

Oracle® Tuxedo System and Applications Monitor Plus

Reference Guide

12c Release 2 (12.1.3)

June 2015

ORACLE®

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

TSAM Plus Server, Command, and API Reference

| | |
|---|---|
| Local Monitor Server | 1 |
| LMS | 1 |
| tlisten Options for JMX Monitoring | 4 |
| GWTDOMAIN Option for BTM Monitoring | 5 |
| tmadmin Command | 5 |
| Call Path Monitoring APIs. | 6 |
| tpgetcallinfo(3c). | 6 |
| tsambegin(3c) | 6 |
| tsamend(3c) | 7 |

TSAM Plus Database Metadata

| | |
|--|----|
| Tuxedo Configuration Information | 1 |
| Tuxedo Monitoring Information | 12 |
| TSAM Plus Management Information. | 39 |

Enterprise Manager for Tuxedo Target Reference

| | |
|---|---|
| Understanding Properties and Metrics Tables | 1 |
| Property Characters. | 1 |
| Metrics Tables. | 2 |
| Status Column | 2 |
| Collection Interval | 2 |
| Tuxedo Targets | 2 |

| | |
|---------------------------------------|-----|
| Tuxedo Home | 4 |
| Tuxedo Application Home | 5 |
| Tuxedo tlisten | 5 |
| Tuxedo Domain | 7 |
| Tuxedo Machine | 18 |
| Tuxedo Group | 31 |
| Tuxedo Server | 36 |
| Tuxedo System Server | 52 |
| Tuxedo Bridge | 56 |
| Tuxedo TMS | 60 |
| Tuxedo /T Domain Gateway | 64 |
| Tuxedo Web Service Gateway | 72 |
| Tuxedo Workstation Listener | 78 |
| Tuxedo Jolt Listener | 82 |
| Tuxedo Event Broker | 86 |
| Tuxedo LMS | 91 |
| Tuxedo /Q Manager Server | 93 |
| TMA Targets | 100 |
| TMA SNA Gateway | 100 |
| TMA TCP Gateway | 107 |
| TMA CRM | 114 |
| ART CICS Targets | 118 |
| Tuxedo CICS Region | 118 |
| Tuxedo ART CICS Transaction | 120 |
| ART CICS TSQ Server | 124 |
| ART CICS TDQ Server | 127 |
| ART Batch Targets | 129 |
| Tuxedo Batch System | 129 |

| | |
|---------------------------------------|-----|
| OTMQ Manager Server | 132 |
| ECM Tables | 139 |
| Tuxedo Domain | 140 |
| Tuxedo Machine | 143 |
| Tuxedo Group | 145 |
| Tuxedo Server | 146 |
| Tuxedo Bridge | 148 |
| Tuxedo TMS | 148 |
| Tuxedo /Q | 149 |
| Tuxedo Message Queue (OTMQ) | 152 |
| Properties.xml Schema | 155 |

MBeans and JMX Operations

| | |
|--|----|
| Admin MBean | 2 |
| Tuxedo Domain MBean | 7 |
| Tuxedo Machine MBean | 11 |
| Tuxedo Group MBean | 17 |
| Tuxedo Server MBean | 20 |
| Tuxedo System Server Mbean | 23 |
| Tuxedo Bridge MBean | 25 |
| Tuxedo TMS Mbean | 28 |
| Tuxedo /T Domain Gateway | 29 |
| Tuxedo Mainframe Adapter Gateway for SNA | 30 |
| Tuxedo Mainframe Adapter Gateway for TCP | 30 |
| Tuxedo Web Service Gateway | 31 |
| Tuxedo Workstation Listener | 31 |
| Tuxedo Jolt Listener | 35 |
| Tuxedo Event Broker | 37 |

| | |
|--------------------------------------|----|
| Tuxedo Queue Server | 37 |
| Tuxedo QTMQ Server | 38 |
| Tuxedo ART Batch System Target | 40 |

TXST Command and Variable Reference

| | |
|--|----|
| TXST Command Categories Overview | 1 |
| Browse Commands | 2 |
| cd. | 2 |
| prompt. | 3 |
| pwd | 4 |
| Control Commands | 5 |
| connect | 5 |
| connectDomain | 6 |
| disconnectDomain | 7 |
| disconnect | 7 |
| exit | 8 |
| Editing Commands | 9 |
| create | 9 |
| delete | 11 |
| get | 12 |
| set | 13 |
| Information Commands | 14 |
| find | 14 |
| getMBean | 15 |
| getPath | 15 |
| lookup | 16 |
| ls | 17 |
| redirect | 18 |

| | |
|--|----|
| startRecording | 19 |
| stopRecording | 20 |
| stopRedirect | 20 |
| easeSyntax | 21 |
| Life Cycle Commands | 22 |
| migrate | 22 |
| resume | 22 |
| shutdownDomain | 23 |
| startDomain | 24 |
| shutdown | 25 |
| start | 26 |
| suspend | 27 |
| TXST Variable Reference | 28 |
| Jython Class for Tuxedo Mbeans | 29 |
| Mbean | 29 |
| getName | 30 |
| getType | 30 |
| getMbeanName | 30 |
| DomainMbean | 30 |
| CreateMachine | 30 |
| GetParameters | 30 |
| GetParameter | 31 |
| SetParameters | 31 |
| SetParameter | 31 |
| GetRoutings | 31 |
| Add Routing | 32 |
| DeleteRouting | 32 |
| SetRoutingParameter | 32 |

| | |
|--|----|
| SetRoutingParameters | 32 |
| GetRoutingParameter | 33 |
| Swap | 33 |
| Tuxedo_Domain | 33 |
| MachineMbean | 35 |
| CreateGroup | 35 |
| CreateBridge | 36 |
| GetParameters | 36 |
| GetParameter | 36 |
| SetParameters | 36 |
| SetParameter | 37 |
| DeleteRecursively | 37 |
| Delete | 37 |
| Migrate | 37 |
| Clean | 37 |
| GetNativeClients | 38 |
| Suspend | 38 |
| Resume | 38 |
| KillClient | 38 |
| GetTransactions | 38 |
| AbortTransaction | 39 |
| GetUlog | 39 |
| Client_Connections | 39 |
| Machine_Operation_Statistics | 39 |
| Tuxedo_machines | 40 |
| GroupMbean | 42 |
| CreateServer | 42 |
| GetParameters | 42 |

| | |
|---|----|
| GetParameter | 42 |
| SetParameters | 43 |
| SetParameter | 43 |
| CreateTMS | 43 |
| DeleteRecursively | 43 |
| Delete | 43 |
| Migrate | 44 |
| Tuxedo_groups | 44 |
| BridgeMbean | 45 |
| GetParameters | 45 |
| GetParameter | 46 |
| GetRemoteLinks | 46 |
| GetRemoteLinkParameter | 46 |
| SetRemoteLinkParameters | 46 |
| SuspendRemoteLink | 47 |
| ResumeRemoteLink | 47 |
| DeactivateRemoteLink | 47 |
| Bridge_Remote_Link_Statistics | 47 |
| Bridge_Queue_Statistics | 48 |
| Tuxedo_ECM_Bridge | 49 |
| ServerMbean | 49 |
| GetParameters | 49 |
| GetParameter | 50 |
| SetParameters | 50 |
| SetParameter | 50 |
| Delete | 50 |
| SetServiceParam | 50 |
| GetServiceParam | 51 |

| | |
|--------------------------------------|----|
| DeleteService | 51 |
| GetServices | 51 |
| SuspendService | 51 |
| ResumeService | 52 |
| Server_Statistics | 52 |
| Service_Statistics | 53 |
| IPC_Queue_Statistics | 54 |
| Tuxedo_servers | 55 |
| SystemServerMbean | 56 |
| GetParameters | 57 |
| GetParameter | 57 |
| SetParameters | 57 |
| SetParameter | 57 |
| Delete | 58 |
| System_Server_Number | 58 |
| TMSMbean | 58 |
| GetParameters | 58 |
| GetParameter | 59 |
| SetParameters | 59 |
| SetParameter | 59 |
| Delete | 59 |
| TMS_Transaction_Statistics | 59 |
| Tuxedo_TMS | 60 |
| TDomainGatewayMbean | 61 |
| GetParameters | 61 |
| GetParameter | 61 |
| SetParameters | 61 |
| SetParameter | 62 |

