QuickSpecs

Overview

HP OpenView Storage Area Manager (SAM) software simplifies and automates the management of your storage resources, infrastructure and application capacity. It manages both, tape and disk, direct-attached and network storage, across multi-vendor devices, operating systems and distributed environments. From its central console, it allows you to effectively monitor and manage storage and storage service availability, performance, usage, cost, and growth, helping you to gain control of your storage while optimizing your resources and cost.

The HP OpenView Storage Area Manager (SAM) software suite consists of five components: device management; capacity management; performance management; storage allocation and virtualized access control, and storage usage metering and billing. Each component functions either individually or together to enable integrated storage resource, application capacity and infrastructure management. This highly flexible "building block" architecture and out-of the box integration capabilities ensure rapid deployment and quick return on investment, while allowing an enterprise to address its most urgent management problems first.

To move toward integrated service-driven storage management, Storage Area Manager enables you to define, monitor, and measure storage service levels and view storage services as an integral part of the overall IT service. This helps you to guarantee quality of services and increase the value of your storage investments.

What's New

SAM 3.1 introduces additional operating system (OS) support including OpenVMS and NetWare, and expands the supported devices ecosystem. It also introduces applications views within the Storage Builder module for monitoring, managing, and planning the growth of Oracle and Exchange capacity.

Models

Storage Area Manager (SAM) suite media	SAM suite media	T2524AA
	SAM, 1TB LTU license for SAM suite	T2525AA
	SAM, 5 TB LTU license for SAM suite	J5365AA
	SAM, 10 TB LTU license for SAM suite	J5366AA
	SAM, 50 TB LTU license for SAM suite	J5367AA
Storage Node Manager (SNM)	SNM, 1 TB LTU license	T2526AA
	SNM, 5 TB LTU license	J5369AA
	SNM, 10 TB LTU license	J5370AA
	SNM, 50 TB LTU license	J5371AA
Storage Optimizer	Storage Optimizer, 1 TB LTU license	T2527AA
	Storage Optimizer, 5 TB LTU license	J5373AA
	Storage Optimizer, 10 TB LTU license	J5374AA
	Storage Optimizer, 50 TB LTU license	J5375AA
Storage Builder	Storage Builder, 1 TB LTU license	T2528AA
	Storage Builder, 5 TB LTU license	J5377AA
	Storage Builder, 10 TB LTU license	J5378AA
	Storage Builder, 50 TB LTU license	J5379AA
Storage Accountant	Storage Accountant, 1 TB LTU license	T2529AA
	Storage Accountant, 5 TB LTU license	J5381AA
	Storage Accountant, 10 TB LTU license	J5382AA
	Storage Accountant, 50 TB LTU license	J5383AA
Storage Allocater	Storage Allocater, 1 TB LTU license	T2530AA
	Storage Allocater, 5 TB LTU license	J5385AA
	Storage Allocater, 10 TB LTU license	J5386AA
	Storage Allocater, 50 TB LTU license	J5387AA

QuickSpecs

Overview

Kit Contents

- Installation Guide
- Administrator's Guide
- Storage Area Manager tutorial CD

Customer Benefits

Business Value
- Increases operational efficiency through centralized, simplified and automated management and
- onitoring of multi-vendor enterprise-wide storage resources, applications and infrastructure.
- Decreases Total Cost of Ownership (TCO).
- Increases resource utilization.
- Increases customer satisfaction through guaranteed quality of storage services.
- Provides a transparent growth path for the future.

Simplified, Automated Operations
- Seamlessly integrated software suite for maximum leverage of management and monitoring capabilities.
- Intuitive, easy-to-use tools and automated wizards to drive staff efficiency and shorten learning curve.
- Automated device discovery and topology mapping to graphically display devices and their physical and redundant connections.
- Switch zoning presentation and management for effective and simplified administration.
- Continuous health status and event monitoring to quickly isolate and solve problems.
- Secure management through firewalls to provide management flexibility.
- Automated reporting to save time and increase QoS.
- Volume management to enable mapping of host utilization to LUN consumption.
- Support for multi-vendor devices and OSs to simplify management of heterogeneous storage.
- Out-of-the box integration with enterprise management solutions to enable integrated service management.

Centralized Management
- Central console and common reporting structure to manage and monitor storage [service] availability, performance, usage, cost and growth.
- Common launch platform for devices to enable centralization of storage management functions.
- Manager-of-Managers capabilities to centralize management of separate or geographically distributed sites.

