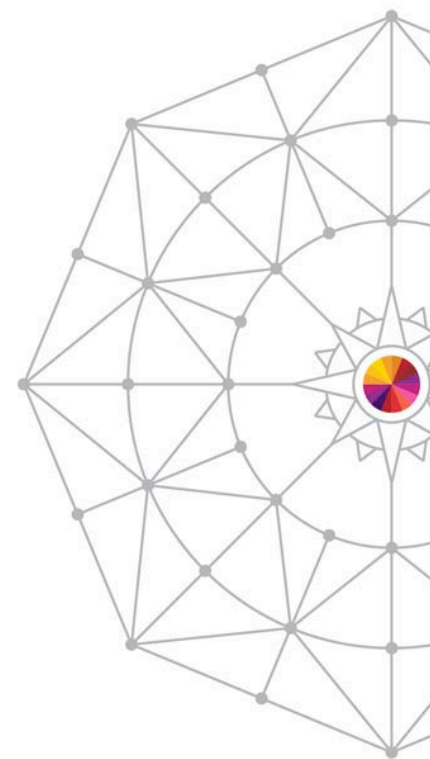


Ensure Your Data is Available When You Need it With Proactive Monitoring

Session 15913

Steve Aaker

Sr. Principal Product Strategy Manager



SHARE is an independent volunteer-run information technology association
that provides education, professional networking and industry influence.

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What Initiatives are CTOs Considering in 2014?



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Objectives

Transparent

Executive Level
Storage Reports,
Views & Alerts

Proactive

Analytics To Identify
Problems Before
They Occur

Intelligent

Tools to Help Storage
Administrators Be
More Efficient



Transparently Manage Your Storage

- When Will We Need More Capacity?
- Can We Get More Performance from the System?
- Which Organizations are Using the Most Storage?

StorageTek Tape Analytics 2.0

- ✓ Customized Dashboards
- ✓ Executive Reports via Email
- ✓ Logical Grouping of Storage Resources



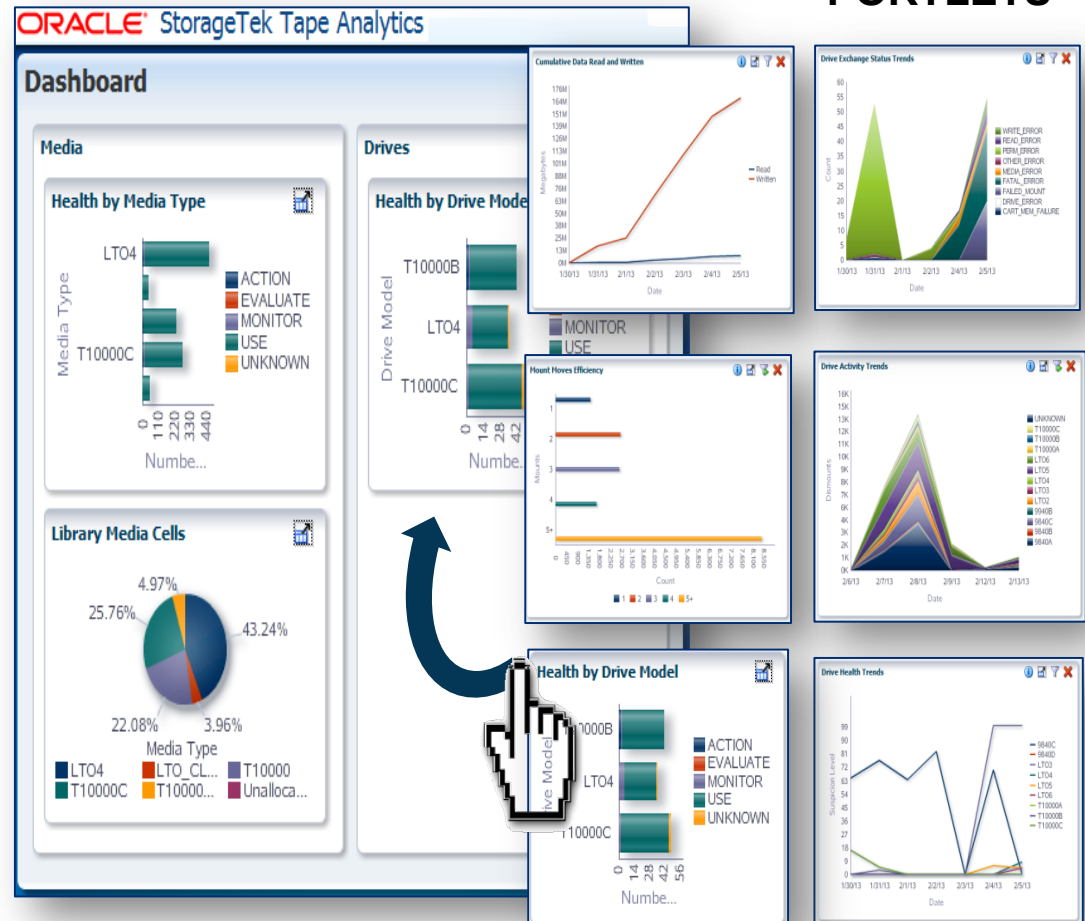
Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Customize Your Tape Analytics Dashboard

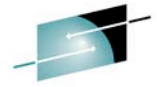
PORTLETS

New View With 2.0

- Select the Graphs & Charts Most Important to You
- Filter Graphs and Charts by Asset Location, Logical Group, Device Type
- Create Multiple Dashboard Templates



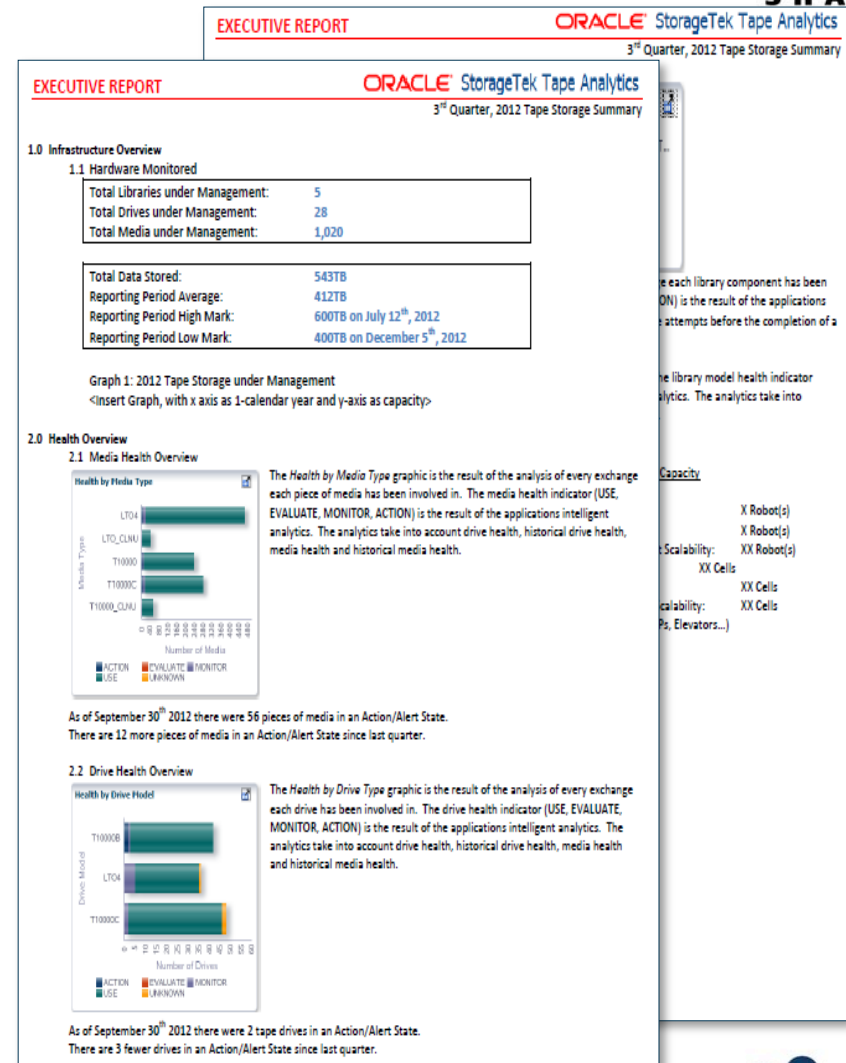
Gain A New Perspective



SHARE
Influence

Automated Reports

- Daily, Weekly, Monthly & Annual Summaries of Your Tape Environment
- Covering Health, Capacity, Growth, Performance, Alerts & Media Validations
- Executive Level Reports
- Generated Through Dashboard Settings and Portlet Selection

