WHITE PAPER

Getting Down to **Business**

IT is most effective as a business partner when it holistically manages mission-critical applications. By doing so, IT can ensure that all the pieces are working together to support maximum performance and first-class customer service.

During the holiday season of 2009, a popular manufacturer of personal navigation devices discovered that customers were unable to download must-have instruction manuals from its website. With too many people trying to access the download page at once, the application began to buckle under the pressure. Eventually, other parts of the company's site crashed as a result. The impact was broad: thousands of eager customers were shut out of the site, and the company couldn't quickly figure out the cause of the problem. Who knows how many customers were discouraged, never to re-turn. This wasn't the first time the company had experienced a meltdown with its e-commerce operations. In an October 2010 survey of midsize-to-large company IT departments by IDG Research Services, respondents reported significant losses in revenue and employee productivity as a result of application downtime.

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Common **Challenges**

The following results show how companies struggle with infrastructure management and application troubleshooting:

- On average, companies experience losses of $115,000 or more for each hour of downtime.
- Typically, IT administrators' spend one-third of their time fighting fires related to applications and infrastructure management.
- Read the full report

SOURCE: IDG Research Services, October 2010

This scenario is all too familiar for many IT departments. A business problem related to technology arises, yet IT doesn't know about it in time to prevent it from snowballing, much less fix it before the damage hits. Typically, IT departments rely on a grab bag of tools and processes to manage the thousands of components, hardware and applications in its arsenal. The silo-based approach almost always adds complexity and wastes time. In the IDG survey, 41% of respondents reported spending between 20 and 40 percent of their time fighting fires related to applications and infrastructure management.

The traditional approach to systems management focuses on the health of individual IT components, often measured using many different tools or point products. Managing systems and components individually is often prohibitively time-consuming and error-prone. Without a consolidated view of the environment, and ways to modify and monitor many systems at once, it's easy to make a change to one system that cascades catastrophically across many systems and users.

More problematic, IT cannot connect the dots to determine dependencies between systems in order to identify the cause of an incident and then resolve it before business operations suffer. A slow page load on a website could indicate a problem with the server, the network, an application or database, a lack of bandwidth, storage systems or a combination of these factors. Applying guesswork in mission-critical environments just won't do.

Fundamentally, IT metrics don't always line up with business metrics. While the company's servers and networks may be running optimally, IT may not realize that users are experiencing poor response times or that business transactions are failing. Users just want to get business done and serve customers in the best possible manner. There's a troubling disconnect here between IT and business when it comes to user experience and performance, which threatens both competitiveness and productivity.

Finally, when it comes to maintenance and troubleshooting, IT teams for management and support are usually not on the same page. When problems arise, it's not easy for a help desk employee to pull up the configuration data needed to file a service request or apply a fix. This delays the process for resolution and can also result in errors if system data is incorrectly compiled, resulting in the wrong patch. Conversely, staff may be in the dark about patches and issues occurring throughout the environment, which can cause duplicated effort and patch conflicts. This fragmented approach to systems management and support is expensive in labor and introduces unnecessary risk.

Evolving IT management needs

The growing relationship between IT and a company's marketplace success has put enormous pressure on IT managers to deliver a highly-reliable infrastructure and be a partner in meeting business objectives. More than 250 IT professionals were asked to rank the relative importance of business goals to their organizations in the 2010 IDC paper, "Optimizing Business Performance: The Oracle Enterprise Manager 11g Approach." Reducing costs was ranked as the most important goal, followed by increasing revenues, improving quality and maintaining internal customer satisfaction rates. Yet cost constraints continue to make this job unwieldy.

IT managers seek ways to be more efficient in application and infrastructure management while delivering high service levels, and securing and maintaining systems for compliance. It's a large bill to fill. Business users simply want access high-quality data and applications whenever and however they need to quickly complete tasks, such as orders and reports.

Cost-effectively marrying IT and business goals is top of mind for many IT leaders today. Adopting a holistic, integrated approach to IT management and support is an excellent foundation for IT and business alignment. Oracle calls this business-driven IT management. Oracle Enterprise Manager 11g is at the heart of this effort.

A new approach

As an example of business-driven IT management, consider the case of the navigational devices company. IT didn't see the trends occurring with its website slowdowns early enough. What could have been a minor blip developed into a blow-up. IT looked ineffective and could not be a reliable partner for the business that day. Worse, customers were frustrated, and IT spent hours restoring service. After deploying Oracle Enterprise Manager, however, the company has broader and deeper insight into all of its systems and can monitor real-time performance levels. When an anomaly arises, Oracle Enterprise Manager analyzes whether the issue is a normal or abnormal variation, and then sends out an alert so that system administrators can research hardware or software issues if warranted. Access to early-trend indicators allows the company to minimize and even eliminate impact on users. The software also provides feedback, allowing the company to optimize its infrastructure and processes for improved customer experience.

Oracle Enterprise Manager gives IT organizations better visibility into business transactions, control of business services and the ability to achieve higher applications service quality by managing the entire technology stack. Here are a few additional highlights:

- IT has time to analyze whether a variation indicates a real abnormality or normal pattern of usage.
- IT can trace the transaction to its source and determine root cause across multiple systems and components.
- IT can manage systems holistically and prevent problems from happening with a single console, where administrators can drill down into applications, transactions and systems, and even an individual user's activity.
- For Oracle customers, there's no need to have another management technology. Oracle Enterprise Manager manages all Oracle components and technologies, from applications to disk.

Oracle Enterprise Manager 11g: A closer look

Oracle Enterprise Manager 11g helps organizations achieve an ROI of 149 percent for IT management investments while also helping reduce customer-reported IT issues by as much as 80 percent. The latest release expands coverage to include management of Oracle's Sun servers, networks, virtual machines and storage hardware. Oracle Enterprise Manager performs application performance management, configuration management, lifecycle management and application quality management across all Oracle technologies and a large number of non-Oracle technologies.