| | |
|---------------------------------------|----|
| Delete | 62 |
| Remote_Link_Statistics | 62 |
| Domain_Gateway_Transaction_Statistics | 63 |
| EventBrokerMbean | 63 |
| GetParameters | 63 |
| GetParameter | 64 |
| SetParameters | 64 |
| SetParameter | 64 |
| Delete | 64 |
| Event_Statistics | 65 |
| QueueServerMbean | 65 |
| GetParameters | 65 |
| GetParameter | 66 |
| SetParameters | 66 |
| SetParameter | 66 |
| Delete | 66 |
| Queue_Space_Statistics | 66 |
| Queue_Space_Peak | 67 |
| Queue_Statistics | 68 |
| Tuxedo_Q_QSPACE | 69 |
| Tuxedo_Q_QUEUE | 70 |
| WebServiceGatewayMbean | 70 |
| GetParameter | 70 |
| GetParameters | 70 |
| SetParameter | 71 |
| SetParameters | 71 |
| Delete | 71 |
| Web_Service_Gateway_Statistics | 71 |

| | |
|---------------------------------|----|
| WorkstationListenerMbean | 73 |
| GetParameter | 73 |
| GetParameters | 73 |
| SetParameter | 73 |
| SetParameters | 73 |
| Delete | 74 |
| Get Handler Parameter | 74 |
| Get Handlers | 74 |
| Suspend Handler | 74 |
| Resume Handler | 75 |
| Kill Handler | 75 |
| Get Clients | 75 |
| Suspend Client | 75 |
| Resume Client | 76 |
| Kill Client | 76 |
| Workstation_Listener_Statistics | 76 |
| JoltListenerMbean | 77 |
| GetParameter | 77 |
| GetParameters | 77 |
| SetParameter | 77 |
| SetParameters | 78 |
| Delete JSL | 78 |
| Get Handlers | 78 |
| Suspend Handler | 78 |
| Resume Handler | 79 |
| Jolt_Listener_Statistics | 79 |
| ARTBatchSystemMbean | 79 |
| GetBatches | 79 |

| | |
|---------------------------|----|
| CancelBatch | 80 |
| PurgeBatch | 80 |
| HoldBatch | 80 |
| ReleaseBatch | 81 |
| GetBatchSysOuts | 81 |
| SubmitBatch | 81 |
| GetGDGFiles | 81 |
| GetBatchFiles | 82 |

TSAM Plus Server, Command, and API Reference

This chapter contains the following sections:

- [Local Monitor Server](#)
- [tlisten Options for JMX Monitoring](#)
- [GWTDOMAIN Option for BTM Monitoring](#)
- [tmadmin Command](#)
- [Call Path Monitoring APIs](#)

Local Monitor Server

LMS

Name

LMS—The Oracle TSAM Plus Agent Local Monitor Server

Synopsis

```
LMS SRVGRP="identifier" SRVID="number" [other_parms]
CLOPT= "-A -- -l
tsam-manager-dataserver-url[,tsam-manager-backupdataserver-url,...] [;tsam-ma
nager-dataserver-url, tsam-manager-dataserver-url,...] [-t
heartbeat-interval] [-n fetch_coll_capacity] [-m metrics-shm-size] [-T
data-thread-number] [-e log-warning-interval]"
```

Description

LMS is an Oracle TSAM Plus Agent Tuxedo server. It provides the following functions:

- Acts as the local Tuxedo domain data collection proxy

The performance metrics collected by the Oracle TSAM Plus framework are passed to the plug-in. Oracle TSAM Plus default plug-in sends the data to the LMS using the Tuxedo service infrastructure.

- Plug-in metrics are stored in the LMS before being sent to the Oracle TSAM Plus manager data server. The LMS and Oracle TSAM Plus manager use the HTTP+XML protocol.
- Other management information exchanges between the LMS and Oracle TSAM Plus manager.

The LMS must be configured in the `UBBCONFIG` file and set with the proper options. One Tuxedo machine must be configured with one LMS. Multiple LMS on one machine is not supported. LMS is recommended to be configured at the end of `UBBCONFIG` so that it can retrieve all server information when Tuxedo domain booted. LMS still can synchronize the configuration to TSAM Plus manager periodically.

Options

-1

Mandatory parameter. It specifies the Oracle TSAM Plus manager data servers addresses. You can set one or multiple addresses. The host address and port number are set based on your Oracle TSAM Plus manager installation. The format is:

```
host:port/tsam, host:port/tsam, ...[; host:port/tsam, host:port/tsam, ...]
```

- `host` is the host DNS name or IP address of the box where TSAM Plus manager is installed.
- `port` is the TCP port number.
- `tsam` is the Oracle TSAM Plus manager reserved path name.

TSAM Plus server addresses can consist of two parts using semicolon (;): the first active data servers part and the second standby data servers part. Each part contains multiple TSAM Plus server addresses separated by comma (,).

LMS logs on with the TSAM Plus manager specified by the first address. If failed to connect, LMS tries the next server. If no active data server is available, the standby data Server is used. At most 126 servers can be configured.

If a connected server is failed for health checking, LMS reconnects the servers from first to last.

When the connection to a data server is broken, the thread reconnects the data servers from first to last to get another active data server which connection number does not meet the maximum value. If there is no server available, the thread keeps reconnecting the data server one by one with an incremental sleep interval specified by the `-r` option.

Note: Configuring multiple TSAM Plus manager addresses has been supported since TSAM Plus 12.1.3.

`-m`

Optional parameter. Specifies the size of shared memory used to store raw data metrics. The optional trailing letter `k` or `m` denotes KB or MB bytes, otherwise the unit is in bytes. The effective value is rounded up to 4K size since it is the page size for most platforms.

The default value is 10MB if this option is not present. The size of the shared memory will not grow at run time when there is no free space to store new data. In this case oldest data is replaced with new data.

`-r`

Specifies the maximum sleep time (in milliseconds) of reconnecting when TSAM agent keeps failing to connect TSAM manager. The default value is 60,000 milliseconds.

`-t`

Optional parameter. It specifies the time interval in seconds that LMS should connect to the Oracle TSAM Plus manager with configuration synchronization. The default value is 100 seconds.

`-n`

Optional parameter, introduced since TSAM Plus 12.1.1.1. It specifies the amount of monitoring data sent by TSAM Plus agent to TSAM Plus manager per request. Valid value range is from 1 to 100 and the default value is 16. If configuring a value that is greater than 100, 100 will be used.

`-T`

LMS creates multiple threads to fetch data from Ring Buffer and sends the data to Manager Server. This option specifies the total number of threads the data servers can be connected. The threads number is distributed to each active data server evenly. The maximum value is 1023.

`-e`

Optional parameter. It specifies the time interval LMS sends a warning message to ULOG if performance metrics data is dropped due to shared memory size limit. Its range is

[1-65535]. The default value is equal the `-t` value. The warning message reports how many messages have been lost during the past interval.

Example(s)

[Listing 1-1](#) shows the LMS in UBBCONFIG.

Listing 1-1 LMS in UBBCONFIG

```
...
*SERVERS
LMS SRVGRP=LMSGRP SRVID=1
CLOPT="-A -- -l tsamweb.abc.com:8080/tsam -m 20M -t 180 -n 64"
...
```

tlisten Options for JMX Monitoring

The following `tlisten` options serve for JMX monitoring:

`-j jmxaddr`

Used to start the embedded JMX agent.

`jmxaddr` specifies the address of RMI connector of embedded JMX agent. If the address has been occupied by another process, an error message is printed into ULOG and JMX agent fails to start up. [Table 1](#) lists the `jmxaddr` address formats.

Table 1 IPv4 and IPv6 Address Formats

| IPv4 | IPv6 |
|---|---|
| <code>rmi://IP:port</code> | <code>rmi://[IPv6 address]:port</code> |
| <code>rmi://hostname:port_number</code> | <code>rmi://hostname:port_number</code> |
| <code>rmi://#. #. #. #:port_number</code> | Hex format is not supported |

Note: For the MP domain, you need to configure the `-j` option for `tlisten` on all machine nodes.

- m `jvm_min_mem`
Specifies the minimal memory size (in MB), that should be allocated for the JVM used by JMX agent. The default value is 200MB.
- M `jvm_max_mem`
Specifies the maximum memory size (in MB) that can be allocated for the JVM used by JMX agent. The value of `jvm_max_mem` cannot be set smaller than the value of `jvm_min_mem`, otherwise the JVM are not created and JMX agent fails to start up. The default value is 500MB.
- S
Specifies SSL connection rather than the default connection between EM OMS/Agent and JMX agent.
- C `keyStore`
Specifies the `keyStore` absolute path.
- P `keyStorePassword`
Specifies the environment variable in which the password for the key store is stored. This variable is only usefully when no `tty` is attached.

GWTDOMAIN Option for BTM Monitoring

A new CLOPT option is introduced for GWTDOMAIN.