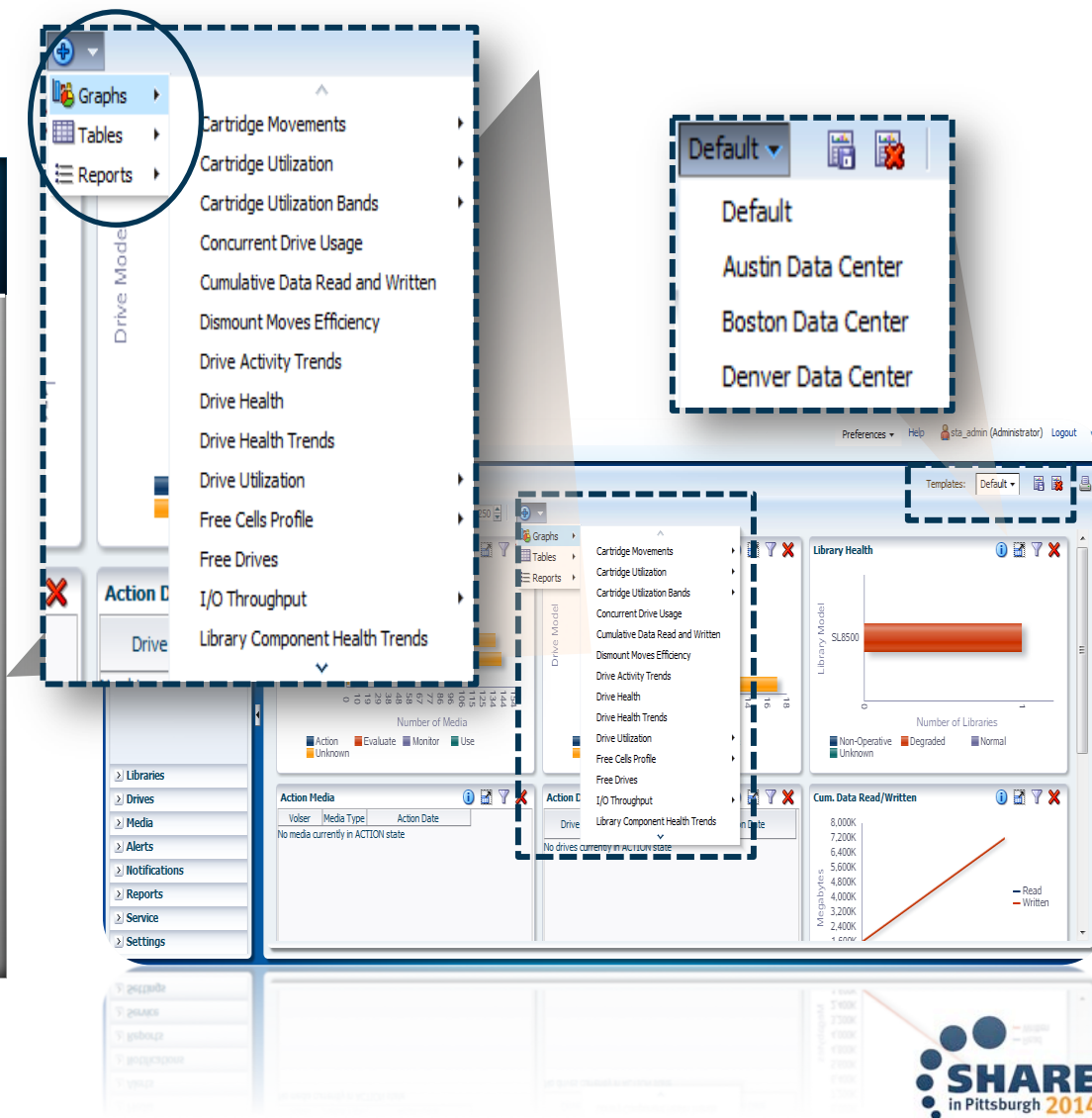


Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

A Closer Look at Customized Dashboards

Working with Portlets

- Expanded Portlet Options
- Select Desired Portlets from Drop Down Menu
- Create Customized View and Save as Dashboard Template
- Create Public or Private Dashboards



The screenshot displays the SHARE dashboard interface with several key elements highlighted by dashed blue boxes:

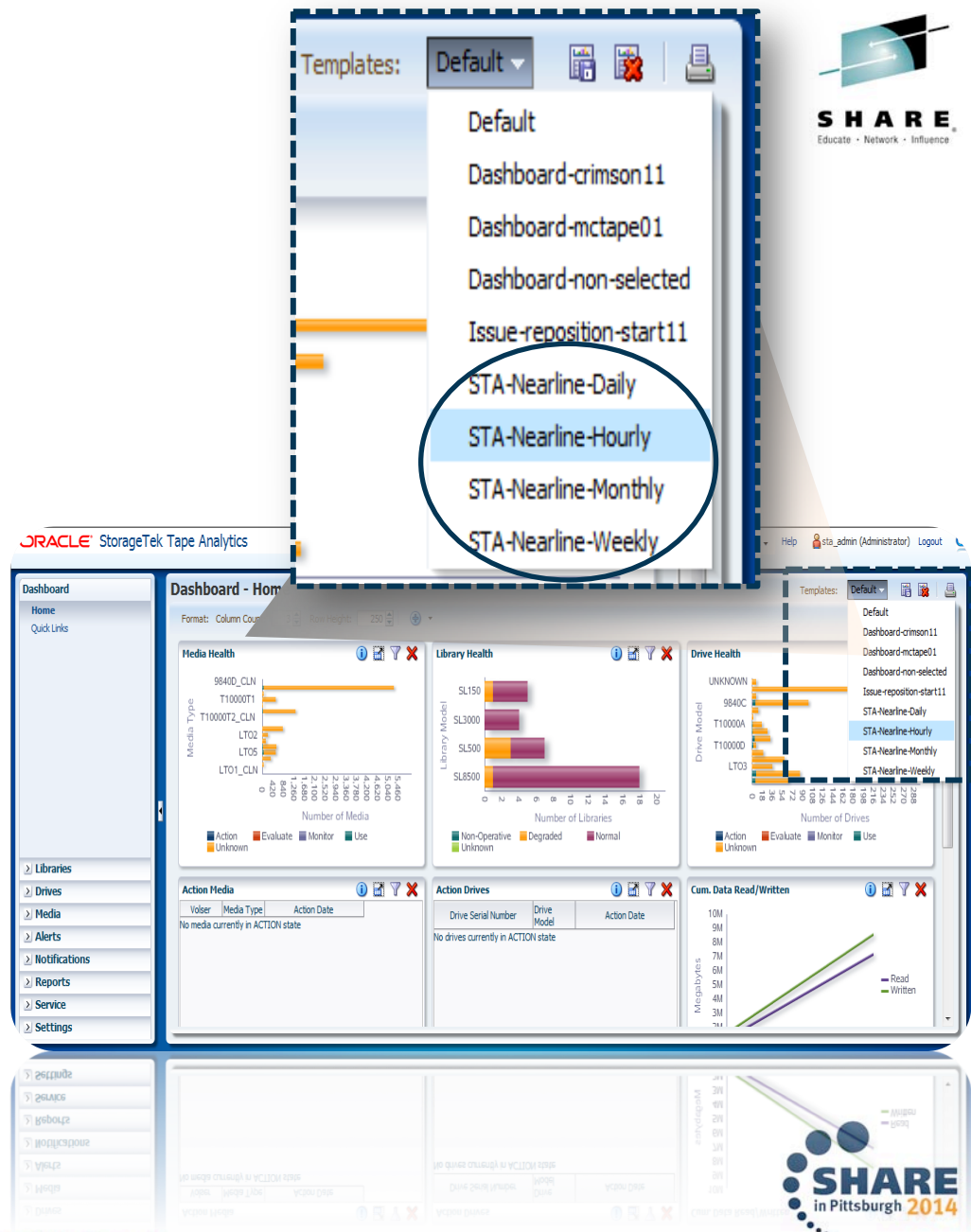
- Portlet Selection Menu:** A dropdown menu is open, showing a list of portlets including Cartridge Movements, Cartridge Utilization, Cartridge Utilization Bands, Concurrent Drive Usage, Cumulative Data Read and Written, Dismount Moves Efficiency, Drive Activity Trends, Drive Health, Drive Health Trends, Drive Utilization, Free Cells Profile, Free Drives, I/O Throughput, and Library Component Health Trends. The 'Graphs' category is selected, and the 'Tables' and 'Reports' categories are also visible.
- Dashboard Template Selection:** A dropdown menu shows the current template is 'Default'. Other available templates include 'Austin Data Center', 'Boston Data Center', and 'Denver Data Center'.
- Dashboard Content:** The main dashboard area displays several portlets, including 'Library Health' (a bar chart showing the number of libraries in different states), 'Cum. Data Read/Written' (a line chart showing data read and written in megabytes), and 'Action Media' (a table showing media in ACTION state).

Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Mainframe Reports

Nearline Reports

- New Mainframe Portlets Available:
 - Drive Utilization
 - Concurrent Drive Usage
 - Free Drives
 - I/O Throughput
 - Cartridge Movements
 - Cartridge Utilization
 - Free Cells



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

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> Tape System Activity

> Setup & Administration

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Format:

Column Count:

2

Row Height:

190

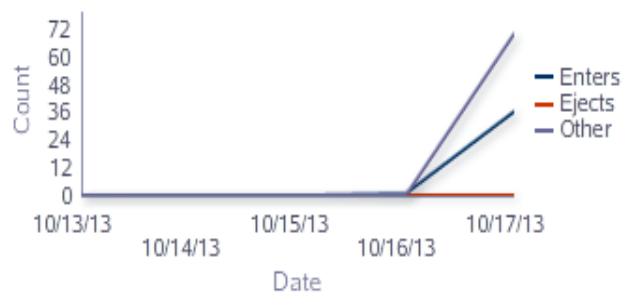


Templates:

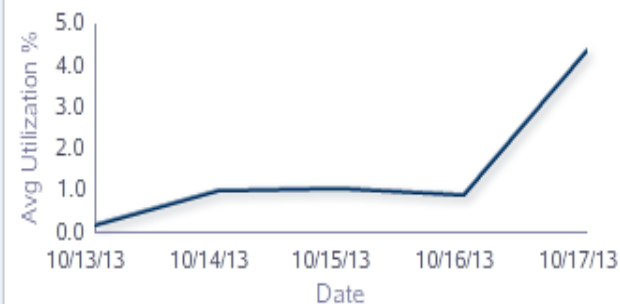
STA-Dashboard-All-Graphs



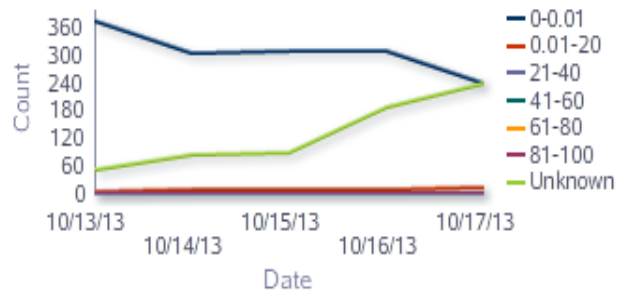
Media Movements (Daily)



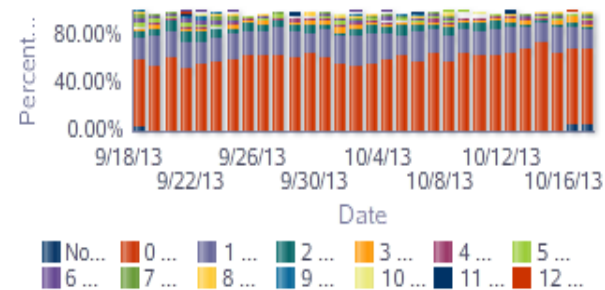
Media Utilization (Daily)



Media Util Bands (Daily)



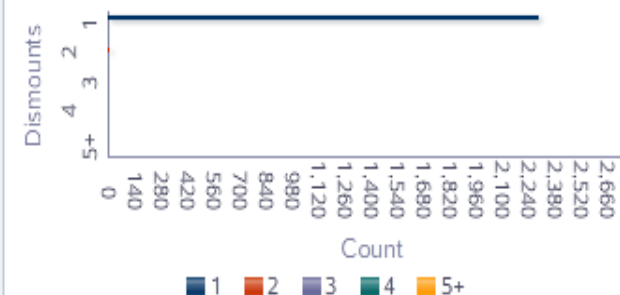
Drive Concurrent Usage (Daily)



Cum. Data Read/Written



SL8500 Move Efficiency (Dismounts)



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Templates:

STA-Dashboard-All-Graphs



Format: Column Count:

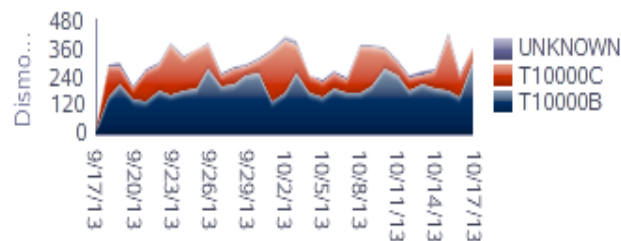
2

Row Height:

190

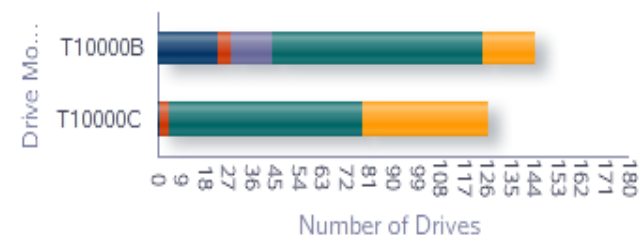


Drive Activity Trends



Date

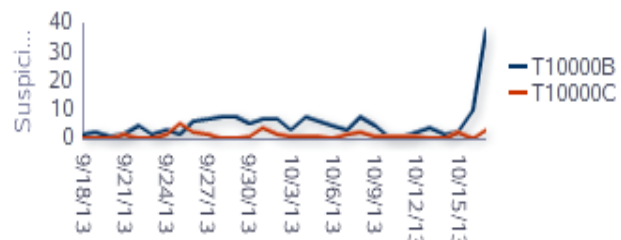
Drive Health



Number of Drives

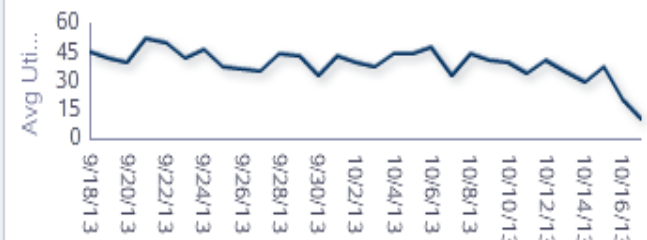
Action Evaluate Monitor Use
Unknown

Drive Health Trends



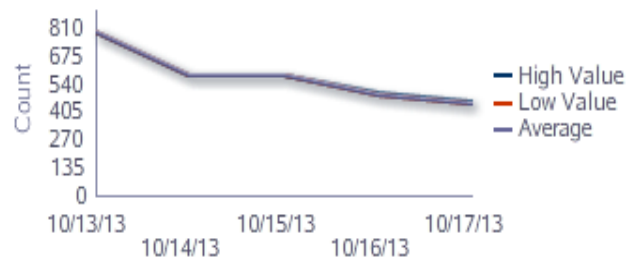
Date

Drive Utilization (Daily)



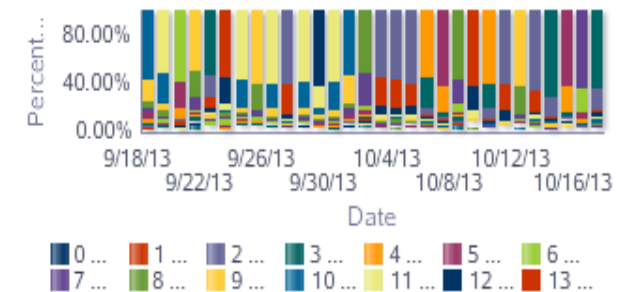
Date

Media Slots Available (Daily)



Date

Drives Available (Daily)



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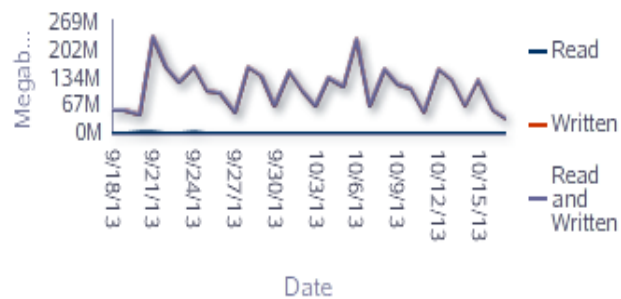
> Setup & Administration

Dashboard

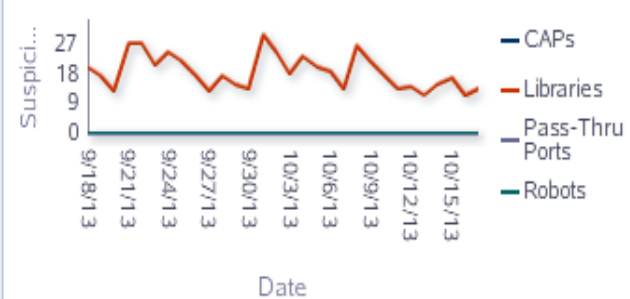
Templates: STA-Dashboard-All-Graphs

Format: Column Count: 2 Row Height: 190

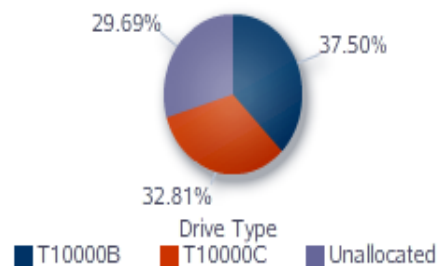
I/O Throughput (Daily)



