FLEXLINE™ V-SERIES STORAGE SYSTEMS

VIRTUAL POWER SUITE SOFTWARE

Key benefits

Safeguard data
SnapShot software streamlines disk mirroring, backup/restore and application development/ testing.

Consolidate easily
SnapVantage software lets you deploy and manage hundreds or thousands of Linux virtual servers in the zVM/zLinux environment with just a few clicks.

Increase availability
SVA Path software simplifies storage management to achieve a higher level of data availability in open systems environments.

Manage effciently
SVA Administrator software increases operational productivity, so you can manage multiple StorageTek SVA disk system platforms without additional staff, tools, processes or time.

Stay informed
SVA NMP software monitors and reports activity on SVA systems and SVA Administrator software servers within NMP framework environments from Hewlett-Packard, Computer Associates and Tivoli.

Avoid interruptions
PPRC software solutions replicate data to support business continuity to remote storage subsystems in real time while maintaining data integrity and availability.

Accelerate throughput
HSDM software moves compressed data quickly from SVA disk to tape for backup and archive.

Migrate transparently
TDMF software allows you to migrate data from any legacy system to SVA disk systems while maintaining non-stop access and application availability.

Virtual Power Suite™ software for FlexLine™ V-Series storage systems

More disk means more management and maintenance headaches. StorageTek® has committed years of research and development to create a suite of highly efficient, intelligent software solutions for Shared Virtual Array® (SVA™) disk systems, part of the FlexLine V-Series line of virtual storage systems. These solutions are designed to streamline and simplify enterprise disk management. The result is Virtual Power Suite™ software for FlexLine V-Series storage systems, a collection of powerful yet easy-to-use offerings that help you maintain, expand, reconfigure and control your StorageTek SVA disk systems. With this software suite, your storage environment can evolve as needed to help you achieve maximum access to enterprise storage.

SnapShot software
PPRC SnapShot software creates a virtual copy of any volume or data set in seconds, without consuming additional disk space or impacting performance. SnapShot software saves space in the data center by expanding storage without using additional disks. It reduces channel traffic and associated CPU costs that are normally consumed with conventional replication technology. It improves availability since data is ready to share immediately after a “snapshot” is taken. You have access to these copies to support application testing and development and to do the things you need to do, without adding more capacity to your storage. And it saves IT resources since all replication tasks are performed nondisruptively, saving hours of batch processing time while potentially freeing hours each day for key applications. Couple PowerPPRC software with PPRC SnapShot software, and you can create instant copies of your critical data on both sides of your DR solution. SnapShot software works with all SVA disk system-supported operating systems and platforms and integrates seamlessly with many database products and products from IBM, Innovation Data Processing, BMC Software and others.

SnapVantage software
Storage consolidation is made easy with SnapVantage™ software. This software can be implemented with SVA disk systems to centrally deploy and manage hundreds or thousands of Linux virtual servers on an IBM zSeries mainframe. SnapVantage software supports the mainframe environment and builds on StorageTek’s SVA Console (SVAC) software for Virtual Machine (VM) and SnapShot technologies to create a bootable server in seconds. It accelerates time to market since virtual servers can be deployed and recovered in seconds with a few clicks of a mouse. Operating expenses are lowered since one person with limited Linux or VM knowledge can set up and manage thousands of servers from an intuitive GUI that simplifies all VM administration and SVA disk activities. This software even includes special capabilities to clone and manage temporary environments for backup, reporting, testing and training. And since it’s supported by StorageTek service professionals, you have access to technical resources when and where you need them.

SVA Path software

Now you can simplify storage management and optimize your Shared Virtual Array disk systems to achieve a higher level of data availability in open systems environments. SVA Path™ software allows you to maintain continuous operations and performance optimization through automatic path failover, monitoring and load balancing. It offers data path and LUN management between servers and storage, providing automatic path failover and balancing from the host to keep applications operating at maximum efficiency. Path balancing reduces bottlenecks and improves channel throughput, so physical resources operate more efficiently. And LUN management, including manual LUN exclusion, helps avoid data corruption. SVA Path software is the ultimate value-added software solution, designed for enterprises that want to get the most out of their SVA system investment.

