

ORACLE TUXEDO SYSTEM AND APPLICATION MONITOR

KEY FEATURES AND BENEFITS

FEATURES

- Application status monitoring
- Call path monitoring and analysis
- Service monitoring and statistics
- System server monitoring and statistics
- Transaction monitoring
- Re-hosted mainframe application monitoring
- Event alerts
- Open plug-in framework
- Dynamic monitoring policy management
- Web-based reporting and management
- Internet Protocol version 6 (IPv6) Support

BENEFITS

- Improve the performance of your Oracle Tuxedo applications and application environments.
- Rapidly identify and resolve bottlenecks and system issues to minimize downtime.
- Increase compliance with SLAs.
- Integrate with existing system management applications to lower total cost of ownership.
- Track progress through real time and historical analysis to optimize IT investments.

Distributed computing environments increasingly require comprehensive monitoring and reporting functionality. Through monitoring tools, you can identify where a call hangs, how many requests to a service failed for a given time period, and the current status of all participants in an extended addressing (XA) transaction. Oracle Tuxedo System and Applications Monitor (TSAM) provides this information for all components of an Oracle Tuxedo environment, enabling you to easily identify bottlenecks and expedite problem resolution as well as tune application performance and optimize capacity planning.

Comprehensive Performance Monitoring

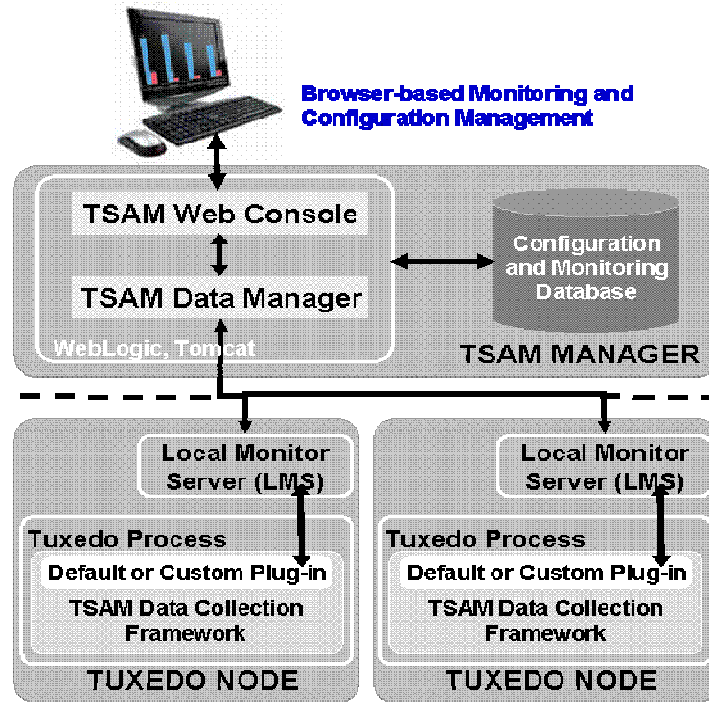
Oracle TSAM provides end-to-end transaction and services monitoring. It allows users to set and monitor response time service-level agreements (SLAs), investigate the performance and behavior of live application services, and improve capacity planning through utilization metrics for all components within the Oracle Tuxedo infrastructure.

Oracle TSAM monitors the major performance-sensitive areas of an Oracle Tuxedo enterprise computing environment. It can be used to monitor real-time performance bottlenecks and business data fluctuations, determine service models, and provide notification when predefined thresholds are violated.

Distributed, Extensible Architecture

Oracle TSAM consists of two components: an agent and a manager. The agent resides on each monitored Oracle Tuxedo node and enables collection of various performance metrics for applications, including XA and non-XA transactions, services, and system servers. Built on an open plug-in framework, the agent can be used to customize performance metrics collection and send this information to management tools.

Oracle TSAM manager provides a graphical user interface to correlate and aggregate performance metrics collected from one or more agents, and display the results in real time. Through this Web-based console, users can create metrics and alerts, define monitoring policy, and view and analyze the collected data.



Oracle TSAM provides a data collection agent for each node and an application manager to handle administration and data presentation.