-m

The BTM monitor URL. The format is `http://<HOST>:<PORT>/btmmonitor/agent/agent/`.

Example:

```
GWTDOMAIN SRVGRP="gwgrp" SRVID=1003 CLOPT="-A -- -m
http://bej301493.cn.oracle.com:9001/btmmonitor/agent/agent/"
```

When this option is specified, GWTDOMIAN starts an embedded JVM and runs a BTM delegate observer to monitor bidirectional calls between WTC and itself.

tmadmin Command

Oracle TSAM Plus Agent provides a `tmadmin` command to turn on/off. If you want to turn off Oracle TSAM Plus temporarily, this command can be used. The format is as follows:

```
changemonitor (chmo) [-m machine] on|off
```

The `-m` parameter specifies the logic machine name where the Oracle TSAM Plus collection is disabled. Without this option, monitoring on all machines is disabled. By default, monitoring is

turned on. If monitoring is turned off, all data collection is stopped even if there is a monitoring policy defined.

Call Path Monitoring APIs

tpgetcallinfo(3c)

`tpgetcallinfo` is used for call path monitoring. Using `tpgetcallinfo` allows applications to make dynamic decisions based on application performance metrics. When call path monitoring is enabled, `tpgetcallinfo` allows applications to get the corresponding call path information, for example, correlation ID and various timestamps.

For more information, see [tpgetcallinfo\(3c\)](#) in the ATMI C Function Reference.

tsambegin(3c)

Name

`tsambegin()` - Used in pair with `tsamend()` for users to manually add a segment to the current call path.

Synopsis

```
#include <tsam_ext.h>

long tsambegin(char* type, char * subtype, int argc, char ** argv, int flags)
```

Description

type

Specifies the monitoring type defined by users. Its value is a NULL-terminated string with a length limit of 255. For example, it could be "CICS" or "Database".

subtype

Specifies the subordinate command type defined by users. Its value is a NULL-terminated string with a length limit of 255. For example, it could be "insert" or "update". Both type and subtype values can be potentially specified as filters when users submit a query.

argc

Specifies the number of string pointed by argv. It must not less than 0.

argv

Specifies a list of properties transferred to TSAM, in which every string should be formatted like (%s=%s). The property name and value are defined by users. The maximum total length of argv is 4000 bytes.

flags

Reserved.

Return Values

If succeeded, TSAM Plus returns a positive description in long type denoting a sequence ID. The sequence ID is transferred to `tsamend()`, by which TSAM Plus can correlate the two APIs.

Otherwise, TSAM Plus returns a negative error code.

Errors

Its error codes are defined in the file `tsam_ext.h`.

Table 1-1 tsambegin Error Codes

| Error Macro Name | Value | Description |
|-----------------------------------|-------|-------------------------------|
| TSAM_EXT_ERROR_NOTENABLE | -1 | TSAM Plus is not enabled |
| TSAM_EXT_ERROR_NOTMONABLE | -2 | TSAM Plus is not monitorable |
| TSAM_EXT_ERROR_INVALIDARG | -3 | argc or argv value is invalid |
| TSAM_EXT_ERROR_INVALIDTYPE | -4 | type value is invalid |
| TSAM_EXT_ERROR_INVALIDSUBTYP E | -5 | subtype value is invalid |

See Also

[tsamend\(3c\)](#)

tsamend(3c)**Name**

`tsamend()` - Used in pair with `tsambegin()` for users to manually add a segment to the current call path. It must be used with `tsambegin()` in the same thread.

Synopsis

```
#include <tsam_ext.h>

int tsamend(long cd, int argc, char ** argv, int flags);
```

Description

cd

Specifies the sequence ID returned by `tsambegin()`.

argc

Specifies the number of string pointed by **argv**. It must not less than 0.

argv

Specifies a list of properties transferred to TSAM Plus, in which every string should be formatted like (%s=%s). The property name and value are defined by users. The maximum total length of argv is 4000 bytes.

flags

Reserved.

Return Values

If succeeded, returns 0; otherwise, returns a negative error code.

Errors

Its error codes are defined in the file `tsam_ext.h`.

Table 1-2 tsamend Error Codes

| Error Macro Name | Value | Description |
|---------------------------|-------|-------------------------------|
| TSAM_EXT_ERROR_NOTENABLE | -1 | TSAM Plus is not enabled |
| TSAM_EXT_ERROR_NOTMONABLE | -2 | TSAM Plus is not monitorable |
| TSAM_EXT_ERROR_INVALIDARG | -3 | argc or argv value is invalid |
| TSAM_EXT_ERROR_INVALIDCD | -6 | cd value is invalid |

See Also

[tsambegin\(3c\)](#)

[Call Path and Tuxedo Monitoring Policy](#) in [Oracle TSAM Plus User Guide](#)

TSAM Plus Database Metadata

This chapter contains the following sections:

- [Tuxedo Configuration Information](#)
- [Tuxedo Monitoring Information](#)
- [TSAM Plus Management Information](#)

Tuxedo Configuration Information

This section contains the following:

- [TUXDOMAIN](#)
- [MACHINE](#)
- [GROUPS](#)
- [SERVER](#)
- [SERVICE](#)
- [LDOM](#)
- [RDOM](#)
- [ARTREGION](#)
- [ARTTUXGROUP](#)
- [ARTRESGROUP](#)
- [ARTTRAN](#)

- [IMS_TRANS](#)
- [IMS_APPS](#)

TUXDOMAIN

Tuxedo domain information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------|----------------|----------|-------------|---------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Unique | 11.1.1.1.0 | The domain name to identify the domain. Its value is composed of: [Domain id] : [PMID of master machine] : [IPC key] |
| MASTER | VARCHAR2(255) | NO | | 11.1.1.1.0 | LMID of master machine |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the Tuxedo domain: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| TUXMODE | VARCHAR2(31) | YES | | 11.1.1.1.0 | MODE parameter in UBB |
| TAG | NUMBER | NO | | 11.1.1.1.0 | Internal used. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

MACHINE

Tuxedo machine information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-----------------|-------------------|-----------------|-----------------------------|----------------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| TUXDOMAI NID | NUMBER | NO | FK to TUXDOMAI N (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | PMID of the Tuxedo Machine |
| LMID | VARCHAR2(255) | NO | | 11.1.1.1.0 | LMID of the Tuxedo Machine |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the Tuxedo machine: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| TUXVERSIO N | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo version |
| TSAMVERSI ON | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM Plus Agent version |
| HOSTNAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Host name of the machine. |
| SERVERNA ME | VARCHAR(1 023) | YES | | 12.1.1.0 | The host name of TSAM Plus manages to which the Tuxedo machine is connecting. |

| | | | | | |
|------------|----------------|-----|--|------------|--|
| SERVERPORT | NUMBER | YES | | 12.1.1.0 | The port of TSAM Plus manager to which the Tuxedo machine is connecting. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved |

GROUPS

Tuxedo group information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------|----------------|----------|--------------------|---------------|---|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| MACHINEID | NUMBER | NO | FK to MACHINE (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Group name |
| TUXGRPID | NUMBER | NO | | 11.1.1.1.0 | GRPNO parameter in the UBB. |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the Tuxedo machine: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved |

SERVER

Tuxedo server information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|----------------|-----------------|--------------------|----------------------|---|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| GROUPID | NUMBER | NO | FK to GROUPS (ID) | 11.1.1.1.0 | GRPNO parameter in the UBB |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | AOUT parameter in UBB |
| TUXSVRID | NUMBER | NO | | 11.1.1.1.0 | SRVID parameter in UBB |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the Tuxedo machine: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| CLOPT | VARCHAR2(1023) | YES | | 11.1.1.2.0 | CLOPT parameter in UBB |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

SERVICE

Tuxedo service information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|---------------|-----------------|--------------------|----------------------|--------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| SERVERID | NUMBER | NO | FK to SERVER (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Service name |

| | | | | | |
|------------|----------------|-----|--|------------|---|
| FUNCNAME | VARCHAR2(255) | YES | | 11.1.1.1.0 | Function name |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the Tuxedo machine: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

LDOM

Tuxedo local domain gateway information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-----------|---------------|----------|-------------|---------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | The name of this local domain access point. |
| LDOMID | VARCHAR2(255) | NO | | 11.1.1.1.0 | The identifier of the domain gateway group associated with this local domain access point. |
| GROUPNAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | The group name of the domain gateway group representing this local domain access point. |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of this local domain access point: VALid |

| | | | | | |
|-----------------|----------------|-----|-----------------------------|------------|----------------|
| TYPE | VARCHAR2(255) | YES | | 11.1.1.1.0 | Always TDOMAIN |
| TUXDOMAI NID | NUMBER | NO | FK to TUXDOMAI N (ID) | 11.1.1.1.0 | |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