SVA Administrator software

As the management window into the powerful SVA disk system, the SVA™ Administrator software simplifies storage administration across the enterprise, reducing resource consumption and boosting productivity. This software is used to manage one or several StorageTek SVA disk systems in mainframe and open systems environments. It makes storage consolidation practical with centralized administration using a Microsoft Windows-based GUI (via the SVA disk system Console) for a singlepoint of control across multiple SVA systems. It allows configurations to be defined and redefined as needed, so changes in the storage environment can be handled dynamically. It also copies data on demand, so backup windows are shortened and application availability is improved. SVA Administrator software makes it easy and feasible to increase operational productivity, so you can manage multiple platforms without additional staff, tools, processes or time.

SVA NMP monitor software

SVA Network Management Protocol (NMP) software monitors and reports activity on StorageTek's Shared Virtual Array disk systems and SVA Administrator software servers. It works with leading framework monitoring software products to provide a centralized view of server and subsystem properties and status. It's designed to immediately alert you to problems, so you can take action to keep data available. SVA NMP software integrates with Computer Associates Unicenter TNG, HP OpenView Network Mode Manager and Tivoli NetView foundation software. It will also send alert messages via e-mail — no monitoring framework required.

FLEXLINE™ V-SERIES STORAGE SYSTEMS

VIRTUAL POWER SUITE SOFTWARE

PowerPPRC, Proxy PPRC, PPRC SnapShot software suite

PPRC (Peer-to-Peer Remote Copy) software products replicate disk data to remote storage subsystems in real time while maintaining data integrity and availability in System/390, z/OS and open systems platforms. PPRC software suite provides synchronous data copying functionality between primary and secondary sites, minimizing response time during duplication so availability is maintained. When coupled with PPRC SnapShot software, you can implement a disaster recovery strategy that allows you to capture point-in-time updates on your remote SVA system. It can be implemented with StorageTek's SVA disk systems for mirroring data across a campus or to and from a remote site. It can also be the cornerstone of a complete disaster recovery plan for maintaining synchronized, up-to-date copies of data at a remote site. With StorageTek, you get expert onsite assistance for planning, installation and implementation.

High-Speed Data Mover (HSDM) software

High-Speed Data Mover (HSDM) software moves data quickly from your Shared Virtual Array disk system to tape. It moves compressed data through the entire system, including channels and host, enabling very fast backup and restore. Performance varies, but HSDM software typically provides a speed improvement of 30 perccent to 40 percent and sometimes 60 percent or more. Data recovery does not require decompression, so recovery is accelerated. Existing disk capacity and bandwidth is used more efficiently. Your backup window is reduced so that you can protect more data faster. And it integrates seamlessly in open systems and MVS environments with the FDR (Fast Dump Restore) InstantBackup software from Innovation Data Processing. That means it works with both the FDR and ABR products from Innovation. You can save even more time and tape costs by adding Extended High-Performance Data Mover (ExHPDM) software enhancement, which accelerates backup and restore times by as much as 70 percent.

Transparent Data Migration Facility (TDMF) Virtual software

TDMF/Virtual software is a host-based virtual storage management product that provides seamless data migration with no downtime. You can migrate data from any legacy system to an SVA disk system with non-stop data access and application availability. All of the key steps — installation, copying and migration — happen non-disruptively and are transparent to data users. TDMF/Virtual software helps you take control of your data: source volumes can be quickly updated for reliable fallback, remote data centers can be consolidated or relocated and logical datasets and workloads can be performance balanced for greater efficiency. And by freeing you to implement emerging storage features and technologies, TDMF/Virtual software provides an open window to the future, allowing you to protect your storage investment while reducing the cost of implementation.

