

EMC VNX SERIES TOTAL EFFICIENCY PACK

Boost application performance, protect critical information, and reduce storage costs with comprehensive software from EMC

ESSENTIALS

- Optimize SLAs for both the lowest cost and the highest application performance automatically
- Secure data where it is created and enforce retention at the file-level for compliance
- Recover and repurpose applications locally and remotely
- Protect any host or any application from any disaster
- Manage Microsoft Exchange, SQL Server, SharePoint, and Oracle application copies and prove compliance with protection policies
- Manage all software via Unisphere™

IT administrators everywhere are under constant pressure to do more with less: shrinking budgets, fewer resources, and less infrastructure. EMC meets these challenges with a set of unique and powerful storage and data management software solutions. Designed to work with the EMC® VNX™ series of storage platforms, these advanced features dramatically improve efficiency by simplifying and automating many storage tasks.

The EMC Total Efficiency Pack for VNX includes five complete data management suites:

- **FAST Suite**—Automatically optimize for the highest system performance and the lowest storage cost simultaneously.
- **Security and Compliance Suite**—Keep data safe from changes, deletions, and malicious activity.
- **Local Protection Suite**—Practice safe data protection and repurposing.
- **Remote Protection Suite**—Protect data against localized failures, outages, and disasters.
- **Application Protection Suite**—Automate application copies and prove compliance.

FAST SUITE

The FAST Suite improves performance and maximizes storage efficiency by enabling customers to deploy a FLASH^{1st} strategy. Using the FAST suite and just a small number of Flash drives, a FLASH^{1st} strategy lowers storage costs and delivers higher performance levels for your most important applications by automatically tiering and serving data from the most cost-effective drive type, based on the data's need. Customers define how and when data is tiered using policies that dynamically move active data to high-performance drives, and less active data to high-capacity drives, in one-gigabyte increments for both block and file systems. For inconsistent, high-demand workloads, an extendable cache of up to two terabytes ensures that data is served from the highest performing Flash drives for as long as needed. With a FLASH^{1st} strategy, customers never have to make concessions for cost or performance.

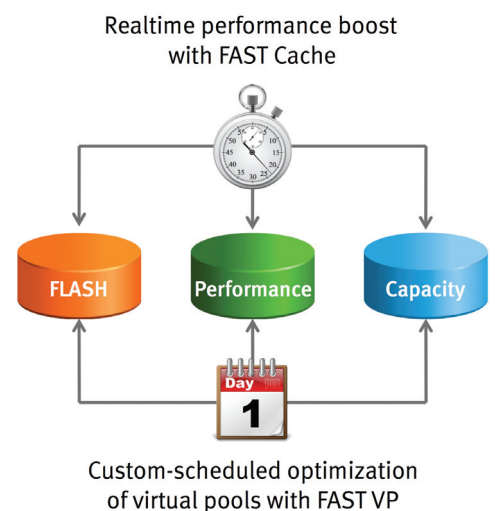


Figure 1. Set-it-and-forget-it performance optimization for application workloads

SECURITY AND COMPLIANCE SUITE

The Security and Compliance Suite helps customers ensure that data is protected from unwanted changes, deletions, and malicious activity. Encrypt data where it is created for protection anywhere outside the server. Maintain data confidentiality for selected data at rest and enforce retention at the file-level to meet compliance requirements. Integrate with third-party anti-virus checking, quota management, and auditing applications for added data protection, security, and peace of mind.



Figure 2. Meet compliance requirements to secure and retain sensitive data

LOCAL PROTECTION SUITE

Practice safe data protection and repurposing with the Local Protection Suite. This suite gives customers any point-in-time recovery with DVR-like roll-back capabilities for business continuity on block-based storage, allowing recovery of production applications with minimal data exposure. Application owners can tune recovery point objectives based on the criticality of data, and perform faster recovery through self-service capabilities. Create point-in-time copies to instantly restore production data residing on file-based storage as well as use production copies for development, testing, decision support tools, reporting, and point-in-time backups.

