Oracle® Tuxedo System and Applications Monitor Plus

Release Notes

12*c* Release 2 (12.1.3)

June 2015

ORACLE

Oracle TSAM Plus Release Notes, 12*c* Release 2 (12.1.3)

Copyright © 2013, 2015 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Oracle TSAM Plus 12*c* Release 2 (12.1.3) Release Notes

About Oracle TSAM Plus 2
Oracle TSAM Plus Software Components 5
Function Matrix 5
Installation Notes 9
Upgrade Considerations 10
Interoperability 10
Version Supported by Enterprise Manager for Oracle Tuxedo 10
Known Issues 11
See Also 12

Oracle TSAM Plus 12*c* Release 2 (12.1.3) Release Notes

Oracle TSAM Plus 12*c* Release 2 (12.1.3)
Date: June 2015

Table 1 Revision History

Revision Date	Summary of Change
July 2015	Release 12.1.3 Rolling Patch 008
April 2014	Release 12.1.3 GA

- About Oracle TSAM Plus
- Oracle TSAM Plus Software Components
- Function Matrix
- Installation Notes
- Upgrade Considerations
- Interoperability
- Version Supported by Enterprise Manager for Oracle Tuxedo
- Known Issues

About Oracle TSAM Plus

Oracle Tuxedo System and Applications Monitor Plus 12*c* Release 2 (12.1.3) provides comprehensive monitoring and reporting for the Oracle Tuxedo system and applications. It includes three components: Oracle TSAM Plus Agent, Oracle TSAM Plus Manager, and Enterprise Manager for Oracle Tuxedo.

Oracle TSAM Plus 12.1.3 new features are:

- Integration with Oracle Business Transaction Management (BTM) to monitor business transactions end-to-end spanning Oracle Tuxedo, Oracle WebLogic Server, and Oracle Database.
- Scripting tool provides Jython interface for writing scripts quickly for Tuxedo system and application management and monitoring. Such scripts can be used to automate operations, collect runtime statistics, perform administrative tasks, and so on.
- New management interface for Oracle Tuxedo `UBBCONFIG` and `BDMCONFIG`, including JMX interface.
- Integrated management and monitoring of Oracle Tuxedo applications on Exalogic with Oracle Enterprise Manager
  - Ability to monitor Oracle Tuxedo domains on Exalogic from Exalogic dashboard.
  - Oracle Enterprise Manager compliance and health checks for Oracle Tuxedo applications to ensure optimal deployment.
  - One-stop configuration management of Oracle Tuxedo domains across Exalogic rack.
  - One-stop rolling patch management of Oracle Tuxedo domains across Exalogic rack.
- Resource Broker enhancements in Enterprise Manager for Oracle Tuxedo
  - Discover and introspect the existing Oracle Tuxedo domains and subsequently define dynamic resource broker policies for the domain.
  - Support existing Oracle Tuxedo Application Runtime for CICS and Batch domains.
- Oracle Tuxedo Application Runtimes 12.1.3 enhancements
  - Oracle ART IMS monitoring in standalone Oracle TSAM Plus, including Oracle ART IMS transaction, program, and trace monitoring; IMS call path enhancement, including DLI support.
  - Schedulable Oracle ART Batch job from Enterprise Manager console.

  - Batch monitoring enhancements, including job incident policy, job log, and syslog management.
  - CICS configuration file monitoring and management from Enterprise Manager console.
- Standalone Oracle TSAM Plus console performance enhancements
  - Enhanced Oracle TSAM Plus manager console performance for applications with tens of thousands of Oracle Tuxedo server/services instances.
  - Enhanced throughput and communication between Oracle TSAM Plus agent to manager (one LMS can connect to multiple Oracle TSAM Plus managers).
  - Faster and easier configuration for auto-data purge.
  - Reduced response time when querying call path, call pattern, and service from large amounts of historical data.
  - More efficient call pattern calculations.
- Standalone Oracle TSAM Plus console usability enhancements
  - Ability to save and reuse a query for service, call path, and call pattern monitoring.
  - Global dashboard and domain homepage, which provides overall domain status and information about monitoring data volume.
- Call path monitoring and analysis enhancements
  - Ability to query call path by ECID and display ECID in call path.
  - Enables call path monitoring for conversational calls.
  - Ability to monitor OCI SQL calls to Oracle Database from Oracle Tuxedo applications and collect useful statistics such as return code, time taken by the SQL call, etc.

For more information, see the Oracle TSAM Plus Users Guide.