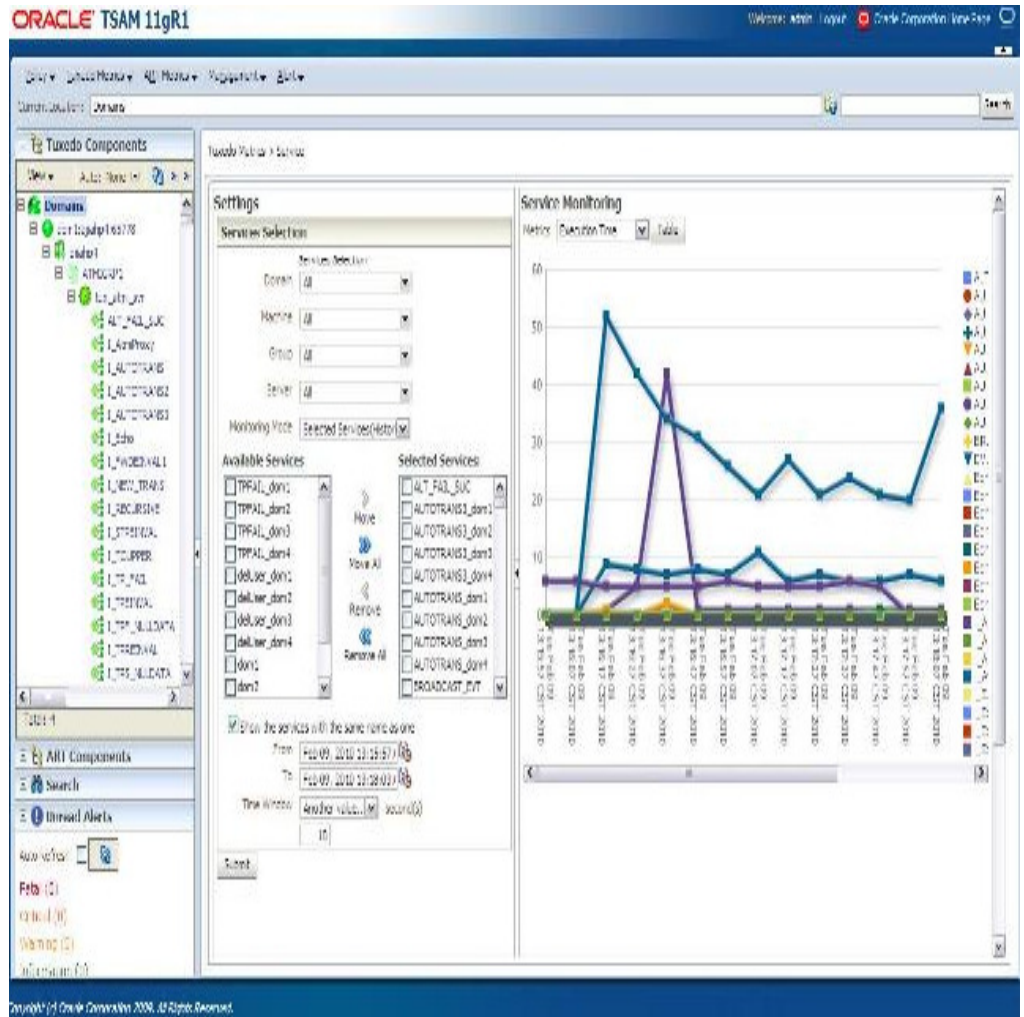
Server and Transaction Monitoring Across Multiple Domains

Oracle TSAM provides monitoring for each of the four key aspects of a distributed Oracle Tuxedo environment:

- **Call paths.** A tree table view is used to represent an Oracle Tuxedo call path. The call path tree shows the relationship and detailed information of each service invocation, including source, destination, status, IPC queue length, execution time, CPU consumption time, waiting time, call type, and detailed transport information. The application can analyze existing call paths and summarize the call patterns.
- **Service monitoring.** Unlike call path monitoring, which focuses on message correlation triggered by a particular call, service monitoring focuses on pure service execution. It records service execution status including, among other factors, the request waiting time, service routine execution time, CPU consumption time, execution status, and buffer size.
- **System servers.** System server monitoring tracks the overall data for each network connection, including BRIDGE and GWTDOMAIN. This enables the application to provide real-time throughput and other important statistical data such as number of messages, total message size, and number of requests waiting for reply. System server monitoring also monitor GWWS performance, including failed/succeeded request number, average response time and pending request number.
- **Transactions.** Transaction monitoring following XA specifications is a critical function of Oracle TSAM. The application collects a wide array of transaction

information, including initiator, start time, execution time, return code, and transaction ID. In addition, if a transaction is sent across domains, the program will report the mapping between local and remote transactions.

- **Rehosted Mainframe Applications.** TSAM monitors Oracle Tuxedo Application Runtime for CICS transactions and TCP terminal metrics, including transaction request number, execution time, CPU time and terminal sessions for applications rehosted from mainframe environment.



Centralized Management and Control

Oracle TSAM manager is the data manipulation and representation component of Oracle TSAM. The manager communicates with Oracle TSAM agent for performance metrics; maintains persistent data storage; and provides a Web console interface for policy administration, data presentation, and alerts management. Oracle TSAM Manager runs on popular web containers such as Oracle WebLogic Server and Apache Tomcat.

RELATED PRODUCTS AND SERVICES

Oracle Tuxedo delivers a robust platform to run high-volume applications across distributed, heterogeneous computing environments, enabling transactions that stretch from customer-facing, business-critical applications to back-office processes, across any system, anywhere in the world.

RELATED PRODUCTS:

- Oracle Tuxedo
- Oracle Service Architecture Leveraging Tuxedo (SALT)
- Oracle Tuxedo Mainframe Adapter
- Oracle Tuxedo Application Runtime for CICS and Batch
- Oracle Tuxedo Application Rehosting Workbench
- Oracle Tuxedo JCA Adapter
- Oracle Tuxedo Jolt

Monitoring Policy

Before monitoring starts, users specify which Oracle Tuxedo system components and applications to monitor—and how to monitor them—by configuring respective monitoring policies. Such a policy defines the monitored Oracle Tuxedo component, monitoring categories, and monitoring properties. Oracle TSAM provides flexible, dynamic control over these policies. With the Web console, users can

- Turn monitoring on or off without rebooting Oracle Tuxedo applications
- Apply monitoring procedures at the server, group, or machine level
- Implement fine-grained monitoring properties based on time and ratios

Reporting and Analysis

Through the Web console, users can monitor live application requests, service activities, XA transactions, and throughput of Oracle Tuxedo servers. In addition, users can query statistics on service performance, system performance, and specific application patterns with data on the service call tree. The monitoring results are displayed in a chart that can be refreshed in specific time intervals—data can be viewed even on a per second basis. All metrics can also be viewed in table format and exported to Excel sheet.

Event Alerts

Using Oracle TSAM, users can define event alerts and the actions to perform when the event is triggered. Users can set and monitor alerts on application request and service execution times; number of messages queued on interprocess communication queues; and the health of Oracle Tuxedo domains, servers, gateways, and other components. Oracle TSAM alerts trigger events in the Oracle Tuxedo event server, which enables user-defined services to be associated with the alerts.

Contact Us

For more information about Oracle TSAM, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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