growth factor of 50% to cover incremental capacity growth. The readjusted order now is quantity (15) T4295AA and provides headroom for future capacity growth.

HP Storage Essentials SRM Report Optimizer software formerly SRM Report Optimizer Software

Concurrent User License Definition and Usage:

- The software is licensed by the amount of users that simultaneously use the Software at any one point in time.

HHP Storage Essentials SRM Performance Pack software and HP Storage Essentials SRM Performance Pack Enterprise software

Licensing is based on a per Array basis

- 1 - AArray LTU licensing is determined by the number of HP Enterprise Virtual Array (EVA) or HP XP Array (XP). For example, you have 1 HP EVA in your Storage Area Network; all you need is 1 Storage Essentials SRM Performance Pack 1 - Array LTU. You can also move a license from one HP EVA to another. For example, the customer has 4 HP EVAs, but only 2 LTUs. If the customer wants to view a snapshot of performance data, on any of the 4 HP EVAs with 2 LTUs, they can. By doing so, you will only collect real-time performance data, without interruption, on licensed HP EVAs. As you move a license around from monitoring HP EVA to HP EVA, you will not collect historical data on unlicensed arrays; therefore you will see data collections gaps in your collected data. For some customers this is acceptable; for a customer who prefers a complete historical performance history then you want to have one Storage Essentials SRM Performance Pack 1-Array LTU per monitored HP EVA. The same logic applies to purchasing HP Storage Essentials Performance Pack Enterprise software LTU for HP XP

Product Highlights

management.

License to use (LTU) ordering:

- All initial quotes/orders begin with the selected product number multiplied by the quantity desired of either media and or LTU for each product. If you meet the minimum ordering requirements, you can use the Tier-2 product numbers to achieve higher quantity benefits

Ordering Examples Tier-1:

- Physical Media Kit (CD and DVD): Customer wants to order (500) MAPs of HP Storage Essentials SRM Enterprise Edition, 500 MAPs of HP Storage Essentials SRM Chargeback Manager, (6) TB of HP Storage Essentials SRM File System Viewer, (1) MAL of HP Storage Essentials SRM Exchange Viewer, (1) Concurrent User LTU of HP SRM Report Optimizer and (2) HP Storage Essentials SRM Performance Pack LTUs to monitor performance on two HP EVA 8000. This is what you order:
 - Quantity (1) T4283B Storage Essentials SRM v6.1Media kit
 - Quantity (1) T9421BA Storage Essentials SRM Report Optimizer v6.1Media Kit
 - Quantity (10) T4284AA Storage Essentials SRM Enterprise Edition 50 MAP LTU (10 X 50 MAPs = 500)
 - Quantity (10) T4286AA Storage Essentials SRM Chargeback Manager 50 MAP LTU
 - Quantity (6) T4292AA Storage Essentials SRM File System Viewer 1TB LTU
 - Quantity (1) T4288AA Storage Essentials SRM Exchange Viewer 1 MAL LTU
 - Quantity (1) T9422AA Storage Essentials SRM Report Optimizer 1 Concurrent User LTU
 - Quantity (2) T5422AA Storage Essentials SRM Performance Pack 1 Array LTU
- Electronic download (E- Delivery Media Kit): Customer wants to order 500 MAPs of Storage Essentials Enterprise Edition, (500) MAPs of Storage Essentials Chargeback Manager, (6) TB of File System Viewer, (1) MAL of Exchange Viewer, (1) Storage Essentials SRM Report Optimizer 1 Concurrent User LTU and (2) HP Storage Essentials SRM Performance Pack 1 array LTUs to monitor performance on two HP EVA 8000. This is what you order:
 - Quantity (1) T4283BE Storage Essentials SRM v6.1 E-Media kit
 - Quantity (1) T9421BAE Storage Essentials SRM Report Optimizer v6.1 E-Media Kit
 - Quantity (10) T4284AAE Storage Essentials SRM Enterprise Edition 50 MAP E-LTU
 - Quantity (10) T4286AAE Storage Essentials SRM Chargeback Manager 50 MAP E-LTU
 - Quantity (6) T4292AAE Storage Essentials SRM File System Viewer 1TB E-LTU
 - Quantity (1) T4288AAE Storage Essentials SRM Exchange Viewer 1 MAL E-LTU
 - Quantity (1) T9422AAE Storage Essentials SRM Report Optimizer 1 Concurrent User E-LTU
 - Quantity (2) T5422AAE Storage Essentials SRM Performance Pack 1 Array E-LTU

