

Features/Functionality

Extended Tape Library Architecture (ETLA) Family

HP StorageWorks Command View for Tape Libraries (TL) Software is an important building block in HP's Extended Tape Library Architecture (ETLA), which provides the foundation for improved backup reliability and simplified management of your HP enterprise tape libraries, while making them a more resilient, secure, and adaptable part of your SAN. HP Command View TL lets you manage multiple HP EML and ESL E-Series tape libraries and HP Virtual Library Systems from a single easy-to-use application. Its intuitive graphical interface makes even the most complex library management tasks easy to understand. Contrast this with other enterprise tape libraries that use a collection of unconnected utilities to monitor and manage the system. With Command View TL, you can manage your tape libraries - check drive status, receive trouble alerts, diagnose problems, and much more - through a simple browser interface from anywhere in the world.

Set up and configure your tape library in the SAN in less than two hours with Command View TL's configuration wizards and graphical interface. Command View TL makes configuring and upgrading your library easy:

- Establish backup security
- Configure new tape drives and slots after a library upgrade
- Move tape drive access between servers
- Upgrade controller and tape drive firmware

Day-to-day management tasks are also easier with Command View TL. Log in locally or remotely to:

- Check activity logs
- Monitor the health of tape drives and media
- Move or eject data cartridges
- View alerts to stay informed about potential problems in the library and SAN
- Identify and resolve problems with the library and the SAN
- Print detailed support tickets that will help diagnose and fix problems quickly

Command View TL and the library Interface Manager make your HP E-Series tape library self-aware and network-aware. These self-managing libraries improve backup job reliability, cut down on your administrative overhead and provide you data protection that is secure, adaptable, and resilient.

Secure Manager for Tape Libraries

HP StorageWorks Secure Manager for Tape Libraries (TL) is an optional module for Command View TL that provides an additional level of security that lets you control access to the tape library by authorizing specific servers to access the library's drives and robotics. Secure Manager TL increases backup reliability by blocking disruptive traffic from unauthorized hosts to the library, which is one of the main causes of failed or incomplete backups.

Secure Manager TL enables you to establish up to six logical partitions in a single physical library. Partitions can be used to accommodate different backup applications, tape technologies or separate SANs, isolate departmental systems from each other, or create separate storage systems for any other reason. Each logical partition appears to its authorized servers as a complete physical tape library.

Because Secure Manager TL is part of Command View TL, it uses the same graphical user interface to make it easy to set up and view access privileges and partitions.

Models

Features/Functionality

HP StorageWorks Command View for Tape Libraries Software (Command View TL)	Permanent License for Command View for Tape Libraries Software for ESL NOTE: Permanent license to use for base software platform. Order 1 per library. Used for the ESL E-Series	343374-B21
HP StorageWorks Secure Manager for Tape Libraries (Secure Manager TL)	Permanent License for Command View for Tape Libraries Software for EML E-Series NOTE: Permanent license to use for base software platform. Order 1 per EML E-Series library.	T3663A
HP StorageWorks Secure Manager for Tape Libraries (Secure Manager TL)	Permanent License for Secure Manager for Tape Libraries Software for ESL NOTE: Requires permanent license to use for base software platform (HP Command View TL for ESL). Order 1 per ESL E-Series library.	343376-B21
HP StorageWorks Secure Manager for Tape Libraries (Secure Manager TL)	Permanent License for Secure Manager for Tape Libraries Software for EML NOTE: Requires permanent license to use for base software platform (HP Command View TL for EML). Order 1 per EML E-Series library.	T3664A

What's New

Major new release of Command View TL 2.0 and Secure Manager TL 2.0 software for the both the ESL E-Series and EML E-Series (not supported on the ESL 9000) that includes the following enhancements:

- Dynamic host mapping - Automatically configure additional servers or storage to your SAN-based ESL E-Series or EML E-Series tape libraries without having to reboot the interface controller.
- Role-based security - Establish different levels of security access for Command View TL (administrator, operator, guest and service accounts).
- Further integration of Library and Tape Tools - allows for improved tape drive and media health check analysis.
- Improved partitioning - Modify an existing partition (add additional slots or tape drives, for example) without first deleting the old one.
- Better performance - Significant speed improvements in the Command View GUI and firmware download process.
- Proactive support ticket Generation - Generate support tickets with more complete information and faster than before. Support tickets are proactively generated for tape drives each time the media is ejected.
- Improved health monitoring - A summary of the component status and recent alerts is now also included. Tape library readings now appearing in the GUI include: temperature, voltage and fan speed sensors within the tape library.
- Interoperability between the new and older 1.x versions of Command View TL and Secure Manger TL - Integrate older libraries (e.g. ESL9000) and new ones under a single platform.

