

# STORAGE

Vol. 9 No. 8 November/December 2010

How the cloud may affect your storage

Big changes coming for storage?

Hot technologies for 2011

Salary survey

Quality Awards: Tape libraries

Will cloud tier trump tape?

Innovators make stacks seem small

Users cool to management apps

Vendor resources

## Spectra Logic Reigns Supreme

*Spectra Logic tops both the midrange and enterprise tape library categories in the latest Storage magazine/ SearchStorage.com Quality Awards service and reliability survey.*

By Rich Castagna



### WHEN SPECTRA LOGIC CORP.

shows up for the Storage magazine/ SearchStorage.com Quality Awards for tape libraries, it doesn't fool around. Leading the field for both midrange and enterprise-class libraries by substantial margins, Spectra Logic adds a couple of new notches to its belt to complement its two previous wins in the midrange group, as well as a win and a second-place finish for enterprise products. In all other cases—three enterprise and two midrange surveys—Spectra failed to tally enough responses to be among the finalists.



If they're in it, they win it . . . or just miss, as with Spectra's second-place overall ranking in the last enterprise tape libraries survey. This time, Spectra's overall score bested its nearest competitor in the enterprise group by nearly a full point: 7.40 to IBM's 6.47. Quantum Corp. (6.39), Hewlett-Packard (HP) Co. (6.24) and Oracle Corp. (6.16) rounded out the list of five finalists. It should be noted that all the scores were very good, and any of them would have been high enough to take top honors on at least one our past surveys.

In the midrange group, Spectra made it back to the winner's podium after missing the finalist cut in our previous two tape library surveys (but finishing first in the first two surveys). Its overall score of 6.84 was a bit less impressive than its enterprise ranking, but it was more than enough to once again beat IBM, which notched a fine score of 6.43; filling out the midrange field were Dell Inc. (6.33), HP (6.25) and Sony (5.46).

One respondent referred to Spectra as "the most overlooked tape vendor in the market." If there's any truth to that distinction, it's bound to change soon.

The "steady and solid" award (if we had one) would have to go to IBM. Over the course of the five surveys we've fielded in the past five years, the company has snagged just one enterprise win but perennially finishes second or third in both tape library categories—a demonstration of consistency unmatched by other library vendors and rare among any of our Quality Award product categories.

One respondent referred to Spectra as "the most overlooked tape vendor in the market." If there's any truth to that distinction, it's bound to change soon.

## MAKING THE BUY

With tape being relegated to a more limited and specialized data protection role in most shops, it would seem to be harder than ever for a tape library salesperson to get their foot in the door. Nonetheless, they seem to be doing a pretty good job of determining a customer's needs and delivering. For midrange libraries, Spectra Logic's 6.78 led the pack in the sales-force competence section of our survey; IBM and HP tied for second with a score of 6.26. Spectra's 7.25 for the statement "The vendor's sales support team is knowledgeable" was the highest, and only 7.00-plus, mark,

## ABOUT THE SURVEY

The *Storage* magazine/SearchStorage.com Quality Awards are designed to identify and recognize products that have proven their quality and reliability in actual use. Results are derived from a survey of qualified readers who assess products in five main categories: sales-force competence, initial product quality, product features, product reliability and technical support. Our methodology incorporates statistically valid polling that eliminates market share as a factor. Indeed, our objective is to identify the most reliable products on the market regardless of vendor name, reputation or size. Products are rated on a scale of 1.00 to 8.00, where 8.00 is the best score. A total of 331 respondents provided 372 midrange and enterprise-class tape library evaluations.

How the cloud may affect your storage

Big changes coming for storage?

Hot technologies for 2011

Salary survey

Quality Awards: Tape libraries

Will cloud tier trump tape?

Innovators make stacks seem small

Users cool to management apps

Vendor resources

propelling it to the highest rankings for all the statements in the rating category.

In the enterprise tape library division, Spectra Logic again swept, but with scores above 7.00 for all statements on the way to a 7.36 category rating—an astonishing feat when you consider that the highest score we had seen previously in this category was a 6.53, which Spectra earned on the last survey. The keys for Spectra, again, were a knowledgeable sales support team (7.61) and a 7.50 rating for “My sales rep is knowledgeable about my industry.”

IBM had another strong showing in sales-force competence with a total score of 6.34 highlighted by a 6.62 for the knowledgeable sales support team statement. Quantum rode three 6.00-plus and three high-5.00 ratings to a solid 6.09 third-place finish.

