

## EXPERTS ADVISE USERS TO DELAY UPGRADING

Symantec Corp. isn't the first company to rearchitect its product from a flat-file to a database architecture. Microsoft Corp. attempted a similar feat with WinFS, in which it was integrating unstructured data into a relational database. WinFS reached beta after several years of development, but Microsoft canned the project in June 2006. In a blog posted on the Microsoft Web site, the company announced it would no longer be "pursuing a separate delivery of WinFS," instead choosing to integrate it into the next release of SQL Server.

"Converting a basic file system into a more organized structure like a database is no mean feat," says Ash Ashutosh, CTO of Hewlett-Packard Co.'s storage management software group and founder of ApplQ. "Everyone understands files, but databases are a whole different beast," he says. "The tools are a lot geekier."

In Symantec's case, the company picked the Sybase database because other Symantec products use it, but also because Sybase made its product look like a file system to the app, according to Ashutosh. He says this would have meant fewer changes to the Veritas NetBackup code, but significant testing between NetBackup and the Sybase database. Ashutosh says Symantec should have kept Veritas NetBackup Version 6.0 in "QA and test for a good 24 months." Symantec shipped NetBackup 5.1 on June 7, 2004, and NetBackup 6.0 on October 3, 2005. (HP's OpenView Storage Data Protector product competes with Symantec's Veritas NetBackup.)

According to industry analysts, all software companies, especially the larger players, are under considerable internal pressure to meet release dates that have more to do with meeting quarterly earnings than releasing a solid product. There's also pressure from customers demanding new features. The upshot is buggier software. Experts advise not to upgrade to a new release until absolutely necessary.

issues with the catalog," he says. However, he notes, the firm's catalog isn't particularly big (approximately 100MB). "If there were going to be major problems, I thought it was going to be at that stage."

Not so, but there were other surprises. During the upgrade process, users must disable all their policies, perform the upgrade and then re-enable the policies. The Renault F1 Team discovered a problem when it came to reactivating its policies. A script that should have re-activated all the policies didn't work, so an admin had to reactivate all the policies manually. It ended up taking almost a day to upgrade the master server, considerably longer than the company had expected.

Engineers then performed three test backups and three test restores, which all worked fine. "Off they went home, happy as Larry," says Hackland. But when they returned to work the following day, they discovered that none of the scheduled backups had run. "I am still not entirely clear what the issue was," says Hack-

land. Symantec told him it was due to a "storage unit problem," which is a part of Veritas NetBackup. He says Symantec engineers corrected the issue that day by stopping and restarting NetBackup, which they had done a number of times during the installation.

"That was a little nerve-wracking, coming in the next morning and getting the report that none of the backups had run," he says. "The rest of the upgrade that week was fine ... It took an age to import the media database, but there were no other issues on that day."

### NetBackup Operations Manager

The final part of Renault F1's upgrade was to replace Advanced Reporter and Global Data Manager with the new reporting tool in Veritas NetBackup 6.0 called NetBackup Operations Manager (NOM).

"NOM is much easier to use; it's easier to see if backups have failed," says Hackland. However, there's no migration path between Advanced Reporter and NOM, so all of the historical data collected by Advanced Reporter is lost once NOM is installed. "I wish there had been some way of archiving the old Advanced Reporter stuff ... It's not a major deal because we have the information anyway, but it seems a strange thing that you couldn't go back and look at the historical logs," he says.

According to Symantec, Advanced Reporter wasn't serving the needs of its users and had to be overhauled. "It was a design question. Did we want features x, y and z, or did we want a very tight link in with the past?" says Mike Adams, Symantec's senior group manager, product marketing, Veritas NetBackup. "We thought it best to add feature sets to NOM [rather] than to create a vast link from Advanced Reporter to Operations Manager."

Symantec's Kixmoeller adds that historical data is really only used to see how well the current backup environment is performing. "When you move to [NetBackup] 6, you have changed your environment and you'll want to look at a new baseline of data," he says.

Flavio Hürlimann, IT storage specialist at Sunrise/TDC Switzerland AG, a major telecom provider in Zurich, says NOM is an improvement over the previous reporting tools in Veritas NetBackup, but he feels it still doesn't meet requirements. Because it's Java-based, it takes a while to build screens, "so you're not sure if you have the most current information," he says. Sunrise/TDC Switzerland uses a reporting tool from Agite Software AG called backupVisual, which Hürlimann says creates more detailed reports and presents data more graphically than NOM.

Symantec is aware of the need for more detailed reporting on Veritas NetBackup and is adding more