

WHITE PAPER

Enabling Partner Success: Independent Software Vendors Leveraging Oracle Grid-SOA Offerings

Sponsored by: Oracle Corporation

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PARTNER VALUE PROPOSITION

The combination of Oracle's grid and service oriented architecture (SOA) technologies and initiatives, coupled with the Oracle PartnerNetwork (OPN) program, is enabling the company to provide its independent software vendor (ISV) partners with the ability to deliver more flexible and scalable solutions and capture new market opportunities. The ISVs interviewed for this IDC White Paper worked with Oracle to help position and deploy Oracle 10g products along with their own software solutions to deliver competitive advantage that they felt included:

- ☒ Ability to offer customers a lower cost of entry or total cost of ownership (TCO) by providing solutions that require less costly server and storage resources and are configured to work with industry-standard hardware
- ☒ Flexibility for customers to scale systems up or down depending on their system demands
- ☒ Providing solutions that reduce system complexity and support for their customers and for their own hosted offerings through virtualization capabilities and management tools
- ☒ Improved system quality, reliability, and availability — a foundation for improved service-level agreements (SLAs) for their customers
- ☒ Increased agility to respond to business changes and market opportunities, accelerating delivery for "faster time to market" of new capabilities and services
- ☒ Ability to address new customer size and industry segments requirements and to incrementally evolve offerings to market demand
- ☒ Offering standards-based solutions for future extension and interoperability as well as optimization of system and human resources

From a top-line perspective, the ISVs interviewed benefited from membership in OPN and participation in Oracle Grid and SOA Initiatives by gaining access to technical training and sales support that assisted them in developing and demonstrating the customer value of embedded Oracle 10g and grid-hosted solutions. These ISVs have developed close working relationships with Oracle and identified customers through joint marketing initiatives that have resulted in net-new business. They have also been able to capitalize on Oracle's brand recognition and market exposure, increasing their overall technology value proposition.

In addition, the Oracle technology, according to the ISVs interviewed, has provided them with solutions that deliver value to customers through reductions in overall complexity and cost while increasing productivity. Their experiences indicated that the Oracle Grid and SOA technologies helped them to maximize server and storage capacity, provide high availability of system resources, and deliver uninterrupted service during upgrades and maintenance. Oracle's standards-based technology also contributes to customer confidence and acceptance rates, according to the Oracle ISV partners.

The ISVs interviewed also experienced key business benefits both from their relationships with Oracle and from Oracle 10g technologies that helped to identify and drive leads and accelerate their ability to win key projects and enter new markets. According to the ISVs, these benefits, combined with Oracle guidance to help incorporate functionality and plan their product life cycles, position them to better resource and develop their future business opportunities. In addition, the ability to provide hosted grid solutions has enabled some ISVs to deliver services to customers in an efficient and cost-effective way.

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THE PRESSURE TO PERFORM

Embracing Change for Opportunity

Organizations today are under pressure to adjust rapidly to meet changing business requirements with fewer resources. Factors such as economic volatility, regulatory responsibilities, and global supply chains and competition are influencing organizations to adopt new processes or enhance existing ones. These factors all require reliable, highly integrated systems that ensure accurate and timely automation and access to vast stores of information. Achieving such aims, however, is not an easy feat. Most enterprises have amassed an assortment of systems over time, and built on a variety of vendors' products and generations of technology, as a result, such efforts in the past have been challenging and costly.

Most enterprises realize that they need to become much more strategic in how they build and deploy applications. As processing requirements change and new stakeholders are brought on board, business systems need to readily adapt and scale. The marketplace is beginning to pay closer attention to system architecture best practices and taking a longer-term vision of treating IT environments in a more holistic fashion. These trends are creating opportunities for vendors such as Oracle and its ISV business partners to leverage their offerings to help enterprises build more efficient solutions and take better advantage of their existing IT assets.

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To gain some of the necessary degrees of flexibility and control, many organizations have opted to pursue a three-pronged strategy to centralize, modularize, and standardize their IT systems. By creating sets of common infrastructure, data, and application services, organizations hope to optimize system assets, dynamically calling on and allocating each as needed. The growing emphasis of SOA and grid technologies in the greater vendor community is also helping to drive companies to take a hard look at their existing IT environments and future road maps. Ensuring appropriate provisioning, access, monitoring, management, capacity balancing, and backup across such distributed environments is taxing, and enterprises will require more advanced approaches and technologies to address these demands. These organizations will be doing this with keen attention to TCO, leveraging low-cost system alternatives and flexible licensing arrangements from their IT suppliers.

Oracle views its partners as crucial in driving grid and SOA solution deployment and is providing them with appropriate tools and resources to enable these efforts. ISVs, systems integrators (SIs), value-added resellers (VARs), and other solution providers are in an ideal position to better understand specific customer pain points and educate customers about what is available in the market to help them make critical technology decisions and address their customized needs. Oracle has launched initiatives that provide sales and marketing, technical resources, and tools that are explicitly geared to helping its partner community take advantage of the latest capabilities in its Oracle Fusion Architecture, Oracle Fusion Middleware, and Oracle Database software for SOA and grid activities.

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Based on interviews highlighted in this IDC White Paper, IDC has observed that ISV partners that have participated in these programs have been able to identify leads, close business, and create for themselves differentiating value propositions to build business. Gaining experience and reference cases in these emerging solutions areas is crucial in this highly competitive software and services vendor marketplace, but it is also important to building overall market confidence to take further advantage of these computing approaches.

Market Momentum for Service Oriented Architecture

For years, the IT industry has been advancing network infrastructure capabilities that allow for greater levels of communication within and outside the enterprise. Following suit, applications are moving away from discrete container-centric environments to more logical constructs that take advantage of the power of the network. What might appear to some as counterintuitive to simplifying and consolidating systems is the market migration to further levels of application fragmentation within an SOA environment. Although each service may be more easily created, reused, and maintained, added complexities in state management, dynamic mediation and aggregation, and computing support will result. Web services standards-based technologies are being developed to make it easier to integrate and manage service-based systems, and complementary trends in virtual processing software and grid computing are gearing up to help balance underlying system computing capacity with dexterity and efficiency. They are all critical components of a dynamic IT environment.

