

# FLEXLINE™ V-SERIES STORAGE SYSTEMS

SHARED VIRTUAL ARRAY® DISK SYSTEMS

### Key benefits

### Reduce costs and improve efficiency

Reduce your TCO with one of the most effective and efficient solutions available for storing, protecting and managing your data. Backup your data fast, but use up to 60 percent less physical storage requirements than with traditional storage solutions.

### Use every byte

The SVA disk system is an example of storage efficiency. Use 100 percent of available storage in most cases — eliminate waste and do more with less storage capacity.

### Simplify IT

Automatic macro-management provides lowtouch storage for today's complex environments. Intelligent self-tuning, automatic media management and disruption-free configuration save time, effort and resources.

### Be safe, be fast

Copy and recover data sets and volumes in seconds with SnapShot software — you obtain increased data protection and business continuity without doubling or tripling disk expenditures.

### Reduce downtime

Mirror and move data transparently with StorageTek's Peer-to-Peer Remote Copy (PPRC) technology, a suite of high-performance, business continuity tools.

#### Gain hours of availability

Add Shared Virtual Array disk systems for FlexLine V-Series storage systems and gain hours of additional application availability.

#### Accelerate time to market

Reduce application development cycles with instant resets and concurrent testing, using snaphot copies.



## Shared Virtual Array® disk systems for FlexLine™ V-Series storage systems

When you invest in conventional disk storage systems, you typically use only 30 percent to 60 percent of available capacity. StorageTek's Shared Virtual Array® (SVA™) disk systems for FlexLine™ V-Series storage systems use every byte — 100 percent — of available disk capacity, in most cases. Your storage dollars are invested in usable storage, not dead space.

### Less is more

With their low capacity utilization rates and your ever-changing application environments, conventional disk systems force you to purchase more capacity than you need to meet your business requirements. This puts additional strain on time, budgets and resources by forcing you to manage more when you need to manage less. StorageTek's SVA disk systems keep things simple with powerful data management capabilities that accelerate performance across the enterprise while simplifying data management. Built-in intelligence handles self-tuning, automatic media management and disruption-free configuration changes, so existing IT resources can handle increasing workloads and data growth. Combine SVA disk technology with the unique Virtual Power Suite™ software for FlexLine V-Series storage systems and you can copy, move and protect data with ultimate efficiency, less effort and greater reliability. That can equate to eliminating thousands of I/Os per second over conventional disk technology.

### Dynamic storage

With the dynamic storage capabilities of SVA disk systems and practical storage solutions like PPRC SnapShot software, you can instantly copy any volume or LUN data set to make an almost unlimited number of file copies. It happens non-disruptively, so you potentially gain hours of availability for key applications every day and use no physical storage resources in the process. Other solutions from StorageTek® can further simplify your storage strategy. High-Speed Data Mover (HSDM) software moves your data up to 50 percent faster than traditional alternatives. Another example, SnapVantage™ software, a component of the Virtual Power Suite™ software, gives you the ability to deploy hundreds of virtual Linux servers in VM environments in minutes and manage them with an easy-to-use interface designed for non-technical personnel.

### Services

### **Baseline Implementation Services**

StorageTek's Implementation Services assist you in achieving the full benefit of your storage investments — right from the start. The Baseline Implementation Services offering for Shared Virtual Array disk systems includes knowledge transfer to your organization. The service consists of installation and configuration of SVA Administrator software and the configuration of logical volumes on the SVA disk system. In addition, the service includes design validation, documentation and project management.

In addition to Baseline Implementation Services, StorageTek offers two tiers of higher-level consulting services for organizations whose implementation needs go beyond the baseline level. To learn more, ask your StorageTek representative about Value Plus Implementation Services and Custom Implementation Services, or visit www.storagetek.com.

### Shared Virtual Array® disk systems for FlexLine™ V-Series storage systems specifications

Capacity	
Virtual device capacity	Up to 11.624 TB (virtual – 3390 format)
Device images supported	4096–3380-J/E/K and/or 3390-1/2/3 or 1365–3390-9
LUN sizes supported	2.6 GB with increments of 2.6 GB
	7.4 GB with increments of 7.4 GB
	2.0 TB (single LUN)
Effective user cache capacity	Up to 96 GB
Drive capacity	73 GB, 15,000 rpm Fibre Channel drives
Connectivity	
ESCON ports	4-32 ports, in increments of 2 or 4 (V2X2)
ESCON logical paths	8,192 (512 per logical control unit) (V2X2)
Fibre Channel ports	4-16 ports, in increments of 2 or 4 (V2X2)
ESCON/Fibre Channel mixed ports	Minimum 4 ESCON ports and 2 Fibre Channel ports to a maximum of 28 ports, in increments of: 2 or 4 ESCON ports 2 or 4 Fibre Channel ports (V2X2)
FICON logical paths	2,048 (128 per logical control unit, 256 per FICON port) (V2Xf)
FICON ports	8-16 ports, in increments of 2 (V2Xf)
Operating system	
Supported mainframe operating systems (4,096 volume and 3380/3390	22/22
device support)	0\$/390
	z/0\$
	MVS/ESA (ESA support is limited)
	VM/ESA (ESA support is limited)
	z/VM
Supported open systems operating systems	Solaris, HP-UX, Windows NT, Windows 2000, Windows Server 2003, AIX, Novell, Linux

Management	W. IB 0.: 1 I I 0 W
Storage management software	Virtual Power Suite including SnapVantage, SVA Administrator, SVA NMP monitor, High Speed Data Mover and SVA Console software
Data replication	PowerPPRC and PPRC SnapShot copy software and remote mirroring software
Mechanical	
Height	61.0 in (155.0 cm)
Depth	30.0 in (77.0 cm)
Width	36.0 in (92.0 cm)
Weight	982.0 lb (445.0 kg)
Service clearance	Front and rear: 21.3 in (54.1 cm)
	Side: 2.5 in (6.4 cm)
Environmental	
Relative humidity	20% to 80%
Temperature (operating)	+60° to +90° F (+16° to +32° C)
Power	
KVA	2.6 minimum, 3.8 maximum (dual line cord)
Voltage	200-240 VAC
Frequency	50-60 Hz
Circuit breaker	30 Amps
KBTU per hour	8.6 minimum, 12.4 maximum (dual line cord)
Regulatory compliance	
Electromagnetic compatibility	FCC (47 CFR 15, Subpart B) Class A
	CE (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3)VCCI (CISPR 22) Class A
	Canada (ICES-003) Class A
Safety	UL 1950
	CAN/CSA 22.2 No. 950
	EN60950

Note: The V-Series components V2X2 and V2Xf can also be designated as FLXV2X2 and FLXV2Xf.



### ABOUT STORAGETEK®

Storage Technology Corporation (NYSE: STK) is a \$2 billion global company that enables businesses, through its information lifecycle management strategy, to align the cost of storage with the value of information. The company's innovative storage solutions manage the complexity and growth of information, lower costs, improve efficiency and protect investments. 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

© 2004 Storage Technology Corporation, Louisville, CO. All rights reserved. Printed in USA. StorageTek and the StorageTek logo are registered trademarks of Storage Technology Corporation. Other names mentioned may be trademarks of StorageTek as a long trademarks. StorageTek as a long trademark as of StorageTek as standard warranty terms apply, unless the equipment is specifically identified by StorageTek as "used" or "refurbished." Replacement parts provided under warranty to any service offering may be either new or equivalent-to-new, at StorageTek's option. Specifications/legacific