Key Features

- Simple, web-based device and host configuration capability between library components: robotics, drives, and interface controllers
- Complete remote manageability for HP EML and ESL E-Series tape libraries and HP Virtual Library Systems in SANs - monitor and manage multiple libraries from any network location
- Automated setup and configuration of tape libraries in SANs -- no need to set up each Fibre Channel interface controller separately
- Automation of complex and repetitive library system management tasks
- Advanced device-level access control via Secure Manager option to prevent unauthorized servers from interrupting critical backup jobs
- Better SAN performance because management traffic stays out of the data path
- Integration with leading enterprise management applications including HP Storage Essentials though SMI-S
- Single server support to run both Command View TL and Command View EVA (separate applications) on the same server.
- Worldwide name retention support on interface controllers for the ESL or EML - replacement interface controllers can automatically download the existing maps from the old controller without the need to reconfigure and start from scratch.

Customer Benefits

- **Experience better backup reliability:** Prevent rogue servers and SAN events from disrupting your backups with Secure Manager TL's access control. Eliminating such disruptions improves backup performance and can reduce the number of backup failures by up to 90%.
- **Simplify the management of your libraries:** Save time by performing all your daily management and troubleshooting tasks with a single program, Command View for Tape Libraries, which can be accessed from anywhere via a browser interface. Command View TL's GUI and parallel download capabilities make managing your library faster and easier.
- **Reduce the complexity of installation and upgrades:** Use step-by-step wizards to simplify the process of setup and configuration. Command View TL's graphical interface will present a clear picture of your tape library configuration, making it easy to set up security, assign servers to backup devices, add library upgrades, and upgrade library firmware when necessary.
- **Keep your data secure from unauthorized access:** Define exactly which servers can access which tape drives and cartridges in the library with Secure Manager TL's simple tools. Without access protection, your data may be at risk from unauthorized servers in your rapidly changing SAN environment.
- **Use one tape library to accommodate different requirements:** Divide your tape library into up to six logical partitions to support different backup applications, multiple tape formats, or separate departmental requirements with Secure Manager TL. Save money by consolidating your storage into a single library while providing what appears to your users as multiple dedicated physical libraries.
- **Manage your SAN dynamically:** Configure new servers on the SAN into your tape library automatically, without having to reboot the interface controller. Add additional slots and tape drives to partitions without having to recreate from scratch.
- **Improve the security of your library:** Role-based security allows you to establish different levels of security access to Command View TL (administrator, operator, guest and service accounts).
- **Upgrade easily to future library enhancements:** Protect your investment in your chosen library platform with an easy upgrade path as interface technologies change.

Extended Tape Library Architecture (ETLA)

The HP StorageWorks Extended Tape Library Architecture (ETLA) is designed to save you time and money by improving backup reliability and simplifying the setup, configuration, management, and troubleshooting of your enterprise tape libraries. HP builds intelligence and manageability into every HP E-Series tape library through the Interface Manager, a processor that serves as the control center for ETLA. The Interface Manager hosts library services that make the library self-aware and network-aware, able to monitor the whole environment and alert you to problems in the library or on the SAN before they threaten the security of your data. Interface controllers provide an extra layer of intelligence between the library and the SAN to handle access conflicts and shield the library from unrelated SAN events. ETLA isolates the tape library from the SAN infrastructure, so when you make a change to your SAN infrastructure, such as adding a new switch or HBA, no changes are required on the tape library.

With ETLA, you can log onto HP StorageWorks Command View for Tape Libraries (TL) Software from anywhere on the network - from across the room or across the globe - to monitor and manage your HP tape libraries. Unlike other tape libraries that require different utilities for different aspects of library management, Command View TL provides a simple graphical interface for managing all facets of your HP E-Series tape libraries, from initial setup to daily management to resolving a potential problem.

Secure Manager for Tape Libraries (TL), an optional software module that works within Command View TL, further improves your library's security and manageability, giving you an easy way of controlling access to tape library devices and setting up partitions. You will experience fewer backup failures as Secure Manager TL blocks disruptive traffic from unauthorized hosts. Divide a single E-Series library into up to six partitions to support separate and secure departmental systems, multiple backup applications, or different tape technologies.

Features/Functionality

The bottom line is that ETLA increases the reliability and manageability of your tape libraries. As a key component of HP's Adaptive Infrastructure strategy, ETLA ensures that your HP E-Series tape library can easily scale up as needed and adapt smoothly to changes in your SAN environment.