## PRODUCTS IN THE SURVEY

**The following vendors/model lines of midrange and enterprise-class tape libraries were included in this Quality Awards survey. The total number of responses for each finalist is included in parentheses after the product names.**

### MIDRANGE TAPE LIBRARIES

- Dell Inc. PowerVault 124T/114T, TL4000/TL2000 or ML6000 Series (76)
- Hewlett-Packard (HP) Co. StorageWorks MSL Series (25)
- IBM System Storage TS3100/TS3200/TS3310 (29)
- Oracle Corp. (Sun) StorageTek SL24 or SL48\*
- Overland Storage Inc. NEO 200s/400s or NEO 2000E/4000E Series\*
- Qualstar Corp. TLS or XLS Series\*
- Quantum Corp. M Series, PX502, Scalar i40/i80 or Scalar 24/50\*
- Sony (All models) (13)
- Spectra Logic Corp. 20K/T24/T50 (17)
- Tandberg Data StorageLibrary T24/T40/T80/T120/T160 or StorageLoader Series\*

### ENTERPRISE TAPE LIBRARIES

- Hewlett-Packard StorageWorks ESL/EML Series (22)
- IBM System Storage TS3400/TS3500 (49)
- Oracle (Sun) StorageTek SL500/SL3000/SL8500 (38)
- Overland Storage NEO 8000 Series\*
- Qualstar RLS Series\*
- Quantum Scalar i500/i2000/i6000 or PX720 (36)
- Spectra Logic 64K/T120/T200/T380/T680/T950 or T-Finity (19)

\* Received too few responses to be included among finalists

## OUT OF THE BOX

It's been said there's nothing in a data center with more moving parts than a tape library. If any of those parts fails to mesh properly or misses its mark, a poor first impression is inevitable. The initial product quality section of our survey measures how quickly and easily a tape library got up and running and in production. The good news is that tape library vendors have risen to the occasion despite the mechanical nature of their products; when averaging all ratings for all vendors, this survey's roster of vendors received the highest scores ever for initial product quality in both the midrange and enterprise tape library categories.

Continuing its tour de force, Spectra Logic topped both groups with an even 7.00 in the midrange group and another eye-popping 7.50 to lead its enterprise peers. In the midrange group, Dell's very impressive 6.70 placed it second followed by another outstanding score of 6.61 from IBM. In the enterprise sector, HP's 6.52 earned second place, with Quantum just behind at 6.45—scores that could have been category winners in the past.

For enterprise tape libraries, respondents registered their particular satisfaction with high scores across the board for "I am satisfied with the level of professional services this product requires," "The product requires very little daily intervention" and "This product is easy to use." Midrange users gave their highest scores to the statements related to easy installation and configuration, as well as ease of use.

In the enterprise sector, HP's 6.52 earned second place, with Quantum just behind at 6.45—scores that could have been category winners in the past.

## FEATURES AND FUNCTIONS

What a library can—and can't—do is the bottom line, and modern tape libraries are far from the one-trick ponies of yesteryear. Here again, Spectra Logic led a very strong group of product lines to some of the best scores yet in the product features rating category, with a midrange score of 6.82 and an enterprise score of 7.42.

For enterprise tape libraries, Quantum nosed out IBM for second (6.65 vs. 6.59), with HP (6.43) and Oracle (6.29) not far behind. Midrange scores were also striking; IBM's 6.59 trailed only Spectra, while Dell (6.38) and HP (6.36) were in a virtual tie for third.

Statements related to good design, scalability and management features were among the highest scorers for all vendors, but the blanket "Overall, this product's features meet my needs" statement came out on top for enterprise tape libraries. Spectra dominated with the only 7.00-plus scores, ranging from 7.00 to 7.63 for the eight statements in the category.

Midrange users were also pleased with overall feature sets, and rated design and management features highly. In a rare occurrence for these survey results, Spectra failed to sweep the features statements, thwarted by IBM's 6.52 for "This product loads and ejects tape efficiently."

## STEADY PERFORMERS

There's no test like time when measuring the reliability of a product, and our

How the cloud may affect your storage

Big changes coming for storage?

Hot technologies for 2011

Salary survey

Quality Awards: Tape libraries

Will cloud tier trump tape?

Innovators make stacks seem small

Users cool to management apps

Vendor resources

survey results indicate that tape libraries are doing a better job than ever at the daily grind of data center operations. For our enterprise tape libraries, the average of all scores is the highest yet on the five surveys we've conducted, and the midrange group's score was second to only one previous survey.

Spectra's 7.26 score in the product reliability category led the enterprise pack by a substantial margin (IBM was second with a 6.34 followed by Quantum's 6.18). While the midrange group was a little more competitive, Spectra's 6.67 placed it in front of IBM and Dell.