Many organizations typically consider where manual efforts can be eliminated and target opportunities for greater levels of integration and optimization across an overall process. Such automation can translate into greater efficiencies and labor savings, along with better risk management, by avoiding potentially costly errors. Building solutions based on SOA, combined with leveraging system virtualization technology, should isolate explicit service and application functionality from any particular operating system or physical environment — allowing greater levels of choice and autonomy, as well as dexterity to add or delete processes. In addition to cost savings by eliminating redundant systems and in particular ongoing change management efforts, some of the largest benefits for businesses from SOA are in the form of decreased time-to-market differentiation, increased levels of information exchange and collaboration across value chains, and optimized leveraging of external resources.

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SOA can open doors to more flexible sourcing scenarios and technology access models. Although additional challenges exist in managing, monitoring, and securing a service-based environment, by implementing a policy-driven system with abstracted capabilities to handle these needs, organizations can provide more detailed control and governance across the IT landscape. If such a system is implemented with care, the ability to enforce business, fiscal, and regulatory policy compliance can be supported via both centralized and federated SOA (and information grid) models. The ability to pull information across the environment for enhanced decision support, and eventually integrated into real-time processes as needed, is another key goal.

Large enterprises and those with complex, heterogeneous environments have been the first to actively pursue SOA. However, interest and activity have been building across the entire market, with more than 30% of enterprises recently surveyed by IDC indicating that they are already at some stage of adopting some form of SOA, whether a discrete solution or at an intended enterprise scale. Even more are or will be working with Web services technologies in general. The initial wave of first movers has been concentrated in the financial and communications sectors, high-tech manufacturing, and federal government, but growing interest and adoption span multiple industries and size classes.

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According to IDC, by the end of 2006, the total worldwide SOA-driven software spending opportunity should reach \$2.3 billion and is expected to grow to nearly \$9 billion by the end of 2009. Most enterprises anticipate expanding their SOA environments in an evolutionary manner over multiple years, and the momentum of growth is expected to be propelled as more ISVs introduce service-compliant applications into the marketplace in the later part of the decade and beyond.

Given in part the many planning and transformation activities often associated with enterprises pursuing strategic SOA initiatives, the total SOA external services opportunity is dramatically larger than that of software; it is forecast to reach \$8.6 billion by the end of 2006 and aggressively expand to a tremendous \$29 billion by the end of 2009. SOA external services spans multiple areas within consulting, systems development and integration, and outsourcing.

One of the most important considerations when examining the adoption of SOA is the benefit it naturally brings to the ISV community itself. As the market has matured and environments have become more complex, it has become more difficult to prompt customers to upgrade and add more technologies to the mix. With SOA constructs, ISVs are looking not only to gain their own efficiencies in development and life-cycle management but also to position themselves to more flexibly address future customer requirements and access models. In turn, customers are also looking to the IT community to address their interoperability concerns by providing more standardized technologies and unified solutions. By adopting such key standards and protocols, ISVs are finding new ways not only to package their own solutions but also to creatively bundle their technologies with those of their partners to go to market with differentiated packages.

The Potential of Grid Computing

Two of the key IT goals prompting the building interest in applying virtualization and grid computing are to obtain value from taking full advantage of systems underlying capacities and to effectively leverage, traverse, and manage heterogeneous environments. Enterprises hope to gain added flexibility and value by pooling system hardware assets and system infrastructure software assets as shared resources across multiple domains. They also need to achieve more consistent availability to address unexpected workload volatility and only scale out capacity as needed.

According to IDC research, grids hold significant potential in the marketplace, especially as the technology becomes more broadly applied to commercial datacenters. However, much education needs to still take place in the market regarding what such environments entail.

Virtual processing software ranges from virtual machine software that is designed to make a single system appear to be many systems, each supporting its own operating environment, to single-system image clustering software, which makes many systems appear to be a single computing resource running a single operating environment. This category also includes parallel processing software, load-balancing software, and data and application availability software.

There are also many ways to look at the grid market today. One approach is to divide the market into three types of grids, based on end use: compute grids that focus on computational power allocation, optimization grids that focus on high-level productivity and cost efficiency, and data grids that focus on optimization and compute power for information-centric concerns. Vendors, such as Oracle, also refer to the term "Enterprise Grids" to reflect a more comprehensive datacenter utilization of such technologies versus a limited set addressed solely within point solutions.

Highly synergistic with the concepts of SOA, the goal of these varying forms of grid-based approaches is to leverage common interfaces. These interfaces are always accessible and available and can dynamically manage and provision enterprise-scale infrastructure services. Grid computing typically makes IT resources available by networking them together with management or provisioning software, allowing an application to draw on processing, data storage, or other resources on an as-needed basis. As new application and system access and ownership models have emerged

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in the IT industry to promote hosted and utility-based models, the concepts of sharing and dispersing resources in a demand-driven manner are gaining tremendous mindshare. Another factor driving recent interest in leveraging grid computing in particular is the growing availability of hardware and software technology to support such environments.

According to recent IDC research, healthy interest exists in organizations of all types and sizes to leverage grid computing and virtualization technologies, with over a third of the sample reporting to be either in production or in pilot stages in some form. An interesting dimension to these findings was also the relatively high propensity of these study respondents to indicate the likelihood of reaching out and engaging external services providers for consulting related to these initiatives. In 2005, IDC estimated that grid and cluster technologies would help drive \$5 billion in server hardware spending by 2009, along with another potential \$5 billion in related investment for attached storage, networks, software, and services.

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Enterprises are consumed with mitigating risk, especially when it comes to making IT decisions. They want minimal disruption to their environments, and they are in a catch-22 regarding when to take the plunge and adopt new or upgraded technology. ISVs are under pressure to help organizations simplify their systems and guarantee reliable performance. According to IDC research, the software industry needs to address customer concerns regarding quality and consistency. By adopting grid constructs and preparing solutions that can be more flexibly managed and supported, ISVs can begin to address some of these fundamental concerns.