Rolling Patch 008 includes the following new features and enhancements:

- Support for WLS 12.1.3 + ADF 12.1.3
- Support for Oracle Database (with or without partition feature):
  - Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - 64bit Production (Without the partition feature)
  - Oracle Database 11g Standard Edition Release 11.2.0.1.0 - 64bit Production

  - Oracle Database 12c Enterprise Edition Release 12.1.0.1.0 - 64bit Production (Without the partition feature)
  - Oracle Database 12c Standard Edition Release 12.1.0.1.0 - 64bit Production

Oracle TSAM Plus Software Components

Oracle TSAM Plus 12.1.3 software consists of the following components:

- Oracle TSAM Plus Agent 12.1.3

  Oracle TSAM Plus agent enables collection of various performance metrics for applications. It includes the following sub-components:

  - Oracle TSAM Plus Plug-in Framework
  - Oracle TSAM Plus Default Plug-in
  - Local Monitor Server (LMS)
  - accrpt, an utility to analyze accounting and chargeback information generated by `-a` option in `servopts(5)`
  - Oracle Tuxedo JMX Agent
  - Oracle Tuxedo Scripting Tool
  - Oracle Business Transaction Management (BTM) Tuxedo Observer

- Oracle TSAM Plus Manager 12.1.3

  Oracle TSAM Plus Manager correlates and aggregates performance metrics collected from one or more Oracle Tuxedo domains and displays those in real time. It includes the following sub-components:

  - Oracle TSAM Plus Console
  - Oracle TSAM Plus Data Server

- Enterprise Manager for Oracle Tuxedo 12.1.0.3.0

  Enterprise Manager for Oracle Tuxedo is an Oracle Enterprise Manager plug-in, which enables you to monitor and manage Oracle Tuxedo product family from a centralized console along with other products such as Oracle WebLogic Server and Oracle Database.

Note: The Oracle TSAM Plus Agent 12.1.3 is shipped in Oracle Tuxedo 12.1.3 installers. Enterprise Manager for Oracle Tuxedo 12.1.0.3.0 is shipped in Oracle TSAM Plus Manager 12.1.3 installers.

Function Matrix

The following function matrix tables show the supported functionalities of Oracle TSAM Plus for different Oracle Tuxedo family products.

Table 2 Function Matrix - Monitoring

Monitored Product	Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
Oracle Tuxedo Core	Call Path	Yes	
	Call Pattern	Yes	
	Service (real time)	Yes	
	Service (aggregated per collection interval)	Yes Can be implemented by metrics query	Yes
	Accounting and Chargeback	Yes	
	XA Transaction (real time)	Yes	

Table 2 Function Matrix - Monitoring

Monitored Product	Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
Oracle Tuxedo Core	XA Transaction (aggregated per collection interval)	Yes Can be implemented by metrics query	Yes
	Bridge	Yes	Yes
	/T Domain Gateway	Yes	Yes
	TMQUEUE		Yes
	JSL/WSL/TMS		Yes
	Tuxedo User/System Event		Yes
	Microsecond Level Metrics	Yes	
TMA	TMA SNA Domain Gateway		Yes
	TMA SNA CRM		Yes
	TMA TCP Domain Gateway		Yes
SALT	GWWS	Yes	Yes
OTMQ			Yes

Table 2 Function Matrix - Monitoring

Monitored Product	Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
ART CICS	ART CICS Transaction (real time)	Yes	
	ART CICS Transaction (aggregated per collection interval)	Yes Can be implemented by metrics query	Yes
	ART CICS Terminals	Yes	
	ART CICS TSQ/TDQ		Yes
	Call path extended API for ART CICS	Yes	
ART Batch	Job Information	Yes	Yes
ART IMS	IMS Monitoring	Yes	
	Call path extended API for DLI	Yes	
All	Alert	Yes Basic	Yes Based on EM event/incident system. More sophisticated and flexible
All	Monitoring Policy	Yes Users must define their policies first.	Out of box

Table 3 Function Matrix - Management

Monitored Product	Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
Oracle Tuxedo Core	Management functionalities migrated from Tuxedo administration console		Yes
	Dynamic request broker		Yes
ART CICS (From Tuxedo 11.1.1.1)			Yes
ART Batch (From Tuxedo 11.1.1.1)	Basic JES Job Operations	Yes	Yes
	GDG Management		Yes

Table 4 Function Matrix - Other

Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
Application Package Management/Resource Broker/Dynamic Resource Broker for Oracle Tuxedo		Yes
Application Package Management/Resource Broker/Dynamic Resource Broker for ART CICS/ART Batch		Yes
Reporting		Yes
SLA		Yes
Customizable Job		Yes

Table 4 Function Matrix - Other

Function	TSAM Plus Console (Tuxedo 12.1.3)	Enterprise Manager for Oracle Tuxedo (EM Console) (Tuxedo 12.1.3)
One console to monitor Oracle Tuxedo, WebLogic Server, and Oracle Database		Yes
Integration with Tuxedo OVAB Plug-in		Yes

Installation Notes

Oracle TSAM Plus 12*c* Release 2 (12.1.3) is supported for the following Oracle Tuxedo releases:

- Oracle Tuxedo 12c Release 2 (12.1.3)

For more information about supported platforms, see Oracle TSAM Plus Supported Platforms, Web Containers, and DBMS.