RDOM

Tuxedo remote domain gateway information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------|----------------|----------|-------------------|---------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | The name of the remote domain access point |
| RDOMID | VARCHAR2(255) | YES | | 11.1.1.1.0 | Reserved |
| LDOM | NUMBER | NO | FK to LDOM(ID) | 11.1.1.1.0 | |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | The status of the remote domain access point: <ul style="list-style-type: none"> • Active • SUSPended • INITializing • INActive • UNKNown |
| TYPE | VARCHAR2(255) | YES | | 11.1.1.1.0 | The type of domain: TDOMAIN |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

ARTREGION

Tuxedo application runtime for CICS region information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------------|--------------------|----------|-----------------------------|---------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | Region ID |
| TUXDOMAI NID | NUMBER | NO | FK to TUXDOMAI N (ID) | 11.1.1.1.0 | Domain ID |
| NAME | VARCHAR2(255) | NO | Unique | 11.1.1.1.0 | Region name |
| STATUS | VARCHAR2(31) | YES | | 11.1.1.1.0 | The status of the Region: <ul style="list-style-type: none">• ACT: Active• INA: Inactive• INV: Invalid, the node may not exist anymore. |
| STARTTIME | TIMESTAMP | YES | | 11.1.1.1.0 | Start time |
| SHUTDOWN TIME | TIMESTAMP | YES | | 11.1.1.1.0 | Shutdown time |
| TRANCLASS ESDESC | VARCHAR2(4000) | YES | | 12.1.1.0 | The content of file tranclasses.de sc |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

ARTTUXGROUP

Tuxedo application runtime for CICS region information

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|--------|----------|-------------|---------------|------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |

| | | | | | |
|-------------|----------------|-----|----------------------|------------|-------------------|
| ARTREGIONID | NUMBER | NO | FK to ARTREGION (ID) | 11.1.1.1.0 | |
| GROUPID | NUMBER | NO | | 11.1.1.1.0 | Tuxedo Group ID |
| NAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo Group Name |
| STATUS | VARCHAR2(31) | YES | | 11.1.1.1.0 | Reserved. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

ARTRESGROUP

Tuxedo application runtime for CICS group information

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------|----------------|----------|----------------------|---------------|---|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| ARTREGIONID | NUMBER | NO | FK to ARTREGION (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Resource group name |
| STATUS | VARCHAR2(31) | YES | | 11.1.1.1.0 | The status of the resource group: <ul style="list-style-type: none"> • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

ARTTRAN

Tuxedo application runtime for CICS transaction information

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------------|--------------------|-----------------|-------------------------------|----------------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| ARTRESGRO UPID | NUMBER | NO | FK to ARTRESGRO UP (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Resource group name |
| STATUS | VARCHAR2(31) | YES | | 11.1.1.1.0 | The status of the Region group: <ul style="list-style-type: none">• ACT: Active• INA: Inactive• INV: Invalid, the node may not exist anymore. |
| TRANCLASS | VARCHAR2(255) | YES | | 12.1.1.0 | The transaction class which this resource group belongs to. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

IMS_TRANS

IMS transaction configuration

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|-------------------|-----------------|--------------------|----------------------|------------------|
| NAME | VARCHAR2 (255) | NO | PK | 12.1.3 | Transaction code |
| SPA_SIZE | NUMBER | YES | | 12.1.3 | SPA size |

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-----------------|--------------------|-----------------|---------------------------------|----------------------|--|
| RESPONSE | VARCHAR2 (255) | YES | | 12.1.3 | Whether response is required for the transaction code specified in the "NAME" field. Its value is "Yes" or "No". |
| EDIT | VARCHAR2 (255) | YES | | 12.1.3 | Whether the messages are converted to upper case automatically. Its value is "UC" or "ULC". |
| APPNAME | VARCHAR2 (255) | NO | | 12.1.3 | The name of the COBOL application program that processes the transaction code specified in the "NAME" field. |
| CLASS | NUMBER | YES | | 12.1.3 | The class of the transaction code. Its range is [1..999]. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 12.1.3 | Reserved. |
| TUXDOMAI NID | NUMBER | NO | PK, FK to TUXDOMAI N (ID) | 12.1.3 | Domain ID |

IMS_APPS

IMS application configuration

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-----------------|--------------------|----------|---------------------------------|---------------|---|
| NAME | VARCHAR2 (255) | NO | PK | 12.1.3 | Application name |
| PGMTYPE | VARCHAR2 (255) | NO | | 12.1.3 | For MPP, its value is "TP"; for BMP and BMPT, its value is "BATCH". |
| LANG | VARCHAR2 (255) | NO | | 12.1.3 | For COBOL programs, its value is "COBOL"; for c programs, its value is "C". |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 12.1.3 | Reserved. |
| TUXDOMAI NID | NUMBER | NO | PK, FK to TUXDOMAI N (ID) | 12.1.3 | Domain ID |

Tuxedo Monitoring Information

This section contains the following:

- [POLICY](#)
- [ALERT_DEFINITION](#)
- [ALERT](#)
- [CALLPATH](#)
- [MON_CPSEGMENT](#)
- [MON_XA](#)
- [MON_SERVICE](#)
- [MON_GWTDOMAIN](#)
- [MON_GWTLINK](#)
- [MON_BRIDGE](#)

- [MON_BRGLINK](#)
- [MON_GWWS](#)
- [MON_ARTTCP](#)
- [MON_JESJOB](#)
- [MON_CLOB](#)
- [MON_IMS_DETAIL](#)

POLICY

Monitoring policy information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------------|-------------------|----------|-----------------------------|---------------|---|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| TUXDOMAI NID | NUMBER | NO | FK to TUXDOMAI N (ID) | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Policy name. |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | Policy status: <ul style="list-style-type: none"> • enabled • disabled |
| AGENTTYPE | VARCHAR2(255) | YES | | 11.1.1.1.0 | Policy type: <ul style="list-style-type: none"> • tuxedo: Tuxedo monitoring policy. • art: Tuxedo application runtime for CICS monitoring policy. |
| CREATEDTI ME | TIMESTAMP | NO | | 11.1.1.1.0 | Create time |
| MODIFIEDTI ME | TIMESTAMP | YES | | 11.1.1.1.0 | Modify time |

| | | | | | |
|-------------|----------------|-----|--|------------|---------------------------|
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | Reserved. |
| DEFINITION | VARCHAR2(4000) | YES | | 11.1.1.1.0 | Policy definition in XML. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

ALERT_DEFINITION

Monitoring alert policy definition.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------|---------------|----------|-------------|---------------|---|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| ARTREGIONID | NUMBER | YES | | 11.1.1.1.0 | ART Region ID |
| NAME | VARCHAR2(255) | NO | UNIQUE | 11.1.1.1.0 | Alert definition name |
| STATUS | VARCHAR2(31) | NO | | 11.1.1.1.0 | Status: <ul style="list-style-type: none"> enabled disabled |
| SEVERITY | VARCHAR2(31) | NO | | 11.1.1.1.0 | Alert definition severity: <ul style="list-style-type: none"> information warn critical fatal |

| | | | | |
|-----------------|----------------|-----|------------|--|
| TYPE | VARCHAR2(255) | NO | 11.1.1.1.0 | Alert definition type: <ul style="list-style-type: none"> • callpath • svc • xatran • gwtdomain • bridge • gwws • arttran • arttcp • jesjob • jesmetrics |
| AGENTTYPE | VARCHAR2(255) | YES | 11.1.1.1.0 | Alert definition agent type: <ul style="list-style-type: none"> • tuxedo • art • jes |
| EXPRESSION | VARCHAR2(4000) | YES | 11.1.1.1.0 | Alert definition expression |
| EXPRESSION MODE | NUMBER | NO | 11.1.1.1.0 | Alert definition expression mode: <ul style="list-style-type: none"> • 0 (Metric Evaluation) • 1 (fml) |
| ACTION | VARCHAR2(255) | YES | 11.1.1.1.0 | Alert definition action. Null or a Tuxedo event broker name |
| RESFILTER | VARCHAR2(4000) | YES | 11.1.1.1.0 | Alert definition resource filter |
| RESFILTER MODE | NUMBER | NO | 11.1.1.1.0 | Alert definition resource filter mode: <ul style="list-style-type: none"> • 0 (Selection) • 1 (advance) |

| | | | | | |
|--------------|----------------|-----|--|------------|---|
| TUXEVENTNAME | VARCHAR2(255) | YES | | 11.1.1.1.0 | The event name posted to the Oracle Tuxedo event broker. The event name is the alert name by default; you can also specify it manually. |
| CREATEDTIME | TIMESTAMP | YES | | 12.1.1.1 | Alert definition created timestamp |
| MODIFIEDTIME | TIMESTAMP | YES | | 12.1.1.1 | Alert definition modified timestamp |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |
| INTERVAL | NUMBER | YES | | 11.1.1.1.0 | Alert check interval |