Another interesting dimension to consider is that CIOs and business executives alike prefer to work with vendors that stay involved with them on an ongoing basis and help them work through issues. By leveraging grid management techniques and technologies, ISVs and other solution providers can play a more active role in helping their customers manage their systems and solutions, whether to help solve problems or get more involved with proactive planning and ongoing maintenance.

ORACLE'S GRID AND SOA STRATEGY

Oracle Grid and SOA Offerings

Oracle's comprehensive product reach, from its applications down through many layers of the infrastructure, places the company in an optimal position to add value to its partners' software and service offerings on many fronts. The company continues to commit significant resources to evolve its offerings to address the architectural demands presented by SOA and to optimize its infrastructure software to run on and facilitate managing a grid-based environment. A variety of acquisitions and licensing arrangements has helped Oracle further extend its SOA portfolio and Web services support, and the company is active in promoting and implementing core and emerging technology and industry-level standards.

Oracle's recommended strategy for its customers and partners for business infrastructure is to standardize, consolidate, and automate. To aid in these goals, Oracle intends to provide a unified infrastructure platform in 2007, targeting greater levels of interoperability and bundled configurations.

The Oracle Fusion Middleware portfolio, with its Oracle Application Server 10g as a critical deployment foundation, offers a suite of products for integration and event processing, strategic business process modeling and execution, identity management, business activity monitoring and business intelligence, portal infrastructure, business rules and traditional development tooling, Web services management, and dedicated edge processing for applications such as RFID.

From the applications dimension, the Oracle E-Business Suite (EBS) has already been exposed as Web services. Other Oracle applications, including PeopleSoft, JD Edwards, and Retek, are in the process of being SOA-enabled. In the future, these offerings will be further configured and supported by Oracle Fusion Middleware to take advantage of a standards-based infrastructure. By doing so, Oracle is positioning to more easily extend its application environment to integrate with third-party applications and technology.

In 2003, Oracle announced the launch of Oracle Application Server 10g, Oracle Database 10g, and Oracle Enterprise Manager 10g as a complementary family of products targeted at providing a foundation for grid computing and SOA. Together these technologies are targeted at enabling pools of information and data resources to be shared across multiple applications and physical machines. The value is to configure and optimize computing capacity and storage as needed by shifting resources, managing provisioning, and automating failover.

Oracle's grid infrastructure is designed to provide asset management services, with virtualization capabilities, dynamic provisioning, resource pooling, automated tuning, and unified management across layers of the computing stack (databases, application servers, storage, and applications). Oracle Enterprise Manager is positioned as a centralized framework with a user dashboard through which administrators can monitor and manage Oracle database, application server, and underlying storage and operating system resources, with plug-ins for third-party technologies. Specific vendor systems management capabilities are meant to be leveraged and augmented by Oracle Enterprise Manager rather than replaced. The premise behind Oracle's strategy is to utilize a common, central database repository for pan-system capture and control.

Oracle's data grid strategy builds on the company's Oracle Real Application Clusters (RAC) technology, which runs on symmetric multiprocessors (SMPs), as well as commodity servers including blades, and supports multiple databases and multiple applications, which are not dedicated to individual servers. With its Oracle Database 10g release, the company extended capabilities in dynamic provisioning of resources (storage, servers, and data) and policy-based automated workload management. These capabilities provide for mixed application workloads to be managed proactively in a single cluster. To address storage grid requirements, Oracle includes Automatic Storage Management (ASM) as a feature of this offering.

Specific products within the Oracle SOA Suite, which is part of the Oracle Fusion Middleware portfolio, include Oracle BPEL Process Manager, Oracle Business Activity Monitoring, Oracle Web Services Manager, Oracle Enterprise Service Bus, and Oracle Business Rules.

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Standards Support

Enterprises are looking to vendors to address the many complexities surrounding interoperability between systems; thus, support of standards is an extremely critical issue. Many organizations are creating policies around what standards to uphold and adopt, and they will often mandate that their IT providers prove adherence to specific protocols. Most will want their ISVs and SIs to address those standards that are likely to emerge as market standards. Vendors should also consider supporting the many industry-specific schemas and communications protocols gaining traction in specific segments of the market.

Oracle has a stated commitment to building standards-based software to help its customers reduce complexity and get the most of their existing technology investments. Oracle has traditionally been a leading proponent of standards such as Java. Today the Oracle 10g family of software is based on leading industry standards such as XML and Web services. In addition, the company is actively involved in key standards bodies such as the Web Services Interoperability Organization (WS-I), World Wide Web Consortium (W3C), Organization for the Advancement of Structured Information Standards (OASIS), and Liberty Alliance. With its growth, whether via acquisition or organic R&D efforts, Oracle has remained committed to support for current and emerging SOA and security standards.

Oracle is also a sponsor of the Global Grid Forum (GGF) and is a board member of the Enterprise Grid Alliance (EGA), a non-profit organization comprising vendors and customers chartered to develop enterprise grid computing solutions and drive grid adoption. The Web services and grid communities are converging to support like and complementary standards that focus on resource management interoperability, such as Web Services Resource Framework (WSRF) and Web Services Distributed Management (WSDM).

ORACLE: EMPOWERING PARTNERS

Oracle PartnerNetwork

Oracle has implemented specific enablement and go-to-market strategies based on its grid and SOA technologies to align with the needs of ISVs driving and delivering opportunities in this area. Key to this strategy is supporting partners in the areas of sales, marketing, and technical support and services, underpinned by Oracle PartnerNetwork. OPN is Oracle's framework for providing resources to its worldwide partner network and includes an information management portal, an interaction center, and access to benefits such as education and technical, marketing, and sales assistance.

Oracle's Grid and SOA Initiatives have one overarching goal: to drive partner return on investment (ROI). These strategic initiatives have been designed to help enable partners to successfully adopt, develop, and deploy grid and SOA solutions built on Oracle's software, according to the vendor. The goal is to help partners jump-start the use and deployment of the Oracle 10g family of software in solutions for early adopters of grid and SOA.