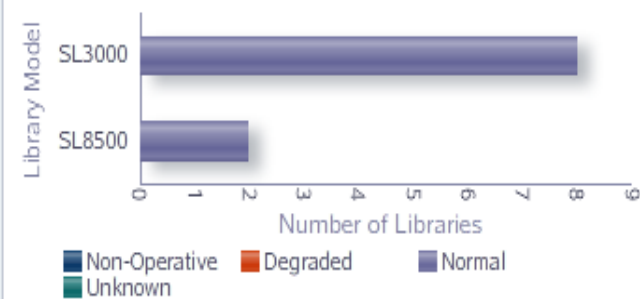
Library Component Health Trends



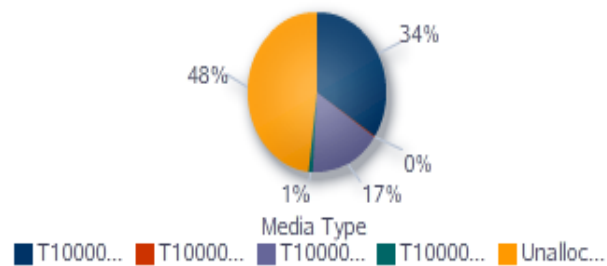
Library Drive Bays



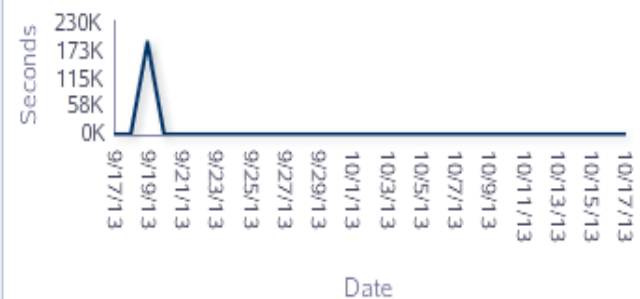
Library Status



Library Media Slots



Max Mount Time (Daily)



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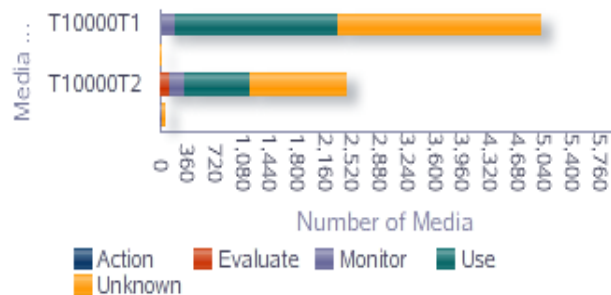
> Setup & Administration

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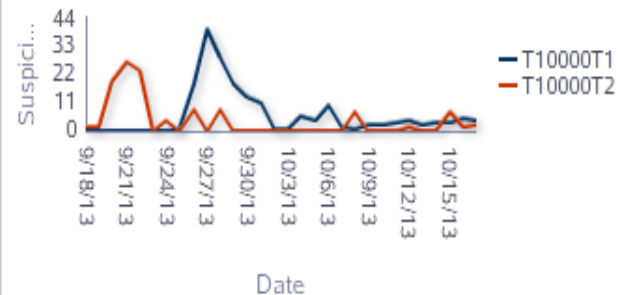
Templates: STA-Dashboard-All-Graphs

Format: Column Count: 2 Row Height: 190

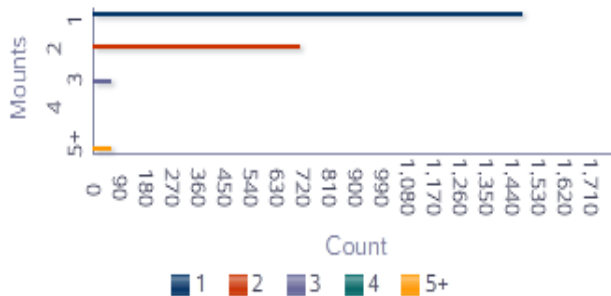
Media Health



Media Health Trends



SL8500 Move Efficiency (Mounts)



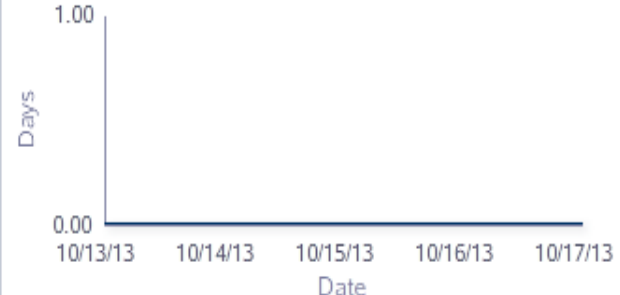
Media Validation

No data to display

Mounts (Daily)



Media - Least Recently Mounted (Daily)



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Dashboard

Templates: STA-Dashboard-All-Reports

Format: Column Count: 2 Row Height: 285

Data Read Report

Total Data Sent to Host : 226.20 TB
Average Compression Ratio : 1.36 : 1
Total Data Read from Tape : 165.75 TB
Data Read Daily - Average : 305.81 GB
Data Read Daily - High Mark : 67.12 TB on August 9, 2013
Data Read Daily - Low Mark : 92.45 MB on June 16, 2012

Data Written Report

Total Data Sent to Tape : 42.34 EB
Average Compression Ratio : 1.61 : 1
Total Data Written to Tape : 26.23 EB
Data Written Daily - Average : 48.40 TB
Data Written Daily - High Mark : 287.85 TB on September 21, 2013
Data Written Daily - Low Mark : 25.82 GB on January 2, 2013

Drives Health Report

Total Drives Monitored : 270

Drives in ACTION state : 24
Drives in EVALUATE state : 8
Drives in MONITOR state : 16
Drives in USE state : 154
Drives in UNKNOWN state : 68

Library Status Report

Total Libraries Monitored : 10

Libraries in NOTOPERATIVE state : 0
Libraries in DEGRADED state : 0
Libraries in NORMAL state : 10
Libraries in UNKNOWN state : 0

Drives Health Report

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Templates:

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Format: Column Count:

2

Row Height:

285



Media Health Report



Total Media Monitored : 7,536

Media in ACTION state : 12

Media in EVALUATE state : 121

Media in MONITOR state : 388

Media in USE state : 3,015

Media in UNKNOWN state : 4,000

Media Validation Report



Total Validations Performed : 0

Number of Pending Validations : 0

Number of Active Validations : 0

Number of Failed Validations : 0

Number of Completed Validations : 0

Number of Media Used in Validations : 0

Number of Drives Used for Validations : 0

Last Validation Date and Time : 12/31/69 5:00 PM

Total Time Used for Validations : 0:00:00

Monitored Device Counts



Total Libraries Monitored : 10

Total Robots Monitored : 26

Total CAPs Monitored : 26

Total Pass-Thru Ports Monitored : 4

Total Drives Monitored : 270

Total Media Monitored : 7,536

Total Media Removed : 4,762

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Templates:

STA-Dashboard-All-Tables



Format: Column Count:

2

Row Height:

280



Drives Watch List



Drive Serial Number	Drive Model	Drive Health Indicator	Drive Health Trend	
572004000876	T10000B	✗	▬	
572004001072	T10000B	✗	▬	
572004004910	T10000B	✗	▬	
572004005202	T10000B	✗	▬	
572004005890	T10000B	✗	▬	
572004005977	T10000B	✗	▬	
572004008317	T10000B	✗	?	
572004008918	T10000B	✗	▬	
572004011417	T10000B	✗	↓	
572004011523	T10000B	✗	▬	

Media Watch List



Volser	Media Type	Media Health Indicator	Media Health Trend	
AF0536	T10000T1	✗	▬	Media Leader Needs
AH0049	T10000T1	✗	▬	Media Leader Needs
LP0273	T10000T2	✗	?	
LP0274	T10000T2	✗	?	
US0093	T10000T2	✗	?	
US0094	T10000T2	✗	?	
US0095	T10000T2	✗	?	
US0096	T10000T2	✗	?	
US0097	T10000T2	✗	?	
US0098	T10000T2	✗	?	

