

# Double-Take® Availability™ Case Study

## Sylectus



### Testimonial

*"It's been a great solution for us. After we installed it we were able to forget about it. All of the time savings and reduction in overtime that it's enabled has been amazing."*

- Jim Lemire, Senior Systems Support Manager



### Critical Issue

Marketing literature for many software infrastructure products say something to the effect of, "works with all of the most common databases." Pervasive, the database that Sylectus uses, is not one of the most common databases. Consequently, most disaster recovery/high availability products don't work with it. Pervasive offers a replication tool, but Sylectus had performance and technical issues with it. As a result, the company needed another solution.

Pervasive has its own replication tool that allows organizations to protect their data and operational uptime by replicating data to a second system in real time. Sylectus used this tool, but it encountered a number of problems with it. For one, the tool locked tables and, consequently, blocked replication, while creating considerable grief in the production environment. In addition to causing production performance problems, the tool also consumed substantial bandwidth.



### Business Challenge

Good business practice dictates that organizations protect their applications and data from downtime and loss due to disasters, technology failures and just normal system maintenance. This is especially true for Sylectus. It provides web-based trucking management software services to its more than 900 customers, which, in total, operate more than 16,000 trucks. If Sylectus' applications or data were unavailable, those customers would find it difficult to manage their fleets.

Data protection and system uptime are, therefore, paramount for Sylectus.

Sylectus runs its business using Pervasive databases. Because Pervasive has a far smaller customer base than some of the other Windows-based databases, most high availability/disaster recovery products don't support it.

#### Company Name:

Sylectus, an Omnitracs LLC subsidiary

#### Headquarters:

Woodhaven, MI, USA and Windsor, ON, Canada

#### Industry:

Trucking software

#### Business Environment:

- Established: 2001
- Customers: >900, with 16,000 trucks
- Provides a protected wealth-creation network for managing in the New Trucking Economy
- Operates over the web

#### Implementation Team:

Sylectus and Goldstar Software



## Solution

After reading a case study about another Pervasive shop that was using it and speaking with one of its primary technology suppliers, Goldstar Software, Sylectus determined that Double-Take Availability was exactly the solution it needed.

Double-Take Availability replicates Sylectus' production applications, system settings and data, including data in the Pervasive databases, from a server farm containing 13 servers to two sites in real time. One site is active and the other is passive.

The active site provides a means to offload some work from the production system. Users can log into it and perform queries, without the need for additional configuration. Shifting queries to the live backup reduces the load and, thereby, improves performance on the production system.

The passive replica serves as a disaster recovery site. Some configuration would be required before users could switch to it, but that would not take long. In fact, tests prove that a failover can be completed in less than five minutes. As a result, should the primary site become unavailable for any reason, operations can be switched to the passive backup site very quickly. If that were to happen, data would continue to be replicated from the new production site to the active backup in real time.

Another benefit of Double-Take Availability is that, unlike the Pervasive replication tool, it sips, rather than gulps bandwidth. Double-Take Availability replicates byte-level data changes, rather than copying whole files or blocks when only a small amount of the data in them has changed. In addition, it can compress data before transmitting it.

Sylectus can also set up new replica sites much faster than it could in the past. Using the Pervasive tool, the initial replication took at least eight hours, and sometimes as long as 24 hours.

With Double-Take Availability, the initial replication generally takes two to three hours. And, because it is done in the background, users continue working as usual during that time.

Ease of use is another Double-Take Availability advantage. "For us, it's been pretty much install it, monitor it and leave it alone," reported Jim Lemire, Senior Systems Support Manager. "And we've had none of the maintenance downtime that we had in the past."

That set-it-and-forget-it attribute extends to database changes. Sylectus frequently modifies its database schema. In the past, it took IT about five minutes to change the schema, but about an hour and a half to change the Pervasive replication. In contrast, with Double-Take Availability, "It's just files in a folder," said Lemire. "If I change or add a new table, it just copies that stuff over. There's no additional work to change the replication."



## Results

- Fully protects Pervasive and other databases
- Provides a scalable solution
- Minimizes bandwidth requirements
- Cut time to perform initial sync by about 75%, and almost 90% in some cases
- Improves performance on the production system
- Requires no ongoing support



## Technologies

### Software:

- Double-Take Availability
- Windows Server 2008 R2

### Hardware:

- IBM blade servers



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