Oracle Enterprise Manager is Oracle's on-premise management platform, providing a single pane of glass for managing all of a customer's Oracle deployments, whether in their data centers or in the Oracle Cloud. Through deep integration with Oracle's product stack, Enterprise Manager provides market-leading management and automation support for Oracle applications, databases, middleware, hardware and engineered systems.

Enterprise Manager helps increase business agility using application-to-disk automation and maximizes service levels through intelligent management of the Oracle stack. It also enables customers to reduce costs through comprehensive lifecycle automation, combined hardware and software management, proactive monitoring and compliance control.

**Fusion Middleware Management**
Oracle Enterprise Manager’s Fusion Middleware Management solutions provide full-lifecycle management for Oracle WebLogic, SOA suite, Coherence, Identity Management, WebCenter, and Oracle Business Intelligence Enterprise Edition. Oracle Enterprise Manager provides a single console to manage these assets from a business and service perspective, including user experience management, change and configuration management, patching, provisioning, testing, performance management, business transaction management and automatic tuning for these diverse environments.

**SOA Management**
Understanding complex service dependencies, monitoring consumer expectations, and controlling service ownership costs are the biggest barriers to effectively managing service-oriented architecture (SOA) applications and infrastructure. To overcome these challenges, administrators need solutions that increase service visibility and production assurance while lowering the cost and complexity of managing SOA environments. Oracle SOA Management Pack Enterprise Edition provides runtime governance as well as comprehensive service and infrastructure management functionality to help organizations maximize the return on investment from their SOA initiatives.

**Automate SOA Service and Transaction management**
Oracle SOA Management Pack Enterprise Edition provides administrators with a consolidated browser-based view of the entire SOA environment, enabling them to monitor and manage all their components from a central location. This streamlines the correlation of availability and performance problems for all components across the SOA.
environment. Oracle Enterprise Manager integrates with the Oracle Fusion Middleware Control, Oracle Service Bus console, and Oracle Business Activity Monitoring. With a rich set of service and system-level dashboards, administrators can view service levels for key web services, SOA composites, Oracle Service Bus proxy and business services, as well as SOA infrastructure components.

Figure 1. End-to-end transaction visibility

Figure 2. Service Bus Heat Map

Oracle Enterprise Manager allows you to manage your Oracle SOA Suite applications leveraging a model-driven “top-down” approach within your development, quality assurance (QA), staging, and production environments. Business application owners and operational staff can automatically discover and correlate your SOA composites, components, services, and back-end Java EE implementations through detailed modeling and drill-down directly into the performance metrics at the component level. Business transactions and service dependencies can be automatically discovered and the message flows mapped. Details about individual and aggregate transaction execution can be searched for and displayed.

By providing and maintaining the business context while traversing your organization’s application infrastructure, your developers and operational staff can leverage Oracle
Enterprise Manager to meet the high availability and top performance criteria necessary to maximize business results.

Oracle Enterprise Manager enables your application development and support teams to:

- Continuously discover components, transaction flow, service dependencies and relationships
- Monitor business transactions as they flow across tiers
- Manage Oracle SOA Suite applications with minimal manual effort, regardless of application-specific knowledge or programming expertise
- View aggregated dependences or drill-down to method-level interactions
- Monitor endpoint performance with both synthetic service tests and deep component implementation visibility
- Search and analyze single instance transaction performance, with built-in report generation for slowest running or faulted instances
- Link to related diagnostic and database metrics, taking advantage of SOA Suite specific knowledge
- Quickly isolate and diagnose the root cause of SOA application performance problems in QA, staging, and production environments
• Quickly view the SOA dehydration database performance by viewing the dehydration store growth rate, table space, wait bottlenecks, top SOA SQLs and a lot more.

Configuration Management
Configuration information for the Oracle SOA Suite, Oracle Service Bus, and BPEL processes are collected and stored in the Oracle Enterprise Manager repository. With this information, administrators can:

• View the historic configuration changes across the SOA Suite and Oracle Service Bus environment

• Baseline a working configuration by saving it in the repository

• Compare SOA Suite and Oracle Service Bus server and domain configuration parameters with other servers and domains

Lifecycle Management
Oracle SOA Management Pack Enterprise Edition allows administrators to automate SOA Suite patching, deployment, and server provisioning, as well as Service Bus deployment and server provisioning.

SOA administrators can automate patching of SOA infrastructure spread across multiple machines in parallel. Patch plans can be created that will comprise of multiple patches, while patch conflicts can be proactively detected by running patch plan analysis before actually applying the patch plan to the entire SOA Infrastructure setup. Rollbacks can be automated similar to patching automation.

Administrators can deploy multiple SOA composites and Service Bus projects to servers using the deployment procedure framework. A multistep interview process lets users choose the source files for the process, project or resource, target domain, and credentials, then schedule a future deployment using the job system. This enables administrators to:

• Clone directly from test to production

• Clone from fully tested gold image stored in software library

• Provision new composite or new version of existing composite to existing SOA Infrastructure

• Specify composite from software library or file system

• Optionally specify configuration plan

Administrators can provision new Service Bus and SOA Suite domains based on Middleware Provisioning Profiles in EM12c software library. The provisioning process allows for configuration parameters to be set on the domains being provisioned.

Historical Analysis and Reporting
In addition to real-time monitoring of metrics for SOA infrastructure targets, Oracle Enterprise Manager stores the collected metric and configuration data in a central repository enabling administrators to analyze metrics through various historical views.
(such as Last 24 Hours, Last 7 Days, and Last 31 Days) to facilitate strategic trend analysis and reporting. Customizable service and system dashboard functionality allow users to create reports on various services and systems for service level availability, usage, performance, and business indicators.

The Ideal Choice

SOA delivers agility to an enterprise; however, if not properly managed, may increase management complexity and cost. Oracle Enterprise Manager makes it easy for IT administrators to effectively manage SOA complexity by providing runtime governance in conjunction with business and IT alignment. Offering service level management, triage, and root cause analysis at all SOA application levels, Oracle Enterprise Manager is an ideal choice for maximizing consistent SOA application performance and creating a superior ownership experience.

CONTACT US

For more information about SOA Management Pack Enterprise Edition, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.