



JULY 28, 2011

SEMICONDUCTOR COMPANY REDUCES DATABASE PROVISIONING TIME 99% WITH TRACE3 AND DELPHIX

Consolidate. Instantly Provision. Maximize Performance.

BENEFITS

99% reduction in database refresh time (15 minutes vs. 5 days)

98% less storage capacity required (45:1 consolidation ratio)

Simplified, 3-step provisioning process

SAP application administrators can perform refreshes themselves

Virtual databases have usability parity with physical databases

Role-based access control

Supports Oracle de-duplication

Projected payback in 1.9 months

Utilizes Oracle API's for synchronization and replication

Compliments Data Guard to provide DR capabilities

RESULTS

The proof of concept demonstrated a 99% reduction in database refresh time (15 minutes vs. 5 days), with 98% less storage capacity required—a 45:1 total consolidation ratio. Database consolidation ratios were 302:1. The Delphix implementation is currently underway, which will allow the company to:

- Sync via standard APIs
- Provision and refresh from any time or SCN
- Shrink with block-aware compression and filtering
- Sync daily or within seconds via log shipping by policy

“After their SAP administrator provisioned a 7.2 terabyte database in 15 minutes with no assistance from the storage group, UNIX group, DBAs, or backup/restore, they really understood the full value of the Delphix solution.”

PAUL MONTOYA - Professional Services Architect
Trace3

Every once in a while, a technology comes along that addresses our customers' pain points so thoroughly that it pretty much sells itself. What if you could promise customers a solution that would allow them to provision full copies of multi-terabyte databases in minutes, with no impact to production, while achieving a huge consolidation of the underlying storage?

No doubt you've heard of server virtualization, the foundation of private cloud computing. It's an easy sale: buy less hardware, provision resources faster, and reduce costs. Database virtualization offers those same benefits to customers that routinely work with large data sets, especially in dev/test environments. Right now, that technology is exclusively the domain of Delphix, a Trace3 technology partner.

Just a few years ago, many customers were reluctant to virtualize their servers because the technology was viewed by many as not ready for production. Today, virtual machines are ubiquitous. Showing customers the benefits of database virtualization now will not only generate sales, it will also build loyalty to Trace3, giving our customers confidence that we stay on the leading edge.

The featured case study explains how Trace3 worked closely with a semiconductor customer to embrace database virtualization. A successful proof of concept resulted in a 99% reduction in database refresh time—from 5 days to 15 minutes—while yielding a 45:1 storage consolidation ratio, for a projected payback of 1.9 months.

“Delphix will provide our customer with real time access to multiple copies of critical business applications, whereby enabling them to do more testing in less time. It will also help them solve some of their biggest operational problems of rapidly growing storage, replication/DR and backup requirements.”

JEFF POLLARD - Senior Account Manager
Trace3

DELPHIX VIRTUALIZES DATABASE INFRASTRUCTURE TO PROVIDE COMPLETE, FULLY FUNCTIONAL DATABASES THAT OPERATE IN 1/10TH THE SPACE, WITH IMPROVED AGILITY, MANAGEABILITY, AND PERFORMANCE

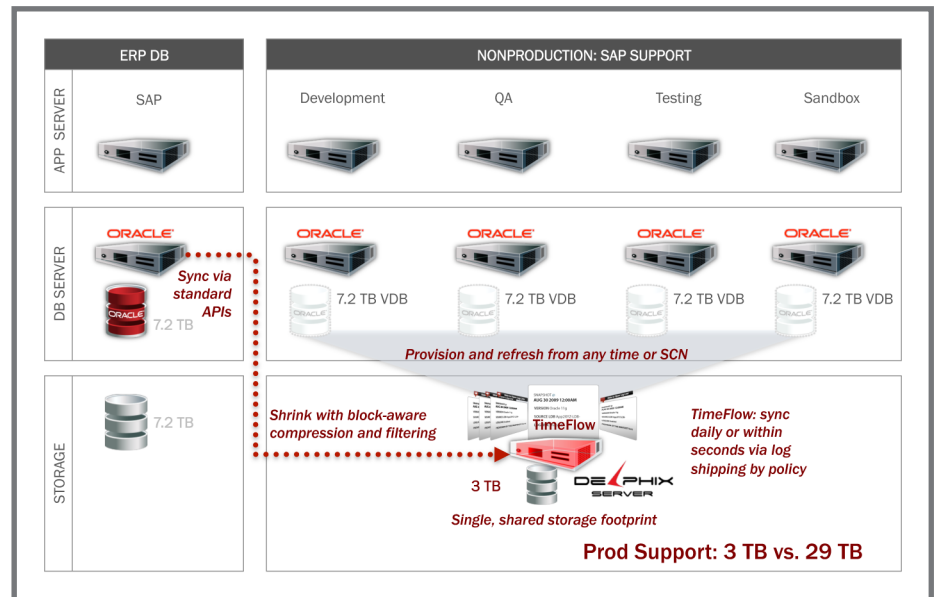
Competition for market share is intense in the semiconductor industry. Development and testing cycles are directly linked to profitability, since customers are always demanding more advanced chips on which to base their own products.