Ordering Examples Tier-2 (Higher quantity purchase tier only):

- Physical Delivery (CDs and DVD) Media Kit: Customer wants to order (800) MAPs of HP Storage Essentials SRM Enterprise Edition, (600) MAPs of HP Storage Essentials SRM Chargeback Manager, (20) TBs of HP Storage Essentials SRM File System Viewer, (20) MALs of HP Storage Essentials SRM Exchange Viewer, (5) Storage Essentials SRM Report Optimizer 1 Concurrent User LTU, and (10) HP Storage Essentials SRM Performance Pack LTUs to monitor performance on (10) HP EVA 8000. This is what you order:
 - Quantity (1) T4283B Storage Essentials SRM v6.1 Media kit
 - Quantity (1) T9421BA Storage Essentials SRM Report Optimizer v6.1 Media Kit
 - Quantity (16) T4284AG Storage Essentials SRM Enterprise Edition 50 MAP LTU (16 X 50 MAPs = 800)
 - Quantity (12) T4286AA Storage Essentials SRM Chargeback Manager 50 MAP LTU
 - Quantity (20) T4292AG Storage Essentials SRM File System Viewer 1TB LTU
 - Quantity (20) T4288AG Storage Essentials SRM Exchange Viewer 1 MAL LTU
 - Quantity (5) T9422AG Storage Essentials SRM Report Optimizer 1 Concurrent User LTU
 - Quantity (10) T5422AG Storage Essentials SRM Performance Pack 1 Array LTU
- Electronic download (E- Delivery Media Kit): Customer wants to order (800) MAPs of Storage Essentials SRM Enterprise Edition, (600) MAPs of Storage Essentials SRM Chargeback Manager, (20) TB of File System Viewer, (20) MALs of Exchange Viewer and (5) Storage Essentials SRM Report Optimizer 1 Concurrent User LTU, and (10) HP Storage Essentials SRM

Product Highlights

Performance Pack LTUs to monitor performance on two HP EVA 8000. This is what you order:

- Quantity (1) T4283BE Storage Essentials SRM v6.1 E-Media kit
- Quantity (1) T9421BAE Storage Essentials SRM Report Optimizer v6.1 E-Media Kit
- Quantity (16) T4284AGE Storage Essentials SRM Enterprise Edition 50 MAP E-LTU
- Quantity (12) T4286AGE Storage Essentials SRM Chargeback Manager 50 MAP E-LTU
- Quantity (20) T4292AGE Storage Essentials SRM File System Viewer 1TB E-LTU
- Quantity (20) T4288AGE Storage Essentials SRM Exchange Viewer 1 MAL E-LTU
- Quantity (5) T9422AGE Storage Essentials SRM Report Optimizer 1 Concurrent User E-LTU
- Quantity (10) T5422AGE Storage Essentials SRM Performance Pack 1 Array E-LTU

HP E-Delivery ordering:

- E-Delivery definition - The product is delivered to you in the form of an e-mail which allows you to download the software code (E-Media) and/or receive the License-To-Use (LTU) document and access to the license key. E-Delivery products are available worldwide, excluding Japan
- To place an order, please refer to the E-Delivery product number column and order the applicable E-Delivery E-Media kit and/or E-LTU. When a license product is ordered, the LTU will be replaced with E-LTU in the product description. For example, if you order quantity one T4284AAE the product description changes to SE EE 50 MAP E-LTU for 50 MAPs.