The enterprise-class tape libraries seem to be a step ahead of their more modest brethren in the product reliability ratings. All the enterprise vendors' product lines scored well across all eight statements in this category, with the top scores generally given for "This product requires very few unplanned patches/updates" and "The product meets my service-level requirement." For all products and all statements, there were only five sub-6.00 scores.

With a narrower margin of victory than in other categories, Spectra Logic's midrange entries scored highest on six of the statements, ceding to IBM for "This product is rarely the cause of backup failures" and to Dell for "This product experiences very few bugs."

### **SAFETY NET**

One product may have a great feature list and be easy to get up and running and manage, but the day it decides to hiccup—and that day will come—the most important part of the product is likely to be how well it's supported. Most users can easily overlook minor problems if they're resolved quickly and effectively, but if they have to jump through hoops or search for missing manuals, even an otherwise exemplary product can quickly go south.

In the technical support category, Spectra Logic locked up its clean sweep in both the midrange and enterprise groups, resoundingly so, with the highest scores recorded to date for tape libraries. Its 7.45 anchored a strong overall showing in the enterprise group, followed by IBM's solid 6.63 and Quantum just a hair behind with a 6.58 rating. Spectra topped 7.00 for eight statements in the category, with its highest marks for "This product is easy to service" and "Vendor's support personnel are knowledgeable." All vendors netted high ratings for having knowledgeable support personnel, punctuated by Quantum's 6.97 and IBM's 6.83 for that statement.

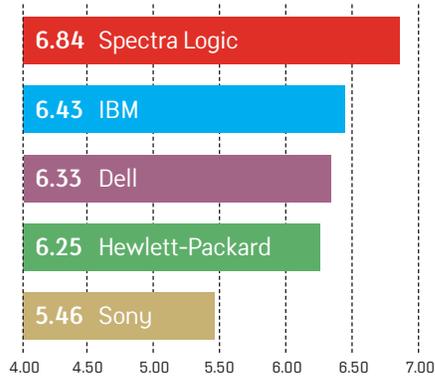
We found midrange tape library users to be almost as satisfied with the support their vendors provide. Dell posted a 6.47 as overall runner-up to Spectra Logic's 6.91, and tied Spectra with a 6.67 rating for the "Problems are resolved in a timely manner" statement.

There's no test like time when measuring the reliability of a product, and our survey results indicate that tape libraries are doing a better job than ever at the daily grind of data center operations.

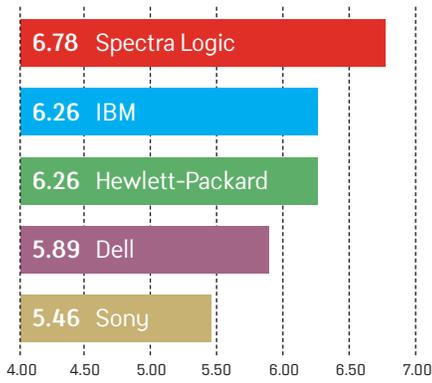


- Dell Inc. PowerVault 124T/114T, TL4000/TL2000 or ML6000 Series
- Hewlett-Packard (HP) Co. StorageWorks MSL Series
- IBM System Storage TS3100/TS3200/TS3310
- Sony (All models)
- Spectra Logic Corp. 20K/T24/T50