When those dev/test cycles involve large databases—which they often do—accommodating and accelerating the

Delphix addresses this business challenge so well that this particular Trace3 customer—which was already using thin-provisioned, cloned volumes—couldn’t say no.

Challenge

A heavy global user of Oracle/SAP ERP and SRM applications with 75% of its overall storage capacity in non-production, the customer wanted to



process has traditionally been a challenge for IT. Although technologies exist to ease the pain, such as thin-provisioned clones, many companies still struggle with copying huge databases back and forth. This takes time and money in the form of staff and storage resources.

reduce the storage investment required to support business projects. It also wanted to accelerate development and testing cycles, and enable IT staff to focus on high-value strategic projects by reducing time spent on tactical activities.

Operational challenges included slow database refreshes (3-5 days) due to manual processes and involvement of multiple groups, including UNIX, storage, DBAs, SAP. Because the company's use of SAP is expanding, requests for database provisioning and refreshes came in on a weekly basis. Dev/test teams wanted the ability to recover databases from any point in time, rather than being restricted to the last time a snapshot was taken. They also wanted to have independent environments to reduce risk and improve agility.

High rates of data growth—around 300 gigabytes a month for the ERP system alone—continued to impact database provisioning times, threatening to slow dev/test cycles.

Solution

The company asked Trace3 if a database virtualization solution could help solve these problems. They were skeptical of the technology, as they considered it to be new and not yet proven. However, the prospect of reducing storage costs was compelling enough for them to allow Trace3 to conduct a proof of concept with Delphix.

Trace3 showed the customer how the Delphix solution could provide fast time to value by removing the need to make and move multiple copies of databases. Instead, a single, virtual authority stays synchronized with production, allowing all downstream database copies to be served from a single, shared storage footprint. Not only does Delphix provide space-efficient cloning at the storage level, it also orchestrates tasks that formerly required a database

administrator to perform. The results are less redundant infrastructure, less complexity, and less operational time.

“At first, the customer was mostly interested in the storage savings,” says Paul Montoya, professional service architect with Trace3. “But after their SAP administrator provisioned a 7.2 terabyte database in 15 minutes, in just three steps, with no assistance from the storage group, UNIX group, DBAs, or backup/restore, they really understood the full value of the Delphix solution.”

Databases can be provisioned from any point in time, giving developers more agility and more granular access to data sets. What's more, much in the way that a hypervisor manages virtual server resources and allocates processing power or memory to hungrier workloads, Delphix can manage storage resources to give priority to certain databases. Virtual databases have usability parity with physical databases, support role-based access control, and are Oracle deduplication-friendly.

Results

The proof of concept demonstrated a 99% reduction in database refresh time (15 minutes vs. 5 days), with 98% less storage capacity required—a 45:1 total consolidation ratio. Database consolidation ratios were 302:1. The Delphix implementation is currently underway, which will allow the company to:

- Sync via standard APIs
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“Delphix will change the lives of our customers' database administrators, allowing them to be much more strategic,” concludes Jeff Pollard, Senior Account Manager, Trace3. “Delphix will provide our customer with real time access to multiple copies of critical business applications, whereby enabling them to do more testing in less time. It will also help them solve some of their biggest operational problems of rapidly growing storage, replication/DR and backup requirements.”

ROI Projections

	YEAR 1	YEAR 2	YEAR 3	TOTAL
CAPEX	\$365,531	\$365,531	\$365,531	\$1,096,594
OPEX	\$10,385	\$10,385	\$10,385	\$31,154
Delphix	\$46,000	\$46,000	\$46,000	\$137,999
Total Savings	\$329,916	\$329,916	\$329,916	\$989,749
Payback (Months)	1.9			

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