Customer Benefits

Storage Essentials SRM Software Integrations:

- **Automate common storage tasks and remove process errors and latencies** - The integration of HP Operations Orchestration and HP UCMDB removes human error by automating storage tasks and process with easy to execute common workflows for ITIL-compliant storage change management process automation.
- **Provides IT operations with an extended view of storage, SAN infrastructure and servers** -The integration of HP Universal Configuration Management Database (UCMDB) support critical business services by having access to deep configuration information associated with the overall storage environment for better business outcomes.
- **Improve storage administrative efficiency; reduce costs and management complexity** - Storage Essentials SRM integration with HP System Insight Manager delivers unified server and storage management, improving efficiency via shared services like single sign on, security administration, asset management, reporting, and discovery, licensing administration, storage resource management and event management.
- **Easy integration increases productivity and manageability** - Storage Essentials SRM integration software integrates with HP software via Smart Plug-In (SPI) delivers integrated IT Services management in areas like provisioning, operations, reporting and charge back and managing an end-to-end Microsoft exchange and UNIX environment when included with HP Operations for Windows or UNIX.
- **Unified tool to manage XP arrays** - Storage Essentials SRM XP Provider allows IT staff to manage all their heterogeneous networked storage, infrastructure and HP XP array from a single unified interface. This simplifies management and reduces TCO since traditional device managers like HP Command View XP are usually not required. HP Storage Essentials SRM XP Provider software is included with HP Storage Essentials SRM Enterprise Edition Software.
- **Easily move and visualize SAN attached storage in an SAP Environment** - HP Storage Essentials Application Integration Software for SAP Adaptive Computing Controller (ACC) helps customers with SAP ACC installations seamlessly move and visualize SAN attached storage and infrastructure resources between physical servers when SAP application services are required for more storage capacity. Ideal for SAP test environments. HP Storage Essentials SRM Software for SAP ACC is included with HP Storage Essentials SRM Enterprise Edition Software.

Storage Essentials SRM Suite:

- **Automation of network discovery for quick access to the right data** - Big picture visualization automatically discovers and maps the storage network (DAS, SAN, and NAS) and backup topology by pictorially displaying the objects, path and zones between the application and LUN on which the corresponding data resides.

Product Highlights

- **Increases business application availability** - big picture view monitors and reports on a variety of business applications and (Oracle, Sybase, Cache Intersystem's, MExchange, MSSQL) and cluster configurations with infrastructure dependencies to facilitate faster end-to-end root cause analysis and reduce unplanned downtime.
- **Increased utilization of capacity management** - Monitors availability and utilization at host, switch and array. Graphical trending and forecasting. Soft Quota management allows proactive monitoring of consumption levels, and file system management provides file-level scanning, analysis, reporting, tiered storage monitoring/reporting and policy-based management capabilities.
- **Simplifies worldwide access of storage information with powerful ad hoc, interactive and easy to customize reports** - Extensive set of reports can be customized and scheduled for automatic e-mail distribution, satisfying requirements for capacity and performance management and planning, asset management, and chargeback. Supports a wide variety of reporting formats, including HTML, XML, Microsoft Excel, and PDF.
- **File performance management** - Monitor performance from application objects down to storage subsystems and file identification. Monitors application, host, HBA, switch, disk subsystem. Enables quick detections of performance "bottleneck", so service level agreements (SLA) are maintained or exceeded.
- **Industry standard based architecture** - Designed on the Storage Management Initiative Specification (SMI-S), industry standard for storage network management based on the Common Information Model (CIM) and Web-Based Enterprise Management (WBEM). Enables support for multi-vendor storage infrastructures and ensuring investment protection.
- **Integrated NAS and SAN Management** - Analyze impact of configuration changes and file sharing activities for HP ProLiant Storage Servers, HP Enterprise File System (EFS) Clustered Gateway and Netapps. Extends full range of discovery, visualization, reporting, event notification, dependency and path, capacity planning, and real-time performance to NAS.
- **End-to-end Backup management** - Monitor overall status of the entire backup process with a single view of backup activities and path dependencies. Identify unprotected applications, servers and files. Root cause analysis of backup failure. Visualize the backup configuration and recoverability of a file, directory, volume or a server for HP Data Protector and Veritas NetBackup Software.
- **End-to-end performance management for HP Enterprise Virtual Array** - Unified and simplified interface helps EVA administrators quickly visualize the big performance picture of their entire EVA SAN environment including business applications, hosts, HBA ports, switch ports, storage system port counters and HP EVA
- **Full support for host virtualization** - HP Storage Essentials agentlessly discovers VMware hypervisors, VM's and the VM-storage dependencies. Users can see VM - storage topology maps, manage and report capacity of hypervisors/VM's and provision storage to hypervisors.