Command View TL Functions

- View asset information for the selected library system
- View health summaries for all components of the library system: drives, robotics, interface controllers, and the Interface Manager. Advanced tape and media diagnostics also provide health check margin analysis.
- View library inventory: slots, media, and drives
- Search for media by barcode label
- View details on drives, robotics, interface controllers, and Interface Manager, including worldwide names, speeds, and connection types
- Configure hosts, HBA-to-drive mapping and masking settings with Secure Manager Tape Library Software
- Automatically configure new SAN servers to the tape library without having to reboot the interface controller
- Upgrade firmware on the tape drives, interface controller and Interface Manager cards. Parallel firmware downloads provide for exceptionally fast performance.
- Configure IP network parameters for the management station and Interface Manager cards in each library
- Configure SNMP trap/event destinations to receive alerts asynchronously
- View persistent event logs for the library system, where event filtering makes fault detection easier.

HP Secure Manager TL Functions

- Automatically discover hosts and HBAs on the SAN or add your own for access control and security purposes
- Configure hosts and HBA-to-drive mapping and masking settings
- View host-to-library connectivity authorized by secure manager
- Configure up to six library partitions per tape library
 - Set up mixed media-partitioning, allowing the library to support multiple drive and media types
 - Enable two or more applications to share one library
 - Support more than one SAN with a single E-Series tape library

Software Licensing

- A 60-day, instant-on trial license for Command View TL is included with all HP E-Series tape libraries.
- A permanent license for Command View for Tape Libraries Software for ESL is required for the ESL E-Series (one license per library).
- A permanent license for Command View for Tape Libraries Software for EML is required for the EML E-Series (one license per library).
- A permanent license for Secure Manager for Tape Libraries Software for ESL or EML E-Series is an optional, but highly recommended, module that provides enhanced device-level security and partitioning capabilities (one license per library).

Distribution Media

Available via CD-ROM and online from: <http://www.hp.com/support/cvesl>

Documentation

- HP StorageWorks Interface Manager and Command View for Tape Libraries Software Installation and User Guides provided
- "Online Help" provided within Command View TL interface at: <http://www.hp.com/go/automated>

Software and Hardware Supported

Supported Software

Operating systems supported

Management station:

- Microsoft® Windows® 2000 Professional
- Microsoft® Windows® 2000 Server edition SP3
- Microsoft® Windows® Windows XP Professional
- Microsoft® Windows® Windows Server 2003
- Microsoft Internet Explorer v6.0 SP1 or later, or Netscape Navigator 6.2 or later (Java support must be enabled in the browser)
- An Internet connection is recommended for Command View TL to receive firmware and software release information automatically from the HP support website.
- Java Runtime Environment (JRE) plug-in v1.4 or later from Sun Microsystems

Client browsers supported

Hardware Prerequisites

Management station (provided separately by user)

- Pentium III 500 MHz, 256 MB RAM
- 10/100 Base-T network card (a static IP address is recommended)
- Operating system, browsers, and JRE plug-in requirements described above

Supported Tape Libraries

Command View for Tape Libraries supports single-frame EML and ESL E-Series tape libraries and multiple-frame ESL tape libraries connected via the Cross Link Kit, as well as HP 6000 Virtual Library Systems.

Supported Hardware

Model Description

HP StorageWorks EML E-Series Tape Libraries

EML 103e Tape Library
EML 245e Tape Library
Other EML E-Series configurations

HP StorageWorks ESL E-Series Tape Libraries

ESL712e Tape Library
ESL630e Tape Library
ESL322e Tape Library
ESL286e Tape Library

HP StorageWorks 6000 Virtual Library System

6105 Virtual Library System
6109 Virtual Library System
6510 Virtual Library System
6518 Virtual Library System
6840 Virtual Library System
6870 Virtual Library System

Service and Support, HP Care Pack and Warranty Information

Warranty

HP Care Pack Services offer upgraded service levels to extend and expand your standard product warranty with easy to buy, easy to use support packages that help you make the most of your hardware and software investments. They let you choose the support levels that meet your business requirements, from basic to mission-critical. They help you contain total cost of ownership.

HP Care Pack warranty extensions can be purchased along with HP products to cost-effectively upgrade or extend your warranty. For many products, post-warranty HP Care Pack Services are available when your original warranty has expired.

Why purchase an HP Care Pack service?

Your standard warranty protects against product defects. HP Care Pack Services help you guard against unplanned downtime, which can reduce your productivity and profitability. These convenient service packages:

- Protect your investment in HP products
- Provide consistent, predictable levels of support across your entire department or business
- Ease budget planning with fixed-cost support that includes parts and labor
- Give you direct access to proven technical and problem-solving expertise
- Offer a choice of response-time and repair-time commitments
- Deliver prompt, measurable results
- Are available whenever and wherever you do business

HP Care Pack availability may vary by country and product.