Data Read/Written Trends



Type	Start Value	Trend Data	End Value	High
Total Data Stored	8,013,100		418,456,...	418,...
Read	1,661		150,541	67,1
Written	16,126,6...		79,902,6...	321,
Read and Written	16,128,3...		80,053,1...	322,
Data Compression	278		208	

Drive Capacity Planning



Type	Start Value	Trend Data	End Value	High
Drive Bays Instal...	384		384	
Drives Bays Occ...	270		270	
Drives Removed	25		63	
Drives Utilized (...)	115		2	
Drives Under-Util...	1		0	
Drives Unknown/...	154		268	

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Format: Column Count: 2 Row Height: 280

Templates: STA-Dashboard-All-Tables

Media Capacity Planning

Type	Start Value	Trend Data	End Value	High
Media Slots Inst...	14,642		14,642	
Media Slots Activ...	0		0	
Media Slots Occu...	7,609		7,462	
Media Removed	2,325		4,762	
Media Utilized (>...	58		180	
Media Blank (< 0...	0		3	
Media Unknown/...	7,551		7,279	

Drives Req Most Cleanings per Meter

Drive Serial Number	Drive Model
572004011080	T10000B
572004008328	T10000B
572004008317	T10000B
572004008013	T10000B
572004007979	T10000B

Media Exceptions

Volser	Media Type	STA Stop Tracking
There are no current media exceptions		

Monitored Device Trends

Type	Start Value	Trend Data	End Value	High
Libraries	2		10	
Robots	0		26	
CAPs	0		26	
Pass-Thru Ports	0		4	
Drives	83		270	
Media	12,298		7,536	
Media Removed	0		4,762	

Logical Grouping

Customize Your View

Logically Group Your
Storage so it Make
Sense to You



Datacenter A



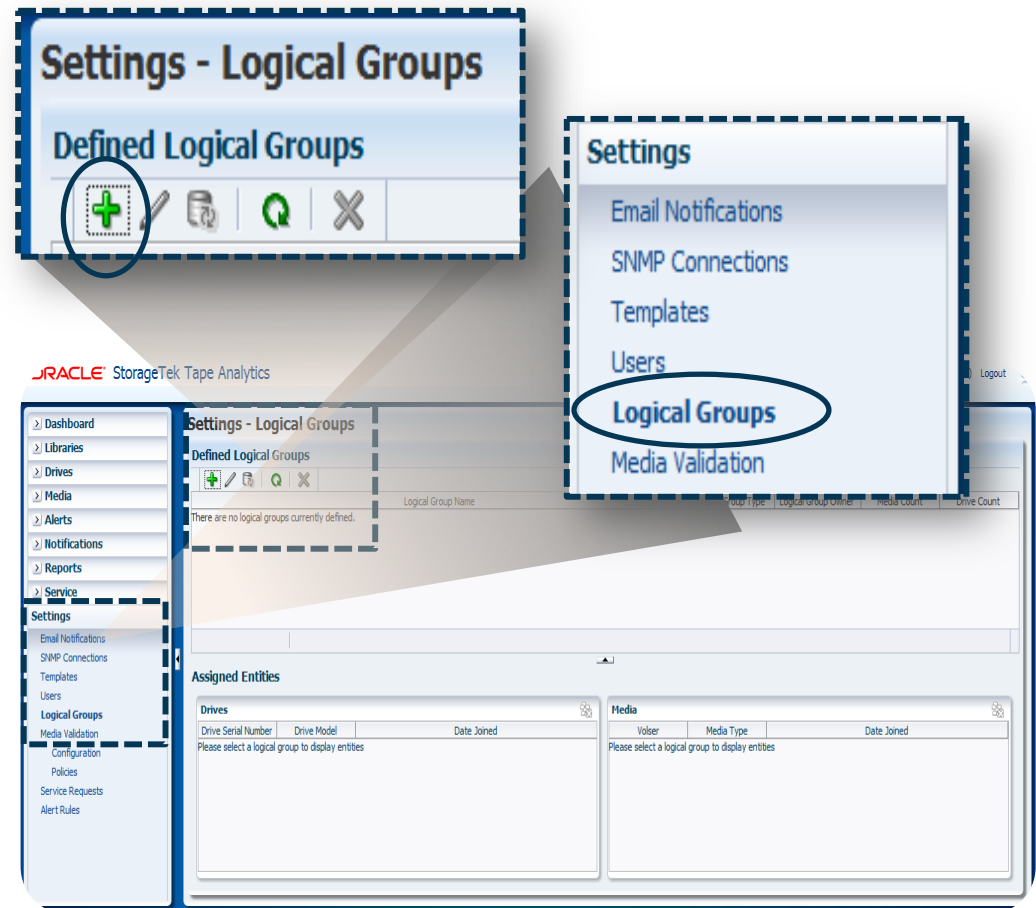
Datacenter B



A Closer Look at Logical Grouping

Logical Groups

- Create Logical Groups Through the Settings Tab
- Add Groups, Remove Groups, Edit Groups
- Logical Group can be Used as a Filtering Item on the Dashboard and Media Validation



Settings - Logical Groups

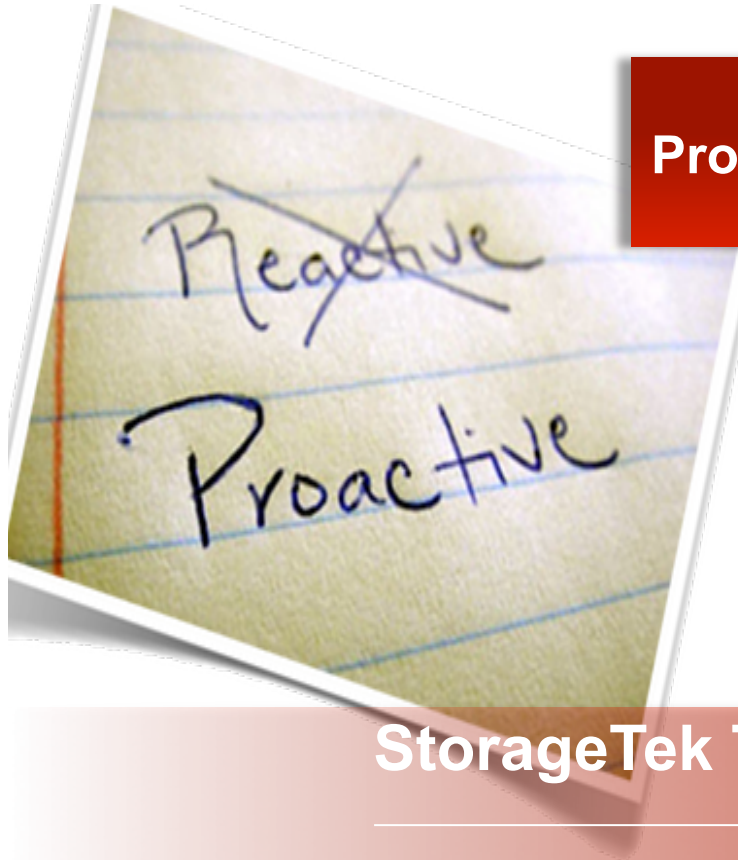
Defined Logical Groups

There are no logical groups currently defined.

Assigned Entities

Drive Serial Number	Drive Model	Date Joined
Please select a logical group to display entities		

Volser	Media Type	Date Joined
Please select a logical group to display entities		



Proactively Manage Your Storage

- How of is the Health of Your System Trending?
- What are Our Least Healthy Storage Devices?
- When did we Last Scan Our Media?

StorageTek Tape Analytics 2.0

- ✓ Software to Monitor EVERY Drive and Media Exchange
- ✓ Automated Media Validation Scans



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Tape Analytics Analyzes 370+ Tape Attributes So Tape Administrators Can Focus on Your Business



ORACLE® StorageTek Tape Analytics	
Media - Overview	
Details for Media A0B1C835	Monitored since 2012-06-10
Media Details <ul style="list-style-type: none"> Volume Serial Number : Media Type : Media Health Indicator : WORM/VolSafe Media : Media Manufacturer Serial Number : Media Manufacturer : Media Warranty Indicator : STA Start Tracking : STA Stop Tracking : 	Most Recent Exchange <ul style="list-style-type: none"> Last Exchange Start : Exchange Elapsed Time : Exchange Mount Time : Recording Technique : Media Exchange Status : Exchange Drive Cleaning Required : Mount R/W MB/Sec : Media Load Limit Alert : Data Compression Ratio : Cart Memory Failure :
Media DATA Activity <ul style="list-style-type: none"> Media Dismounts : Dismounts with Errors : MB Read : MB Write : MB R/W : MB Sent : MB Received : Avg Mount Read MB/Sec : Avg Mount Write MB/Sec : Avg Mount R/W MB/Sec : 	Additional Exchange Info <ul style="list-style-type: none"> Media MB Capacity : Media MB Avail Pre : Nearing Media Life Alert : IBM Media Efficiency : HP Media Status : Media Length in Meters : Media Manufacturer Date : Media Auxiliary Memory Capacity : Media Directory Corrupt :

LIBRARY MEDIA VALIDATION

+ TAPE ANALYTICS

Library Media Validation + Tape Analytics



Powerful Enterprise Tape Management

Performance Features

Intelligent Validation Drive Selection

- STA analyzes your drive environment
- STA recommends optimal drives for media verify

Intelligent Media Validation Queue Generation

- Leverage STA to identify media candidates for scanning

Automated Media Validation

- Media selection based on your policy settings
- Verify based on: Media Health, Days Since Last Mount, Random

