



News

Volume 2, Number 1, April 2001

Intro and welcome

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This issue of our quarterly AIT Forum newsletter highlights the role of storage service providers (SSPs) in the new enterprise, with emphasis on AIT solutions for this segment of the market.

Look for articles on the following:

- SSP roundtable
- Retrospect software and AIT
- Hot Plug Tape

You'll also find a spotlight on AIT Forum founding member Overland Data and our regular features of AIT success stories and AIT in the news.

We think you'll find the newsletter easy to use. It is online in PDF format on our Forum Web site, www.aittape.com. Read the newsletter online or download it at your convenience.

We welcome your suggestions to make this newsletter the best information tool possible. Contact our editor with your comments and ideas through marty@bitsprings.com.

Happy reading, and thanks for your interest in AIT.

SSP roundtable—a lively time was had by all

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Thinking "network storage, not just storage," as urged by David Hill of the Aberdeen Group in his keynote address (see page 3), attendees and speakers at the January 2001 AIT Forum meeting had a lively discussion on storage service providers (SSPs).

With our special focus on AIT tape technology, we have excerpted the panel's discussion of tape's role in the SSP arena.

Discussion leader: Zachary Shess [ZS], the Aberdeen Group

Panel members: David Hill [DH]; Darrell Royal [DR], ManagedStorage International; Greg Mangold [GM], CreekPath Systems

ZS: What will be the most compelling change to the SSP market in the next year?

DR: There will be a focus on what SSPs will bring into the storage model. Will it be something highly scalable and able to be leveraged? It may be proprietary software tools and a scalable software model, or a well-defined storage consulting practice.

ZS: When SSPs started out they saw the dot.com market as the target. What solutions will be successful in the future?

GM: Content is where and what it is about.

DR: Their solutions must be compelling.

DH: Storage management must be separated from data management and made easy.

ZS: Obviously, tape is a potential market. What value does tape provide?

GM: Tape has always been a problem for companies. It has been forced upon them from a business continuity standpoint. We see companies using tape, but relying upon people who know what they are doing to support it.

DR: New applications like streaming broadcast video with a few moments on disk and the rest on tape could provide tremendous cost savings.

DH: The management of specific content is what the SSP could provide, using tape.

ZS: What features will be important in tape environments?

All: Small areal and physical densities in secure systems.

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Retrospect and AIT

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Retrospect backup software from Dantz serves the small to medium business market, backing up all computers on the business's network, from notebooks to servers. When paired with AIT tape technology, Retrospect offers:

- Increased AIT backup performance
- A more complete backup network solution

The Retrospect IncrementalPlus feature creates more efficient backups by comparing a snapshot of the backup disk to the files in the backup set and backing up only unique files. Pair this with the Retrospect Snapshot feature, which delivers faster restores, pinpointing any date in time, or any file or files across time. And Retrospect includes optimized drivers that maximize AIT backup performance.

With Retrospect, you can keep multiple backup sets so you're always sure of access to your data. Retrospect provides file verification to complement AIT safety features. Single-pass restores remove complexity from the restore procedure, and built-in disaster recovery lets you rebuild your system without extra steps.

Retrospect addresses backup needs for all computers on the network, not just servers. This includes critical data on notebook computers, which are prioritized and backed up automatically each time they connect to the network. With full Windows and Macintosh support, Retrospect supports most business environments.

The marketplace already sees some Retrospect-AIT solutions:

- Sony Canada and Australia bundle Retrospect with AIT tape drives.
- Toshiba America plans to bundle Retrospect with AIT.

- Dantz Retrospect and AIT solution providers already have many mutual customers, including Nortel, Oracle, and Motorola.

Dantz plans the following future Retrospect features:

- Auxiliary Memory support
- Bootable tape support
- Advanced library kit
- Macintosh OS X support
- Linux client

Hot Plug Tape

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Hot Plug Tape is an industry first 3.5-inch tray to hold either a 20–40 gigabyte DAT or an AIT tape device. With Hot Plug Tape, you can mix primary and secondary storage on the same controller or SCSI bus.

The carrier has an SCA II type connector for easy installation. Hot Plug Tape can be plugged into:

- Two 1-inch hot plug bays or one 1.6-inch hot plug bay in all corporate and enterprise Compaq servers.
- Compaq Ultra2 and Ultra3 external storage enclosures.

Compaq has also upgraded their Smart Array 5300 series and Integrated Smart Array controllers to accept tape along with hard drives.

Reduce ownership costs: Hot Plug Tape has been designed so that you can mix and match hard drives and tape drives on the same SCSI bus. Now there is no need to purchase a separate controller just for your tape device.