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These capabilities are in addition to Oracle's ongoing Application Integration Initiative to ensure that its partners' software complies with its integration methodologies, standards (e.g., XML, Web services, BPEL), and published APIs and to provide design and development assistance, validated integration, upgrade guidance, and training.

Partners committed to identifying, positioning, selling, deploying, and supporting grid and SOA solutions based on Oracle 10g technology can benefit from a direct link to Oracle's technical and business assets offered to initiative members. This link provides partners with access to resources, tools, and services that are designed to align with their needs within the enablement, sales, and deployment cycles of grid and SOA solutions. Partners are required to meet predefined criteria to be accepted into the initiatives and to maintain member status. More detailed information on these initiatives is available on the Oracle PartnerNetwork site under Oracle Grid Computing Initiative and Oracle SOA Initiative sections:

☒ Grid: www.oracle.com/partners/home/bi/global/grid/unauth/index.html

☒ SOA: www.oracle.com/partners/home/bi/global/ofm/unauth/index.html

In addition, OPN provides the framework by which all partners access the benefits based on their membership commitment. Benefits such as joint marketing and sales engagement activities, business strategy planning, and access to key Oracle personnel and technology road maps increase with the commitment of partners as defined at each OPN membership level. Membership ranges from Partner to Certified Partner and Certified Advantage Partner.

Kodak Health Group, Perfit Computer Systems, and System Access, profiled in the following pages, are only a few of the ISV partners that have participated in and benefited from a partnership built on the Oracle 10g technology, as well as the OPN program and its affiliated Grid and SOA Initiatives, to capture market opportunities. These ISVs and others have access to an array of benefits as OPN members and members of the Grid and SOA Initiatives to realize the market potential of those solutions. Partners in the initiatives are assisted in achieving their goals through membership privileges that include the following:

☒ Access to Oracle SOA- and Grid-specific product, technical, sales, and marketing resources and services

e.g., White Papers, customer presentations, sales kits, research reports

☒ Informational webinars; Online and instructor-led technical and sales training

☒ Technical enablement, migration assistance, and support

☒ Access to beta testing and pilot classes

☒ Participation in lead generation and awareness activities

☒ Exposure to Oracle field sales for increased partnering opportunities

PARTNER AND CUSTOMER CASE STUDIES

Case Study Methodology

IDC conducted telephone interviews with a selection of current Oracle ISVs. These ISVs were identified by Oracle. IDC developed a standard interview guide to facilitate the exploration of the ISVs' views and real-world experiences in adopting and implementing grid and SOA solutions. The Oracle ISVs provided the views into the customer case studies.

The Kodak Partner Experience

Kodak Health Group of Rochester, New York, develops workflow, patient care, and radiology solutions for the healthcare industry. Its new storage management platform for image and data consolidation and access, Versatile Intelligent Patient Archive (VIParchive), uses Oracle Database 10g with RAC as an embedded component of the solution.

The product, which was released in 2005, is being sold as a standalone and hosted solution, and the Health Group has made a concerted commitment to using Oracle technology to enhance its offering to meet the overall requirements of its customers. "Oracle is the database we leverage across our product portfolio because it's the database our customers prefer," said Ken Rosenfeld, worldwide business manager for information management solutions in the Health Group. "From an IT perspective, hospitals have certain expectations of product quality, and we've been leveraging Oracle for this reason."

Adopting the Oracle 10g platform as a major component of its Grid architecture has allowed Kodak to support its storage software for both large countrywide hospital systems and smaller regional centers, which has had a noticeable impact on its business. "10g was a big enabler in allowing us to scale down the solution to provide all its advantages to smaller customers. But we also have a unique offering in the market that is helping us win deals with some of the largest archives in the world," said Rosenfeld, adding that Scotland is deploying the solution across its many hospitals countrywide.

Embedding Oracle 10g in its solution provides a competitive advantage to the Kodak Health Group by providing a lighter overall footprint for the customer through reduced server requirements, according to Rosenfeld. "Competitive systems implementing Grid technology use more hardware power than VIParchive with 10g. The key advantage to our product in using 10g in a grid is lowering total cost of ownership because we can consolidate the storage requirements into one system," he said, adding that the most important benefits to customers are the three Cs: continuity, consolidation, and control, which lead to a decrease in hospital TCO.

Bringing these value propositions to bear through its grid solution has become a key selling point for the ISV, especially as customers begin to more clearly understand the benefits and make them written requirements. Rosenfeld cited Oracle's support for industry standards as an important driver in customer decisions: "We're leveraging a technology that is widely available, but not necessarily in the medical data market because no one is implementing such an industry standard-based solution — that's something that gives customers confidence in the solution," he said.

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VIParchive is the first of the Kodak Health Group's products to incorporate Oracle RAC 10g, which has been deployed at multiple customer sites and as a hosted offering with two live customers, providing access to information distributed across multiple storage sites, platforms, and architectures. "On day one of implementation, we have to be able to deliver all the hardware a customer is going to use for the next 10 years," said Rosenfeld. "The flexibility and scalability of 10g make it adaptable to increases in storage capacity requirements and the addition of new applications or other information sources."

From a business perspective, Kodak Health Group expects incremental revenue to be one of many overall benefits derived from providing a grid-based solution through partnership with Oracle. The ISV expects a minimum revenue increase of 25% directly attributable to its grid solution. "Oracle and 10g have enabled us to enter the market with a compelling offering, and now that we're marketing a grid-based solution, interest has started to increase, specifically for storage archival systems," said Rosenfeld, adding that the organization has 25 personnel trained on its grid-enabled solution and expects that number to increase as it begins conducting new deployments.

In its hosted solution, Kodak Health Group also finds grid to be an efficient architecture for the datacenter because it is able to leverage the same infrastructure for multiple customers. "We can start with a small configuration of hardware and grow it as needed, which is a cost savings to us while we're already recognizing revenue from the service we provide," said Rosenfeld, adding that the capabilities of Virtual Private Database (VPD) mean the company doesn't have to physically partition the database server, but rather can allow for virtual access controls across customers and multiple departments within a single customer.