Optimized Resource Utilization
- Automated identification of wasted or stale storage to free up capacity.
- Monitor, manage and plan growth of Oracle and Exchange capacity via a single pane of glass.
- Usage metering and billing to recover cost for delivering storage services.
- Magnitude increase of operational efficiency through simplified, automated, painless management of the enterprise storage resources and infrastructure.

Maximized Availability
- Unique storage service management capabilities to enable storage to be managed and monitored as an integral component of the overall enterprise IT service.
- Inventory of allocated vs. unallocated and used vs. free storage by host, storage device, LUN, partition, volume, directory, and user.
- Automated capacity threshold warning system for early notification of potential capacity shortfalls.
- Historical trending and future extrapolations to enable service stability and just-in-time capacity allocation.
- Assessment of customer usage and consumption patterns to anticipate future storage/service demands.
- Logical, online storage provisioning for storage allocation without impact on operations.
- Virtualized storage access control to provide highest levels of data integrity.
- Automated host access notification to ensure your data is safe from network intruders.
- User-roles for better customization and of your management environment.

Optimized Performance
- Performance monitoring to identify bottlenecks before they impact business operations.
- Baselining and over-baseline notification to help identify potential slowdowns before they happen.

Customized Service Offering
- Classification of storage service offerings to better align storage usage with business value and needs.
- Billing and charge-back.
- Storage usage metering and billing to recover your cost for providing storage services.

Growth Path for the Future
- Broad range of multi-vendor device and system support to seamlessly manage existing and future storage and maximize your storage investments.
- Modular, building block product structure and additive capacity tier licenses.
- A unique service-driven management approach to enable you to take the next step towards providing storage utility services.

Software Support

Software Pre-requisites
- Adobe Acrobat Reader (to read product install and admin guides)
- Device Managers for each managed device (arrays, switches, tape libraries, etc.)
- Microsoft Internet Explorer - or - Netscape Navigator
- Performance Metrics:
  - Storage Optimizer relies on HBA SNIA libraries to gather performance information for hosts.
  - OpenView Performance Agents (OVPA) or OpenView Operations (OVO}) provide additional metrics. SNIA libraries are available, at no cost, with all major operating systems. If both OVPA and OVO (both are purchased items) are to be present, OVPA most be installed first.
  - Storage Optimizer may also leverage performance reporting tools for collecting device-specific performance data. For example, HP StorageWorks Performance Advisor XP is required for performance metrics from the HP XP array family.

Software Warranty
Warranty code 3U; duration of limited warranty: 90 days from the day of purchase, replacement of defective media

Software Licensing
The software licenses are based on terabytes (TB) of storage capacity managed by SAM. The application product comes with a license-to-use (LTU) to manage 1, 5, 10, or 50 TB and the first year of 8x5 support. The media product comes with SAM software on CD and documentation. Installation keys are shipped when HP OpenView Storage Area Manager suite or individual [tier-] product numbers are ordered. These keys must be registered to convert them to permanent "operational keys". Storage Area Manager utilizes two types of licenses: installation and operational.
Installation licenses are included on the entitlement Certificate that is delivered with the software. These licenses enables you to use Storage Area Manager or the individual SAM product for 60 days after initial installation, which allows you time to request, receive and install your operational license(s); and evaluate each Storage Area Manager applications.

Features

The HP OpenView Storage Area Manager (SAM) software suite consists of five components: HP OpenView Storage Node Manager (device management); HP OpenView Storage Builder (capacity management); HP OpenView Storage Optimizer (performance management); HP OpenView Storage Allocater (storage allocation and virtualized access control); and HP OpenView Storage Accountant (storage usage metering and billing). Each component functions either individually or together to enable integrated storage resource, application capacity and infrastructure management. This highly flexible "building block" architecture and out-of the box integration capabilities ensure rapid deployment and quick return on investment, while allowing an enterprise to address its most urgent management problems first.

Storage Node Manager
- Automated discovery, mapping, monitoring, and management of devices through firewalls across distributed, multi-vendor SAN, NAS, and DAS environments.
- Continuous health monitoring and real-time event status information.
- Graphical zone presentation.
- Manager of Manager (MoM) functionality for centralized management of large environments.
- Common launch platform for central device management.