Virtual Power Suite™ software for FlexLine™ V-Series storage systems specifications

	SVA Administrator software	SnapShot software	PPRC software suite	SnapVantage software	HSDM software	TDMF/Virtual software	SVA Path software	SVA NMP software
Mainframe								
Minimum software requirements[1]	OS390 2.10 min z/VM 3.1 min z/OS 1.1 min Optional SVAA Server requires Java JDK 1.3.1	OS390 2.1 min z/VM 3.1 min z/OS 1.1 min Optional SVAA Server requires Java JDK 1.3.1	Implemented in hardware and invoked via TSO or IDCAMS ICE2 card type required for ESCON	z/VM3.1 Linux for zSeries distribution SuSE 7.0 (Linux 2.2 Kernel), 7.2 (Linux 2.4 Kernel), 8.1; RedHat 7.2 (Linux 2.4 Kernel) SVAA 3.1 for VM	MVS/ESA 5.2.2+, JES2 or JES3 FDRINSTANT 5.3, 4.0 Innovation data processing's FDR 5.3, 4.0+	TDMF 3.1.0 Replicator 3.5.0 base level	Not supported	Not supported
Supported storage systems	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500	SVA or RVA, including V2X, V2X2, V2Xf, V960, 9500		
Open systems								
Supported operating environments	Sun Solaris 2.6, 7, 8 or 9 Windows 2000, Windows 2003 and NT Linux RedHat 7.3 HP-UX 11.0, 11.i AIX 4.3.3, AIX 5L 5.1, AIX 5L 5.2	Sun Solaris 2.6, 7, 8 or 9 Windows 2000, Windows 2003 and NT Linux RedHat 7.3 HP-UX 11.0, 11.i AIX 4.3.3, 5.1, 5.2	Controlled by SVA Administrator Sun Solaris 2.6, 7, 8 or 9 Windows 2000, Windows 2003 and NT Linux RedHat 7.3 HP-UX 11.0, 11.i AIX 4.3.3, 5.1, 5.2				Sun Solaris 2.6, 7, 8 Windows 2000, Windows 2003 and NT HP-UX 11.0, 11.i AIX 4.3.3, AIX 5L 5.1, AIX 5L 5.2	Monitors: - NT4 SP5, - W2K SP1 - Unicenter TNG 2.1 for NT4, TNG 2.4 for W2K - Tivoli Netview 6.01 - OpenView NNM 6.1 Agents: - NT4, W2K, - AIX 4.3.3, 5.1 - HP UX 11.0 - Solaris 2.5.1, 2.6, 7, 8, 9 - Agent requires Solaris 2.5.1, 2.6, 2.7, SVAA 3.1+ installed and available SNMP environment
Minimum hardware requirements	250 MHz Intel-compatible processor or Sparc 2 with 128 MB memory. 15 MB free space in the directory where the SVAA server will be installed	250 MHz Intel-compatible processor or Sparc 2 with 128 MB memory 15 MB free space in the directory where SVAA server will be installed	250 MHz Intel-compatible processor or Sparc 2 with 128 MB memory 15 MB free space in the directory where SVAA server will be installed				Sparc 2 with 128 MB memory 20 MB free space in $TEMP and 20 MB free space in the server installation directory Intel Pentium-based computers with 2 MB free space in install directory	NT4 or Win2000 workstation for monitor component and one supported framework (Computer Associates Unicenter TNG, Tivoli Netview or Hewlet-Packard OpenView)
Supported storage systems[2]	V2X,V2X2, V960, 9500	V2X,V2X2, V960, 9500	V2X,V2X2, V960, 9500				V2X,V2X2, V960, 9500	V2X,V2X2, V960, 9500

[1] *Compatible with current releases supported by IBM (Please see http://www-1.ibm.com/servers/eserver/zseries/zos/support/zos_eos_dates.html)*

[2] *V2X, V2X2 and V2Xf can also be designated as FLXV2X, FLXV2X2 and FLXV2Xf.*

StorageTek®

ABOUT STORAGETEK®

Storage Technology Corporation (NYSE: STK), a $2 billion worldwide company with headquarters in Louisville, CO, has been delivering a broad range of storage management solutions designed for IT professionals for over 30 years. StorageTek offers solutions that are easy to manage, integrate well with existing infrastructures and allow universal access to data across servers, media types and storage networks. StorageTek's practical and safe storage solutions for tape automation, disk storage systems and storage integration, coupled with a global services network, provide IT professionals with confidence and know-how to manage their entire storage management ecosystem today and in the future.

StorageTek products are available through a worldwide network. For more information, visit www.storagetek.com, or call 1.800.275.4785 or 01.303.673.2800.

WORLD HEADQUARTERS

Storage Technology Corporation
One StorageTek Drive
Louisville, Colorado 80028 USA
1.800.877.9220 or 01.303.673.5151

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