Enterprise Manager for Oracle Tuxedo is an Oracle Enterprise Manager plug-in. You need to deploy it to Oracle Enterprise Manager. For more information, see Deploying Enterprise Manager for Oracle Tuxedo in Oracle TSAM Plus Deployment Guide.

Upgrade Considerations

Enterprise Manager for Oracle Tuxedo 12.1.0.3.0 supports Oracle Tuxedo 12.1.3. You need to upgrade your Oracle Tuxedo to 12.1.3 before using Enterprise Manager for Oracle Tuxedo 12.1.0.3.0.

Interoperability

For standalone TSAM Plus manager:

- Oracle TSAM Plus 12*c* Release 2 (12.1.3) manager maintains full interoperability with Oracle TSAM agent 12.1.1.1, 11.1.1.2, and 11.1.1.1.0.
- Oracle TSAM Plus 12*c* Release 2 (12.1.3) manager can monitor Oracle TSAM 1.1/10gR3 agent.
- Oracle TSAM Plus 12*c* Release 2 (12.1.3) manager can report performance, and alerts collected by Oracle TSAM 1.1/10gR3 agent.

- Oracle TSAM Plus 12*c* Release 2 (12.1.3) manager cannot monitor Oracle Tuxedo node status (domain, machine, group, server and service) collected by Oracle TSAM 1.1/10gR3 agent.
- Policies and alert definitions defined using Oracle TSAM Plus 12*c* Release 2 (12.1.3) console cannot work on an Oracle TSAM 1.1/10gR3 agent node. Oracle TSAM Plus 12*c* Release 2 (12.1.3) agent can work with Oracle TSAM 1.1/10gR3 agent in MP and Domain modes.
- You cannot define policies for Oracle TSAM 1.1/10gR3 agent in the Oracle TSAM Plus 12.1.3 console. You must use the `TMMONITOR` environment variable or the `tmadmin chmo` command to define Oracle TSAM 1.1/10gR3 agent compliant policies.

For Enterprise Manager for Oracle Tuxedo:

- It can work with TSAM Plus 12.1.3 JMX agent only.

Version Supported by Enterprise Manager for Oracle Tuxedo

Enterprise Manager for Oracle Tuxedo 12.1.0.3.0 supports monitoring the following product versions:

- Oracle Tuxedo 12*c* Release 2 (12.1.3)
- Oracle SALT 12*c* Release 2 (12.1.3)
- Oracle TMA 12*c* Release 2 (12.1.3)
- Oracle Tuxedo Application Runtime 12*c* Release 2 (12.1.3)

Known Issues

The following section describes known problems in Oracle TSAM Plus 12*c* Release 2 (12.1.3). Entries include a description of the problem, and a workaround or solution where appropriate.

Each problem is listed by the Bug ID number. The Bug ID number is provided to facilitate the tracking of these problems.

BugID	Description and Workaround or Solution
1. 16475008	**Problem:** While browsing TSAM Console pages, you may get an error message "`An unknown error occurred during data streaming. Ask your System Administrator to inspect the server-side logs`", and find an exception "`java.lang.NoClassDefFoundError: sun/awt/X11GraphicsEnvironment`" or "`java.lang.InternalError: Can't connect to X11 window server using 'hostname:1.0' as the value of the $DISPLAY variable.`" in the server-side log.
	Platform: Unix/Linux
	Workaround: This problem may be caused by an invalid `$DISPLAY` environment variable value setting. Do one of the following: • Append `-Djava.awt.headless=true` to `JAVA_OPTS` for Tomcat or `JAVA_OPTIONS` for Weblogic, or • Run `xclock` to see if `$DISPLAY` is running. If `xclock` runs successfully, the `$DISPLAY` environment variable value setting is correct; otherwise, set a valid `$DISPLAY` environment variable value.
2. 16470085	**Problem:** Starting up the target of Tuxedo system or user server which requires additional environment variables from Enterprise Manager target homepage fails.
	Platform: Generic
	Workaround: Define the additional environment variables in the `ENVFILE` file of the server in `UBBCONFIG` file.
3. 14485664	**Problem:** You cannot monitor any ART JES metrics if the time zone of machines on which OMS and Oracle Database are running is different.
	Platform: Generic
	Workaround: Use the same time zone and synchronize the clock of machines on which OMS and database are running.

BugID	Description and Workaround or Solution
4. 23192934	**Problem:** The Tomcat version embedded in TSAM Plus 12.1.3 installer has security vulnerabilities.
	Platform: Generic
	Workaround: After installing TSAM Plus 12.1.3, upgrade the embedded Tomcat version to 7.0.69 or later. For more information, see the Apache Tomcat official web site.

See Also

- Oracle TSAM Plus Product Overview
- Oracle TSAM Plus Installation Guide
- Oracle TSAM Plus Deployment Guide
- Oracle TSAM Plus Configuration Guide
- Oracle TSAM Plus User Guide