

Overview

Introduction

The AntemetA Multipathing Software Solution for AIX (also known as AMS) is designed for connecting IBM® p-series servers running AIX® to the HP Storage Works Enterprise Virtual Array (EVA) family.

This solution supports all HP Enterprise Virtual Arrays with HSV100/110/200/210 controllers and takes benefits of all inherent high availability, performance and storage virtualization features of those arrays.

This solution is based on the standard IBM® native Host Bus Adapters and drivers delivered by IBM®. The native Host Bus adapters and their drivers are usually installed by IBM® service representative, avoiding a third party company from manipulating the IBM® servers.

The solution is based on standard IBM MPIO components that represent a smooth & non-intrusive integration of HP Enterprise Virtual Arrays in IBM® AIX servers. Installation & upgrade are fully integrated within standard IBM® maintenance tool (SMIT).

Models/Ordering Information

AntemetA Multipathing Software Solution for AIX	AntemetA Multipathing Software Solution for AIX one license	358337-B21
	AntemetA Multipathing Software Solution for AIX five licenses	358338-B21
	AntemetA Multipathing Software Solution for AIX 10 licenses	358339-B21

NOTE: Order one Multipathing Software license for each LPAR (Logical Partition) that you want to manage or for each host you want to manage (if LPAR is not used).

NOTE: the Part-numbers listed above include both the AntemetA software for AIX5.2 and the AntemetA software for AIX5.3.

What's New

- Add EVA3000/5000 Active/Active Controller failover support
- Add IBM® Virtual IO support to already shipping product
- Add FC5716 San Boot support to already shipping product



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Overview

Benefit

Feature	Function	Benefit
Single solution for the entire EVA family.	Support both the EVA3000/5000 and EVA4000/6000/8000 on a same pair of HBA.	Transparent integration or data migration of EVA 4000/6000/8000 in the SAN. Investment protection and compatibility across the EVA array family.
Support the EVA3000/5000 Active/Active functionality	Introduce Active/Active controller failover for EVA3000 and EVA5000 Storage System.	Support for Active/Active controller failover, allowing the use of industry popular multipathing solutions and native host bus adapters
Queue depth management.	Enhanced SCSI protocol handling to manage extended queue depth.	Optimization of EVA performance.
San Boot capability.	Allows IBM® AIX boot from the EVA (available using 6228, 6239 and FC5716 HBAs).	Cost efficiency. SAN boot feature reduces hardware components in the servers, enables quick replacement of failing server and enables quick installation of multiple servers with cloning.
Manageability.	Enhanced Graphical User Interface (GUI) to manage both system and storage resources.	Ease of administration and cost efficiency. No additional knowledge is required for the administrators.
Support of IBM® native FC Host Bus Adapter.	Uses native IBM® FC6228, FC 6239 and FC 5716 HBAs.	Only IBM® native hardware components are used. Fully compatible with native manufacturers' HBA originally integrated in AIX servers exploiting all its functionalities. Covers most used IBM® hardware platforms.
Support of IBM® pSeries (including p5 servers), RS/6000 including LPAR (Logical Partition) running AIX5.2 or AIX5.3		
Support only with IBM® p5 and AIX 5.3 ML3 minimum, single and dual VIO servers	Uses native IBM® FC6228, FC 6239 and FC 5716 HBAs.	Single VIO Server for tests and development purpose; Dual VIO server for production systems.
Support MPIO framework	Provides support for multiple paths for FC storage subsystems	Automatically discover, configure and make available every storage device path.
Support of the multipath configuration environment to EVAs	Allows the connection of EVAs to IBM® hardware platforms	No-single-point-of-failure from server to storage
Static load balancing	LUNs are distributed over different controller ports and HBAs.	Better bandwidth utilization
Enhanced data availability	When a path fails, I/O operations using this path are re-routed to an alternative path.	Single adapter, FC cable or EVA controller failures are supported without I/O disruption.
Automatic Path Failover Protection	Provides Path failure detection, Alternative data Path selection and presentation, Path failure notification to the Host.	No-single-point-of-failure from server to storage.