Software Features/Functionality

Simplifies management, reduces human-error and increases administrator and IT Operations efficiency

- Integration with HP Operations Orchestration automates error-prone IT management process
- Integration with HP UCMDB provides SAN storage context across the enterprise by providing a comprehensive catalog of all heterogeneous storage infrastructure configuration data
- Integration with HP System Insight Manager for Unified Server and Storage Management
- Unified interface for end-to-end EVA and SAN performance management
- Integration with HP Service Desk Software based on Smart Plug-in interface expands IT management across the enterprise.
- Integration with SAP ACC application environment to seamlessly move SAN attached storage between physical servers when SAP application services for more storage resources are required
- Single interface for managing Servers, Storage and HP XP arrays without HP Command View XP (Legacy or Advanced Edition)
- Automation of network (DAS, SAN, NAS) discovery and time consuming tasks
- Discover and Visualize storage resources
- Single interface for zoning and provisioning
- Easy to create and customize storage and infrastructure inventory reports

Increase utilization

- Soft quota management
- Identify old, large, junk, duplicate files
- Just-In-Time purchase of capacity via trend analysis

Improve Quality of Storage Service

- Visualize Application-to-LUN mapping
- Application to infrastructure performance monitoring
- Chargeback based on asset and storage allocation

Protect Investment and protect against downtime

- Plan, discover, visualize, monitor and report on host clusters
- Product design based on industry standards - SMI-S, WMI and WBEM
- CLI, API, HP Software Service Desk and HP Operations for Windows or Unix Smart Plug-In and ODBC/JDBC interface for integration into existing environment
- Ad hoc, interactive and easy customizable reports in html, xml, xls and PDF format
- Choice of central management station (CMS) OS deployment (Windows or Linux)
- Easy growth path from SMB to Enterprise