Storage Builder
- Storage allocation and utilization views by application, host, device, user, directory, volumes, LUN.
- Monitor, manage and plan growth of Oracle and Exchange capacity via a single pane of glass.
- Historical trending and future extrapolations.
- Reports, graphs, and charts for capacity management and planning.
- Automated notification of capacity threshold violations.
- Application/Host utilization to LUN mapping for improved understanding of environment.

Storage Optimizer
- Monitoring of host, storage, and infrastructure performance
- Automated baselining, threshold determination, and over-baseline notification
- Storage performance reporting, historical trending, and analysis

Software Support

Storage Accountant
- Usage metering, automated calculation and billing based on assigned storage.
- Reporting, financial analysis, budgeting, cost management and charge-back.
- Management of service levels and price tiers based on storage and services associated with it.
- Enables customer- or device-based reporting.

Storage Allocater
- Enables virtualized access control between host and multi-vendor storage (RAID, JBOD, tape)
- Allows drag-and-drop LUN assignment and reassignment without system reboot
- Provides automated configuration wizard to reduce deployment time
- Offers automated notification of unauthorized host access

Supported Applications
- Oracle 8i (8.0, 8.1), 9i (9.0, 9.2) all 32- and 64-bit versions
  - HP-UX 11.0, 11.11
  - Sun Solaris 7.0, 8.0, 9.0
  - Microsoft Windows 2000 Professional, Server, Advanced Server, and Data Center (SP3)
  - Microsoft Windows NT Workstation, Server, and Enterprise Server (all SP6a)
  - Tru64 UNIX V4.0F, V5.1A
- Exchange 2000
  - Microsoft Windows 2000 Server, Advanced Server

Volume Managers
- Logical Volume Manager (LVM)
  - HP-UX 11.0, 11.11
  - IBM AIX 4.3.3, 5.1
- Logical Storage Manager (LSM)
  - Tru64 UNIX 4.0f, 5.1a, 5.1b
  - OpenVMS 7.3, 7.3-1
- Veritas VxVM
  - HP-UX 11.11
  - SUN Solaris 7 & 8
  - Windows 2000

Cluster Management
- MC Service Guard
  - HP-UX 11.0, 11.11
- Microsoft Cluster Server
  - Windows NT Enterprise Edition
  - Windows 2000 Advanced Server
  - Windows 2003 Enterprise Web Server
- Veritas Cluster Server for SUN Solaris

Hardware Support

Hardware Pre-Requisites (Server/Client)	

- Microsoft Windows 2000 Professional, Server, or Advanced Server
  - **Intel® processor:** 1GHz (minimum) or up to 2.4GHz, dual-processor (recommended)
  - **Memory:** 1GB (minimum); 2GB (recommended)
  - **Disk Space:** 700MB (see system requirements in installation guide to optimize disk performance)
  - **Video Resolution:** 800x600
- HP OpenView Storage Management Appliance II (option)
  - **Memory:** Additional 1GB RAM required for installation (HP part number: 201694-B21 includes two 512-MB DIMMs)
- HP OpenView Storage Management Appliance III (option)

Supported platforms (across the SAM portfolio – exceptions noted)

Hosts
- HP-UX 11.0, 11.11 (11i), and 11.20 (IA64)
- Sun Solaris 7.0, 8.0, 9.0
- Red Hat Linux 7.1 (Kernel 2.4.2), Advanced Server 2.1
- SuSE Linux SLES 8.0
- Microsoft® Windows® 2000 Professional, Server, Advanced Server, and Data Center (SP3 & SP4)
- Microsoft Windows NT® Workstation, Server, and Enterprise Server (all SP6a)
- Microsoft Windows 2003
- IBM AIX 4.3.3 and 5.1
- Tru64 UNIX V4.0f, 5.1a, 5.1b (except Allocater)
- OpenVMS 7.3 and 7.3-1 (Node Manager, Builder, & Accountant)
- Novell NetWare 6.0 (Node Manager, Builder, & Accountant)

Management Server
- Microsoft Windows 2000 Professional, Server, Advanced Server (SP3 & SP4)
- HP OpenView Storage Management Appliance II or III with HP OpenView Storage Management Appliance software v2.1 installed

Management Console
- HP-UX 11.0, 11.11
- SUN Solaris 8.0
- Microsoft Windows 2000 Professional, Server, Advanced Server (SP3 & SP4)
- Microsoft Windows XP Professional
- Linux RedHat AS 2.1

