INNOVATION Data Processing Offers
Enterprise Storage Management Solutions

INNOVATION Data Processing is a leading independent software vendor providing non-disruptive business protection and enterprise storage management solutions for IBM eServer z/OS, OS/390, and S/390 Linux attached enterprise storage, as well as for Windows, Unix and Linux, storage area network (SAN), network area storage (NAS) and local area network (LAN) distributed storage. INNOVATION solutions deliver exceptional reliability and winning price/performance.

FDR/UPSTREAM is the company's high-performance storage management product for centralized, automated, unattended backup/restore and archival for open systems. Wherever data is stored on a LAN, SAN, and NAS, FDR/UPSTREAM will provide automated operations to backup and restore and archive data on an OS/390 or z/OS MVS mainframe server. FDR/UPSTREAM can be used with Microsoft Windows, Novell, Unix, AIX, Sun, HP, Intel Linux, and Linux for zSeries servers.

Unique Features

FDR/UPSTREAM has unique features to facilitate efficient backup processes, including online database agents and the ability to compress data at the client level, minimizing data flow across the network. It has also developed a process called UPSTREAM Full Merge Backup that drastically reduces the elapsed time for full backups by utilizing already existing file backups and only opening and transmitting files that have changed. It merely requires a first-time full backup to the backup server's attached storage. All future backups are then incremental and full merge backups. When a "full merge backup" is completed, a new point-in-time image of the server is consolidated onto a tape or tape set. This approach reduces the elapsed time for backups, and provides extremely efficient restore operations for data recovery. Finally, FDR/UPSTREAM has an easy-to-use, Java-based graphical user interface and management tool that runs in a Web browser. "The FDR/UPSTREAM client always looks the same wherever it is running," said Patrick Fitzsimmons, the product manager at INNOVATION.

Sigma Aldrich Case Study

FDR/UPSTREAM has emerged as the solution of choice for centralized storage management in complex IT environments. For example, two years ago, Sigma Aldrich decided to consolidate its backup solutions. In addition to an IBM 3090 mainframe with z/OS, the company supports Oracle, Unix and several flavors of Windows. Plus, it uses EMC DASD storage. "We wanted to have a one backup solution," said John Hunter, senior systems programmer at Sigma Aldrich.

Hunter was already familiar with INNOVATION products and knew that INNOVATION's FDRSOS and FDR/UPSTREAM/SOS products can access EMC's business continuance volumes directly. "Being able to read them from the mainframe side made the process a lot easier with our huge databases," Hunter said. "That pointed us to a mainframe backup solution." Over several months, the company systematically installed FDR/UPSTREAM, using it for perhaps 100 Windows servers as well as Unix platforms and Oracle databases. "The Windows and Unix people love it because they have a single point of control for backups," Hunter said. And since FDR/UPSTREAM serves as the backend for the Oracle Recovery Manager (RMAN) API, "the Oracle people are using the same tools that they were using before and don't see any difference," Hunter said.

Open Systems Solution

This year, INNOVATION introduced UPSTREAM RESERVOIR, which uses an open systems server instead of a mainframe as the backend. "Now organizations can use UPSTREAM whether they have a z/OS mainframe or not," Fitzsimmons said.

For instance, the City of Tucson, AZ used FDR/UPSTREAM to backup its AIX servers. This year, it wanted an open systems solution and chose UPSTREAM RESERVOIR. "It does a great job," said Avram Adam, Unix systems administrator.

"INNOVATION legacy and our earlier INNOVATION experience were the primary reasons we chose UPSTREAM RESERVOIR, but UPSTREAM RESERVOIR stands on its own," said George Morey, the mainframe systems programmer who had UPSTREAM RESERVOIR running in a short period of time.

Conclusion

FDR/UPSTREAM and UPSTREAM RESERVOIR provide extensive reporting, the ability to schedule tasks and are simple to install, use and understand. "When we talk to IT directors, backup is still a major concern," said Fitzsimmons. With FDR/UPSTREAM and UPSTREAM RESERVOIR, that problem is solved.