Hardware Support

Supported Storage Devices	3Par Data systems	INSERV All models	
	EMC CLARiiON	CX-100 to CX-700, CX3, CX4	
	EMC Symmetrix	DMX800, DMX1000, DMX2000, DMX3000, DMX3, DMX4	
	HDS Lightning	9910, 9960, 9970V, 9980V	
	HDS Thunder	9200, 9520V, 9530V, 9570V, 9580V, 9585V	
	HDS Tagmastore USP Sanrise H12000	100, 600, 1100, USP-V, USP-VM	
	HDS Tagmastore AMS	200, 500, 1000, 2100, 2300, 2500	
	HDS Tagmastore AMS and WMS NAS	100, 200, 500	
	HDS Tagmastore WMS	100	
	HDS Tagmastore NSC	55	
	HPXP	XP48, XP512, XP128, XP1024, XP10000, XP12000, XP20000, XP24000	
	HP EVA	EVA3000, EVA 5000, EVA 4000, EVA 6000, EVA 8000, EVA 4100, EVA 6100, EVA 8100, EVA 4400, EVA 6400, EVA 8400	
	MSA	MSA1000, MSA 1500	
	HP Windows NAS	Proliant ML and DL Storage Servers	
	HP All in One NAS	AiO 400 and AiO 600	
	HP EFS Clustered NAS Gateway (formerly Polyserve)	StorageWorks Clustered Gateway (CGW)	
	ESL Tape Library	712e, 630e, 322e, 286e, 9xxx	
	EML Tape Library	71e, 103e, 245e, 348e, 375e, 442e, 469e, and 505e	
	IBM DS4100 (formerly FASiT100), DS4300 (formerly FASiT600, including Turbo option), DS4400(FASiT700), DS4500(FASiT900), DS4500,DS4800, DS4700,DS6000, DS6800,DS8000, DS8100, DS8300		
	IBM SAN Volume Controller (SVC) (2145)		
	IBM Tape Library	3581, 3582, 3583, and 3584	
	StorEdge	StorEdge 9900	SE9910, SE9970, SE9960, SE9980
		StorEdge 9990	100 600 1100
		StorEdge 9985	
		StorEdge NAS 5000	5210, 5310
	Sun/StorageTek Sun StorageTek NAS	5210, 5310, 5320	
	Sun/StorageTek Sun StorageTek Mid Range Array	6140, 6540	

Hardware Support

Supported Interconnect Devices – Switches

- Brocade Silkworm 3900, 4100, 4900, 5000, 7500, 200E
- Brocade 5300, 5100, 300
- Brocade M4400, M4700
- Brocade Directors 12000, 24000, 48000, DCX Backbone, DCX- 4S
- Cisco MDS 9216, 9120, 9124, 9134, 9140, 9216A, 9216i, 9222i
- Cisco MDS 9506, 9509, 9513
- HP StorageWorks 4/8 and 4/16 SAN Switch (Silkworm 200E)
- HP SW SAN Switch 2/32 (Brocade 3900)
- HP SW SAN Switch 4/32 (Brocade 4100)
- HP SW SAN Switch 4/64 (Brocade 4900)
- HP SW SAN Switch 4/32B (Brocade 5000)
- HP SW 8/8 SAN Switch (Brocade 300)
- HP SW 8/24 SAN Switch (Brocade 300)
- HP SW 8/40 SAN Switch (Brocade 5100)
- HP SW 8/80 SAN Switch (Brocade 5300)
- HP SW SAN Core Switch 2/64 (Brocade 12000)
- HP SW SAN Director 2/128 (Brocade 24000)
- HP SW SAN Director 4/256 (Brocade 48000)
- HP SW 4/256 SAN Director 4/48 Blade
- HP SW DC SAN Backbone Director (Brocade DCX Backbone)
- HP SW DC04 SAN Director Switch (Brocade DCX-4S)
- HP SW MSA SAN Switch 2/8
- HP SW MPR 400
- HP SW Multi-Protocol Router Blade (FR4-18i)
- Brocade 4Gb SAN Switch for HP c-Class BladeSystem
- Brocade 8Gb SAN Switch for HP BladeSystem c-Class
- Brocade 4GB SAN Switch for HP p-class Blade (Brocade 4012)
- Cisco MDS 9216A, 9216i, 9222i
- Cisco MDS 9120, 9124, 9134, 9140, 9216
- Cisco MDS 9506, 9509, 9513
- Cisco MDS 9124e Fabric Switch for c-Class BladeSystem
- Cisco MDS 9216i, 9222i
- Cisco MDS 9124, 9134
- Cisco MDS 9506, 9509, 9513
- Cisco MDS 9124e Fabric Switch for c-Class BladeSystem
- Cisco MDS 9000 8Gb FC Module
- HP StorageWorks 8/20q Fibre Channel Switch
- McDATA 4Gb SAN Switch for HP p-Class BladeSystem
- HP 4Gb Virtual Connect Fibre Channel Module for c-Class BladeSystem (VC-FC)
- Qlogic 5200
- Qlogic 5600
- Qlogic Director 9000

