

Overview

HPE StoreEver TapeAssure Advanced Software

HPE StoreEver TapeAssure Advanced is an analytics software with automated, predictive monitoring of health and performance of tape drives and cartridges. TapeAssure Advanced reporting and analysis allows users to get the most out of their investment by knowing how their library is being used. HPE StoreEver TapeAssure Advanced Software is fully integrated with HPE StoreEver Command View for Tape Libraries to provide an intuitive, easy to use dashboard for analysis of performance, health and utilization of tape drives and cartridges.

TapeAssure Advanced analytics features makes use of predictive forecasting to anticipate the likelihood of bottlenecks, failures, and load balancing issues in the tape library environment. Analysis of drive/tape utilization helps users to understand available capacity and performance which helps to plan ahead.

Key Features

- Automated and predictive monitoring of health & performance of tape drives and cartridges.
- Automated alerts keep you informed of anything you should know.
- Automatic testing of suspect drives with proactive diagnostics.
- Get the most out of your investment by knowing how your library is being used.
- Understand available capacity and performance by monitoring library and drive utilization to plan ahead for future needs.
- Analysis reported on an easy to use dashboard with detailed graphs and charts.
- Non data path and non-invasive solution.
- Covers all of your tape libraries, drives and tapes as you use them.
- Licensable feature of Command View for Tape Libraries.

Customer Benefits

- **Peace of mind:** TAA provides automated and predictive monitoring of health & performance of tape drives and cartridges, and automated alerts keep users informed of anything that should be known.
- **Easily view library & drive utilization:** TAA & CVTL together provide an easy to use dashboard with detailed graphs and charts. This simple dashboard helps users get the most out of their investment by knowing how their library is being used. Users can also understand available capacity and performance by monitoring library and drive utilization, which helps for planning ahead for future needs.

Feature details:

Predictive Analytics for Tape Drives and Cartridges:

- Predictive analytics monitors performance, health and utilization of the tape libraries, drives and cartridges. Using statistical analysis, TapeAssure Advanced (TAA) can predict future behavior of the tape infrastructure proactively, capturing issues before they arise.

Customer benefits of predictive analytics for drives and cartridges:

- TAA predicts potential bottlenecks reducing unscheduled downtime.
- TAA can identify load balancing issues to help improve the drive utilization.
- TAA can help users to plan ahead based on the utilization information.
- Proactively predict potential hardware failures. TAA can predict potential drive/cartridge failures, which minimizes unscheduled downtime

Predictive Analytics:

	Tape Drives	Tape Cartridges
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Overview

Health	Write and read health parameters of drives and pro-actively predict potential drive failures in near future	Plot the graph of "write" quality of the backups on the given tape with various drives, and predict the chances of failure of a given tape cartridge
Life	Analyze the head life, reposition life and load/unload life and will predict the usable life remaining in the tape drive	Analyze the remaining usable life in tape cartridges

Library TapeAssure Overview:

The Library TapeAssure Overview displays information for all the libraries for which the TapeAssure Advanced information is available through the CVTL database. Items include:

- Library usage - The Library usage demonstrates how the library is being utilized.
- Moves per library - The Moves graph shows the number of moves (tapes moved from slot to drive or vice versa and slot to slot) performed per library.
- Empty slots per library - Empty Slots graph shows the number of empty slots available per library.

Performance Advisor for Drives: Helps to identify the drives with lower performance and utilization.

- Performance Advisor will graph both drive performance and utilization.
 - Performance is defined as the native transfer rate/host transfer
 - Drive utilization is defined as percentage of time spent on pulling the tape
- Graphs can be plotted with different time intervals and custom time intervals
- Tape Assure Advanced Software will help to compare the drive utilization of drives from different libraries and benchmark the drive utilization across different libraries. Hotspot and bottlenecks in the tape infrastructure becomes quickly visible in this.
- Performance Advisor will categorize the drives in to four categories as below, based on the lower/higher performance and utilization. Based on the analysis of performance advisor backup and archive operations could be reconfigured to improve the performance/utilization of such drives which would result in to higher ROI for customer.
 - Categories included are:
 - High Utilization -High Performance (Green zone):
For the drives which are achieving 70% and above performance and utilization can be categorized as highly utilized with high performing drives.
 - High Utilization-Low Performance:
Drives which are highly utilized but have low performance (less than 50% of the max speed of writing).
 - Low Utilization-High Performance:
Drives with high performance and low utilization (less than 50%) are placed in this zone
 - Low Utilization-Low Performance (Red Zone):
These drives are not being utilized to their true potential and they are not performing with their maximum stipulated capacity.

Utilization analysis for Tape Cartridges: Tape cartridge utilization and performance graphs are plotted with the drive serial number and timeline, helping to analyze how tape cartridges have been performing or utilized over any given timeline.

Advanced Dashboard: Display for easy understanding of critical hardware warnings, and with live graphs and charts.