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Standard Features

No-Single-Point-Of-Failure - Dual redundant Controller Operation	<p>Multiple path failover capability and redundant components architecture eliminate single points-of-failure from server to EVA subsystem storage in a clustered or single server configuration.</p> <p>Up to 255 LUNs can be presented and used by one host and one EVA. Please see the Technical Specifications section below for more details.</p>
High Availability	<p>The Multipathing Software solution for AIX enhances high availability in complex SAN (Storage Area Networks) ensuring application and data availability in enterprise solutions.</p> <p>Fibre Channel storage controllers provide redundant paths for continuous 24x7 data access. Redundant physical connections define separate physical "paths" in a Multipathing configuration. Each path originates at an HBA port on the server and ends at a unique RAID controller port in the storage system.</p>
Performance	<p>The solution takes advantage of all performances of the HP HSV Array Controllers.</p> <p>Enhanced SCSI protocol handling to manage extended queue depth. This dramatically increases performance.</p>
Storage Consolidation	<p>Two or more hosts can share the same storage allowing maximum utilization of resources.</p> <p>Zoning is mandatory between different platform and Operating Systems.</p>
Data Availability	<p>Continuous Access (CA) and Replication Storage Manager (RSM) support allows the data replication over distant site.</p>
Event Notification	<p>Standard IBM® AIX tools are used, this speeds up administrative integration tasks.</p>
Operating System Support	<p>Support IBM® AIX 5.2 (32 and 64 bit modes, ML06 minimum required) using the AntemetA software for AIX5.2</p> <p>Support IBM® AIX 5.3 (32 and 64 bit modes, ML01 minimum required) using the AntemetA software for AIX5.3</p> <p>Support single or dual VIO Server with IBM® AIX 5.3 ML03 on the client and VIO 1.2.0.0 minimum using the AntemetA software for AIX5.3 (only dual VIO server is supported for production environment)</p> <p>NOTE: Both software are included in the AntemetA Multipathing Software Solution for AIX (refer to the Model/Ordering Information section).</p>
Clustered Server Support	<p>Support of HACMP 5.1 . & 5.2</p>



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Standard Features

Manageability

Command View EVA, installed on the HP OpenView Storage Management Appliance (SMA), is the user interface used to perform storage management tasks, including:

- Creating virtual disk families, including selection of VRAID level, cache policy, and host presentation.
- Managing system hardware located in the racks.
- Creating snapclones and snapshots of virtual disks.
- Viewing event information.
- Creating data replication groups.

IBM® AIX command line feature:

- `antemeta_bootlist` - Allows to display and alter the list of boot devices available to the system.
- `iostat` - Monitors system Input/Output device loading.
- `lscfg` - Lists the informations of the devices configured in AIX.
- `lsattr` - Lists the parameters of one specified device.
- `show_wwid` - Shows the WWN of HBAs.
- `topology` - Allows to change the adapter connection mode.
- `getpath` - Shows for a specific hdisk, the pdisk device, connection and path_id value corresponding to the active path
- `lshsx` - Shows path status for all hdisks
- `setpath` - set specific path to use for hdisk device.

A specific GUI is included with the AMS product for managing both system and storage resources.

Packaging

Software kit containing CD-ROM media, documentation and license.

Warranty

Standard Industry 90-day conformance.



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Service and Support, HP Care Pack, and Warranty Information

Software Warranty HP warrants only that the Software media will be free of physical defects for a period of ninety (90) days from delivery.

Software Product Services Product Support gives the customer access to HP's experienced technical support resources as well as access to HP's Information Services database for support on a variety of multi-vendor/multi-platform software products. Product support includes escalations and problem coordination with the appropriate engineering group. HP offers a variety of options to allow you to tailor your product service to meet the needs of your organization. Basic services on products can be uplifted from day one to ensure you receive the service you need when you need it.

Available software product services

- Software Support 24 x 7 is available 24 hours per day, Monday through Sunday, including holidays.
- Installation Service (software installation).
- Tailored support contracts based on personalized statement of work: contact your local support center via <http://www.hp.com/support/>.
- Software Support 8x5 is available 8 hours per day, Monday through Friday, excluding holidays (for Workgroup Editions only).