Kodak Health Group Customer Case Study: Healthcare Services

Situation Overview

The customer is a large provider of hospital healthcare services to more than 50 hospitals in the United States and has annual revenue of approximately \$3 billion. One of the organization's biggest issues was being able to provide business continuity and disaster recovery for the digital medical data generated by its many hospitals and to lower its overall costs.

Kodak Health Group was challenged by the client to provide a solution that allowed for the easy addition or divestiture of a hospital. The data itself also had to be segregated for each hospital, but physically consolidated for economies of scale. "We had to have an easy way to give the data back to the hospital if there was a divestiture," said Rosenfeld.

The Solution

Kodak Health Group provided the client with its VIParchive Grid solution for the storage and archival of digital medical data that had Oracle RAC 10g embedded within it. Embedding that technology was key to providing a solution that was "extremely" reliable and easy to scale up and down, according to Rosenfeld. "The Oracle Grid technology provides load balancing and scalability of servers and storage without any downtime," he said, adding that VPD provided an easy mechanism for keeping each hospital's data logically separated.

Although the solution has yet to be fully deployed in the live environment, the fact that it can be deployed incrementally has led to high confidence with the client that the implementation will be a low-risk process, one of the issues the ISV had to overcome in winning the deal.

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The Perfit Partner Experience

Perfit Computer Systems Group Inc. of Toronto, Canada, is the developer of the EMDECS business system, a grid-enabled application suite on the Oracle 10g platform for the transportation and construction industry. The ISV, which has 18 employees, has implemented EMDECS in two grid solutions, using Oracle RAC and Oracle Enterprise Manager, and handles a growing customer base of over 1,000 users throughout North America, Europe, and Australia on its grid-based hosted solution.

Perfit has been an Oracle partner for 10 years and cites the relationship as one of the key reasons it has been able to gain a base of international customers for its application suite. According to Kenton Ho, Perfit's director of IT, Oracle's standards-based technology and its positive brand association have resulted in customers being more "confident" in the ISV's overall solution.

This trend is reflected not only in Perfit's geographic coverage but also in the size of customer it's able to attract. Being enabled on Oracle 10g Grid has increased the confidence of the ISV in positioning itself with larger customers that can understand the value of the technology: "Even though we're a small company, the fact that we use Oracle 10g technology means large prospects listen to what we have to offer, and we're able to deliver on their requirements through grid," said Ho.

The EMDECS suite includes applications for fleet maintenance, commercial repair shops, dispatch/logistics, rental/leasing, contract maintenance, and OEM dealerships. Perfit's hosted solution serves truck service garages and truck fleets worldwide. According to Ho, all of the ISV's customers consider access to the system on a 24 x 7 basis as critical to running their businesses, and Oracle Grid technology provides that availability.

"There isn't much in the marketplace that meets our needs, especially with the way Oracle Grid allows us to add servers to scale the solution, perform rolling upgrades for maintenance, as well as provide the capabilities to handle server failures with RAC. This allows us to keep everything up and running," said Ho, adding that these capabilities are a big benefit over those of other solutions, which require that additional "silent" servers be purchased to act in a failover capacity.

In addition to availability and reliability, Perfit includes the scalability provided by the Oracle 10g technology as being of key importance. This is especially true as the ISV works to double the capacity of its hosted solution from 1,000 to 2,000 users by the end of 2006. "We need a solution that will always be available, that will keep users up and running during system upgrades. That feature is no longer an option; it's a must," said Ho.

For Perfit, providing this value through the Oracle Grid platform directly impacts customer satisfaction and increases the company's market potential by allowing it to easily add users to its solution. "If we weren't using grid technology, we wouldn't feel comfortable increasing our customer base at such a high rate," said Ho. "We can spread out the cost by simply adding servers as capacity demands, rather than taking on a high up-front hardware expenditure. There's no limit to how fast or big we can grow."

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The ability of Oracle Grid technology to directly impact cost has been one of the main components in Perfit's bid in eliminating customer objections to the solution, which sometimes hinges on price. "It's no longer considered a barrier," said Ho, adding that cost savings can be directly attributed to Oracle components such as the grid management technology and the fact that it's much simpler to deploy Grid today compared with when the ISV did its first deployment in 1999.

Using Oracle Enterprise Manager with Grid Control allows Perfit to monitor an entire customer system, and the product's GUI-based controls make it easier for both technical personnel and customers to use it, according to Ho. Cost reductions have been realized through use of the technology because the ISV's technical personnel spend less time identifying and addressing system issues and customers are able to monitor the system for initial performance activity issues.

"Our technicians can access Enterprise Manager remotely via VPN using mobile technology, and it's very easy to use, so our customers can monitor it themselves without requiring a dedicated DBA," said Ho, adding that call center support traffic and the cost and time for staff training have been reduced through use of the simplified tool because it involves point-and-click operation rather than running scripts.

Customer interest in grid has increased for Perfit through the ISV's joint marketing efforts with Oracle and hardware partners such as Dell that highlighted the value and benefits of the technology, which are becoming standard requirements. "Grid has become more of an expectation than an option with potential customers. They ask us how and where the application is hosted, and when we tell them what grid offers, they trust us a lot more because they've all gone through server failure at one time or another," said Ho.

Perfit views its Oracle relationship through a technical lens, considering its membership in OPN and the Grid Computing Initiative as the best way to gain access to key resources. In fact, the ISV considers the vendor's support to be "outstanding." In one instance, when Perfit was experiencing some hardware instability and having difficulty isolating the problem, Oracle support staff members were able to identify the issue down to the specific driver level. "The fact that Oracle could identify the problem down to the hardware layer says a lot about [the support staff members'] abilities," said Ho, adding that Perfit receives a consistent level of support around the clock and the globe so it doesn't have to work within the eight-hour eastern North American time zone.