Continuous Validation Drive Monitoring






- STA continues to monitor the validation drives throughout the media verifies
- STA ensures validation drive integrity with periodic health checks

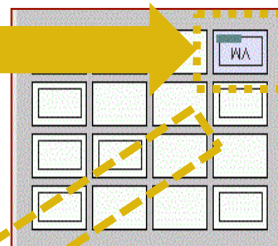


Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Select Validation Drives ()

Leverage Tape Analytics to Identify Healthy Drives for Media Validations

Drive Serial Number	Drive Type	Drive Health Indicator	Exchange Drive Suspicion
513380665	T10000C		0.71
147625188	T10000C		0.64
1054455090	T10000C		0.48
666670245	T10000C		0.47
1905004816	T10000C		0.46













Library Console

Select up to 10* eligible T10000C/D drives to perform validations



Tape Analytics

Drives

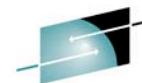
									
									
									
									
									

Library Slots & Media





Create a Queue of Media to Validate ()



Option A: Manually Validation Selections

Media - Overview

Format: [icon] [icon] [icon] [icon]

View [icon] [icon] [icon] [icon] [icon] [icon] [icon] [icon]

Volume Serial Number	Media Health Indicator	Media Type	Serial Number
TEC783	✖	T10000T2	579001000265
VIB079	✖	T10000T2	576001000361
VIB082	✖	T10000T2	576001000361
TCD124	⚠	T10000T2	579001000111
TCD125	⚠	T10000T2	579001000111

1 Multi-Select Volumes to Verify

2 Click Media Validation Icon: 

Option B: Policy Based Validation Selections



Policy Name: *

Policy Description:

☒ Select media format and optional library complex

Media Format: * T10000A

Library Complex (Optional): None

☐ Select logical group

Logical Group: DVT10KD

Policy Criteria:

Random Selection

Media Health = Action

Media Health = Evaluate

Media Health = Monitor

Extended period of non-use

Newly Entered

Bad MIR detected

Validation Test Type:

Basic Verify

Basic Verify

Standard Verify

Complete Verify

Complete Verify Plus

Verify and Rebuild MIR

Complete Verify

Drives

Library Slots & Media



Tape Analytics

[icon]	[icon]				[icon]				
[icon]	[icon]				[icon]				
[icon]	[icon]				[icon]				
[icon]	[icon]				[icon]				
[icon]	[icon]				[icon]				
[icon]	[icon]				[icon]				



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Automated Policies for Media Validation



Policy Based Automated Scanning

StorageTek Tape Analytics can automatically select media to verify based on policy and logically group media

Media Queue



Policies

Tape Analytics
Health Indicator

Date Since Last
Accessed

Random Sampling

VOLSER Range

Newly Entered

Filter Matching: ☒ Match ANY entered criteria ☐ Match ALL entered criteria

STA Start Tracking:

STA Stop Tracking:

Drive Serial Number:

Drive WWNN:

Drive Type: T10000C

Health Indicator:

Drive ID:

Drive WWPN (Port A):

Drive WWPN (Port B):

Drive Model:

Drive Manufacturer:

Encryption Capable:

Drive Interface:

Properties Updated:

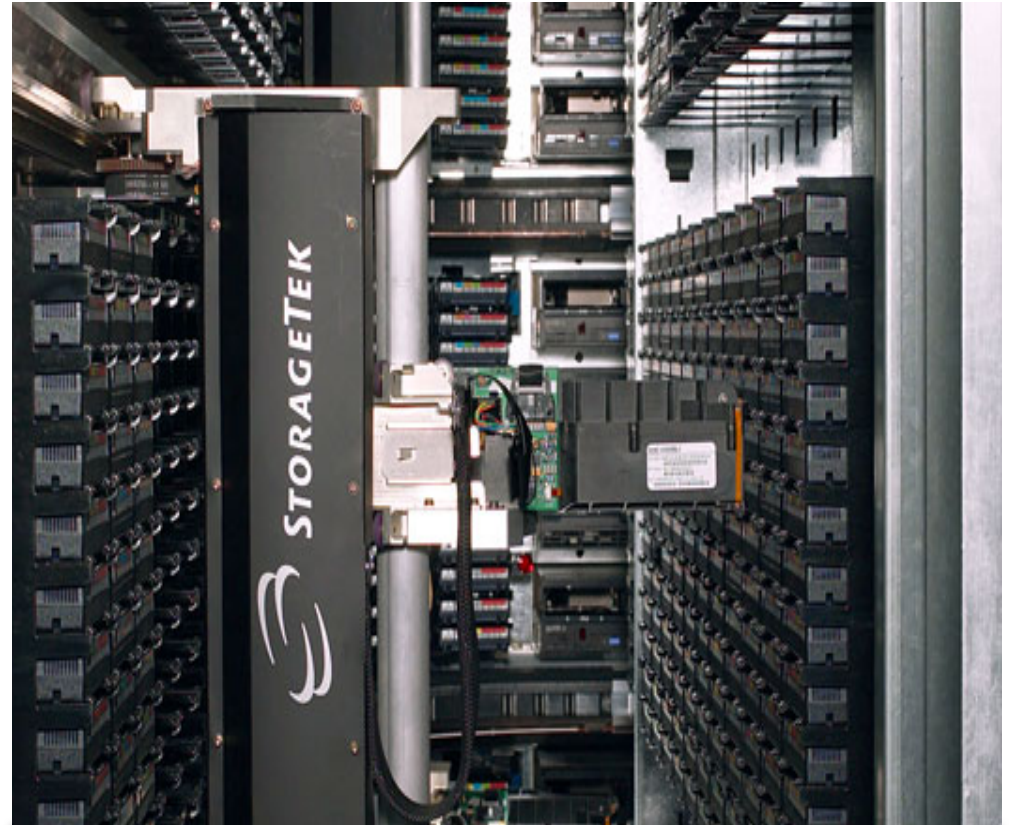
Firmware Version:



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Validation Options

- **Basic Verify (1-2 minutes)**
 - Validate the cartridge Media Information Region (MIR)
- **Standard Verify (10-20 minutes)**
 - Validate two upper and two lower data wraps on tape
- **Complete Verify (9 hours)**
 - Validate entire contents of tape cartridge
- **Complete Verify Plus (9+ hours)**
 - Validate entire contents of tape cartridge, including any DIV CRCs (decrypts and decompresses all data)



Media Validation Overview

Volume Serial Number	Elapsed Time	Validation Test Type	Validation Result	Recommendation
VIB082	0:05:15.2	Complete Verify	✓	Media OK: Continue using.
VIB082	0:05:15.1	Complete Verify	✓	Media OK: Continue using.
TEC783	0:22:39.5	Complete Verify	✗	Migrate Data and Disposition Tape









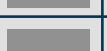








- 1- Media in Verify Queue is Moved to Validation Drive
- 2- Requested Media Verify is Performed
- 3- Results of Verify are Analyzed and Displayed in STA
- 4- Repeat for All Media Waiting in Verify Queue
- 5- Periodic Validation-Drive Health Check



 Tape Analytics

Drives

Library Slots & Media

Intelligently Manage Your Storage

- Can We Leverage Software to Monitor for Us?
- Where are We Seeing Bottlenecks?
- Are Our Drives and Media Optimally Configured?

StorageTek Tape Analytics 2.0

- ✓ Library Performance Reporting
- ✓ Robot and Library Mechanical Device Monitoring
- ✓ Browser and Mobile Access
- ✓ Customized Email Alerts