ALERT

Alert information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|---------------|-----------------|--------------------|----------------------|-----------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| ALERTDEFID | NUMBER | YES | | 11.1.1.1.0 | |
| NAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Alert definition name |
| DOMAIN | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo group number |
| PROCESSNAME | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo process name |

| | | | | |
|-----------|----------------|-----|------------|--|
| SERVERID | NUMBER | YES | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | YES | 11.1.1.1.0 | Tuxedo process ID |
| LOGTIME | TIMESTAMP | NO | 11.1.1.1.0 | The time an alert occurs. |
| CLEARTIME | TIMESTAMP | YES | 11.1.1.1.0 | The time an alert is cleared. |
| SEVERITY | VARCHAR2(31) | NO | 11.1.1.1.0 | Alert definition severity: <ul style="list-style-type: none"> • information • warn • critical • fatal |
| ALERTTYPE | VARCHAR2(31) | NO | 11.1.1.1.0 | Alert definition type: <ul style="list-style-type: none"> • callpath • svc • xatran • gwtdomain • bridge • gwws • arttran • arttcp • jesjob • jesmetrics • system |
| REASON | VARCHAR2(1023) | YES | 11.1.1.1.0 | The reason/cause for the alert. |
| STATUS | VARCHAR2(31) | NO | 11.1.1.1.0 | The status of an alert: <ul style="list-style-type: none"> • 0 (new) • 1 (cleared) |

| | | | | | |
|-------------|----------------|-----|--|------------|--|
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM Plus agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

CALLPATH

Call path master information (for TSAM Plus 12.1.3 GA version only).

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|---------------|----------|-------------|---------------|--|
| CORRELATIONID | VARCHAR2(255) | NO | PK | 11.1.1.1.0 | |
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | Tuxedo process type: <ul style="list-style-type: none"> • 0 (NCLIENT) • 1 (WCLIENT) • 2 (APPSERVER) • 3 (GWTDOMAIN) • 4 (BRIDGE) • 5 (GWWS) • 6 (WSH) • 7 (JSH) • 8 (ISH) • 9 (TMQUEUE) • 10 (TMQFORWARD) |
| DOMAIN | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Tuxedo machine LMID |

| | | | | | |
|--------------|----------------|-----|---------|------------|--|
| INITIATOR | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Initiator process name |
| SERVICE | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Tuxedo service |
| LOGTIME | TIMESTAMP | YES | Indexed | 11.1.1.1.0 | The time a call path is generated |
| USERNAME | VARCHAR2(255) | YES | | 12.1.1.0 | Tuxedo user name |
| CLTADDR | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo client name |
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| SEGMENTCOUNT | NUMBER | NO | | 11.1.1.1.0 | Segment count |
| CALLPATTERN | VARCHAR2(4000) | YES | | 11.1.1.1.0 | Call pattern in XML. If the length exceeds 4000, only an MD5 value will be stored here and the actual value should be found in MON_CLOB table. |

| | | | | | |
|------------------------------|--------------------|-----|--|------------|---|
| CALLPATTE RN_DET AILED | VARCHAR2(4000) | YES | | 11.1.1.1.0 | Detailed call pattern in XML. If the length exceeds 4000, only an MD5 value will be stored here and the actual value should be found in MON_CLOB table. |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

MON_CPSEGMENT

Call path detail information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------------|-------------------|----------|-------------|---------------|-------------------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| CORRELATI ONID | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | |
| DOMAIN | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo group number |
| PROCESSNA ME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo server process name |
| SERVERID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | NO | | 11.1.1.1.0 | Tuxedo server process ID |
| USERNAME | VARCHAR2(255) | YES | | 12.1.1.0 | Tuxedo user name |

| | | | | | |
|---------------|---------------|-----|---------|------------|---|
| DEPTH | NUMBER | YES | | 11.1.1.1.0 | Call path depth |
| TARGETSVC | VARCHAR2(255) | YES | | 11.1.1.1.0 | Target service |
| HOSTSVC | VARCHAR2(255) | YES | | 11.1.1.1.0 | Host service |
| CPUTIME | NUMBER | YES | | 11.1.1.1.0 | CPU time |
| SYSCPUTIME | NUMBER | YES | | 12.1.1.0 | SYS CPU time |
| USRCPUTIME | NUMBER | YES | | 12.1.1.0 | User CPU time |
| ELAPSETIME | NUMBER | YES | | 11.1.1.1.0 | Elapse time |
| TOTALTIME | NUMBER | YES | Indexed | 11.1.1.1.0 | Total time |
| URCODE | NUMBER | YES | | 11.1.1.1.0 | tpurcode |
| ERRNO | NUMBER | YES | Indexed | 11.1.1.1.0 | tperrno |
| STATUS | NUMBER | YES | | 11.1.1.1.0 | Status: <ul style="list-style-type: none"> • null • 1 |
| MSGTYPE | VARCHAR2(16) | YES | | 11.1.1.1.0 | Message type: <ul style="list-style-type: none"> • ARP • ARQ |
| MSGSIZE | NUMBER | YES | | 11.1.1.1.0 | Message size |
| MSGSTAGE | VARCHAR2(16) | YES | | 11.1.1.1.0 | Message stage: <ul style="list-style-type: none"> • STMO • ME2NET • NET2ME • ME2Q • Q2ME • ME2QFAIL |
| MSGQUEUE D | NUMBER | YES | | 11.1.1.1.0 | Message queue length |

| | | | | | |
|-----------|----------------|-----|---------|------------|--|
| LOCALGRID | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Local GRID |
| MSGID | VARCHAR2(255) | YES | | 11.1.1.1.0 | Message ID |
| CALLMODE | NUMBER | YES | | 11.1.1.1.0 | Call mode: <ul style="list-style-type: none"> • 1 (tpacall) • 2 (tpcall) • 3 (tpforward) |
| CALLFLAG | NUMBER | YES | | 11.1.1.1.0 | Call flag |
| SVCSEQ | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Service sequence |
| PSVCSEQ | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Parent service sequence |
| IPCQID | VARCHAR2(64) | YES | | 11.1.1.1.0 | IPC queue ID |
| LOGTIME | TIMESTAMP | YES | | 11.1.1.1.0 | Log time |
| STARTTIME | TIMESTAMP | NO | | 11.1.1.1.0 | Call start time |
| LASTTIME | TIMESTAMP | YES | | 11.1.1.1.0 | Call last time |
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | Tuxedo Process type: <ul style="list-style-type: none"> • 0 (NCLIENT) • 1 (WCLIENT) • 2 (APPSERVER) • 3 (GWTDOMAIN) • 4 (BRIDGE) • 5 (GWWS) • 6 (WSH) • 7 (JSH) • 8 (ISH) • 9 (TMQUEUE) • 10 (TMQFORWARD) |

| | | | | |
|-------------|----------------|-----|--------------|---|
| TSAMVERSION | VARCHAR2(255) | YES | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| CLTADDR | VARCHAR2(255) | YES | 11.1.1.1.0 | Tuxedo client address |
| LDM | VARCHAR2(255) | YES | 11.1.1.1.0 | Ldom name: Ldom ID |
| RDM | VARCHAR2(255) | YES | 11.1.1.1.0 | Rdom name: Rdom ID |
| MSGCVTIME | NUMBER | YES | 11.1.1.1.0 | Message convert time |
| ATTRIBUTES | VARCHAR2(4000) | YES | 11.1.1.1.0 | Reserved. |
| EXTTYPE | VARCHAR2(255) | YES | 12.1.1.0 | Call path extended type |
| EXTSUBTYPE | VARCHAR2(255) | YES | 12.1.1.0 | Call path extended subtype |
| EXTSEQ | NUMBER | YES | 12.1.1.0 | Call path extended sequence |
| EXTCORSEQ | NUMBER | YES | 12.1.1.0 | Call path extended parent sequence |
| ECID | VARCHAR2(1024) | YES | 12.1.3 | ECID (Execution Context ID) |
| MSGTAG | VARCHAR2(4000) | YES | 12.1.3 RP006 | Message Tag |
| MD5 | VARCHAR(40) | YES | 12.1.3 RP008 | MD5 in MON_CLOB_CP |
| MD5_DTL | VARCHAR(40) | YES | 12.1.3 RP008 | MD5 in MON_CLOB_CPDTL |