Membership in OPN also provides the ISV with significant discounts on the price of a full-use license, comprehensive training to help it understand new technologies, and downloadable demo software. Further, membership provides the company with easy access to the right people at Oracle. "If we have any issues, they're always available," said Ho.

At the Oracle Open World conference in San Francisco in 2005, Perfit participated as a panel member in the Grid Forum for Oracle Partners. Through participation with other technology leaders, including HP, Deloitte Consulting, and EDS, Perfit had a platform for exposure of its production deployment of Oracle 10g grid-enabled solutions.

Perfit Customer Case Study: Wilson Transportation and Leasing Group

Situation Overview

Wilson Transportation and Leasing Group is a \$160 million company with 800 employees across seven branches that serve the United States and Canada. The trucking dispatch and logistics company is based in Toronto, Canada.

The customer was looking to Perfit to provide a platform for its mission-critical EMDECS application that could provide 24 x 7 availability and scalability and that also encompassed the company's ERP components, including dispatch, logistics, order entry, and financials. This move was to replace old technology that the company had outgrown.

Wilson's previous platform, which was an Oracle clustered configuration using 8.0.5 Oracle Parallel Server (OPS), was experiencing stability issues that required monthly restarts to bring it back online. In the old configuration, stability and scalability were constrained. The company has been using Oracle clustering technology since 1999.

The Solution

The new solution went into live production in September 2004. The solution comprised Oracle Database 10g with RAC and Automatic Storage Management (ASM) using Oracle Enterprise Manager for system management and monitoring, with the Red Hat Enterprise Linux (RHEL) operating system and two HP DL380 ProLiant servers and an MSA1000 SAN.

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So far, Wilson's main issues with the old system have been alleviated by the new implementation. In using Oracle RAC 10g, Perfit has been able to protect the company from server failure and can allow the client to perform rolling upgrades. According to Ho, when one of the Wilson servers fails or reboots, users continue working on the other server without interruption in their activities; for the same reason, rolling upgrades have eliminated the need to shut down the entire system.

Wilson staff members also benefit from faster system response times due to the load balancing that can now occur across the two servers. In addition, the Oracle RAC-enabled cluster operating under Linux runs for longer periods compared with the older Oracle 8.0.5 OPS technology that was installed on an industry-standard platform. "We used to reboot the 8.0.5 cluster at least once a month, and the Oracle RAC 10g Linux cluster has not been rebooted for over a year," said Ho.

What this has meant to Wilson is that its business can always be operational. In fact, the company says it has had 99.999% uptime since the installation of the new system over a year ago. And management and maintenance have been improved through Oracle Enterprise Manager, which has allowed the customer to monitor the system more easily and get better performance information than what was available through OPS. The system is also configured to send out email notifications when system issues occur.

The System Access Partner Experience

Singapore-based System Access Ltd. is the developer of SYMBOLS, a business application suite for the financial services sector. The solution, which integrates back-office banking functions and front-office customer service support across 30 modules, is standardized on Oracle Database 10g and Oracle Fusion Middleware.

SYMBOLS conducts its transaction processing on an Oracle Database that uses Oracle Forms for user interface development. The portal runs on Oracle Application Server, a part of the Oracle Fusion Middleware family. The Oracle 10g Grid technology provides the suite with efficient database workload distribution so that activities such as transactions and batch programs can run in parallel, an important requirement in the banking industry, according to Giridhar Nayak, director of product development at System Access. "One of the main objectives from the banks is the ability to keep transactions running when the books are being closed at the end of the day. We're able to split the jobs for available CPU capacity and increase throughput," he said.

Oracle 10g Grid is also integral to System Access' ability to provide a solution that is both scalable and always available. What's important to the ISV, according to Nayak, is to be able to propose a cost-effective, smaller footprint solution that can grow with the client based on business requirements but that doesn't require a change in the software. "Our customers need solutions that can scale from a small server to multiple servers, so we typically start with the promise that no matter how big they grow, we won't need to change the software — we'll simply add additional nodes," he said.

For System Access clients in the financial services market, 24 x 7 availability has also become one of the standards by which they evaluate solutions. Providing a solution enabled with Oracle 10g Grid capability has led to high customer confidence that downtime can be eliminated through its capacity for load balancing and nondisruptive failover, said System Access Consulting Practice Manager, Parresh Timbadia, adding that this ultimately impacts the ISV's market potential. "The system must be available at all times, and Grid provides that, and we're able to take on banks with many branches. It's a key differentiator for us," he said. "If we didn't use grid technology, we'd be restricted to playing with small banks."

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One of the biggest hurdles for the ISV is proving the claims of a grid-based system to assuage banking customer challenges on what some consider to be a "newer" technology. To do this, System Access is using an Asia/Pacific customer deployment reference site for targeting regional tier 1 banks in Europe. "Banks are conservative and won't touch new technology until it's proven. But having this live solution helps convince them, and it's opened up a revenue stream by helping us push into new accounts," said Timbadia.

Other key benefits for System Access in positioning its grid-based solution to potential customers are the cost benefits associated with Oracle's open standards-based technology and its Oracle Enterprise Manager with Grid Control. According to Nayak, supporting open standards means being able to deploy on multiple platforms and operating systems, which allows customers of any size to utilize existing investments to realize cost benefits.

Timbadia also says cost reductions for the ISV have been realized through the operational efficiencies gained by leveraging Oracle Enterprise Manager to manage an entire infrastructure remotely. "This technology allows us to do online maintenance in production and in full use, so there's no requirement to bring down the system, and it has lowered our operational costs for support because we can respond faster by having direct access to the system without travel or time delays," he said.

Deploying on Oracle 10g Grid technology has added a new dimension to System Access' business, allowing the ISV to move beyond the restrictions inherent in legacy mainframe configurations, according to Nayak. "Workload management and capacity using a mainframe meant adding nodes, and that wasn't an easy task because it had to be tested and run in backup mode," he said. "Grid allows for easier hardware and software solution management by allowing us to manage and drop in nodes to join the cluster. That's a big simplification for us."