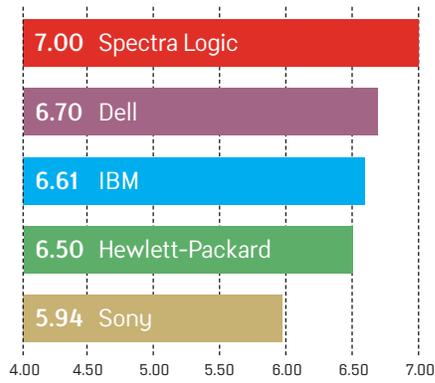
OVERALL RANKINGS



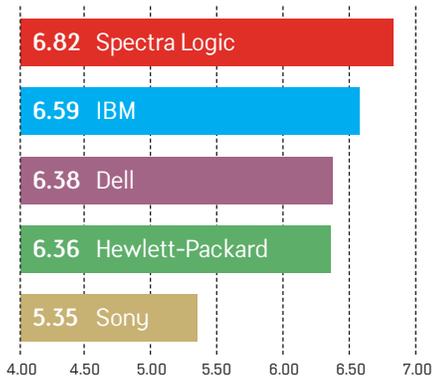
SALES-FORCE COMPETENCE



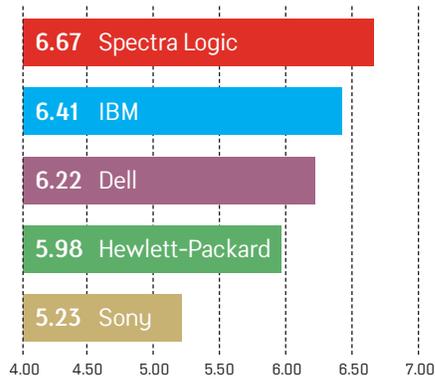
INITIAL PRODUCT QUALITY



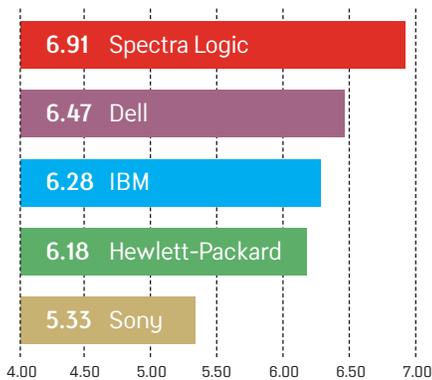
PRODUCT FEATURES



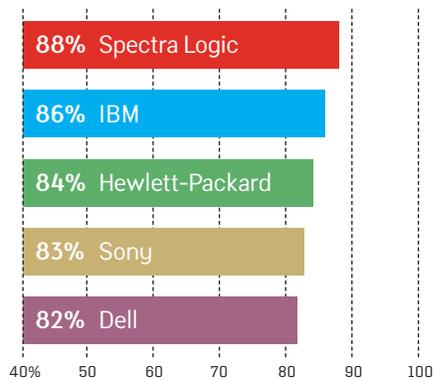
PRODUCT RELIABILITY



TECHNICAL SUPPORT



WOULD YOU BUY THIS TAPE LIBRARY AGAIN?



Based on a 1.00-8.00 scoring scale

How the cloud may affect your storage

Big changes coming for storage?

Hot technologies for 2011

Salary survey

Quality Awards: Tape libraries

Will cloud tier trump tape?

Innovators make stacks seem small

Users cool to management apps

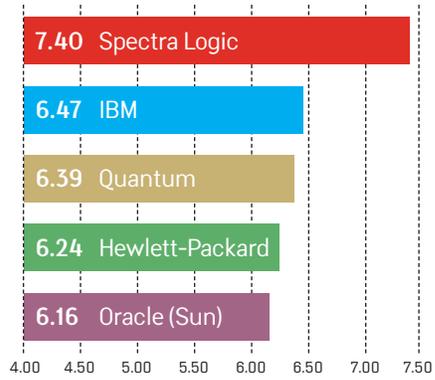
Vendor resources

MIDRANGE

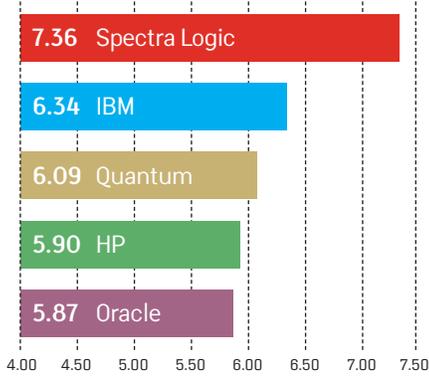


- Hewlett-Packard (HP) Co. ESL/EML Series
- IBM TS3400 or TS3500
- Oracle Corp. (Sun) StorageTek SL500/SL3000/SL8500
- Quantum Corp. Scalar i500/i2000/i6000 or PX720
- Spectra Logic Corp. 64K/T120/T200/T380/T680/T950 or T-Finity