Software Support

Software Pre-Requisites

- HP Systems Insight Manager or greater (Windows); HP Systems Insight Manager (Linux) 5.1
- Oracle database 10g release 2 (10.2.0.3)
- Device Managers for each managed device (arrays, switches, tape libraries, etc.)
- Microsoft Internet Explorer, Netscape Navigator, or Mozilla
- For Windows, latest Windows updates

Application / Database Support		
Database	Version	Platform
Oracle	9i, 9iR2	Win 2K, 2K3, Solaris (SPARC), AIX 5.2, AIX 5.3, HPUX 11.11, 11.23, Linux AS3.0, RHEL4, Suse 9, Tru64 5.1b-2, 5.1b-3, 5.1b-4, OVMS 8.2
	10g (10.1.0.2)	Windows 2003 (x86, IA64) HP-UX 11.11, 11.23 (IA & PA) AIX 5.2, AIX 5.3 Tru64 5.1b-3, 5.1b-4 Solaris 9, 10 (SPARC)
	10g (10.1.0.3)	RHEL 4, RHEL 5, SLES 9, SLES 10 (x86, x64, IA64) OVMS 8.2, 8.2.1, 8.3 (Alpha and Itanium)
	10gR2 (10.2.0.1)	Windows 2003 (x86, x64, IA64) HP-UX 11.11, 11.23, 11.31 (IA & PA) AIX 5.2, AIX 5.3 RHEL 4, RHEL 5, SLES 9, SLES 10 (x86, x64, IA64) Solaris 9, 10 (SPARC), Solaris 10 (x86_64)
	10gR2 (10.2.0.2)	Tru64 5.1b-3, 5.1b-4 OVMS 8.2, 8.2.1, 8.3 (Alpha and Itanium)
	10gR2 (10.2.0.3)	Windows 2008 x86 RHEL 4 (x86)
	10gR2 (10.2.0.4)	Windows 2003 (x86, x64, IA64), Windows 2008 x64 HP-UX 11.11, 11.23, 11.31 (IA & PA) AIX 5.2, AIX 5.3 RHEL 4, RHEL 5, SLES 9, SLES 10 (x86, x64, IA64) Tru64 5.1b-3, 5.1b-4 OVMS 8.2, 8.2.1, 8.3 (Alpha and Itanium) Solaris 9, 10 (SPARC), Solaris 10 (x86_64)
Oracle RAC	9iR2 RAC	HP-UX 11.11 - VCS 3.5
		HP-UX 11.11 - ServiceGuard 11.16
		HP-UX 11.23 IA & PA - VCS 4.1 & 5.0
		Solaris 9 (SPARC) - VCS 4.1
		Solaris 10 (SPARC) - VCS 5.0
		HP-UX 11.23 IA & PA - VCS 4.1 & 5.0
	10g R2 RAC	HP-UX 11.31 IA & PA - VCS 5.0
		HP-UX 11.23 IA & PA - VCS 4.1 & 5.0
		HP-UX 11.31 IA & PA - VCS 5.0
		HP-UX 11.23 IA & PA - ServiceGuard 11.18
		Solaris 10 (SPARC & x86_64) - VCS 5.0
		OVMS 8.3 (Alpha and Itanium)