System Access has been an OPN member for 17 years and participates in the program as an Oracle Certified Advantage Partner. Through its program membership, the ISV has benefited from access to Oracle technical and sales personnel. This close working relationship at the field level has had a positive impact on deal closure rates, according to Nayak. "Our teams work very closely together, and that translates into business," he said, adding that Oracle has helped System Access enter new markets through leveraging regional sales resources.

Being an OPN member has also provided technical benefits in the form of access to a technical services support team that has helped System Access stay informed about new features in the Oracle stack. "This is extremely important for us to fast-track our development and adopt the newest features quickly," said Nayak, adding that Oracle has helped the company through the product validation process and in delivering on large-scale rollouts for banks with up to 4,000 branches.

In addition, OPN supplies the ISV with sales kits that provide the information required by its sales force to understand Oracle's software stack and its licensing options during the proposal writing stage of the sales cycle. System Access development and implementation teams also access Oracle's TechNet, an online resource that includes the latest downloads, documentation, forums, and sample code to assist partner technical personnel in developing to and deploying Oracle technology. "We use these resources all the time," said Timbadia.

System Access currently has six customers on a grid-based solution: two that are live and four that are going live throughout 2006. One of its live customers was looking for a solution that could grow to support its 1,000 branches, and Oracle RAC 10g was a key differentiator in System Access winning the project. "We were able to offer them the flexibility of adding nodes when needed. They're currently using two Oracle nodes running on the RAC architecture, and as they roll out to more branches, we can accommodate that," said Timbadia.

System Access Customer Case Study: MCB Bank Ltd.

Situation Overview

MCB Bank Ltd. is a full-service financial institution based in Pakistan that has been in operation for 50 years and has more than 900 branches throughout the country serving personal and corporate clientele.

The bank had a distributed branch network with data dispersed across the core banking and local branch banking systems. The infrastructure combined multiple technologies, with some providing online capabilities and others working only in batch interface mode. This lack of consolidated information in a centralized core banking system impeded the quick launch of new products and the adding of new "channels" (i.e., branches, Internet, ATMs) to reach customers.

The Solution

System Access implemented its SYMBOLS Core and Internet Banking software in 2005 and 2004, respectively, with Oracle Database Server Enterprise Edition with RAC, Partitioning, and OLAP options and Oracle Application Server Enterprise Edition (now part of Oracle Fusion Middleware) for Forms and Reports.

MCB was looking to System Access to implement a solution that would provide short- and long-term ROI and that could coexist with its legacy system during rollout to the bank's many branches. The business impact of the implementation, according to System Access, has been to increase the bank profits and customer satisfaction. The ISV cited the bank's threefold profit growth in the past year as an indicator of the deployment's success.

Deploying its application on an Oracle Grid architecture based on Oracle RAC clustering allowed System Access to provide MCB with scalability for growth in customer and channel capacity and to make data available on a 24 x 7 basis across its branches, Internet banking site, and ATMs. MCB was also able to benefit from SOA in reusing components across its channels through the SYMBOLS applications for transactions and messaging.

OPPORTUNITIES AND CHALLENGES FOR ORACLE AND ITS PARTNERS

Market momentum and interest in SOA and grid computing continue to build. There is a large value proposition for ISVs to themselves utilize SOA and grid technologies under the covers. This usage by ISVs could provide value to their end customers in the form of added reliability, performance, scalability, interoperability, manageability, and so forth.

Although there has been some progress in bringing greater awareness of grid computing to the general marketplace beyond its traditional base of the scientific and academic communities, there is still substantial ground to cover. The market is still in its early stages; therefore, a bit of patience and investment to build what is necessary for clients' future requirements is an important competitive consideration. Oracle anticipates that its partners can be at the forefront of educating potential customers on the value of such technology; however, the onus on the company will be to stay involved and incorporate market feedback into its own development and marketing. Building and leveraging best practice methodologies and sharing business value models will help both partners and their customers with planning and implementation guidance.

An overall challenge for the industry is to stay focused on creating applications that meet SOA design tenets and that can be optimized in a grid computing environment. To date, the creation of specific applications has been gradual, primarily within the ranks of industry that typically build their own solutions. Oracle faces a specific challenge to integrate its various acquired enterprise applications into one unified architecture and is making significant progress toward this stated goal. With its Fusion initiative, as Oracle rolls out modified and new versions of its own application base, it will undoubtedly pull through market opportunities for other software vendors to provide specialized functionality to extend and integrate with these solutions.

Oracle's extensive application and database customers are obvious prospects for the company and its partners to pursue SOA and grid market opportunities. To extend beyond this traditional base, Oracle also continues to heavily invest in its technologies to ensure that it can compete as a general-purpose platform provider. The measure of the company's future success is deeply tied to its ability to continue to build a robust ISV ecosystem that builds on its technology offerings as a foundation, and Oracle acknowledges that it needs to leave significant room for its partners to build value and grow. ISVs that currently embed databases in their products will be challenged but potentially rewarded by embracing the entire Oracle framework. In the short term, for most ISVs, it will be a question of integrating with and leveraging the capabilities offered by Oracle Fusion Middleware versus holistic application replatforming efforts.

Oracle has made significant moves to compete as a general-purpose platform provider. The measure of the company's future success is deeply tied to its ability to build a robust ISV ecosystem that builds on its technology offerings as a foundation.

This places pressure on Oracle to create innovative arrangements and incentives that reduce the risk for partners to make more dramatic moves.

One area that Oracle could further enhance might be additional services to run grid-based datacenters to facilitate hosting and on-demand initiatives for those partners that may not have all the needed resources, even for backup purposes. And whether hosting solutions themselves or through a third party, ISVs should also investigate building in and offering tooling from the Oracle Fusion Middleware suite that helps them manage, monitor, secure, and integrate these environments in combination with their customers' on-premise applications.

One of the leading reasons that enterprises pursue SOA is to tie together heterogeneous systems, from various generations of technology and from various vendors. Most enterprises desire the flexibility to choose the solution that best fits their business needs rather than worry about what technologies are compatible. IDC recommends that Oracle continue to hold regular interoperability sessions with partners and, even more importantly, with competitors. These sessions will help Oracle communicate to the market how it has embraced standards and can fulfill its "hot-pluggable" vision without mandating use of specific elements of its infrastructure.