MON_XA

XA transaction information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|---------------|-----------------|--------------------|----------------------|--|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| LOCALGTRID | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Local GTRID |
| DOMAIN | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo group number |
| PROCESSNAME | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo server process name |
| SERVERID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo process ID |
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | Tuxedo process type: <ul style="list-style-type: none">• 0 (NCLIENT)• 1 (WCLIENT)• 2 (APPSERVER)• 3 (GWTDOMAIN)• 4 (BRIDGE)• 5 (GWWS)• 6 (WSH)• 7 (JSH)• 8 (ISH)• 9 (TMQUEUE)• 10 (TMQFORWARD) |
| LOGTIME | TIMESTAMP | YES | Indexed | 11.1.1.1.0 | Log time |

| | | | | |
|--------------|---------------|-----|------------|---|
| XACODE | NUMBER | YES | 11.1.1.1.0 | The XA Routine return code |
| REMOTEGTR ID | VARCHAR2(255) | YES | 11.1.1.1.0 | Remote GTRID |
| RMID | NUMBER | YES | 11.1.1.1.0 | RMID |
| XANAME | VARCHAR2(255) | YES | 11.1.1.1.0 | The transaction routine name: <ul style="list-style-type: none"> • tpbegin • tpcommit • tprollback • tpabort • xa_commit • xa_start • xa_prepare • xa_rollback • xa_end • tms_msg_xxx (forGWTDOMAIN XA transaction activities) • xa_msg_xxx (forGWTDOMAIN XA transaction activities) |
| LDOM | VARCHAR2(255) | YES | 11.1.1.1.0 | Ldom name: Ldom ID |
| RDOM | VARCHAR2(255) | YES | 11.1.1.1.0 | Rdom name: Rdom ID |
| MSGCVTTIME | NUMBER | YES | 11.1.1.1.0 | Message convert time |
| EXEETIME | NUMBER | YES | 11.1.1.1.0 | Transaction execute time |
| FLAGS | NUMBER | YES | 11.1.1.1.0 | The XA Routine call flag |

| | | | | |
|-------------|----------------|-----|------------|---|
| TIMEOUT | NUMBER | YES | 11.1.1.1.0 | The XA Routine timeout |
| TSAMVERSION | VARCHAR2(255) | YES | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | 11.1.1.1.0 | Reserved. |

MON_SERVICE

Tuxedo service call information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------|---------------|----------|-------------|---------------|----------------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| SVCNAME | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Service name |
| DOMAIN | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Tuxedo group number |
| PROCESSNAME | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo server process name |
| SERVERID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo process ID |
| THREADID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo thread ID |

| | | | | | |
|-----------------|---------------|-----|---------|------------|--|
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | Tuxedo Process type: <ul style="list-style-type: none"> • 0 (NCLIENT) • 1 (WCLIENT) • 2 (APPSERVER) • 3 (GWTDOMAIN) • 4 (BRIDGE) • 5 (GWWS) • 6 (WSH) • 7 (JSH) • 8 (ISH) • 9 (TMQUEUE) • 10 (TMQFORWARD) |
| USERNAME | VARCHAR2(255) | YES | Indexed | 12.1.1.0 | Tuxedo user name |
| LOGTIME | TIMESTAMP | NO | Indexed | 11.1.1.1.0 | Log time |
| MSGSIZE | NUMBER | YES | | 11.1.1.1.0 | Message size |
| MSGTYPE | VARCHAR2(6) | YES | | 11.1.1.1.0 | Message type: <ul style="list-style-type: none"> • ARP • ARQ |
| MSGQUEUE D | NUMBER | YES | | 11.1.1.1.0 | Message queue length |
| MSGWAITTI ME | NUMBER | YES | | 11.1.1.1.0 | Message wait time |
| STATUS | VARCHAR2(31) | YES | | 11.1.1.1.0 | Reserved |
| ERRNO | NUMBER | YES | | 11.1.1.1.0 | tperrno |
| URCODE | NUMBER | YES | | 11.1.1.1.0 | tpurcode |
| EXECTIME | NUMBER | YES | | 11.1.1.1.0 | Service execute time |
| CPUTIME | NUMBER | YES | | 11.1.1.1.0 | Service CPU time |

| | | | | |
|----------------|----------------|-----|--------------|---|
| SYSCPUTIME | NUMBER | YES | 12.1.1.0 | Service SYS CPU time |
| USRCPUTIME | NUMBER | YES | 12.1.1.0 | Service USER CPU time |
| TSAMVERSION | VARCHAR2(255) | YES | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | 11.1.1.1.0 | Reserved |
| ARTTRAN | VARCHAR2(255) | YES | 12.1.3 | ART CICS transaction server name |
| ARTSVRTYPE | NUMBER | YES | 12.1.3 RP001 | |
| ARTPROGRAMNAME | VARCHAR2(255) | YES | 12.1.3 RP001 | |

MON_GWTDOMAIN

Tuxedo /T domain gateway performance statistics master information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|----------|---------------|----------|-------------|---------------|---------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| DOMAIN | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo group number |

| | | | | | |
|---------------|----------------|-----|---------|------------|---|
| PROCESSNAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo server process name |
| SERVERID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | NO | | 11.1.1.1.0 | Tuxedo process ID |
| LDM | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | Ldm name: Ldm ID |
| LOGTIME | TIMESTAMP | NO | Indexed | 11.1.1.1.0 | Log time |
| LINKNUMBER | NUMBER | YES | | 11.1.1.1.0 | Link number |
| MSGQUEUEID | NUMBER | YES | | 11.1.1.1.0 | Message queue length |
| REQUESTQUEUED | NUMBER | YES | | 11.1.1.1.0 | Reserved |
| WORKLOAD | NUMBER | YES | | 11.1.1.1.0 | Reserved |
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | Tuxedo process type: 3 (GWTDOMAIN) |
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

MON_GWTLINK

Tuxedo /T domain gateway performance statistics detail information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|--------|----------|-------------|---------------|------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |

| | | | | | |
|---------------------|--------------------|-----|---------------------------------|------------|--|
| MON_GWTD OMAINID | NUMBER | NO | FK to MON_GWTD OMAIN (ID) | 11.1.1.1.0 | |
| LINKADDRE SS | VARCHAR2(255) | YES | | 11.1.1.1.0 | Link address |
| LOGTIME | TIMESTAMP | NO | | 12.1.1.0 | Log time |
| LINKSTATU S | NUMBER | YES | | 11.1.1.1.0 | Link status: <ul style="list-style-type: none"> • 0 (UP) • -1 (DOWN) • 1 (INIT) |
| PENDNUMB ER | NUMBER | YES | | 11.1.1.1.0 | Network Pending Number |
| PENDBYTES | NUMBER | YES | | 11.1.1.1.0 | Network Pending Bytes |
| ACCNUMBE R | NUMBER | YES | | 11.1.1.1.0 | Network Message Number |
| ACCBYTES | NUMBER | YES | | 11.1.1.1.0 | Network Message Bytes |
| WAITREPLY NUMBER | NUMBER | YES | | 11.1.1.1.0 | Network Outstanding Requests |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved. |

MON_BRIDGE

Tuxedo bridge gateway performance statistics master information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|-------------------|----------|-------------|---------------|-----------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| DOMAIN | VARCHAR2(255) | NO | Indexed | 11.1.1.1.0 | Tuxedo domain name |

| | | | | | |
|---------------|----------------|-----|---------|------------|---|
| MACHINE | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | YES | | 11.1.1.1.0 | Tuxedo group number |
| PROCESSNAME | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo server process name |
| SERVERID | NUMBER | YES | | 11.1.1.1.0 | Tuxedo server ID |
| PID | NUMBER | NO | | 11.1.1.1.0 | Tuxedo process ID |
| LOGTIME | TIMESTAMP | NO | Indexed | 11.1.1.1.0 | Log time |
| LINKNUMBER | NUMBER | YES | | 11.1.1.1.0 | Link number |
| MSGQUEUE | NUMBER | YES | | 11.1.1.1.0 | Message queue length |
| REQUESTQUEUED | NUMBER | YES | | 11.1.1.1.0 | Reserved |
| WORKLOAD | NUMBER | YES | | 11.1.1.1.0 | Reserved |
| PROCTYPE | NUMBER | YES | | 11.1.1.1.0 | |
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved |

MON_BRGLINK

Tuxedo /T domain gateway performance statistics detail information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|--------|----------|-------------|---------------|------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |

| | | | | | |
|--------------|----------------|-----|-----------------------|------------|---|
| MON_BRIDGEID | NUMBER | NO | FK to MON_BRIDGE (ID) | 11.1.1.1.0 | |
| LINKADDRESS | VARCHAR2(255) | YES | | 11.1.1.1.0 | Link address |
| LOGTIME | TIMESTAMP | NO | | 12.1.1.0 | Log time |
| LINKSTATUS | NUMBER | YES | | 11.1.1.1.0 | Link status: <ul style="list-style-type: none"> • 0 (UP) • -1 (DOWN) • 1 (INIT) |
| PENDNUMBER | NUMBER | YES | | 11.1.1.1.0 | Network Pending Number |
| PENDBYTES | NUMBER | YES | | 11.1.1.1.0 | Network Pending Bytes |
| ACCNUMBER | NUMBER | YES | | 11.1.1.1.0 | Network Message Number |
| ACCBYTES | NUMBER | YES | | 11.1.1.1.0 | Network Message Bytes |
| TSAMVERSION | VARCHAR2(255) | YES | | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | |

MON_GWWS

Tuxedo GWWS performance statistics information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|--------|----------|-------------|---------------|------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |

| | | | | |
|------------------|--------------------|-----|------------|-----------------------------------|
| ACTCLIENT NUM | NUMBER | YES | 11.1.1.1.0 | Active client number |
| ACTTHREAD NUM | NUMBER | YES | 11.1.1.1.0 | Active Thread Number |
| ATTRIBUTES | VARCHAR2(1023) | YES | 11.1.1.1.0 | Reserved |
| AVGINTIME | NUMBER | YES | 11.1.1.1.0 | Average Inbound Process Time |
| AVGOUTTIM E | NUMBER | YES | 11.1.1.1.0 | Average Outbound Process Time |
| DOMAIN | VARCHAR2(255) | NO | 11.1.1.1.0 | Tuxedo domain name |
| TUXGROUP | VARCHAR2(255) | YES | 11.1.1.1.0 | Tuxedo group number |
| GWWSID | VARCHAR2(255) | NO | 11.1.1.1.0 | GWWS ID |
| INBOUNDPE ND | NUMBER | YES | 11.1.1.1.0 | Inbound Pending Request |
| OUTBOUND PEND | NUMBER | YES | 11.1.1.1.0 | Outbound Pending Request |
| INOWFAILN UM | NUMBER | YES | 11.1.1.1.0 | Inbound One-Way Failure Number |
| INOWSUCCN UM | NUMBER | YES | 11.1.1.1.0 | Inbound One-Way Success Number |
| INRPCFAILN UM | NUMBER | YES | 11.1.1.1.0 | Inbound RPC Failure Number |
| INRPCSUCC NUM | NUMBER | YES | 11.1.1.1.0 | Inbound RPC Success Number |
| MACHINE | VARCHAR2(255) | NO | 11.1.1.1.0 | Tuxedo machine LMID |

| | | | | |
|-------------------|-------------------|-----|------------|--|
| OUTOWFAIL NUM | NUMBER | YES | 11.1.1.1.0 | Outbound One-Way Failure Number |
| OUTOWSUC CNUM | NUMBER | YES | 11.1.1.1.0 | Outbound One-Way Success Number |
| OUTRPCFAI LNUM | NUMBER | YES | 11.1.1.1.0 | Outbound RPC Failure Number |
| OUTRPCSUC CNUM | NUMBER | YES | 11.1.1.1.0 | Outbound RPC Success Number |
| PID | NUMBER | NO | 11.1.1.1.0 | Tuxedo process ID |
| PROCESSNA ME | VARCHAR2(255) | NO | 11.1.1.1.0 | Tuxedo process name |
| PROCTYPE | NUMBER | YES | 11.1.1.1.0 | Tuxedo process type: 5 (GWWS) |
| SERVERID | NUMBER | YES | 11.1.1.1.0 | Tuxedo server ID |
| LOGTIME | TIMESTAMP | YES | 11.1.1.1.0 | Log time |
| TSAMVERSI ON | VARCHAR2(255) | YES | 11.1.1.1.0 | TSAM agent version: <ul style="list-style-type: none"> • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3) |

MON_ARTTCP

Tuxedo application runtime for CICS TCP listener performance statistics information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------|
| ID | NUMBER | NO | PK | 11.1.1.1.0 | |
| ATTRIBUTES | VARCHAR2(1023) | | | 11.1.1.1.0 | Reserved |
| DOMAIN | VARCHAR2(255) | NO | | 11.1.1.1.0 | Tuxedo domain name |

| | | | | |
|---------------|---------------|-----|------------|---|
| TUXGROUP | VARCHAR2(255) | YES | 11.1.1.1.0 | Tuxedo group number |
| TRANFAILNUM | NUMBER | YES | 11.1.1.1.0 | Failed Transaction Number |
| TRANSUCCESSUM | NUMBER | YES | 11.1.1.1.0 | Successful Transaction Number |
| MACHINE | VARCHAR2(255) | NO | 11.1.1.1.0 | Tuxedo machine LMID |
| SESSIONNUM | NUMBER | YES | 11.1.1.1.0 | Session Number |
| PID | NUMBER | NO | 11.1.1.1.0 | Tuxedo process ID |
| PROCESSNAME | VARCHAR2(255) | NO | 11.1.1.1.0 | Tuxedo process name |
| PROCTYPE | SMALLINT | YES | 11.1.1.1.0 | Tuxedo process type: 2 (APPSERVER) |
| SERVERID | NUMBER | YES | 11.1.1.1.0 | Tuxedo server ID |
| LOGTIME | TIMESTAMP | NO | 11.1.1.1.0 | Log time |
| TSAMVERSION | VARCHAR2(255) | YES | 11.1.1.1.0 | TSAM agent version: null (11g or above) |

MON_JESJOB

Tuxedo application runtime for Batch job information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------|---------------|----------|-------------|---------------|---------------------|
| ID | NUMBER | NO | PK | 11.1.1.2.0 | Job ID |
| DOMAIN | VARCHAR2(255) | NO | PK | 11.1.1.2.0 | Tuxedo domain name |
| MACHINE | VARCHAR2(255) | YES | | 11.1.1.2.0 | Tuxedo machine LMID |

| | | | | | |
|-------------|--------------|-----|---------|------------|---|
| NAME | VARCHAR2(32) | YES | Indexed | 11.1.1.2.0 | Job name |
| TYPRUN | VARCHAR2(7) | YES | | 11.1.1.2.0 | Job typrun |
| PRIORITY | NUMBER | YES | Indexed | 11.1.1.2.0 | Job priority |
| OWNER | VARCHAR2(32) | YES | Indexed | 11.1.1.2.0 | Job owner |
| EXECMAC | VARCHAR2(32) | YES | | 11.1.1.2.0 | Job executing machine |
| STATUS | VARCHAR2(12) | YES | | 11.1.1.2.0 | Job status: <ul style="list-style-type: none"> • CONVING • WAITING • EXECUTING • DONE • HOLD_CONVING • HOLD_WAITING • HOLD_DELAY • FAIL • DISCARD • INDOUBT |
| JOBCLASS | CHAR(1) | YES | Indexed | 11.1.1.2.0 | Job class. Value may be [A-Z], [0-9] |
| RUNNINGSTEP | VARCHAR2(32) | YES | | 11.1.1.2.0 | Job running step |
| EXECSTATUS | VARCHAR2(32) | YES | | 11.1.1.2.0 | Job executing status |
| SUBMITTIME | NUMBER | YES | | 11.1.1.2.0 | Submit time |
| WAITINGTIME | NUMBER | YES | | 11.1.1.2.0 | Job waiting time |
| EXEETIME | NUMBER | YES | | 11.1.1.2.0 | Job execution time |
| ENDTIME | NUMBER | YES | | 11.1.1.2.0 | Job end time |

| | | | | | |
|--------------|----------------|-----|---------|------------|---------------------|
| PURGETIME | NUMBER | YES | | 11.1.1.2.0 | Job purge time |
| LOGTIME | TIMESTAMP | NO | Indexed | 11.1.1.2.0 | Log time |
| USRCPU | NUMBER | YES | | 11.1.1.2.0 | Job user CPU time |
| SYSCPU | NUMBER | YES | | 11.1.1.2.0 | Job system CPU time |
| INITIATORPID | NUMBER | YES | | 11.1.1.2.0 | Job initiator PID |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 12.1.1.0 | Reserved |

MON_CLOB

Global CLOB information table.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------|----------------|----------|-------------|---------------|--|
| MD5 | VARCHAR2(40) | NO | PK | 12.1.1.0 | Call pattern content MD5 If MD5 is a user name, CONTENT is the saved queries XML. |
| CONTENT | CLOB | NO | | 12.1.1.0 | Call pattern content |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 12.1.1.0 | Reserved |