Increase server uptime: You can keep your systems up and running while you install a new tape drive. The hot plug feature enables you to insert and remove the tape drive without any interference to server operations.

Reduce need for spare parts

With Compaq's service options, customers are offered a 24-hour advance exchange.

AIT success story—Boeing

At Boeing's Rocketdyne Propulsion & Power Division in Canoga Park, backups save astronauts' lives.

On the launch pad, it takes nine hours to pump highly volatile propellant into the orange external fuel tank for the engines that power the shuttle into orbit. In Canoga Park during those nine hours, eight engineers perform trend analysis on engine data displayed on their monitors: real-time data from the shuttle on the launch pad overlaid on previously archived data for the same engines. They're looking for an "out-of-family" condition that might make the shuttle engine unsafe and require its shut down, scrubbing the mission.

With astronauts' lives riding on their trend analysis, Dean Patmor, who is in charge of Boeing's launch support and mission operations for the NASA space shuttle program, and Michael Laverty, computer engineer and flight team systems administrator, put a high premium on backup data from previous missions. "The single most frustrating thing about my job has been ... finding a reliable tape backup system for trend analysis," said Patmor. "The safety and success of every launch depends on data. The absence of data could scrub the launch or, worse, result in a loss of life."

Two years ago, Patmor and Laverty started looking for a backup system to enable full backups. They selected a Qualstar TLS-4000 Series, based on AIT tape technology.

Just three days after installing the Qualstar library, their selection got a real-life test: Laverty had to restore mission-critical data. "In twelve minutes," Laverty explained, "I restored nearly seven gigabytes across a 100Base-T network."

“Now we back up everything several times. I do test restores on a random basis several times a week.”

The system has nine Sony AIT-2 tape drives installed in the Qualstar TLS-412360 tape library, which can house 360 tapes for a total of 18 terabytes of native data (36 terabytes with compression).

Now when you watch a shuttle launch, you’ll know that AIT technology helps make it safe.

Web site update

Winter activities on the Forum Web site, <http://www.aittape.com>, saw eight news releases and eight success stories in the area of technology wins and advances.

The Web site continues at the top of both North American and European search engines, and the most-viewed pages are AIT in the News, Solutions, Technology, and the Newsletter. Questions to info@aittape.com asked about AIT vs. the competition, roadmap, vertical solutions, how to buy, media, and software compatibility.

Member spotlight

Overland Data Inc., AIT Forum founding member

As a founding member of the AIT Forum, Overland Data Inc. recognized the role AIT technology could play in the data storage market, from small and home-based business to the midrange and enterprise sectors, including the storage service provider (SSP) market.

When Overland introduced the AIT LibraryPro, they combined the strengths of Overland robotics with Sony AIT technology. The result is midrange backup with robotic reliability, high data transfer rate, high cartridge capacity, long head life, and fast data access.

Recognizing these advantages, JET MULTIMEDIA chose the AIT LibraryPro for its customers’ critical data storage requirements.

JET MULTIMEDIA is a global new economy player integrating e-agency, e-hosting, advertising, incubation, and Internet content. JET MULTIMEDIA equipped its Nanterre Datacentre near Paris with Overland’s AIT LibraryPro. Backed by storage solution distributor GE Access, the deployment is proving to be of strategic importance to the Web agency’s operations.

“Our core franchise is based on operating mission-critical sites such as e-commerce sites, portals, or extranets within an architecture built for performance, security, availability, and scalability,” stressed Laurent Henniquau, JET MULTIMEDIA head of business development and partnerships. “The decision to deploy two AIT LibraryPro modules in conjunction with VERITAS Software’s Net Backup software is in line with this strategy.”

JET MULTIMEDIA is so impressed with the system’s robust architecture that it is planning to commission GE Access to equip its four other remote sites.

This is just one example of Overland’s promotion and support for the winning AIT tape data storage format.

AIT Forum meeting highlights

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At the January 2001 AIT Forum meeting, members ADIC, BakBone, Compaq, Cybernetics, Dantz Development, Grau Data Storage, Legato Systems, NovaStor, Overland Data, Qualstar, Sony tape streamer products group, Sony media group, Spectra Logic, Unisys, and VERITAS Software welcomed new member MaxOptix. Guests welcomed were Aberdeen Group, CreekPath Systems, and ManagedStorage International. Additional attendees were BitSprings Systems and Relay, Inc.

Keynote address

David Hill, research director, storage and storage management at Aberdeen Group, presented *Storage Service Providers: Challenges and Opportunities*. Stating that efficient storage on demand is the ultimate goal of storage networking, Hill discussed the increasing stress of managing storage. New mission critical systems may not be delivered on time and may not live up to performance and availability expectations. As organizations become ever more dependent on IT, the business consequences of IT infrastructure failure grow more severe. Companies may be relegated to playing catch-up, or becoming second-tier players, or even being forced to close.