The solution encompasses three core areas:

BUSINESS-DRIVEN APPLICATION MANAGEMENT

With Oracle Enterprise Manager, you can manage your company's applications from a business perspective. By focusing on the user experience, companies can continuously monitor users' actions on a website or in critical applications, and receive alerts for critical variables such as response time or page abandon rates. Specifically, the product offers user experience monitoring accelerators for its packaged applications to help customers gain insight into user productivity and satisfaction.

In addition to user experience, business transaction performance and availability are key considerations for business managers. In this area, the product enables quick answers to questions like, why is my transaction taking too long? Or, what is the average transaction time for my gold customers? To enable this, Oracle Enterprise Manager offers unique management capabilities for Oracle WebLogic Server, Oracle SOA Suite and Oracle Service Bus. By inspecting messages as they flow across technology tiers and transaction components, it can construct a complete picture of in-flight transactions and provide detailed information at the individual transaction level. Through the integration with packaged applications and user experience monitoring, the IT administrator sees a consolidated view across business and technical aspects. This enables the administrator to trace transactions — taking advantage of the business properties such as customer name or transaction size — down to the SQL executed in the database or the resources utilized on the server. This level of visibility into business activities has not been previously possible for IT staff. Equipped with an integrated solution across user experience, applications and transactions, IT staff can truly align their actions with business priorities.

INTEGRATED APPLICATION-TO-DISK MANAGEMENT

Deploying disparate point tools to control IT is overwhelming and invites manual processes; systems administrators often need to combine data from many different management technologies to see the big picture. Instead, Oracle Enterprise Manager connects into the management APIs of individual Oracle technologies, allowing a single dashboard that displays the latest system health metrics, and enables root-cause analysis and problem resolution.

This solution delivers full lifecycle management of applications, servers, networks, virtual machines and storage across the complete Oracle technology stack. It automates routine provisioning, patching and compliance management processes, and helps system administrators better integrate physical and virtual environments instead of configuring and managing systems individually. This saves time and costs, and reduces risk.

INTEGRATED SUPPORT AND SYSTEMS MANAGEMENT

Oracle Enterprise Manager brings together the separate worlds of systems management and IT support. From one console IT administrators can view configuration and support information, and automate key tasks. Seamless integration with My Oracle Support from within Oracle Enterprise Manager provides personalized support content and speedy access to Oracle's vast knowledge base.

IT staff can view status, alerts and recommended patches, and search the discussion forums from the Oracle community for the most credible information. Administrators can set up patch deployment plans and do pre-checks to avoid costly patch conflicts. Initiating service requests and resolving issues is more streamlined through automatic integration with configuration data and simple tracking of open issues within My Oracle Support. As a result of these capabilities, IT enjoys greater compliance with security and corporate standards due to fully automated and well-documented change processes.

Business-driven IT management from the customer view

By adopting an integrated, business-aligned approach to systems management versus decentralized methods using inconsistent processes and multiple point tools, IT organizations can bring many benefits to their companies, including:

- **Reduced costs** of managing IT
- **Lower incidence of problems** and lower IT risk from security breaches and noncompliant systems
- **Improved** end-user customer satisfaction and productivity
- **More reliable access** to critical data and systems to drive business goals and revenues
- **Enabled business growth** through larger transaction volumes and faster response times

Companies around the world are realizing the value from this approach. Emerson, a global manufacturing company that develops climate technologies, network power, storage solutions, appliance solutions and motor technologies, among other products, was challenged with supporting its 250 manufacturing locations. The company needed to support users across diverse business divisions with 24x7 operations so that systems remained up and running no matter the time zone. Emerson was also looking to reduce IT costs by standardizing systems management technologies. The company implemented Oracle Enterprise Manager to centralize management of its 14 Oracle E-Business Suite instances, more than 20 Oracle Database instances, more than 40 hosts and more than 700 monitored targets supporting diverse manufacturing and service delivery processes.

"Oracle Enterprise Manager tools have delivered an end-to-end solution for proactively managing availability and performance of our applications, databases, middleware and servers," says Santosh Kumar, Senior Technical Lead within Emerson IT Shared Services. "We have significantly improved system uptime, which is vital to our role in supporting the company's global business divisions."

Another global company, Colorcon, maker of formulated coatings for the pharmaceutical and supplement industries, had been searching for years for a tool that would discover issues before users reported them. Previously, the company proactively found two or three of every 10 issues; after deploying Oracle Enterprise Manager, the company catches eight or nine of every 10 issues before users do, according to Naveen Garg, manager of the global database and Internet infrastructure for Colorcon. The company can also now determine how its various websites are performing compared to each other and has attained consistent monitoring templates to manage all components the same way. "The tool does all of the deep dive diagnostics for you," Garg says. "You can pinpoint issues in minutes rather than hours." The solution also helps ensure success with new deployments. Recently, Colorcon used Oracle Enterprise Manager to quickly identify scripts that were missing from an application before it went live, resulting in a successful launch.

Becoming a reliable partner to the business requires that IT has real-time views of the entire infrastructure, and can proactively identify and troubleshoot issues before they become widespread problems. IT needs insight into user actions and transactions from A-to-Z to determine what is wrong, fix it and prevent it from happening again. With these insights, and a single place to manage and support systems in a highly-automated fashion, IT can move from being a firefighter to a true partner delivering enhanced processes and technological abilities. The end goal of business-driven IT management is to drive quantifiable business value and new revenue streams from a streamlined, centralized systems management approach. **II**