- Dashboard with pie charts shows the critical warnings for drives and cartridges, with the ability to view detailed information on individual drive/cartridge.
- Pie charts that show the health of drives and cartridges
- Dashboard charts for system alerts with detailed descriptions
- Host to drive polling information: Helps to identify ineffective use of drives by host
- Alerts with in depth details

Overview

Software Licensing

		NOTE: Command View for Tape Libraries (CV-TL) 5.2 must first be downloaded and installed prior to using TapeAssure Advanced (TAA). CV-TL will provide the GUI for TAA.	
	Paper Licenses	HPE StoreEver MSL6480 TapeAssure Advanced LTU NOTE: For use with MSL6480 Tape Libraries. One TAA license is required per library. CV-TL must also be installed to use TapeAssure Advanced. NOTE: This is a paper license that will be mailed.	TC445A
		HPE StoreEver MSL TapeAssure Advanced LTU NOTE: for use with MSL2024, MSL3040 & MSL4048 Tape Libraries. One TAA license is required per library. NOTE: This is a paper license that will be mailed.	TC406A
		HPE StoreEver Autoloader TapeAssure Advanced LTU NOTE: for use with 1/8 G2 Tape Autoloader. One TAA license is required per autoloader. NOTE: This is a paper license that will be mailed.	TC407A
	Electronic Licenses	HPE StoreEver MSL6480 TapeAssure Advanced E-LTU NOTE: For use with MSL6480 Tape Libraries. One TAA license is required per library. CV-TL must also be installed to use TapeAssure Advanced. NOTE: This is an electronically delivered Licenses.	TC445AAE
		HPE StoreEver MSL TapeAssure Advanced E-LTU NOTE: for use with MSL2024, MSL3040 & MSL4048 Tape Libraries. One TAA license is required per library. NOTE: This is an electronically delivered Licenses.	TC406AAE
		HPE StoreEver Autoloader TapeAssure Advanced E-LTU NOTE: for use with 1/8 G2 Tape Autoloader. One TAA license is required per autoloader. NOTE: This is an electronically delivered Licenses.	TC407AAE
	Trial / Instant On License	NOTE: A 60 day Instant-On license is available for TapeAssure Advanced software. All TAA features are enabled for 60 days when CV-TL 5.2 is downloaded and installed.	

Documentation "Online Help" provided within the Command View for Tape Libraries interface.

Supported Software

Operating systems supported

- Microsoft Windows Server 2003 SP2 (32/64 bit)
- Microsoft Windows Server 2008 SP1(32/64 bit)
- Microsoft Windows Server 2008 R2 (64 bit)
- Microsoft Windows Server 2012 (64 bit)
- Microsoft Windows Vista (64 bit)
- Microsoft Windows 7 (64 bit)

Client browsers supported

(Minimum requirements)

- Microsoft Internet Explorer v8, v9, and v10
- Mozilla Firefox v15.0.1 or higher
- Google Chrome v24 or higher
- Adobe Flash Player 10.3 or greater

Hardware

Prerequisites (Minimum)

- 1.6-GHz CPU, 1-GB RAM, 2 GB of free disk space for installation and 10/100 Base-T network card (static IP address recommended)

Overview

Supported Tape Libraries

Supported Tape Libraries:

- | | |
|----------------------------------|---|
| HPE StoreEver MSL Tape Libraries | <ul style="list-style-type: none">• HPE StoreEver MSL2024 Tape Library• HPE StoreEver MSL3040 Tape Library• HPE StoreEver MSL4048 Tape Library• HPE StoreEver MSL6480 Tape Library |
| HPE StoreEver Tape Autoloaders | <ul style="list-style-type: none">• HPE StoreEver 1/8 G2 Tape Autoloaders |

Service and Support

Warranty and Services Included with the Product There is no separate service or support offered for TAA, if customer has ordered I&S (Installation and Support) for tape library then TapeAssure would be supported under that I&S contract.

Service and Support **Technology Services for increased uptime, productivity and ROI**
Trust HPE storage technology experts for every level of service and support. Our integrated portfolio of services for storage help customers reduce costs, optimize data, streamline storage management, and improve backup and recovery. Capitalizing on HPE Storage Systems' capabilities requires a service partner who understands your increasingly complex environment. Team with the people who know Hewlett Packard Enterprise infrastructure hardware and software best-the experienced professionals at HPE Services.

Protect your business beyond warranty

Warranty protects against manufacturer defects, however warranty uplifts, such as HPE Pointnext operational services protect the business-by reducing downtime risks and providing operational consistency for mission-critical and standard business computing.

What HPE Storage Technology Services can do for you

HPE Storage Technology Services can help you design, deploy, test, integrate, support, and manage IT and infrastructure solutions. HPE storage lifecycle support services offers a full spectrum of customer care-from technology support to complex migrations to complete managed services.

