

# ORACLE TIMESTEN<sup>®</sup> IN-MEMORY DATABASE 11G PLUG-IN FOR ORACLE ENTERPRISE MANAGER

## KEY FEATURES

- Availability and performance monitoring
- Threshold and event management
- Key configuration and information collection
- Built-in reports for problem diagnosis, trend analysis and capacity planning.

## KEY BENEFITS

- Leverage Grid Control infrastructure for mass deployment
- Monitor and manage your complete Oracle IT infrastructure from a single console

## CAPTURE PERFORMANCE METRICS IN KEY AREAS:

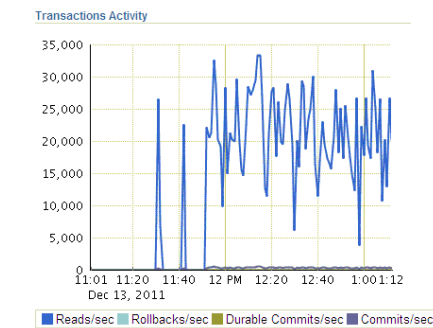
- Cache operations
- Checkpoints
- Connections
- Locks
- Log activity
- Memory
- PL/SQL
- Replication
- SQL statements
- Transactions
- Workloads
- Client/Server
- Aging

*The Oracle Enterprise Manager Grid Control System Monitoring Plug-in for TimesTen In-Memory Database 11g delivers comprehensive availability, performance, and configuration information for TimesTen database.*

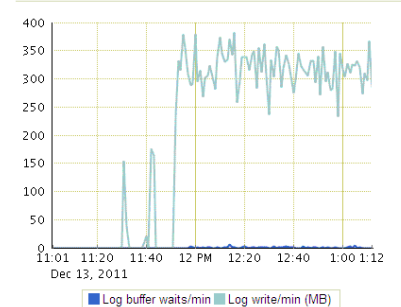
## Oracle TimesTen Plug-In Overview

The System Monitoring Plug-In for Oracle TimesTen In-Memory Database is deployed as part of an Enterprise Manager Agent, running on the server on which the TimesTen database resides. The Plug-in provides users the ability to monitor the TimesTen database configuration, system information, and performance statistics. Configuration information and performance statistics are collected at user-defined intervals. The captured information are periodically uploaded and stored in the Oracle Enterprise Manager repository database. Users can monitor database activities using pre-defined charts, or user-defined reports using the flexible Enterprise Manager report wizard.

TimesTen IMDB Charts



Log Activity



## Flexible Display Formats For Key Performance Metrics

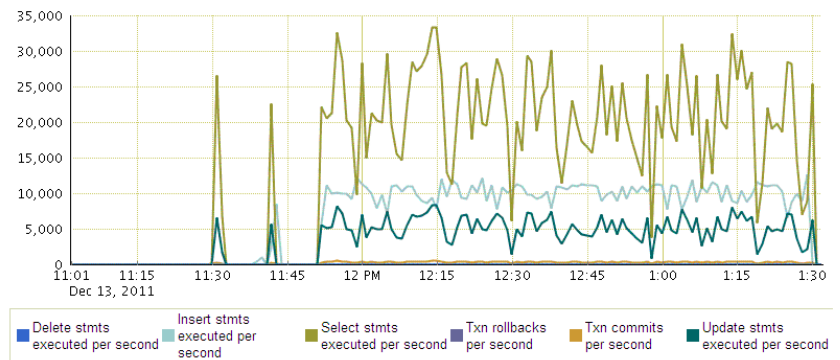
The System Monitoring Plug-In for Oracle TimesTen In-Memory Database delivers the captured information in different formats including:

- Performance data in absolute values, rated values, and time series graphs.
- Built-in reports showing combinations of times series graphs for different sets of performance data.
- User-defined reports for TimesTen database and operating system metrics.

TimesTen IMDB SQL Operation Reports

TimesTen IMDB Charts

SQL Operations



The time series graphs can be displayed over different timeframes (e.g. real-time, last 24 hours, last 7 days, or customer intervals), and the graphs are automatically resized for proper views.