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Expanded Monitoring

Go Beyond Just Drives & Media

Drives

Media

Library
Indicator

NEW with
Tape
Analytics
2.0

Robots

Cartridge
Access
Ports

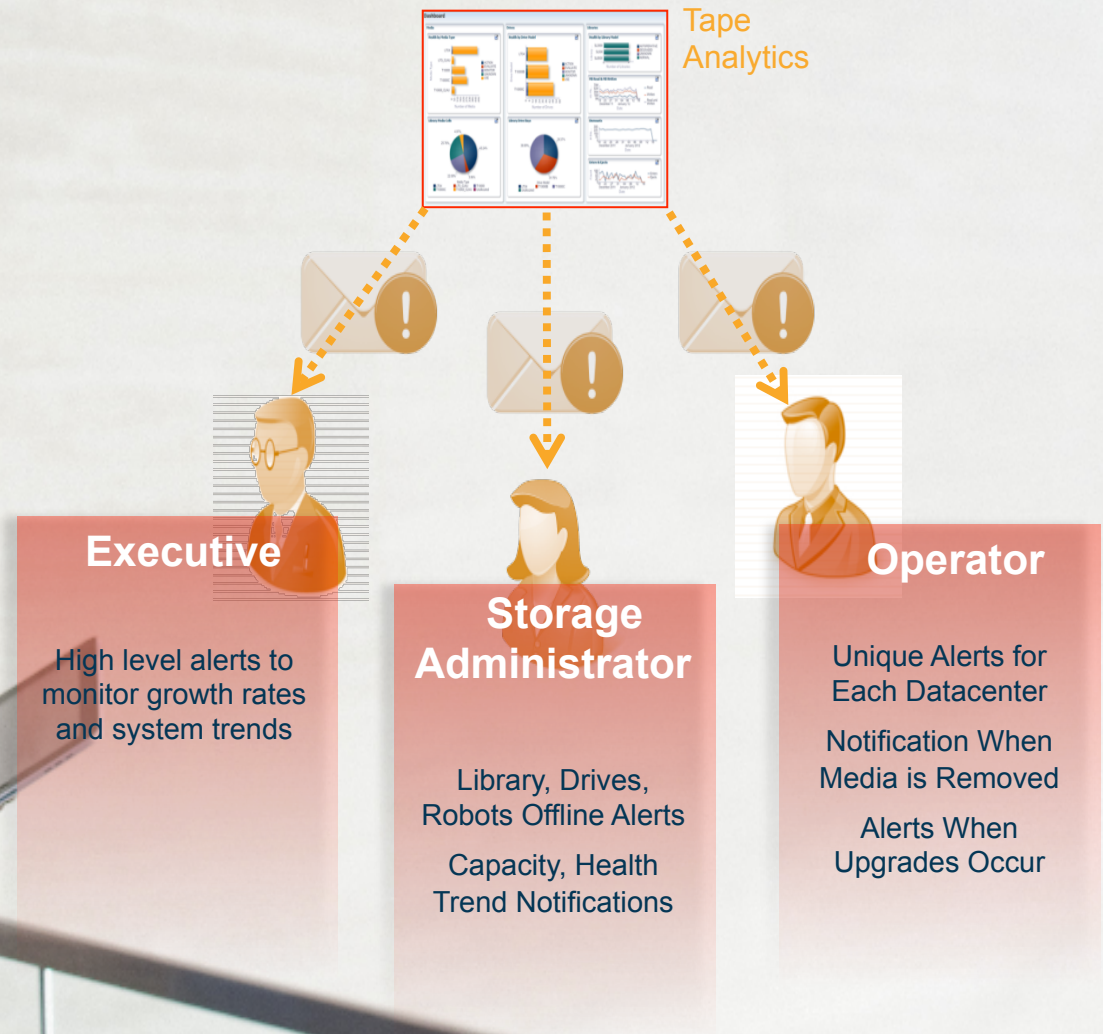
Pass-
Through
Ports

Elevators

Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Advanced Email Alerts

Instant Notifications to Get the Job Done



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Create an Alert Policy in 5 Easy Steps



Alert Policies



1. Policy Name – Custom / Unique Alert Name
2. Policy Type – Library / Drive / Media / Validation / Robot
3. Alert Criteria – Health Threshold, Utilization, On/Offline, etc.
4. Recipients – One or Multiple Email Addresses
5. Review & Activate

Alert Setup: Step 1 – Policy Name

Alert Policies

Policy Name Policy Type Alert Criteria Recipients Review

Enter policy name and description.

Policy Name * Paris Datacenter - Tape Replace

Policy Description

Alert will go out to all system
admin on site

Back Next Cancel

Alert Severity	Enabled
Severe	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	

Displaying 12 of 12 record(s)

Alert Setup: Step 2 – Policy Type

Alert Policies

Policy Name **Policy Type** Alert Criteria Recipients Review

Select policy type

Entity Type:

Library

STA

Complex

Library

Exchange

Drive

Media

Media Validation

Robot

PTP

CAP

Elevator

Select severity:

Back Next Cancel

Alert Severity Enabled

Severe

Warning

Warning

Warning

Warning

Warning

Warning

Warning

Displaying 12 of 12 record(s)

Alert Setup: Step 3 – Alert Criteria

Alert Policies

Policy Name Policy Type **Alert Criteria** Recipients Review

Select alert criteria

Filter Matching:

- ☐ Match ANY of the following
☒ Match ALL of the following

Library Complex Name Is SL8500_1
Media Health Indicator Is ACTION

ACTION
EVALUATE
MONITOR
USE
UNKNOWN

Back Next Cancel

Alert Severity	Enabled
Severe	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	
Warning	

Displaying 12 of 12 record(s)



Alert Setup: Step 4 – Alert Recipients

Alert Policies

Policy Name Policy Type Alert Criteria **Recipients** Review

Select the email addresses to receive alerts matching this policy

Email Recipients:

[Back](#)[Next](#)[Cancel](#)

Alert Severity	Enabled
----------------	---------

Severe	
--------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Warning	
---------	--

Displaying 12 of 12 record(s)

Alert Setup: Step 5 – Review and Activate

Home

Tape System Hardware

Tape System Activity

Setup & Administration

Logical Groups

Alerts Policies

Executive Reports Policies

Templates Management

Media Validation

Service

Automated Service Requests

Logs

Configuration

SNMP Connections

Users

Email

Alert Policies

?

Filter

Export

Import

Refresh

Print

Mail

Close

Refresh

Print

Alert Policy Name	Date Created/Updated	Policy Description	Alert Policy Type	Alert Severity	Enabled
STA-ASR-Issued	2013-09-16 16:14:35	This policy is triggered whenever an ASR is issued	Sta	Severe	
STA-CAP-Status	2013-09-16 16:14:35	This policy will match whenever the CAP status changes to a degraded or non-operative state	Cap	Warning	
STA-Drive Status	2013-09-16 16:14:35	This policy will match whenever the drive status changes to degraded or non-operative state	Drive	Warning	
STA-Drive-Health	2013-09-16 16:14:35	This policy will match whenever the drive health falls below USE	Drive	Warning	
STA-Elevator-Status	2013-09-16 16:14:35	This policy will match whenever the elevator status changes to a degraded or non-operative state	Elevator	Warning	
STA-Library-Status	2013-09-16 16:14:35	This policy will match whenever the library status changes to a degraded or non-operative state	Library	Warning	
STA-Media-Health	2013-09-16 16:14:35	This policy will match whenever the media health falls below USE	Media	Warning	
STA-Media-MIR-Corrupted	2013-09-16 16:14:35	This policy will match when a media's MIR has become corrupted.	Media	Warning	
STA-PTP-Status	2013-09-16 16:14:35	This policy will match whenever the pass-thru port status changes to a degraded or non-operative state	Ptp	Warning	
STA-Robot-Health	2013-09-16 16:14:35	This policy will match whenever the robot health falls below USE	Robot	Warning	
STA-Robot-Status	2013-09-16 16:14:35	This policy will match whenever the robot status changes to a degraded or non-operative state	Robot	Warning	
STA-Sys-Restart	2013-09-16 16:14:35	This policy will match when the STA software is restarted.	Sta	Severe	<input checked="" type="checkbox"/>

11

12

1

2

3

4

5

6

7

8

9

10

11

12

Displaying 12 of 12 record(s)

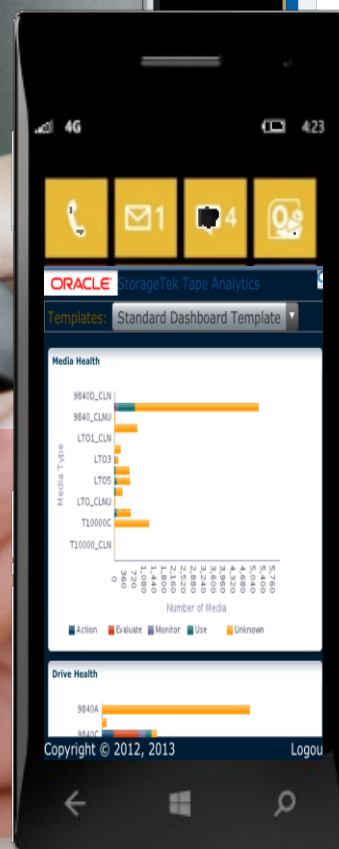
Go Mobile

Proactively Monitor Your Storage
From Anywhere

Executive, Storage Administrator &
Customized Mobile Information



Mobile Browser Access



StorageTek Tape Analytics 2.0

Features Covered Here

- Customized Dashboard
- Executive Reports
- Expanded Portlets
- Logical Grouping
- Library Health Reporting
- Advanced Alerts
- Mainframe Reporting
- Mobile Access