Choose the right level of support, deployment and integration services

HPE support recommendations are designed to help you enhance technology operations and lower risk-and make it easier for you to seek the right balance between affordability and service-level commitments. Depending on your individual support needs, choose from three levels of care that cover the entire lifecycle to better address your needs-Optimized Care, Standard Care, and Basic Care. If none of our support recommendations meet your needs, we can tailor a service solution for your unique support requirements. Only HPE brings together deep expertise, proactive and business critical support and a strong partner network-together with, a full set of infrastructure services designed to power a Converged Infrastructure.

Standard Care-maintains high level of uptime, along with expert help to cut the cost and complexity of implementation and support

HPE Proactive Care 24x7- for a higher return on your storage investment, Proactive Care delivers hardware and software support services designed specifically for your technology; rapid access to Advanced Solution Center Specialists plus, Firmware/Software management and best practice advice. Customers can optimize the return on their IT investment and realize the advantage of running their business critical applications on virtualized infrastructure. **Plus, HPE Proactive Select 10 credits per year**, select from an extensive menu of consultancy and technical services, such as onsite firmware upgrades, health checks, assessments, and education.

Additional Option:

HPE Proactive Care Personalized Support - The HPE Proactive Care Personalized Support option allows for an increased personalization of the Proactive Care support experience through the assignment of an Account Service Manager (ASM) who provides IT best practice advice to help address IT issues and projects. The ASM will develop an annual support plan, provide four days of operational and technical advice, and conduct semi-annual support reviews to ensure the Proactive Care service deliverables address the customer's priorities. This option is only available for Proactive Care customers and may be purchased once per environment.

HPE Personalized Support Additional Day - Customers who require more time than is provided by the Personalized Support option can elect to purchase additional days through the Personalized

Service and Support

Support Additional Day option. The time may be used to provide extra support reviews and/or more operational & technical advice.

Basic Care-Minimum recommended support

HPE Foundation Care 24x7 connects you to Hewlett Packard Enterprise 24 hours a day, seven days a week for assistance on resolving issues - hardware onsite response within four hours and software call back within two hours after opening your case. Three years' coverage recommended with HPE Care Pack Service.

10 Proactive Select credits per year -HPE Proactive Select is a flexible way to purchase services to fit your particular environment or situation. Working with a Hewlett Packard Enterprise Account Support Manager, you select a package of services in the form of services credits that include proactive services spanning many technologies and processes, such as on-site firmware upgrades, health checks, assessments, and education. You tailor the service delivery to improve time to production, optimize performance, or build in continuous improvements

Related Services

HPE Storage Backup Recovery Efficiency Analysis (BEA)

Customers frequently have a limited or inaccurate view of backup asset utilization and future demands. They are often unable to assess how efficiently backup components are being used and the amount of data to be backed up continues to grow exponentially. Problematic issues elongate backup windows and severely impact SLA/RTO/RPO metrics. HPE Benefits: Provides account intelligence and a snapshot of customer's current backup environment; Provides commercial justification to position and sell Hewlett Packard Enterprise products and services; Positions value and experience of HPE Consulting Services

HPE Storage Backup Recovery Impact Analysis (BIA)

Backup continues to present complex operational challenges. With increasingly diverse data protection strategies a clear understanding of its role, service requirements and design are key to ongoing success. HPE Benefits: Provides account intelligence and a snapshot of customer's current backup environment; Provides commercial justification to position and sell Hewlett Packard Enterprise products and services; Positions value and experience of HPE Consulting Services

HPE Storage Backup Recovery Modernization

The standard HPE Backup Recovery Modernization Service includes initial discovery, reference architecture design, request for proposal content development, vendor grading, and final recommendations. Our approach is designed to require minimal resources and locations on your part. The minimum duration of the project is approximately two-to-three weeks, using a lead HPE delivery resource, a Principle Consultant, and additional backup infrastructure subject-matter experts as needed. We begin the service engagement by coupling an initial discovery interview along with data collection. Next, a facilitated design workshop with all key stakeholders is conducted. Results from this activity are intended to validate and ensure customer criteria are understood and proposed solution meets/exceeds expectations.

For more information

<http://www.hpe.com/services/storage>

To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner

HPE Pointnext operational services are sold by HPE and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.

Summary of Changes

Date	Version History	Action	Description of Change
05-Feb-2018	From Version 7 to 8	Changed	Overview and Configuration Information were revised.
04-Dec-2017	From Version 6 to 7	Changed	Overview and Configuration Information were revised.
04-Sept-2017	From Version 5 to 6	Changed	Changes were made throughout the QuickSpecs.
07-Aug-2017	From Version 4 to 5	Changed	Changes made to the Overview and Configuration Sections.
09-May-2017	From Version 3 to 4	Changed	Changes were made throughout the QuickSpecs.
10-Jun-2014	From Version 2 to 3	Changed	Changes were made throughout the QuickSpecs.
05-Mar-2013	From Version 1 to 2	Changed	Changes were made throughout the QuickSpecs.
02-Feb-2013	Version 1	Created	Document Created.



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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

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