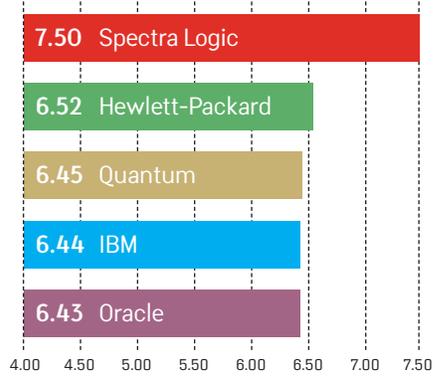
OVERALL RANKINGS



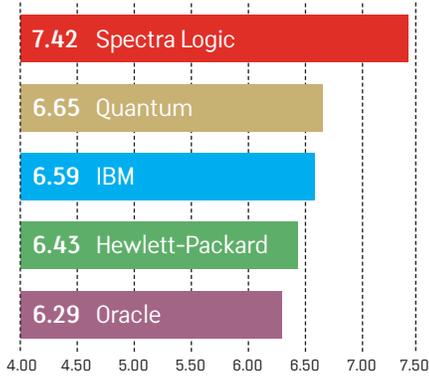
SALES-FORCE COMPETENCE



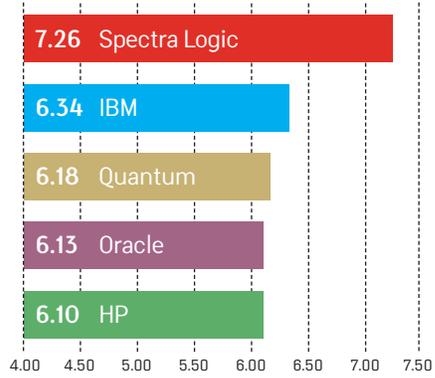
INITIAL PRODUCT QUALITY



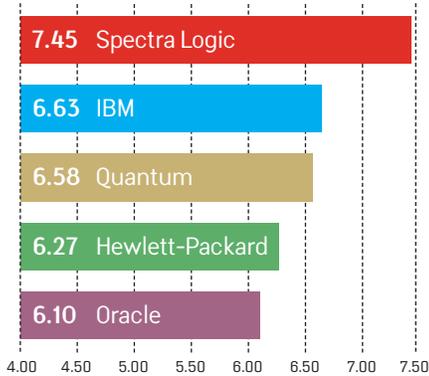
PRODUCT FEATURES



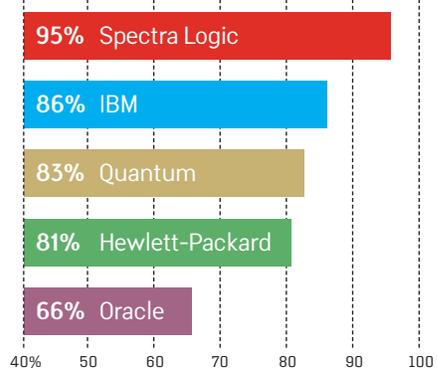
PRODUCT RELIABILITY



TECHNICAL SUPPORT



WOULD YOU BUY THIS TAPE LIBRARY AGAIN?



Based on a 1.00-8.00 scoring scale

ENTERPRISE

How the cloud may affect your storage

Big changes coming for storage?

Hot technologies for 2011

Salary survey

Quality Awards: Tape libraries

Will cloud tier trump tape?

Innovators make stacks seem small

Users cool to management apps

Vendor resources

### REPEAT PERFORMANCE

In all our Quality Awards surveys we ask if respondents, armed with the knowledge they have now, would buy the same product again. Sometimes, these “buy again” results run counter to the overall survey scoring, suggesting that even if somewhat disappointing, the familiar is preferable to the unknown.

But this time the percentage of users who said they would make a repeat purchase hews closely to the rating category scores. In the enterprise group, 95% of Spectra

Logic users said they would buy another tape library from that vendor—hardly surprising given the other results. But IBM (86%), Quantum (83%) and HP (81%) also earned loyalty points among their users. Oracle was the laggard at 66%, perhaps reflecting some confusion over the management handoffs from StorageTek to Sun to Oracle over the past few years.

For midrange tape libraries, the level of satisfaction was equally encouraging for vendors, with Spectra Logic (88%) leading a tightly bunched group with scores all in the range of 82% to 88%. ☉

Rich Castagna (rcastagna@storagemagazine.com) is editorial director of the Storage Media Group.

## HEAVY HITTERS

Average number of terabytes backed up each week using these tape libraries.

MIDRANGE TAPE LIBRARIES	TB
Spectra Logic 20K/T24/T50	58
IBM System Storage TS3100/TS3200/TS3310	33
Hewlett-Packard StorageWorks MSL Series	30
Dell PowerVault 124T/114T, TL4000/TL2000 or ML6000 Series	26
Sony (all models)	13
ENTERPRISE-CLASS TAPE LIBRARIES	TB
Spectra Logic 64K/T120/T200/T380/T680/T950 or T-Finity	106
Oracle (Sun) StorageTek SL500/SL3000/SL8500	77
Quantum Scalar i500/i2000/i6000 or PX720	66
IBM System Storage TS3400/TS3500	55
Hewlett-Packard StorageWorks ESL/EML Series	35



Spectra Logic Corporation • 800.833.1132 • (Fax) 303.939.8844 • 6285 Lookout Road • Boulder, CO 80301 USA • www.spectralogic.com