Additional Features

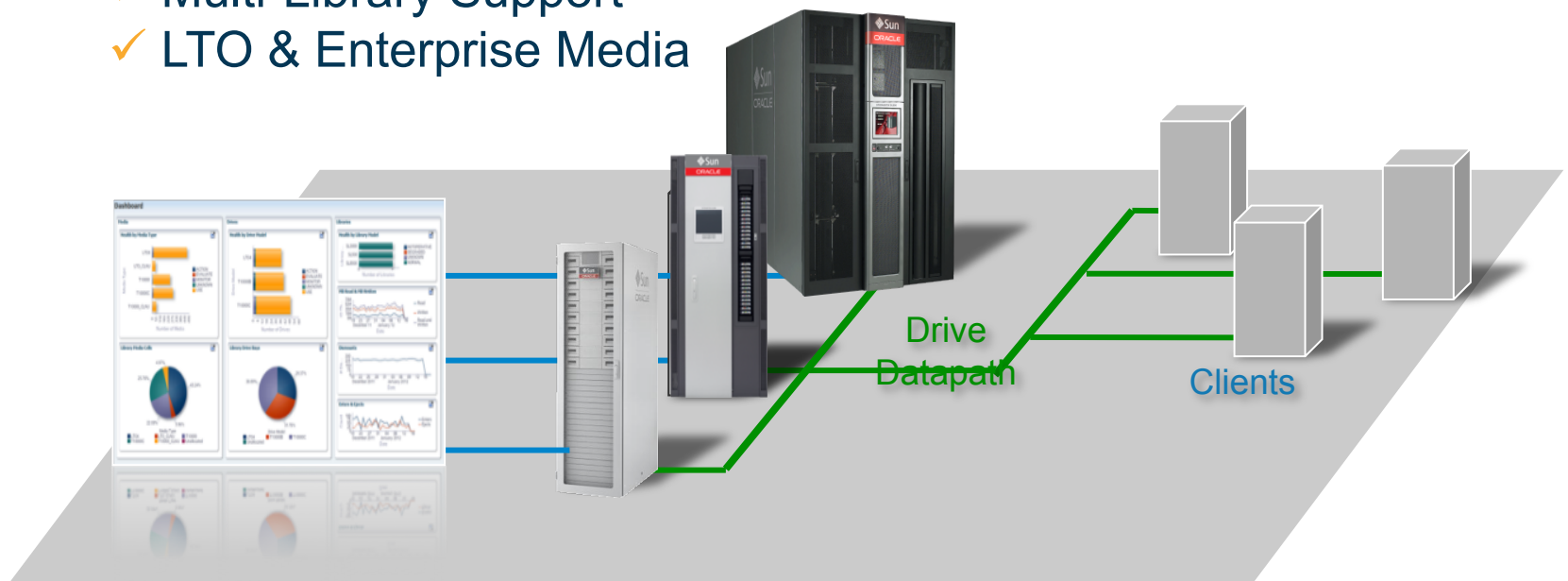
- Support for LTO6, T10KD
- Support for Linux 6
- Support for IBM LTO4 & LTO5
- User Roles
- Performance Enhancements
- Installation Enhancements

Worry Free Deployment

With StorageTek Tape Analytics



- ✓ Datapath Protection
- ✓ Multi-Library Support
- ✓ LTO & Enterprise Media



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



Deployment

Hardware Supported

Oracle StorageTek Libraries

SL8500

SL3000

SL500

SL150



Oracle StorageTek Drives & Media

T10000A/B/C/D

T9840/C/D

LTO HP & IBM 3/4/5/6



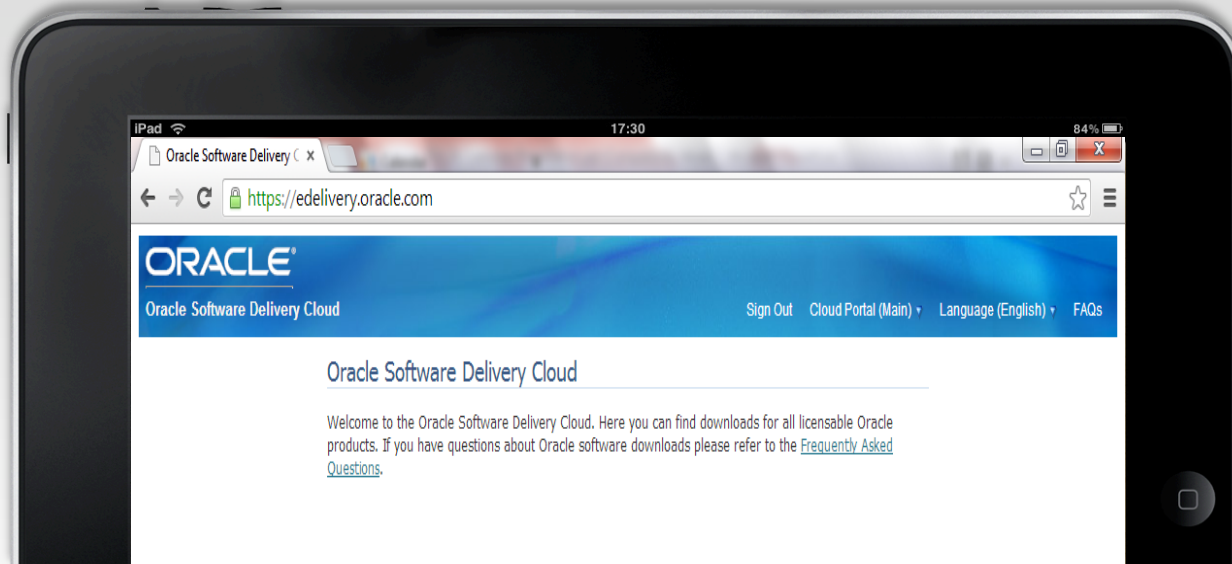
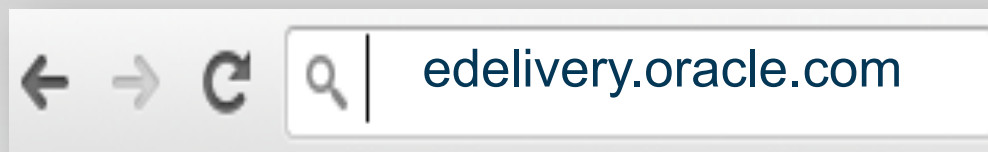
Software Deployment

- **Oracle Linux 6.4**
- **Browser Based UI**
- **Standalone Software Bundle Available through Oracle's eDelivery Website**
 - Tape Analytics Application
 - Oracle's MySQL DB
 - Oracle's WebLogic
- **Advanced Customer Services (ACS) Installation Option**

*For detailed library, drive and media support please reference the product support in the product documentation

Try StorageTek Tape Analytics 2.0

Download it Free For 30 Days!



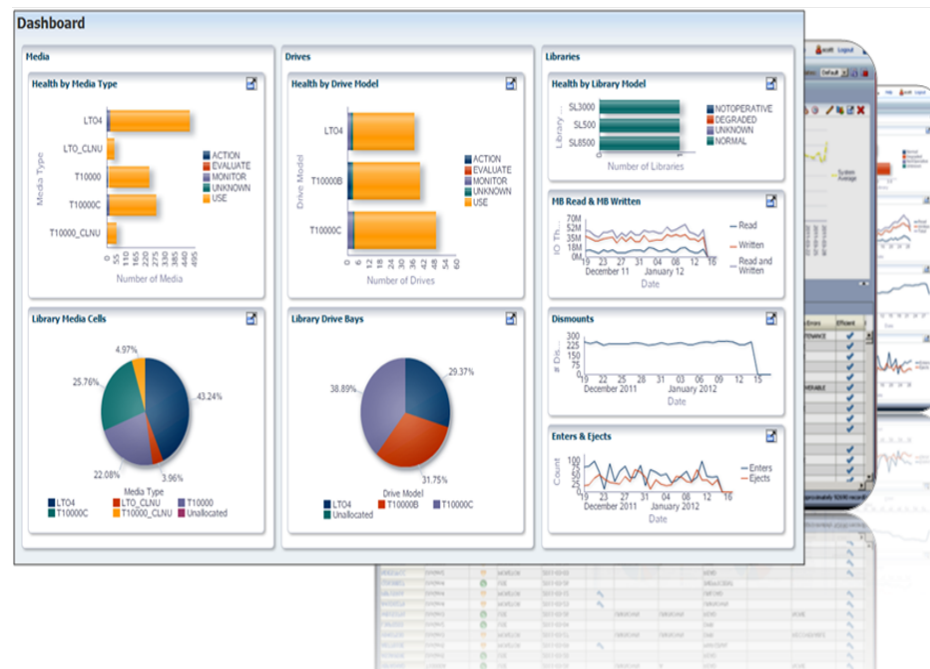


Oracle's StorageTek Tape Analytics Software



Simplify tape storage management, by taking a proactive approach to eliminate library, drive, and media errors

- ✓ **Simplify Tape Management**
Tape Analytics monitors all your drives and media so you can focus your resources elsewhere
- ✓ **Leverage Intelligent Analytics**
Oracle's proprietary algorithms provide proactive health indicators that can be trusted
- ✓ **Worry Free Deployment**
Tape Analytics gathers performance data through the library without ever entering your live data path
- ✓ **Grow with Peace of Mind**
A monitoring application that scales to meet your needs, Tape Analytics supports monitoring multiple globally dispersed libraries from a single interface



Tape Analytics is Exclusively Available for Oracle's StorageTek Tape Libraries



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