Corporate IT cares about storage networking, but the issues are finding the time, skilled people, and capital to do it all. Hardware and software have traditionally been the focus of IT, with storage only now becoming important. IT is racing to know and understand a changing storage, hardware, and software market but the gap is widening between the increasing complexity of storage and the ability to manage it. Software and tools are needed to help personnel do their jobs more effectively.

Storage solution providers recognized an opportunity to provide a more effective way to manage storage, and to eliminate the “management of storage” gap. However, remote management of an enterprise’s storage resources by a trusted third party (SSP) faces acceptance challenges. Will they offer the flexibility to manage an enterprise’s storage? Can the organizations give up control of the essential data assets? In response, SSPs are rapidly changing the business model to extend beyond traditional boundaries.

Hill maintains that an enterprise should consider an SSP when limited IS resources can be redirected to other activities or when IS cannot obtain enough people to manage storage at a cost it can afford. Successful SSPs will have an excellent management strategy, long-term vision, sufficient capital to reach profitability, and excellent customer focus.

How can tape help SSPs meet their challenges? According to Aberdeen, content management will be key to the future of storage. The management of storage over the Web will be critical to enterprise storage requirements. Tape will play a significant role where access frequency and response time are not instantaneous—for example, to access completed end user tasks, read and archived emails and documents, and files that do not require instant viewing.

Aberdeen concludes that the challenges of managing storage growth are real, and that SSPs offer a way to help enterprises manage at least part of this complexity. Trends toward content management, greater management of storage complexity, and World Wide Web globalization will strengthen the role of tape at the SSP.

Storage Alliance program

Steve Baker of Sony introduced the Sony Storage Alliance program, which supports Forum member proposed projects directed toward developing new and strategic AIT market solutions.

Sponsored by Sony, the program offers project assistance in a variety of areas, including participatory funding or marketing and channel development assistance. Projects can be examined and proposed by individual members or by a group of Forum members. Further information on how to apply is available from Sony.

AIT product and program update

John Woelbern of Sony updated membership on new activities in the AIT roadmap. The current roadmap goals to double native capacity and data transfer every two years while maintaining read/write compatibility with the prior generation have been extended to include two more generations of AIT models. AIT-3 is in final development and targeted for launch later this year.

AIT-4 is in advanced development for a 2003 launch. AIT-5 and AIT-6 extend the formal roadmap, bringing capacities to 800GB/cartridge with a 96MB/s data transfer rate.

Working group updates

The Solutions Working Group and the Auxiliary Memory Working Group gave reports at the January 2001 Forum meeting.

Solutions Working Group

The group has posted eight customer success story presentations on <http://www.aittape.com>. An AIT technology overview designed for the end user and also applicable to resellers has been posted to the same section. Next the working group is to post technology presentations and develop customer profiles emphasizing vertical markets where AIT solves a unique problem.

Auxiliary Memory Working Group

The Auxiliary Memory Working Group (formerly known as the MIC Working Group) determined to create an industry group, independent of Sony, to further define the base level specification for auxiliary memory. This industry group will supersede the MIC Working Group that has been attached to the AIT Forum. Leading hardware and software system and storage companies have agreed to participate, and Sony indicated their willingness to fund part of the logistical expenses of such a group for three meetings through the end of 2001.

At the January meeting, group members selected their top five baseline specifications to implement in auxiliary memory. Group member Compaq will lead development of an implementation document.

AIT in the news

Have you heard the latest about AIT?

MaxOptix unveils tape RAID

March 6, 2001—MaxOptix Corp. unveiled the StreamIT, the first tape RAID appliance in the industry. Combining a fault tolerant chassis design with its PowerStream RAID controller for removable storage and Sony's AIT-2 drive technology, StreamIT meets the performance and reliability demands of storage area network (SAN)-based serverless backup applications.

ADIC Scalar AIT libraries selected by Marine Corps

January 17, 2001—ADIC has been awarded a contract to provide automated tape libraries for over 40 United States Marine Corps network centers around the world. The contract is for three different models of the company's Scalar series libraries, all integrating AIT-2.

Overland's AIT LibraryPro certified with Syncsort's Backup Express

January 16, 2001—Overland Data Inc. announced that its AIT LibraryPro has officially been certified to work with Syncsort Inc.'s Backup Express, a high-performance enterprise backup and restore product designed for multi-platform environments, offering a low-cost alternative into the Network Data Management Protocol (NDMP) arena.

AIT Technology Forum News is published by the AIT Forum.

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