**Robust Threshold Alerts and Notification**

To monitor and manage the system by exception, users may define thresholds for critical events and notifications to be generated. Supported notification types include SMTP, SNMP, PL/SQL procedures, O/S commands and scripts.

**ROBUST THRESHOLD ALERTS AND NOTIFICATION**

- User-defined thresholds
- Alerts and notifications
- Blackouts
- Customized policies

ORACLE Enterprise Manager  
Grid Control 11g

Home Tar

Hosts | Databases | Middleware | Web Applications | Services | Systems | Groups

TimesTen In Memory Database 11g:tt11g >

**Metric and Policy Settings**

Metric Thresholds Policies

View Metrics with thresholds

Metric	Comparison Operator	Warning Threshold	Critical Threshold
LOG - Log reads from file system per minute	>=	1	60
LOG - Number of file system reads	>	100	1000000
LOG - Total waits for inserts	>	1	5
MEMORY - Percent of permanent space in use	>	85	99
MEMORY - Percent of temporary space in use	>	85	99
REP - Transactions replicated per minute	>	600000	1000000
LOG - Log bytes to disk per minute in MB	>	10000	100000
LOG - Log flushes to file system per minute	>=	3600	7200

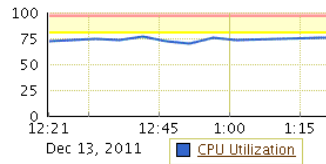
**Powerful Report Customization**

The ability to correlate host metrics such as CPU utilization, memory usage and disk I/O with TimesTen metrics such as connection rates, application transaction rates, replication transaction rates, transaction log buffer waits, and checkpoint bytes written enables the user to quickly get an overview of the system performance and helps speedup the performance analysis process

**POWERFUL REPORT  
CUSTOMIZATION**

- Summary reports
- Detailed reports
- Exception reports

**CPU Utilization**

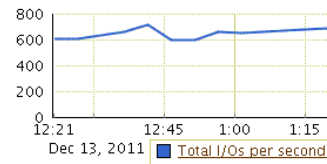


CPU in I/O Wait (%) **✓ 0**

Run Queue Length (5-minute average) **✓ 2.83**

Additional Metrics [CPU Usage](#)

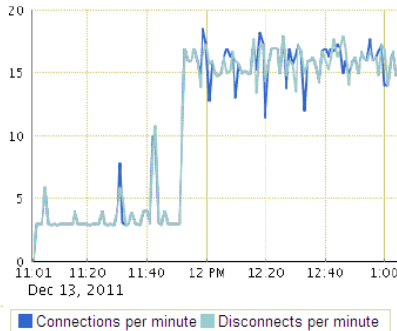
**Disk I/O Utilization**



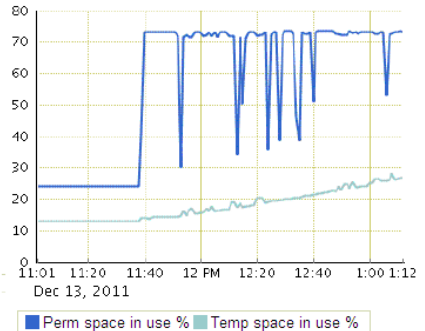
Longest Service Time (ms) **4.44**

Additional Metrics [Disk Activity](#)

**Connection Rate**



**Space Usage (% full)**



**Centralize Monitoring Functions**

The System Monitoring Plug-In for Oracle TimesTen In-Memory Database provides system administrators with a consolidated view of the TimesTen systems in the entire enterprise. This enables administrators to monitor and manage all Oracle software components from a central place. Having such an integrated tool reduces the total cost of ownership by eliminating the need to manually compile critical information from several different tools, thus streamlining the correlation of availability and performance problems across the entire set of IT components.

**Contact Us**

For more information about Oracle TimesTen In-Memory Database, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



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