

## Oracle Project ushers in new era of global utility solutions

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Published in GE's Technically Speaking  
1 June 2007

*A penny saved is a penny earned. He who hesitates is lost. You can't teach an old dog new tricks. If it ain't broke, don't fix it.*

While for the most part these sayings ring true, it seems that GE Energy has not completely embraced the "if it ain't broke" concept. The company is introducing new products based directly on Oracle platforms in addition to its own Smallworld GIS platform, which is recognized as a leader in the industry. Oracle Spatial now provides much of the core geospatial functionality of traditional GIS packages, including the Smallworld platform, so GE made the decision to offer applications directly on Oracle in addition to those based on the Smallworld suite.

While most companies would have been satisfied with the level of success it had with the Smallworld platform, GE Energy wanted to reach an unprecedented level of performance in providing geospatial tools to the utility industry.

"This is a new approach to geospatial computing," says John Eason, director of global utility solutions for GE Energy's geospatial software business.

### **The move to Oracle**

For GE Energy, breaking new ground in the geospatial world is nothing new. More than a decade ago, the company introduced the Smallworld GIS system to address the inadequacies that existed with GIS technology at the time. When it was introduced, the Smallworld platform was the only solution capable of meeting the demands of utility companies deploying complex GIS-based applications to hundreds of people across the enterprise. The Smallworld suite is one of the leading GIS applications used in the management of complex utility and telecommunications networks, and its core architecture is recognized as the most powerful on the market.

But even with all the success of the Smallworld products, GE felt that the future requirements of its clients would require the company to completely rethink its approach to developing geospatial applications.

"The market has built up around a few companies that have all used the layered GIS approach," explains Eason. "What we are doing is completely changing that model. We are

building new applications that are unique in the marketplace: geospatial applications squarely aligned with the CIO's IT strategy."

GE Energy's move toward building applications directly on Oracle is certainly revolutionary, but it's also a logical continuation of the technology platform shift away from the GIS-centric applications to a more open enterprise environment. This new direction by GE is indicative of a more subtle, long-term change in the use of enterprise geospatial technology.

### **Benefits of an Oracle approach**

There are a number of significant benefits as GE develops applications directly on Oracle Spatial. This approach is much more efficient and cost-effective because it leverages the utility's existing data management platform and negates the need for an additional GIS layer that adds cost and complexity.

Eason says that one of the huge advantages of this approach is how effectively it allows utilities to leverage the Oracle technology stack and address the needs of engineering and operational business processes.

Oracle-based applications also use open standards and common programming languages, such as Java, which will make it easier for third-party applications to build upon what GE Energy develops. In addition, the Oracle solution takes advantage of Oracle's market-leading IT standards for open relational databases.

### **Continuing industry-specific solutions**

While competitors have been adding modules and interfaces in an effort to emulate the capabilities of the Smallworld suite, GE Energy built integrated applications based on its original core architecture.

GE Energy led the way by developing an off-the-shelf suite of communications software that could be applied to business problems of its customers. This trend continued with the recent introduction of GE Energy's Office Suite applications for gas distribution and pipeline. The Oracle-based applications follow this same principle.

The first applications will be designed specifically to meet the needs of the mid-sized North American electric distribution market. In many cases, the same applications will be developed on the new platform as well as on the Smallworld application.

"This will make the transition from one platform to another much easier," notes Eason, "and ensure that our customers' investment in our applications is protected."

Since its inception, GE Energy has focused on building high-performance, scalable GIS software that could be applied to different disciplines. That started with the development of the Smallworld products and has led to the Oracle project.

"We will continue to follow that proven model," says Eason.

With the Oracle project, GE Energy will be developing product lines specific to one domain, such as the electric and telecommunications industries, gas distribution, gas pipeline, electric transmission, and refineries. Eason says this trend in geospatial technology has been evolving in recent years. The first new integrated Oracle product will be available sometime around the end of this year, and will be aimed at mid-sized electric utility companies.

### **Smallworld's future**

GE Energy has made it very clear it will continue development and support of the Smallworld platform.

"We have absolutely no plans to retire the Smallworld product line," Eason confirms, adding that GE will continue to provide support and upgrades for Smallworld technology - as well as new applications built on the Smallworld platform - for the foreseeable future.

However, for Smallworld customers who decide to migrate to its Oracle-based products, the transition will be supported through GE's Smallworld Office Suites, which will provide the same level of capability as the domain-specific products on Oracle, as well as tools and support to perform the migration.

"When customers are ready to move, it will be entirely an IT decision because there will be 'functional equivalence' between the two platforms," Eason says. "Our customers will not have to give up any of the rich functionality that made Smallworld a market leader.

"We have tried very hard to make sure our customers are comfortable with the decision," he continues. "They can stay with Smallworld or make the change to the Oracle product. GE and its business partners will continue to develop applications on Smallworld, and there have been absolutely no discussions about ending Smallworld development."

### **Too good to be true?**

Another popular saying is "If it sounds too good to be true, it probably is." The idea of developing software applications that are simple, easy to use, affordable and yet extremely robust may fit the "sounds too good to be true" category, yet that is exactly what GE Energy is doing with the Oracle applications.

Because GE Energy is one of the world's leading suppliers of power generation and energy delivery technologies, with 2006 revenue of \$19 billion, the decisions the company makes has a significant impact on the utility industry. GE Energy and other companies have used Oracle databases in their applications for years, but not in the way GE is currently proposing.

"We wanted to do something different than the rest of the market, and to do this, we needed direct help from Oracle," Eason says.

Because this is such a fundamental change in how business was done, GE spent several years developing the strategy. Eason predicts that over the next five years or so, most of the major players in the utility industry will follow GE's lead and move toward working directly with Oracle Spatial.

While other companies try to catch up, GE Energy's commitment to the Oracle project suggests that the company may have a problem with sayings such as "if it ain't broke," but it has wholeheartedly embraced the credo of "Never innovate to compete; innovate to change the rules of the game."

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