Supported Devices

Storage Node Manager	**Supported Fibre Channel and SCSI Storage Devices**	• HP StorageWorks XP disk arrays (XP1024, XP512, XP256, XP128, XP48) • HP StorageWorks virtual arrays (VA7100, VA7110, VA7400, A7410) • HP StorageWorks Enterprise Virtual Array (EVA) 3000, EVA5000, Enterprise Modular Array (EMA) EMA16000, EMA12000, Enterprise Storage Array (ESA) ESA12000, Modular Array (MA) MA8000, RAID Array (RA) RA8000, MA6000, Modular Storage Array (MSA) MSA1000, and RAID Array (RA) RA4100 • HP Rack Storage/12FC • HP Disk System fc10 (JBOD), sc10, fc60 • HP StorageWorks NAS 8000, B2000, B3000, E7000* • HP StorageWorks NAS b3000 v2, e7000 v2, 4000s, 9000s* • HP NAS 6000 • HP High Availability Disk Array Model 20-SP620 • HP OpenView Continuous Access Storage Appliance • Clariion CX200, CX400, CX600, 5400 • EMC Symmetrix 3xxx, 5xxx, and 8xxx • HDS 7700, 9200, 9910, 9500V, 9960, 9970V, 9980V • IBM Enterprise Storage Server E10, E20, F10, F20, 2105, and 2106 and disks (FC, SCSI) • IBM FAStT T200, T500, T600, T700, T900 • LSI E2400, E2600, E4600, E5600 • NetApps F810, F820, F840, F880, F810C, F820C, F840C, F880C • Seagate disks (FC, SCSI) • StorageTek 9176, D280, D240, D220, D210, D178, D173 • Storagetek BladeStore B280, B240, B220, BC88, BC84, BC82 • Sun StorEdge T300, 9970, 9980 • Hitachi Sanrise 2200, 2800 • XIOtech MAGNITUDE
	Supported Fibre Channel and SCSI tape devices	• HP StorageWorks MSL/ESL tape libraries • HP Tape Library 20/700, 10/180, 6/140, 6/60, 4/40, and 2/20 • HP DLT Library 6/60, 4/60, 2/60, 4/40, 2/40, 2/20, and 1/20; DLT 8000 drive; Ultrium 230 drive • HP/StorageTek 1/10 drive; 252/558 cartridge DLT library; Tape Autoloader 1/8; 1- to 6-drive; 40/100 cartridge DLT library; 1- to 2-drive 15 cartridge DLT library; 4/48, 3/30, 2/28 tape libraries • HP/StorageTek L700, L180, TimberWolf, Timberline, and RedWood • HP/Quantum Rack & Stack DLT 4000 desktop; and SMART Desktop DLT 7000 and 8000 modules • ADIC Scalar 100, 1000, 1000; Dell PV136T; IBM Ultrium Scalable Tape Library (Model 3583); IBM 7337 Model 360 Scalable Digital Linear Tape library

Hardware Support

Supported Interconnect Devices	**Hubs**	

- HP StorageWorks Hub L10 and S10
- HP FC hub

Switches

- HP and QLogic SANBox 8- and16-port switch
- HP and Brocade Aggregator 64-port switch; SilkWorm 2800, 2400; Pegasus non-cascadable/cascadable
- HP StorageWorks FC Switch 16B, FC Switch 8B, Director FC-64; Director 2/64, Director 2/140, Edge Switch 2/12
- HP StorageWorks MSA embedded switch
- HP StorageWorks SAN Switch integrated; FC SAN Switch 8, Switch 8V, Switch 16, Switch 16V, Switch 16N, Switch 8-EL, Switch 16-EL, Edge Switch 2/32, Edge Switch 2/64, Edge Switch 2/24, Edge Switch 2/12
- HP StorageWorks iSCSI storage router 2122
- HP/Cisco MDS9xxx switch
- Brocade and OEM equivalent: SilkWorm 2010/2040/2050, 2210/2240/2250, 2400/2100, 2800, 6400, 3800, 3200, , 3250, 3850, 3900, 12000, and 24000, SAN Switch 2/8V, 2/16V, 2/16N, Director 2/128
- McData ES-1000, ED-5000, ES-3016, ES-3032, ED-6064; ES-3216, ES-3232, Spereon 4300
- Dell PowerVault 56F, 51F
- EMC Connectrix DS-16A, DS-16B, DS-8B; ED-64, DS-16M, DS-32M, ED-1032
- IBM TotalStorage SAN Switch S08, S16, 2109-S16; Integrated Fabric
- QLogic SANbox-8 FC switch, SANbox-16HA High Availability FC switch, SANbox2-8, SANbox2-16, SANbox2-64, SANbox2 5200, SANbox2 3100
- Inrange FC9000 64/128
- Nishan 2000, 3000, and 4000 switches
- Chaparral FC-to-SCSI router
- Vixel 7200 FC switch

