

Buried data sees the light

CARR SCOTT CONVERSION SOFTWARE UNCOVERS PRICELESS INFORMATION

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»» Knowledge is power, and there's a lot of knowledge locked up in Enscribe files, the original file system for Compaq *NonStop™ Himalaya™* servers. Unfortunately, "locked up" isn't just a fanciful phrase. In this flat-file database format, information is hard to reach quickly—and therefore, it's hard to leverage for timely business decisions. That information *really* needs to be in an industry-standard SQL relational database.

The typical response of *NonStop* system users is, "Oh, great. So I need to bring my system down, rewrite my programs, and undertake some massive and time-consuming conversion. But since I run my company's mission-critical applications on the *NonStop Himalaya* system, this is simply not an option."

In fact, the opposite is true. With Escort SQL from Carr Scott Software, even the largest Enscribe applications and files can be converted to a *NonStop* SQL relational database in a few hours or less. And with Escort Journaling, the whole process can be accomplished in the background, with just a few minutes of downtime at the end to synchronize everything.

Magic? Not quite. It's just innovative technology. Even so, one of Carr Scott's biggest challenges since the company's inception in 1995 has been convincing people that this transformation is not only possible, but easy.

The premier product
Dr. Richard Carr and Harry Scott (cofounders of Carr Scott

Software) and their team are not magicians. They just understand the power of the right technology in the right place. "Carr Scott is all about retaining your existing business logic while moving ahead to modern technology," said Scott. "Companies spend millions of dollars developing processes and encapsulating them in computer programs to run their business. Many of these programs were written before current technologies like SQL became available." Carr Scott products allow *NonStop Himalaya* system users to leverage new database and disaster protection technologies, without having to rewrite existing business logic.

To Scott, Enscribe and SQL are like night and day. "Enscribe is a flat-file system, proprietary

to the *NonStop* platform,” he noted. “By contrast, SQL is an industry-standard relational database, which virtually every company in the world that’s writing access tools or browsers can take advantage of. Companies that have not moved to the relational model can’t leverage any of that new technology.”

Escort SQL was Carr Scott’s initial product offering, and it still occupies pride of place in the company’s portfolio. But it’s not alone—four additional products have joined it over the years. They fall into two categories, database enhancement and disaster protection, and they all have the same magic. “We do software makeovers,” summarized Scott. “We provide transformation software that allows *NonStop Himalaya* system users to upgrade to new technology without rewriting their existing programs.”

The lineup

In Carr Scott’s database realm, there’s Escort SQL, which upgrades Enscribe to *NonStop* SQL software; Escort RANGER, which does very fast partitioning of databases to maximize *NonStop Himalaya* system parallelism; and Escort Journaling, which makes it possible to load databases live in the background, while the applications are still up and running.

Here’s how Escort Journaling works: Say you’re doing the

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— HARRY SCOTT, COFOUNDER OF CARR SCOTT SOFTWARE

conversion from Enscribe to *NonStop* SQL. You can be running applications, your programs can be accessing the Enscribe database, and you can be loading the *NonStop* SQL database in the background—all at the same time. Escort Journaling watches the application the whole time and captures every change to the Enscribe database. Once the background load is complete, Escort Journaling applies the changes to the new *NonStop* SQL database; once those are caught up, the applications are stopped briefly, pointed to the new *NonStop* SQL database, and restarted.

“We’ve had customers replace their entire database with only a couple minutes of downtime,” asserted Scott. “Some customers can’t afford hours of system downtime to convert their database from Enscribe to *NonStop* SQL. We can completely transform their database, and they can stay live throughout the process.”

Escort RANGER is just as magical in its own way. “As applications run, the database tends to get out of balance. In order to get the true benefit of *NonStop* system parallelism and scalability, part of normal maintenance includes occasional repartitioning of the database across multiple disk drives and processors,” explained Scott. “Customers tell us that it can take two or three hours *per file* to figure out how to do this manually. With Escort RANGER, one customer recently performed this repartitioning analysis of a multigigabyte file in just six seconds.”

Foiling disasters

On the disaster protection/business continuity side, Carr Scott’s portfolio includes two products, Escort AutoTMF and Escort AutoSYNC. (These products are also sold and supported by Compaq as *NonStop* AutoTMF and *NonStop* AutoSYNC. Compaq also offers *NonStop*

Escort SQL: Enscribe to NonStop SQL magic

Escort SQL from Carr Scott Software converts Enscribe applications and files to the industry-standard NonStop SQL relational database without requiring any change to existing programs; no source code changes or even recompiles are necessary. Users get all the benefits of a manual conversion to SQL without the extra work, time, or risk involved in that time-consuming approach.

"In many cases, Enscribe files were not designed to be the 'clean,' normalized databases businesses would prefer to have," noted Harry Scott, cofounder of Carr Scott Software. "Escort SQL provides a second chance to change existing files during the conversion to SQL—for example, users can expand or eliminate fields, reformat compressed data, and normalize variants. The end result is NonStop SQL tables that are designed to support our customers' business now and into the future."

Transaction Management Facility software—or *NonStop* TMF—as a core element of the *NonStop Himalaya* architecture.)

AutoTMF and AutoSYNC came from a close collaboration between Carr Scott and Compaq, and their joint desire to solve customers' business problems. One such problem was that, in the past, nonaudited files made it impossible for customers to use Compaq Remote Database Facility (RDF) as part of their business continuity plan. "Applications had to use *NonStop* TMF in order to use RDF, and about half the applications written for *NonStop Himalaya* systems didn't include 'begin' and 'end' *NonStop* TMF transaction calls," noted Scott. "The bottom line was, if *NonStop* system users were not using *NonStop* TMF audited files, they couldn't use RDF."

Carr Scott doesn't know the meaning of *can't*, so the company stepped right up to the challenge. "The question was—and it had been on the table for a long time—how do we protect those nonaudited applications?" Scott recalled. "We found that we could use our intercept technology to watch the programs and automatically begin and end the transactions on behalf of the program. If you're using RDF or another replication tool, it can pick up the *NonStop* TMF audit trail and replicate it to the backup. Now you have disaster protection. That's what AutoTMF does, in conjunction with the other tools."

Interestingly, AutoTMF (and *NonStop* TMF software) provides more than just disaster protection benefits. "It's a surprise to many *NonStop Himalaya* system users to learn that performance generally

increases with *NonStop* TMF," said Scott. "When the product first came out 15 or 20 years ago, it slowed down applications. But now you actually get performance 'kickers' by using *NonStop* TMF. In some cases, we've seen application performance increase by as much as 80 percent when *NonStop* TMF is used to audit the files."

Escort AutoSYNC rounds out the portfolio. "I mentioned what RDF does for replicating databases," continued Scott. "But if you're concerned about disaster protection, how do you ensure that you have everything on your backup machines that's required to run your business in the event of a disaster? Having an exact copy of your database is wonderful. But if you don't have all the other pieces, you're still down." AutoSYNC watches all those other non-database files—edit files, object files, source files, setup files—and replicates them to the backup system when anything changes.

Convincing people that these products could really perform as advertised has been a challenge. "People say, 'That's too good to be true. You can't really do that with my real applications.' But with well over 100 customers using Carr Scott technology, it's obvious that our products are for real," concluded Scott. "And they're made for the biggest, baddest server on the planet: the *NonStop Himalaya* system." ■

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