Local Protection

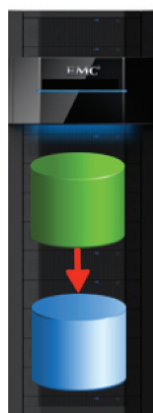


Figure 3. Local copies for instant recovery and repurposing

REMOTE PROTECTION SUITE

The Remote Protection Suite offers protection against localized failures, outages, and disasters. It lets customers deliver disaster recovery protection for any host and any application on block-based or file-based storage—without compromise—and with immediate DVR-like roll-back to a point-in-time. Capabilities include compression and deduplication for WAN bandwidth reduction and application-specific recovery point objectives. Replication options are available for “many to one” fan-in replication for centralized backup operations, as well as “one-to-many” disaster recovery configurations.

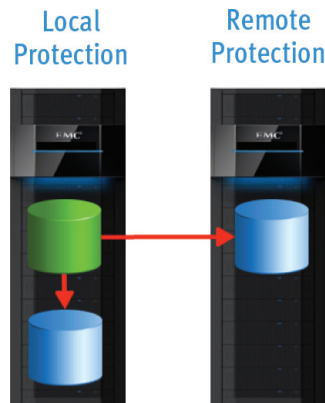
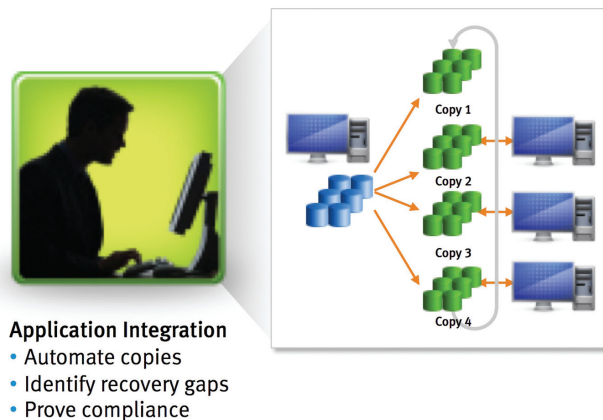


Figure 4. Immediate disaster recovery at a remote site or restore back to production

APPLICATION PROTECTION SUITE

With the Application Protection Suite, automate application-consistent copies of Microsoft® Exchange, SQL Server®, SharePoint® and Oracle, and prove recovery for defined service levels. User roles enable self-service copy management, while improving visibility for all application recovery points. Alerts are generated automatically, enabling fast resolution to recovery gaps. Integrated reporting enables customers to prove compliance with protection policies.



- Application Integration**
- Automate copies
 - Identify recovery gaps
 - Prove compliance

Figure 5. Automate application copies and prove protection compliance

VNX SERIES SOFTWARE SUITES

The VNX series has simple and attractively priced software packs and suites offering customers maximum application performance as well as local and remote protection for assured application recovery. Increase productivity with copies of production data for repurposing activities. Prove compliance with application protection policies and enhance data security. Suites can be purchased individually for any VNX family systems or bundled into comprehensive packs. All software is managed through VNX's easy-to-use interface, EMC Unisphere.

VNX Packs	VNX Suites	Function	
VNX Total Efficiency Pack*	FAST Suite Automatically optimize for the highest system performance and the lowest storage cost simultaneously.	Dynamically tier data across drives	
		Extendable cache for performance boost	
		Trend analysis and reporting	
		Monitor and achieve performance objectives	
	Security and Compliance Suite Keep data safe from changes, deletions, and malicious activity.	Encrypt data where it is created	
		Disk-based WORM functionality	
		Anti-virus integration and alerting	
	Total Protection Pack	Local Protection Suite Practice safe data protection and repurposing.	DVR-like recovery for block storage
			Block storage snaps and clones
			File system snaps
Remote Protection Suite Protect data against localized failures, outages, and disasters.		Unified storage replication with DVR-like recovery	
		Integrated WAN deduplication and bandwidth reduction	
		Granular file system level replication and recovery	
Application Protection Suite Automate application copies and prove compliance.		Application copy management	
	Prove protection compliance		

*The VNX5100 offers the Total Value Pack, which includes the Protection Pack as well as the Security and Compliance Suite. The FAST Suite is available for purchase separately on the VNX5100.

Figure 6. Simple and easy software packs for maximum IT efficiencies

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at www.EMC.com.

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