Bridges

- HP StorageWorks SCSI Bridge fc 4/2, fc 4/1 (CrossRoads 4450), 2/1 (CrossRoads 4250)
- HP StorageWorks MDRII Router
- ADIC Pathlight 5000

HP Service Management Integration	- HP OpenView Operations, HP OpenView Service Desk, HP OpenView Reporter - HP Systems Insight Manager

Hardware Support

| HP OpenView Storage Builder | Supported Fibre Channel and SCSI Storage Devices | • HP StorageWorks XP disk arrays (XP1024, XP512, XP256, XP128, XP48)
• HP StorageWorks virtual arrays (VA7100, VA7110, VA7400, VA7410)
• HP StorageWorks EVA3000, EVA5000, EMA16000, EMA12000, ESA12000, MA8000, RA8000, MA6000, MSA1000, RA4100
• HP Disk System fc10 (JBOD), sc10, fc60
• HP StorageWorks NAS b3000 v2, e7000 v2, 4000s, 9000s*
• HP OpenView Continuous Access Storage Appliance
• Clariion CX family, 5400
• EMC Symmetrix 3xxx, 5xxx, and 8xxx
• HDS 9910, 9960, 9200, 9500V, 9970V, 9980V
• IBM Enterprise Storage Server E10, E20, F10, F20, 2105, and 2106 and disks (FC, SCSI)
• IBM FAStT T200, T500, T600, T700, T900
• LSI E2400, E2600, E4600, E5600
• NetApps F810, F820, F840, F880, F810C, F820C, F840C, F880C
• StorageTek 9176, D280, D240, D220, D210, D178, D173
• Storagetek BladeStore B280, B240, B220, BC88, BC84, BC82
• Sun StorEdge 9970, 9980
• Hitachi Sanrise 2200, 2800

*NOTE: To support these devices, refer to the HP OpenView Capacity Management for StorageWorks NAS Servers application notes at http://ovweb.external.hp.com/lpe/doc_serv/ |
| | HP Service Management Integration | • HP OpenView Operations, HP OpenView Service Desk, HP OpenView Service Reporter, HP OpenView Internet Usage Manager
• HP Systems Insight Manager |

Hardware Support

HP OpenView Storage Optimizer	Supported Fibre Channel and SCSI Storage Devices	• HP StorageWorks XP disk arrays (XP1024, XP512, XP256, XP128, XP48)*
		• HP StorageWorks virtual arrays (VA7100, VA7110, VA7400, A7410)
		• HP StorageWorks EVA3000, EVA5000, EMA16000, EMA12000, ESA12000, MA8000, RA8000, MA6000, MSA1000, RA4100
		• HP Disk System fc10 (JBOD), sc10, fc60
		• Clariion CX family, 5400
		• EMC Symmetrix 3xxx, 5xxx, and 8xxx
		• HDS 9200, 9500V
		• IBM Enterprise Storage Server E10, E20, F10, F20, 2105, and 2106 and disks (FC, SCSI)
		• IBM FAStT T200, T500, T600, T700, T900
		• LSI E2400, E2600, E4600, E5600
		• StorageTek 9176, D280, D240, D220, D210, D178, D173
		• Storagetek BladeStore B280, B240, B220, BC88, BC84, BC82
		• Sun StorEdge 9970, 9980
		• Hitachi Sanrise 2200, 2800