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CONCLUSIONS AND RECOMMENDATIONS

Summarizing Partner Value

The ISVs IDC interviewed have already recognized the following benefits by engaging with Oracle:

- ☒ **Technical training, support, and resources to build expertise.** Access to technical expertise and tools helped these ISVs utilize Oracle technology more effectively to stay informed and gain early access to new features and to obtain the latest technical latest documentations and downloads.
- ☒ **Sales and marketing resources and support to facilitate business development.** Participation in joint sales activities and go-to-market initiatives with Oracle's field force, with access to key Oracle personnel, helped generate and nurture leads on a global basis and a regional basis. Additionally, these ISVs have access to resources and tools that provide the required Oracle product and licensing information to help expedite proposal development.
- ☒ **Planning guidance for product management.** Assistance in tactical and strategic business planning as well as guidance on product life cycle enabled partners to better plan, resource, and develop their business.
- ☒ **Oracle brand leverage for market opportunity.** Recognition as an accredited Oracle ISV partner provided customers with greater credibility and confidence in their solutions. In addition, Oracle's partners can reap the benefits of what the company invests in overall marketing to accelerate customer awareness of the value and specific approaches to grid and SOA technology.

- ☒ **Standards-based technology to meet customer needs.** Leveraging Oracle's standards-based offerings has led to increased customer confidence in the overall solution for integration with other systems. The use of standards by ISVs has helped the vendors themselves and their customers achieve improved operational efficiencies.

These ISVs have garnered new market opportunities by combining their own domain expertise with the advantages of using grid- and SOA-based technology to position their customers to:

- ☒ **Lower IT cost and complexity** by deploying virtualization and grid capabilities and by allowing for system upgrades and maintenance without service interruption
- ☒ **Increase productivity and responsiveness** to ongoing changes in business process requirements and the ability to more rapidly and cost-effectively adopt new solutions and services
- ☒ **Maximize legacy and/or underused assets** by consolidating and managing server and storage capacity to deliver high availability and system scalability to allow for variable and expansion requirements
- ☒ **Meet increasing demands for system availability, reliability, and scalability** for new business requirements as they occur without changing the application while including inherent redundancy and maximized reuse of existing customer investments and solutions
- ☒ **Address specialized business requirements** for specific industry processing requirements

Recommendations

Oracle is reaching out to meet the needs of ISVs through its partnering mandate to build significant momentum for grid and SOA and the use of its technologies. The three ISVs interviewed for this document have already experienced a broad array of benefits from engaging with Oracle and participating in OPN and Oracle Grid and SOA enablement initiatives to identify and close deals. However, the ultimate value proposition for these partners has been in leveraging the technology to help differentiate their offerings in the marketplace by providing more flexible and scalable solutions that can grow and expand with their customers' varying and dynamic needs.

Oracle anticipates that its ISV partners will be able to build significant business opportunities by pursuing SOA and grid constructs and building into their solutions greater levels of standard-based interoperability and performance and enhanced capabilities to leverage grid-based systems hardware and infrastructure.

However, the ultimate value proposition for these partners has been in leveraging the technology to help differentiate their offerings in the marketplace by providing more flexible and scalable solutions that can grow and expand with their customers' varying and dynamic needs.

Some additional points to consider include the following:

- ☒ For Oracle to continue morphing into a full-fledged deployment and management platform provider, it must be as open and transparent as possible with vendor and customer communities. Oracle's partners should continue to place pressure on the company to build into its infrastructure any specific requirements they deem necessary to drive opportunity and compatibility with other technologies they need to support.
- ☒ The economic and flexible use of commodity systems is much of the value proposition underlying grid computing. As ISVs gain more reference cases, they in turn can provide the much-needed proof points to helping the more general population understand the bottom-line impact. For example, specific ROI and TCO frameworks and tools should be developed and leveraged.
- ☒ One of the concerns voiced by many enterprises regarding the adoption of SOA is the impact it may have on performance and transaction integrity, especially as these environments scale out and become more complex. Oracle and its partners should take advantage of whatever differentiating capabilities Oracle's technologies offer and supply benchmarks based on real-world scenarios.
- ☒ As Web services and SOA-based solutions roll out, many organizations will turn to experienced ISVs to help them through their growing pains. Vendors that can convincingly demonstrate the benefit of these technologies in the context of specific industry processes stand to exercise great influence in the market. ISVs should consider where they can take their existing expertise and IP assets within specific vertical market domains and build out solutions leveraging standards-based infrastructure and SOA and grid constructs. Often, ISVs will gain experience from early engagements and reference these learnings for exposure in specific segments of the market for follow-on opportunities.
- ☒ Solutions to target for SOA and grid may include highly collaborative processes and sharing of informational resources; activities that include multiple parties (or systems), whether internal or external to the organization; environments that are required to deal with extreme volatility in load and type of systems engaged (in particular for grid); or environments in flux, such as for a merger or acquisition.
- ☒ Vendors should understand that most organizations will continue to be under duress with tight budgets and resources. Even though on face value, SOA and grid computing can potentially help lead to greater worker and system productivity and cut overall IT costs, enterprises have much more at stake. They are in need of risk mitigation, and any change can present complications. To ensure that no downtime is experienced, as well as for other reasons, many organizations will need to make sure that their systems are and will remain in compliance with any government-, industry-, or company-mandated regulations and policies. ISVs that build up an expertise in these areas and that can help organizations with ensuring that their systems are in check will be well-positioned to address such fears and offer additional services as needed. ISVs could also consider leveraging Oracle's technologies in business intelligence, identity management, security, and compliance to complement such initiatives.

Oracle and its partners should be able to keep the momentum rolling if they continue to focus toward the future, beyond the mere implementation of SOA and grid as technologies in and of themselves, and concentrate on the specific business benefits that these dynamic architectures enable.

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