ORACLE ENTERPRISE MANAGER 10*g* SOA MANAGEMENT PACK

KEY FEATURES

- Centralized Management Console
- Discovery and Service Modeling
  - BPEL PM Server
  - BPEL Processes
  - Partner Links
- Web Services Monitoring
  - End User: SOAP tests
  - Request based monitoring
- BPEL Diagnostics and Error hospital integration
- Infrastructure Management
  - Application Server
  - Dehydration store
- Business-IT Alignment
  - BAM-EM integration
- Service Level Management
- Historical Analysis and Reporting

The Enterprise Manager10g SOA Management Pack delivers comprehensive management capabilities for SOA environments. By combining SOA runtime governance, business-IT alignment, and SOA infrastructure management with Oracle's rich and comprehensive system management solution, Enterprise Manager Grid Control significantly reduces the cost and complexity of managing SOA environments.

Centralized Management Console

The SOA Management Pack provides administrators with a consolidated browser-based view of the entire SOA environment, enabling them to monitor and manage all of their components from a central location. This streamlines the correlation of availability and performance problems for all components across the SOA environment. SOA Management pack integrates seamlessly with Oracle BPEL Process Manager console and Oracle Business Activity Monitoring (BAM). With a rich set of service and system level dashboards, administrators can view service levels for key business processes, and SOA infrastructure components.

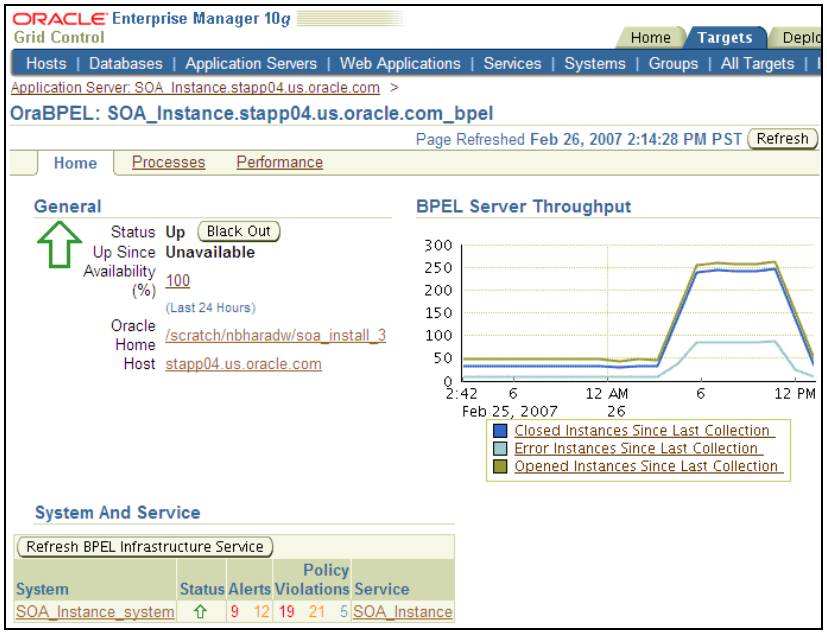

Figure1. BPEL Process Manager homepage showing availability, throughput along with system and service information.

Discovery and Service Modeling

SOA Management Pack discovers BPEL processes deployed on the Oracle BPEL server, and associated partner links. Discovery includes SOA infrastructure components such as BPEL PM server, application server, dehydration store, and the host server. BPEL processes are modeled as generic services, and the SOA infrastructure system and service are also created to model the components supporting the BPEL process. Topology maps identify the relationship between various infrastructure system components, as well as services.

SOA Management Pack offers out-of-the-box automated system modeling capabilities for the SOA infrastructure. SOA infrastructure components such as BPEL PM server, application server, dehydration store, and the host server are modeled into an infrastructure system and an infrastructure service.

Web Services Monitoring

SOA Management Pack provides means to monitor Web services both from an end-user perspective as well as request based monitoring. Administrators can define SOAP tests for one or more partner links of a BPEL process, any hosted Web service, or an external service. These tests measure and record availability and performance of the partner link for historical trending, troubleshooting, and root cause analysis purposes. One or more of these partner link SOAP tests can be defined as key tests to determine BPEL process availability.

Enterprise Manager records several key metrics for Web services hosted on Oracle Application Server. These metrics measure and record data for actual requests associated with the Web service such as request processing time, number of faults, and total requests. Enterprise Manager also provides fetchlets to collect JMX and DMS monitoring data for Web services.

BPEL Diagnostics and Error Hospital

SOA Management Pack measures throughput and load across the BPEL server. The number of open, closed and faulted BPEL process executions is reported over time in a throughput graph. In addition, average latency times for synchronous and asynchronous processes are displayed. An instance error hospital is also listed, with an in-context drilldown to the Oracle BPEL console. Administrators can track a list of errored instances and choose to be notified for instance failures as well.