*NOTE: Performance Advisor XP is required for XP array performance metrics

	Supported Interconnect Devices	**Switches**
		• HP and Brocade Aggregator 64-port switch; SilkWorm 2800, 2400; Pegasus noncascadable/cascadable
		• HP StorageWorks FC Switch 16B, FC Switch 8B, Director FC-64; Director 2/64, Director 2/140, Edge Switch 2/12
		• HP StorageWorks SAN Switch integrated; FC SAN Switch 8, Switch 16, Switch 8-EL, Switch 16-EL, Edge Switch 2/32, Edge Switch 2/64, Edge Switch 2/24, SAN Switch 2/8V, 2/16V, 2/16N, Director 2/128
		• HP/Cisco MDS9xxx switch
		• Brocade and OEM equivalent: SilkWorm 2010/2040/2050, 2210/2240/2250, 2400/2100, 2800, 6400, 3800, 3200, 3250, 3850, 3900, 12000, and 24000
		• Dell PowerVault 56F, 51F
		• EMC Connectrix DS-16A, DS-16B, DS-8B; ED-64, DS-16M, DS-32M, ED-1032
		• IBM TotalStorage SAN Switch S08, S16, 2109-S16 Integrated Fabric
		• McData ES-1000, ED-5000, ES-3016, ES-3032, ED-6064; ES-3216, ES-3232
		• QLogic SANbox-8 FC switch, SANbox-16HA High Availability FC switch, SANbox2-8, SANbox2-16, SANbox2-64, SANbox2 5200, SANbox2 3100
HP Service Management Integration		• HP OpenView Operations, HP OpenView Service Desk
		• HP Systems Insight Manager

QuickSpecs

Hardware Support

HP OpenView Storage Accountant	**Supported Fibre Channel and SCSI Storage Devices**	• HP StorageWorks XP disk arrays (XP1024, XP512, XP256, XP128, XP48) • HP StorageWorks virtual arrays (VA7100, VA7110, VA7400, VA7410) • HP StorageWorks EVA3000, EVA5000, EMA16000, EMA12000, ESA12000, MA8000, RA8000, MA6000, MSA1000, RA4100 • HP Disk System fc10 (JBOD), sc10, fc60 • HP OpenView Continuous Access Storage Appliance • Clariion 5400 • EMC Symmetrix 3xxx, 5xxx, and 8xxx • HDS 9200, 9500V, 9910, 9960, 9970V, 9980V • IBM Enterprise Storage Server E10, E20, F10, F20, 2105, and 2106 and disks (FC, SCSI) • IBM FAStT T200, T500, T600, T700, T900 • LSI E2400, E2600, E4600, E5600 • StorageTek 9176, D280, D240, D220, D210, D178, D173 • Storagetek BladeStore B280, B240, B220, BC88, BC84, BC82 • Sun StorEdge 9970, 9980 • Hitachi Sanrise 2200, 2800
	HP Service Management Integration	• HP OpenView Operations, HP OpenView Service Desk, HP OpenView Reporter, HP OpenView Internet Usage Manager • HP Systems Insight Manager
Storage Allocater	**Supported Fibre Channel and SCSI Storage Devices**	• HP StorageWorks XP disk arrays (XP1024, XP512, XP256, XP128, XP48) • HP StorageWorks virtual arrays (VA7100, VA7110, VA7400, VA7410) • HP StorageWorks EVA3000, EVA5000, EMA16000, EMA12000, ESA12000, ESA8000, RA8000, MA6000 • HP Rack Storage/12FC • HP Disk System fc10 (JBOD), sc10, fc60 • HP High Availability Disk Array Model 20-SP620 • HP OpenView Continuous Access Storage Appliance • EMC Symmetrix 3xxx, 5xxx, and 8xxx • HDS 7700, 9200, 9500V, 9910, 9960, 9970V, 9980V • IBM Enterprise Storage Server E10, E20, F10, F20, 2105, 2106 and disks (FC, SCSI) • IBM FAStT T200, T500, T600, T700, T900 • LSI E2400, E2600, E4600, E5600 • Seagate disks (FC, SCSI) • StorageTek 9176, D280, D240, D220, D210, D178, D173 (limited OS support) • Storagetek BladeStore B280, B240, B220, BC88, BC84, BC82 (limited OS support) • Sun StorEdgeT300, 9970, 9980 • Hitachi Sanrise 2200, 2800 • XIOtech MAGNITUDE
	Supported Fibre Channel and SCSI tape devices	• HP StorageWorks MSL/ESL tape libraries • HP Tape Library 20/700, 10/180, 6/140, 6/60, 4/40, and 2/20 • HP DLT Library 6/60, 4/60, 2/60, 4/40, 2/40, 2/20, and 1/20; DLT 8000 drive; Ultrium 230 drive • HP StorageTek 1/10 drive; 252/558 cartridge DLT library; Tape Autoloader 1/8; 1- to 6-drive; 40/100 cartridge DLT library; 1- to 2-drive 15 cartridge DLT library; 4/48, 3/30, 2/28 tape libraries • HP and StorageTek L700, L180, TimberWolf, Timberline, and RedWood • HP and Quantum Rack & Stack DLT 4000 desktop; and SMART Desktop DLT 7000 and 8000 modules
	HP Service Management Integration	• HP OpenView Operations, HP OpenView Service Desk • HP Systems Insight Manager