Software Support

		Tru64 5.1B3 & 5.1B-4
		RHEL 4 U5 x64 - Oracle Clusterware
Oracle Failover Cluster	10g R2	HP-UX 11.23 IA & PA - VCS 4.1 & 5.0
		HP-UX 11.31 IA & PA - VCS 5.0
		HP-UX 11.23 IA & PA - ServiceGuard 11.18
		Solaris 10 (SPARC, x86_64) - VCS 5.0
		Windows 2003 (x86, x86_64) - MSCS with or without VxVM/VxDMP
		Windows 2008 - MSCS
Sybase	ASE 12.5.0, 12.5.1, 12.5.2	Win 2K, 2K3, Solaris 8, 9, 10(SPARC), HP-UX 11.11 and 11.23
	ASE 12.5.3	HP-UX 11.11 & 11.23 (IA, PA)
	ASE 12.5.4	Solaris 10 (x86_64)
	ASE 15.0.3	Solaris 10 SPARC
MS-SQL Server and MS-SQL Server Cluster	MS-SQL Server 2000 with SP4 (32-bit)	Windows 2000 with SP4 Windows 2003 (x86)
	MS-SQL Server 2000 with SP4 (64-bit)	Windows 2003 (x64 & IA64)
	MS-SQL Server 2005 (x86) with or without SP1, SP2 or SP3	Windows 2003 (x86)
	MS-SQL Server 2005 (x86) with SP2 or SP3	Windows 2008 (x86)
	MS-SQL Server 2005 (x64) with or without SP1, SP2 or SP3	Windows 2003 (x64)
	MS-SQL Server 2005 (x64) with SP2 or SP3	Windows 2008 (x64)
	MS-SQL Server 2005 (IA64) with or without SP1, SP2 or SP3	Windows 2003 (IA64)
	MS-SQL Server 2005 (IA64) with SP2 or SP3	Windows 2008 (IA64)
	MS-SQL Server 2008 (x86) with or with SP1	Windows 2003, 2008 (x86)
	MS-SQL Server 2008 (x64)with or with SP1	Windows 2003, 2008 (x64)
MS-SQL Server 2008 (IA64) with or with SP1	Windows 2003, 2008 (IA64)	
Intersystems Cache	5.0.21	AIX 5.3, Windows 2003
	5.2	AIX 5.3, Windows 2003, OVMS 8.3 (Alpha), RHEL 4
	2007.1	Windows 2003, RHEL 4
FSRM/File System Viewer	Version	Platform
FSRM/File System Viewer		Win 2K, 2K3, 2K8 Solaris 8, 9, 10 (SPARC), Solaris 10 (x86_64),

Software Support

		HP-UX 11iv1(11.11), 11iv2 (11.23pi), 11iv3 (11.31) RHEL 3.0, 4.0, 5.0 SLES 9.0, 10.0 Tru64 5.1b-2, 5.1b-3, 5.1b-4 AIX 5.2, 5.3, 6.1
Exchange	Version	Platform
Exchange Server	Exchange 2000 with or without SP1, SP2, SP3	Windows 2000 with SP4
	Exchange 2003 SP2	Windows 2003 with or without SP1 or SP2
	Exchange 2007, 2007 SP1	Windows 2003 (x64)
	Exchange 2007 SP1	Windows 2008 (x64)
Exchange Server Cluster	Exchange 2003 with SP2	Windows 2003 (x86)
	Exchange 2007, 2007 SP1	Windows 2003 (x64)
	Exchange 2007 SP1	Windows 2008 (x64)
Apps	Version	Platform
SAP ACC	1.00	Windows 2003 SP2 (x64 and IA64)
	7.10	HP-UX 11iv2, 11iv3
Visio	2002, 2003, 2007	WinXP, W2K, W2K3
Protection Manager	Version	Platform
Netbackup	6, 6.5, 6.5.2	Solaris 8,9,10 HP-UX Linux W2K, W2K3, W2K8
	HP Data Protector	5.5, 6.0
Report Applications	Version	Platform
HP SRM Report Optimizer	6.0.1	Windows 2003 (Ent. Ed.) SP1 and SP2
Custom Reporter	6.0.1	Windows 2003 (Ent. Ed.) SP1 and SP2
HP-SIM	Version	Platform
HP-SIM Integration	5.2, 5.2 SP1, 5.2 SP2, 5.3	Windows
HP-SIM Integration	5.2 U1, 5.2 U2, 5.3	Linux
HP Software integration	Version	SE CMS Platform
HP Operations Manager - Windows	7.5, 8.0, 8.1	Win 2K, 2K3
HP Operations Manager - Unix	8.28, 8.29 and 8.30	All supported platforms
HP OpenView Service Desk	4.5, SP 21 for Windows	Win 2K, 2K3
HP Network Node Manager	6.3x, 6.4x, 7.0x, and 7.5	Win 2K, 2K3

