

## MODELS

*SANworks™ Secure Path v3.0 for HP-UX™ by Compaq*

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## OVERVIEW

### **SANworks Secure Path v3.0 for HP-UX**

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Compaq *SANworks* Secure Path for HP-UX is multi-path, high availability software that manages and maintains continuous data access to Compaq storage systems enabling no single point of failure from server to storage. *SANworks* Secure Path is host-resident software that monitors the data paths between server and storage to increase availability of information. In the event that a path failure is detected, *SANworks* Secure Path fails over to an alternative path. When that path becomes available, Secure Path can automatically fail back to the original path. *SANworks* Secure Path for HP-UX can also balance the workload among available paths to optimize system performance.

*SANworks* Secure Path v3.0 for HP-UX supports HP-UX hosts connected to *StorageWorks*™ MA6000, MA8000/EMA12000/EMA16000 and RA8000/ESA12000 storage solutions..

## STANDARD FEATURES

### **No Single Point-Of-Failure**

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Multiple path failover capability and redundant components architecture eliminate single points-of-failure from server to storage in a clustered or single server configuration. *SANworks* Secure Path v3.0 for HP-UX supports up to 32 paths per LUN.

### **High Availability**

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Fibre Channel storage controllers provide redundant paths for continuous 24x7 data access. Redundant physical connections define separate physical "paths" in a *SANworks* Secure Path hardware configuration. Each path originates at an HBA port on the server and ends at a unique RAID controller port in the storage system.

### **Performance**

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*SANworks* Secure Path v3.0 for HP-UX products provides load balancing across the available paths to optimize the performance of the storage controllers.

### **Storage Consolidation**

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Two or more HP-UX hosts can share the same storage allowing maximum utilization of resources.

### **Event Notification**

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Learn about changes in the state of the paths via the console, email or syslog.

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### **Operating System Support**

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Supports HP-UX 11.0



## STANDARD FEATURES *(continued)*

### Manageability

The *SANworks* Secure Path Management Tool (spmgr) has the following features:

- add** – Add a new device to the *SANworks* Secure Path configuration.
- alias** – Assign an alias to an object.
- delete** – Removes a device from the Secure Path configuration.
- display** – Displays information about configured Secure Path devices.
- log** – Sets logging to the console, system log file and email notification.
- notify** – Manage email address and event logging severity to each email recipient.
- prefer** – Assign a preferred attribute to a path.
- quiesce** – Move active I/O to an alternative object and temporarily remove selected object from use.
- restart** – Return a previously quiesced object to an active or available state.
- restore** – Restore one or more devices to their preferred I/O path.
- select** – Select a path for I/O.
- set** – Enable or disable special driver functionality.
- unalias** – Delete an alias.
- unprefer** – Remove a preferred path attribute.

### Packaging

Software kit containing CDROM, documentation and license

### Warranty

Standard Industry 90 day conformance

## BENEFITS AT A GLANCE

Feature	Function	Benefit
Multi-path management	Reroutes I/O to functioning alternate path in case of hardware failure	No Single point of failure from server to storage
<i>SANworks</i> Secure Path Management Tool	General purpose tool to manage the <i>SANworks</i> Secure Path	Ability to manage the <i>SANworks</i> Secure Path from a single application
Dynamic Load Balancing	Monitors and reroutes data to balance I/O	Increased performance
Proactive Path Checking	In the background, determine failed path and take necessary action to ensure availability of path between host and storage	High availability
Autofailback	Online automatic return of storage sets to repaired preferred I/O path	Lights-out operation
Dynamic addition or removal of LUNs	Allows most maintenance without loss of service	High availability

## TECHNICAL SPECIFICATIONS

<b>Basic Configuration</b>	Standalone storage configuration with between dual controllers Support for 1-128 RAID systems per HP-UX host
<b>RAID Controller Software</b>	HSG80: ACS 8.5C, F, G, S; ACS 8.6 F, S, G HSG60: ACS 8.5L; ACS 8.6L
<b>Operating System Support</b>	HP-UX 11.0
<b>Application Support</b>	MC/ServiceGuard 11.xx
<b>Host Adapters</b>	HP A5158A for all supported HP server models and A6685A for K class servers only Support for 1-28 host adapters per HP-UX host, dependant on HP server capacity
<b>Host Platform</b>	HP K, A, L, N, V class server models
<b>Performance Degradation</b>	Minimal

## REGULATORY APPROVALS

Standards for CD-ROM; No special regulatory approvals for the software itself

## ORDERING INFORMATION

Order one Secure Path for HP-UX license for each HP-UX host that you want to manage with Secure Path.

Product Name	Part Number	UPC Codes
SANworks Secure Path v3.0 for HP-UX one license	261705-B21	720591215828
SANworks Secure Path v3.0 for HP-UX 5 licenses	261706-B21	720591215804
SANworks Secure Path v3.0 for HP-UX 10 licenses	261707-B21	720591215781
SANworks Secure Path v3.0 for HP-UX 25 licenses	261708-B21	720591215767
SANworks Secure Path v3.0 for HP-UX 50 licenses	261709-B21	720591215743

These part numbers include the CD-ROM, documentation and appropriate license for SANworks Secure Path v3.0 for HP-UX.

## PHYSICAL DATA

The shipping dimensions are the same for all part numbers.

### Shipping Dimensions

Height	9.25 in/234.95 mm
Width	8.25 in/209.6 mm
Depth	1.25 in/31.75 mm
Weight	3 lb/1.36 kg

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