Software Product Services Included with the Product One year of Software Support 24 x 7 HP Care Pack Service (includes software technical support 24 x 7 and software product and documentation updates) is included with the product except for the Workgroup Editions. For the Workgroup Editions, software product support services are purchased separately.

The following services are offered as HP Care Pack Services at the time of product order

- For Workgroup Editions only: HP Care Pack services are available for 1 or 3 year Software Support (8x5) and 1 or 3 year Software Support 24x7.
- HP Care Pack services are available to upgrade the one year of Software Support 24 x 7 included with the product to 3 full years.
- Installation services.
- HP Care Pack services are prepaid, are configured using Sales Builder for Windows and must be ordered with the product.

For additional software product services information for North American HP Care Pack services, as well as orderable part numbers, please refer to the URLs listed below:

All storage services: <http://www.hp.com/hps/storage/>.

HP Care Pack Priority Services: http://www.hp.com/hps/carepack/storage/cp_networked.html.

Software Support HP Care Pack Services: http://www.hp.com/hps/carepack/software/cp_storage.html.

If you have specific service questions contact your local HP representative. Contact information for your local area can be found at: <http://www.hp.com/cgi-bin/hpsupport/index.pl>.

Maintenance releases, bug fixes and software patches are available at no charge at the following Web site: <http://h18006.www1.hp.com/products/sanworks/secure-path/index.html>.

The following contractual software support services are available at the point of product sale or post product purchase These services are offered via an HP Services sales representative or selected channel partners and include:

- Software Support 8x5 is available 8 hours per day, Monday through Friday, excluding holidays (for Workgroup Editions only).
- Software Support 24 x 7 is available 24 hours per day, Monday through Sunday, including holidays.
- Installation Service (software installation).



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Service and Support, HP Care Pack, and Warranty Information

- Tailored support contracts based on personalized statement of work: contact your local support center via <http://www.hp.com/support/>.



QuickSpecs

AntemetA Multipathing Software Solution for AIX

Technical Specifications

Shipping Dimensions	Height	11.8 in (30 cm)
	Width	8.66 in (22 cm)
	Depth	1.97 in (5 cm)
	Weight	0.88 lb (0.4 kg)
Basic Configuration	Stand-alone storage configuration with dual controllers.	
Storage Controller	HSV100/110 controllers VCS 3.020 minimum, 3.028 recommended	
Software	HSV100/110 controllers VCS 4.001 minimum for Active/Active controller failover configuration HSV200/210 with XCS 5.030 minimum	
Operating System Support	IBM® AIX 5.2 (kernel 32-bits and 64-bits). Maintenance Level 06 minimum IBM® AIX 5.3 (kernel 32-bits and 64-bits) Maintenance Level 02 minimum IBM® AIX 5.3 (kernel 32-bits and 64-bits) Maintenance Level 03 minimum for IBM® Micro-partitioning and Virtual IO Client Server version 1.2.0.0 LPAR support (Logical Partitioning)	
Application Support	HACMP 5.1 (High Availability Cluster Multi-Processing) HACMP 5.2 (High Availability Cluster Multi-Processing)	
Host Adapters	IBM® 6228 Gigabit Fibre Channel Adapter for 64-bits PCI bus IBM® 6239 Gigabit Fibre Channel Adapter for 64-bits X-PCI bus IBM® 5716 Gigabit Fibre Channel Adapter for 64-bits X-PCI bus	
	Support for 1 to 8 Host Adapters per server or partition	
Host Platform	IBM® pSeries (including p5 servers) and IBM® RS/6000 servers running AIX (LPAR supported). BULL® Escala servers running AIX: PL250R-VL, PL250R-L, PL250R/T, PL250R/T+, PL450R/T, PL850R-T-L, PL850R, PL1650R, PL3250R, PL6450R, PL240R/T, PL420R/T, PL820R, PL1600R, PL3200R.	

© Copyright 2011 Hewlett-Packard Development Company, L.P.
The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