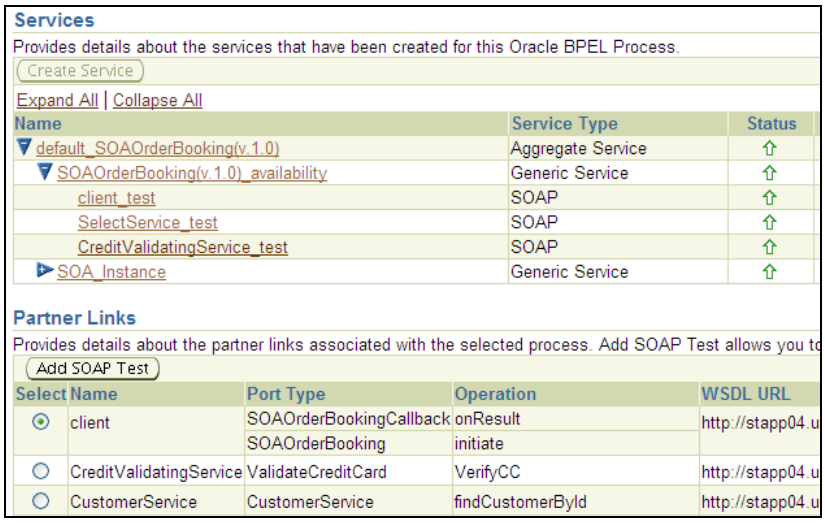

Figure2. Automated System and Services modeled are shown. Key SOAP tests created for partner links are also shown for the BPEL process availability service.

Infrastructure Management

SOA Management Pack monitors the availability of the SOA infrastructure components. Both current and historic availability of targets (such as BPEL PM server) are recorded for troubleshooting and root cause analysis. The SOA infrastructure system and service availability is also recorded. Administrators can be notified when any of the components go down, or troubleshoot after the fact via topology maps to understand which component was responsible for the service failure. By allowing administrators to "manage many-as-one," management of large numbers of components is significantly simplified. By combining SOA targets in systems, administrators can benefit from a wealth of system management features, such as ability to proactively monitor availability via the System Monitoring Dashboard.

SOA Management Pack integrates seamlessly with administrative functionality provided by Oracle products. The Oracle Application Server Control enable administrators to perform basic tasks such as start, stop, deploy and un-deploy SOA applications. The Oracle Database Control enables administrators to perform basic administration tasks on a production database, such as start, stop and other DBA tasks. The Enterprise Manager job system provides DBAs ways to automate key tasks while managing a production BPEL dehydration store and application server components.

Business- IT Alignment

Enterpises can consolidate their IT and business management tools into a unified system using SOA Management Pack. With the Data Exchange Connector, Enterprise Manager can exchange data with any other system over a JMS compliant hub. Data is sent or received by setting up outbound and inbound sessions in Enterprise Manager through a simple wizard. The connector provides a means to integrate Enterprise Manager with business management systems such as Oracle

KEY BENEFITS

- Reduce total cost of ownership
- Understand relationships between SOA components
- Optimize runtime behaviour of agile and complex SOA environments
- Manage many as one, reduce time to resolution, and increase system uptime
- Understand impact of business on IT
- Provide service level management of business processes.

RELATED PRODUCTS AND SERVICES:

- Oracle BPEL Process Manager
- Business Activity Monitoring (BAM)
- Service Level Management Pack (SLM)
- Application Server Diagnostics Pack
- Application Server Configuration Pack
- Provisioning Pack

Business Activity Monitoring (BAM).

For better visibility into SOA environments, a bi-directional data exchange between Oracle Enterprise Manager and BAM allows viewing business KPIs in Enterprise Manager, and viewing system information (target availability information, metric data, and alerts) in BAM. Enterprise Manager enables setting service levels on a combination of system metrics and business KPIs to facilitate comprehensive service level management.

Service Level Management

Through Service Level Management, administrators can monitor services from the end-users' perspective using service tests or synthetic transactions, model relationships between services and underlying IT components, and report on achieved service levels. Service levels can be specified using a combination of system metrics and business KPIs. Service levels can be set for BPEL business processes, or for any Web service within or external to the enterprise.

Historical Analysis and Reporting

In addition to real-time monitoring of metrics for SOA infrastructure targets, Enterprise Manager stores the collected metric and configuration data in a central repository, thereby enabling administrators to analyze metrics through various historical views (Last 24 Hours/ Last 7 Days/ Last 31 Days) and facilitating 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 (SLA), availability, usage, performance, and business indicators.

SUMMARY

SOA delivers agility to an enterprise, however this increases management complexity and cost, at the same time reducing visibility on the holistic IT environment. SOA Management Pack makes it easy for the IT administrator to manage complexity by providing runtime governance and business-IT alignment. SOA infrastructure management helps IT reduce total cost of ownership while implementing SOA projects. A centralized console combined with service and system dashboards provides IT manages and executives a high level picture of the organization. Enterprise Manager provides a superior ownership experience with its unmatched management of Oracle products, as well as third party products.