Supporting your Adaptive Enterprise journey

HP Services helps you make the Adaptive Enterprise real for your organization. The breadth, depth, and quality of HP hardware and software support services can help you improve the performance of your IT support processes and resolve the complex software and hardware problems that tax user productivity. HP Care Pack services help you increase IT environment stability, efficiency, and agility from the desktop to the data center, and improve the productivity of your employees.

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

For more information about HP's Global Limited Warranty and Technical Support, visit ftp://ftp.compaq.com/pub/products/storageworks/warranty/EN_321708-008.pdf

Service and Support, HP Care Pack and Warranty Information

Recommended Services

Software Installation and Start Up Service

- Cost-effectively obtain specialized expertise for a complex, one-time task
- Enjoy top performance right from the start
- Shorten your time-to-ROI

Three years of HP Software Support 24 x 7

- Improve the productivity of system managers and operators
- Improve system performance and reduce downtime due to software defects
- Expedite problem resolution through expert-level technical resources
- Enjoy consistent service coverage across geographically dispersed sites
- Update HP and selected third-party software at a predictable cost
- Take advantage of subscription savings on software updates
- Keep your license compliancy up-to-date

Available HP Care Pack Services

Extend your product warranty with a wide choice of cost-saving support packages.

HP Care Pack Services are sold by HP and HP authorized enterprise and commercial resellers. Services for customers purchasing via direct and enterprise resellers are quoted using HP order configuration tools. Additional information about HP Care Pack Service features and benefits is available at <http://www.hp.com/hps/carepack/services/>.

For more information about Deployment and Per Event Services for HP Storage, visit <http://www.hp.com/hps/storage/>.

Warranty Upgrade Services

Description

Installation of Command View for Tape Libraries Software for ESL or EML into a SAN (per library)

Installation of Secure Manager for Tape Libraries Software for ESL or EML E-Series into a SAN (per library)

Tape Library Installation and Startup (SAN Implementation Service)

SW, 1-year, Phone-in, 9x5

SW, 3-year, Phone-in, 9x5

SW, 1-year, Phone-in, 24x7

SW, 3-year, Phone-in, 24x7

Support Plus, 3-year

Support Plus 24x7, 3-year

Order Number

HA113A1

HA113A1

HA114A1

HA106A1

HA106A3

HA107A1

HA107A3

HA109A3

HA110A3

Band for ESL E-Series library

5J5

5J5

5DQ

8FC

8FC

8FC

8FC

8FC

8FC

Band for EML E-Series library

5J5

5J5

5KF

8XL

8XL

8XL

8XL

8XL

8XL

Service and Support, HP Care Pack and Warranty Information

Additional Services & Warranty Information

Due to the complexities involved with the initial installation of an enterprise Library into a SAN environment, Hewlett-Packard recommends that customers take advantage of the SAN Implementation Service (HA114A1). This service covers pre-installation preparation activities, installation and configuration of the library and interface controllers, configuration of hosts and switches, verification testing and customer orientation.

For more information on HP storage services please visit <http://www.hp.com/hps/storage/>

Configuration Information

HP StorageWorks Extended Tape Library Architecture tightly integrates modular hardware and software components for maximum flexibility. Command View for Tape Libraries is required for all EML and ESL E-Series Tape Libraries. HP StorageWorks Secure Manager for Tape Libraries Software is recommended to increase the security of backup data and increase backup reliability.

Step 1: Choose your tape library and hardware options

Model Description

HP StorageWorks ESL E-Series	<ul style="list-style-type: none"> • ESL E-Series 712e • ESL E-Series 630e • ESL E-Series 322e • ESL E-Series 286e
HP StorageWorks EML E-Series	<ul style="list-style-type: none"> • EML E-Series 505e • EML E-Series 469e • EML E-Series 442e • EML E-Series 375e • EML E-Series 348e • EML E-Series 245e • EML E-Series 103e • EML E-Series 71e

NOTE: Command View TL and Secure Manager TL support any configuration of the EML E-Series and ESL E-Series, including multi-frame ESL configurations.

Step 2: Add Command View for Tape Libraries (required)

Model Description

	Model Description	Product Number
For ESL E-Series libraries	Command View for Tape Libraries Software for ESL NOTE: Permanent license to use. Order 1 per library.	343374-B21
For EML E-Series libraries	Command View for Tape Libraries Software for EML NOTE: Permanent license to use. Order 1 per library.	T3663A

Step 3: Add Secure Manager for Tape Libraries (optional)

Model Description

	Model Description	Product Number
For ESL E-Series libraries	Permanent License for Secure Manager Tape Library Software for ESL NOTE: Permanent license to use for base software platform. Order 1 per library.	343376-B21
For EML E-Series libraries	Permanent License for Secure Manager Tape Library Software for EML NOTE: Permanent license to use for base software platform. Order 1 per library.	T3664A

Configuration Information

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