NOTE: The Supported Platforms and Devices section contains lists of supported devices, some may be discontinued. However, they continue to be supported with Storage Area Manager.

Software Product Services

Service Level One: **Installation & Start-up**	● Implementation services for the OpenView Storage Area Manager Suite of products, including Storage Provisioner ● Assistance with setting up product to meet reporting needs ● Installation, configuration, testing, documenting, and demonstrating the SAM software. ● Option to install or upgrade SAN Management Appliance
Service Level Two: **Consulting**	● Additional tailoring and integration of storage management solution to meet your business needs for storage management ● Project management, design activities, tailored implementation, testing and knowledge transfer.
Service Level Three: **Integration**	● Integration of storage management solution into overall IT management application, such as HP OpenView ● Analysis of storage need ● Survey of business and process needs relative to storage ● Design of storage management solution that will meet these needs

Service and Support Information

Support Services	HP provides high-quality software services that address all aspects of your software application life cycle needs and align with your business goals. With HP as your partner, you have access to standards-based, modular, multi-platform software coupled with HP's best-in-class services and support portfolio.
	HP offers premier onsite deployment assistance and development support, in addition to consulting, outsourcing, financing, education, extensive online self-help, and mission-critical support options. All of these offerings are focused on helping you maximize the return on your investment.
	For more information on HP software support available to address your specific business needs, visit: http://support.openview.hp.com/support_options.jsp.
	The first year of Software Support (previously called, "Customer Care Standard") is included in the software product price. For a small additional fee, customers can extend their telephone coverage hours to 24x7 by purchasing Software Support 24x7 (previously called, "Customer Care Extended"). Both of these services provide access to eCare, telephone support during coverage hours and Software Update Service.. Software Update Service proactively sends all major and minor software updates to the customer contact registered with the product. eCare is an online self-service providing users the ability to -submit and track progress on service calls, -manage support contracts , -search an extensive knowledge bank , and connect with discussions of interest.

Additional Services

	Customers wanting a more personalized or mission critical offering can also order the following services:
Advantage Services	Proactive support for software management servers. Provides technical account advocate to proactively maintain customers' software management server(s). Benefits: Proactively prevents problems and reduces risks of unplanned downtime. Minimizes customers' support overhead. Target customer: Enterprise customers whose business is IT-dependent. Require proactive support to ensure stability and availability of software management servers.
Premier Services	Personalized service for software management environments. Provides named software engineer to partner with customer to manage their environments in the most cost-effective and efficient way. All of CCA benefits, plus: Named contact for reactive and proactive support activities. Trusted relationships, personalized knowledge and attention to customer needs. Maximizes customers' ROI in HP management software. Reduces risks of IT crisis. Minimizes customers' support and operational overhead. Target customer: Enterprise customers with business critical IT (extreme IT dependency). Require personalized support relationship to operate, manage, and evolve complex, business critical software environments.
Proactive 24 and Critical Services	Flexible solution that delivers proactive support and integrated problem resolution. Assists customers to identify areas of IT environment improvement to meet business objectives better. Provides a complete partnership, close communication, and teamwork, which saves time and ensure application availability and reliability

QuickSpecs

Related Options

Care Pack Options

Descriptions	Product differentiator-difference between models	Product number
Install & Startup Service	Setup, install, configure, test, etc. SAM/apps	HA114A1-5G3
Consulting Services	Custom integration based on business needs	HA115A1-5D7
Integration Services	Design overall storage management solution	HA115A1-5D8

Physical Data

Shipping Dimensions		
	Height	15.00 in (38.10 cm)
	Width	10.00 in (25.40 cm)
	Depth	3.25 in (8.25 cm)
	Weight	2 lbs (0.90 kg)