Software Support

Operating System supported on managed host	HP-UX - 11iv1 (11.11), PA-Risc, 11iv2 (11.23), PA-Risc, Itanium, 11iv3 (11.31), PA-Risc, Itanium, Tru64 -Alpha(Tru64 5.1b-2, 5.1b-3, 5.1b-4), OpenVMS - Alpha(V7.3-2, 8.2. 8.3), OpenVMS - IA64(8.2-1, 8.3, 8.3-1H1), NonStop OS(G06.27, G06.28, G06.29, G06.31, H06.10, H06.15) AIX 5.3, 32/64-bit(TL06 SP06 latest qualified) AIX 6.1 32/64-bit Windows 2000 SP4 Windows 2003 SP1, SP2 (x86, x64, IA64) Windows 2003 R2 (x86, x64) Windows 2003 R2 SP2 (x86, x64) Windows 2008 (x86, x64, IA64) Red Hat Advanced Server/Enterprise Server, RHEL AS/ES 4.0 U4, U5, U6, U7,(x86, x64, IA64), RHEL AS/ES 5.0 U1(x86, x64, IA64) Solaris 9 (SPARC) SAN Kit 4.4.14, SAN Kit 4.4.15 Solaris 10 (SPARC) Solaris 10 U4 08/07, Solaris 10 U5 05/08, Solaris 10 U6 10/08" Solaris 10 (X86_64) Solaris 10 U4 08/07, Solaris 10 U5 05/05, Solaris 10 U6 10/08" SuSe OS SuSe LINUX Enterprise Server Release 9 SP4 (x86, x64, IA64) SuSe OS SuSe LINUX Enterprise Server Release 10, SP1, SP2 (x86, x64, IA64) VMware ESX 3.0.2 Update 1, 3.0.3, 3.5, 3.5 Update 2, 3.5 Update 3" VMware ESXi 3.5, 3.5 Update 2, 3.5 Update 3
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Centralized Management Server (CMS):

Windows CMS

For dedicated OR shared management server:

- Windows 2003 SP1, SP2, R2, R2 SP2
 - 32 bit Ent Ed or Server (Microsoft Windows Server has max. support limit of 4g RAM and supported on dedicated mgmt server only)
Windows 2008 SP1 (x64)
 - 64 bit Standard or Enterprise Edition
Recommend the management server is a dedicated server, with no other applications or databases residing on management server other than those explicitly listed.

Linux CMS

For dedicated OR shared management server:

Linux RHEL 4 Update 5/6/7 (32 bit only on x86 or x64)
SLES 9 SP4 (32 bit only on x86 or x64)
SLES 10 with or without SP1, SP2 (32 bit only on x86 or x64)

Software Support

Hardware Pre-Requisites On combined management server with HP SIM:

- **Processor:** Dual Intel XEON or AMD equivalent (32-bit OS only) 3.4 GHz or higher (recommended)
 - **OS:** Windows Server 2003, Enterprise Edition and Windows Server 2003, Datacenter Edition, SP1; WS2003 R2 Enterprise Edition and Server Edition
 - **Memory:**
 - Minimum: 6 GB (For smaller configurations monitoring 20 or fewer devices; includes 2GB requirements for combination with HP SIM)
 - Recommended: 8 GB
 - **Disk space:** Minimum 100 GB recommended; add an additional 100GB or more for archiving/backup
-

Web Client supported

- IE 6.0, 6.0 SP1, 7.0
- Firefox 3.0.x (min 3.0.1) for Windows, 3.0.x for Solaris, Redhat and Suse

Service and Support, HP Care Pack, and Warranty Information

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