MON_IMS_DETAIL

Tuxedo application runtime for IMS transactions or programs.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|--------|---------------|----------|-------------|---------------|--------------------|
| ID | NUMBER | NO | PK | 12.1.3 | |
| DOMAIN | VARCHAR2(255) | NO | Indexed | 12.1.3 | Tuxedo domain name |

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|-------------------|---------------|-----------------|--------------------|----------------------|--|
| MACHINE | VARCHAR2(255) | NO | Indexed | 12.1.3 | Tuxedo machine LMID |
| TUXGROUP | VARCHAR2(255) | NO | Indexed | 12.1.3 | Tuxedo group number |
| PROCESSNAME | VARCHAR2(255) | YES | | 12.1.3 | Tuxedo process name |
| SERVERID | NUMBER | YES | | 12.1.3 | Tuxedo server ID |
| PID | NUMBER | YES | | 12.1.3 | Tuxedo process ID |
| LOGTIME | TIMESTAMP | YES | Indexed | 12.1.3 | Log time |
| TSAMVERSION | VARCHAR2(255) | YES | | 12.1.3 | TSAM agent version. Its value is null. |
| TRANSACTION_NAME | VARCHAR2(255) | YES | Indexed | 12.1.3 | Transaction name |
| TRANSACTION_CLASS | NUMBER | YES | Indexed | 12.1.3 | Transaction class |
| LOGIC_TERMINAL | VARCHAR2(255) | YES | | 12.1.3 | Logic terminal name |
| REGION_TYPE | VARCHAR2(255) | NO | Indexed | 12.1.3 | Region type |
| JOB_NAME | VARCHAR2(255) | YES | | 12.1.3 | JES submitted job name |
| USER_ID | VARCHAR2(255) | YES | | 12.1.3 | User ID of DFSRC00 |
| START_TIME | TIMESTAMP | NO | | 12.1.3 | Transaction/Program start time |
| END_TIME | TIMESTAMP | NO | | 12.1.3 | Transaction/Program end time |
| ELAPSED_TIME | NUMBER | YES | | 12.1.3 | Transaction/Program elapsed time |

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|----------------------|--------------------|----------|-------------|---------------|--|
| SYS_CPU_TIME | NUMBER | YES | | 12.1.3 | Transaction/Program system CPU time |
| USER_CPU_TIME | NUMBER | YES | | 12.1.3 | Transaction/Program user CPU time |
| PROGRAM_NAME | VARCHAR2 (255) | YES | Indexed | 12.1.3 | Program name |
| PSB_NAME | VARCHAR2 (255) | YES | | 12.1.3 | PSB name |
| PROGRAM_ELAPSED_TIME | NUMBER | YES | | 12.1.3 | Total program elapsed time, includes DL/I elapsed time |
| SPA_SIZE | NUMBER | YES | | 12.1.3 | Current SPA size |
| ABEND_NUMBER | NUMBER | YES | | 12.1.3 | Abend code |
| ENQ_NUMBER | NUMBER | YES | | 12.1.3 | Message number pushed in /Q |
| DEQ_NUMBER | NUMBER | YES | | 12.1.3 | Message number popped from /Q |
| DLI_TIME | NUMBER | YES | | 12.1.3 | DL/I elapsed time |
| DLIS | VARCHAR2 (2048) | YES | | 12.1.3 | DL/I list |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 12.1.3 | Reserved |

TSAM Plus Management Information

This section contains the following:

- [GLOBALCONFIG](#)
- [ROLES](#)

- [USERS](#)

GLOBALCONFIG

TSAM Plus global parameters information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|----------------|-----------------|--------------------|----------------------|-----------------|
| PARAM | VARCHAR2(255) | NO | PK | 11.1.1.1.0 | Parameter name |
| VALUE | VARCHAR2(255) | YES | | 11.1.1.1.0 | Parameter value |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved |

ROLES

TSAM Plus role information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|---------------|----------------|-----------------|--------------------|----------------------|------------------|
| NAME | VARCHAR2(255) | NO | PK | 11.1.1.2.0 | Role name |
| ID | NUMBER | NO | Unique | 11.1.1.2.0 | Role ID |
| DESCRIPTION | VARCHAR2(255) | YES | | 11.1.1.2.0 | Role description |
| DEFINITION | VARCHAR2(4000) | YES | | 11.1.1.2.0 | Role definition |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.2.0 | Reserved |

USERS

TSAM Plus user information.

| COLUMN | TYPE | Nullable | Constraints | Since Version | Note |
|------------------|----------------|-----------------|--------------------|----------------------|--|
| NAME | VARCHAR2(255) | NO | PK | 11.1.1.1.0 | User login name |
| ROLENAMES | VARCHAR2(255) | NO | | 11.1.1.2.0 | Role names the user belongs to |
| PASSWORD | VARCHAR2(255) | NO | | 11.1.1.1.0 | User password |
| FULLNAME | VARCHAR2(255) | YES | Indexed | 11.1.1.1.0 | User full name |
| DESCRIPTIO N | VARCHAR2(255) | YES | | 11.1.1.1.0 | User description |
| MODIFIEDTI ME | TIMESTAMP | YES | | 11.1.1.1.0 | User modification time |
| ATTRIBUTES | VARCHAR2(1023) | YES | | 11.1.1.1.0 | Reserved |
| SAVEDQUER IES | VARCHAR2(4000) | YES | | 12.1.3 | Saved queries XML. If the length exceeds 4000, only the user name is stored here and the actual value should be found in MON_CLOB table. |

Enterprise Manager for Tuxedo Target Reference

This chapter contains the following sections:

- [Understanding Properties and Metrics Tables](#)
- [Tuxedo Targets](#)
- [TMA Targets](#)
- [ART CICS Targets](#)
- [ART Batch Targets](#)
- [OTMQ Manager Server](#)
- [ECM Tables](#)
- [Properties.xml Schema](#)

Understanding Properties and Metrics Tables

Property Characters

The following characters are used for describing a property:

- **Visible:** indicates the property is visible on the Target home page on Enterprise Manager console. If not specified, the property is invisible.

- **Editable:** indicates the property can be modified on Enterprise Manager console. If not specified, the property is not editable. Editable(*) indicates it's a mandatory property that you cannot leave empty when adding a standalone target.
- **CMD Option:** indicates the property is specified by a command option of the process.
- **UBB Parameter:** indicates the property is specified by the parameter of the corresponding entry defined in `UBBCONFIG (5)`.

Metrics Tables

Metrics tables in this book lists all the metrics belonging to each target. You can also check all metrics of a target from the Oracle Enterprise Manager Cloud Control by clicking the target menu > **Monitoring** > **All Metrics**.

Status Column

The Status column in availability metrics tables of Tuxedo targets is retrieved from `TA_STATE` field of the corresponding Tuxedo `TM_MIB` classes. The mapping rule from `TS_STATE` to Status column is:

| <code>TA_STATE</code> | Status |
|-----------------------------|--------|
| ACT MIG CLE RES PAR | 1 |
| INA SUS DEA EXI | 0 |

Collection Interval

All the Collection Interval value listed in the following metrics tables are default value and can be customized on the **Metric and Collection Settings** page of each target (Click target menu > **Monitoring** > **Metric and Collection Settings**).

Tuxedo Targets

[Table 3-1](#) lists all Oracle Tuxedo targets the Enterprise Manager for Oracle Tuxedo supports.

Table 3-1 Tuxedo Targets Description

| Target | Description |
|---|--|
| Tuxedo Home | This target is an install homes target which corresponds to a Tuxedo installation. |
| Tuxedo Application Home | This target is a home directory to deploy Tuxedo applications from Enterprise Manager for Oracle Tuxedo. |
| Tuxedo tlisten | This target corresponds to a tuxedo tlisten process. |
| Tuxedo Domain | This target is an Enterprise Manager system target and corresponds to a Tuxedo Domain. |
| Tuxedo Machine | This target corresponds to an entry defined in the MACHINES section of the TUXCONFIG file of monitored Tuxedo domain. |
| Tuxedo Group | This target is a repository side target, which corresponds to an entry defined in the GROUPS section of the TUXCONFIG file of monitored Tuxedo domain. |
| Tuxedo Server | This target corresponds to an entry defined in the SERVERS section of the TUXCONFIG file of monitored Tuxedo domain. |
| Tuxedo System Server | This target corresponds to an entry defined in the SERVERS section of the TUXCONFIG file of monitored Tuxedo domain. |
| Tuxedo Bridge | This target corresponds to a Tuxedo BRIDGE process. |
| Tuxedo TMS | This target corresponds to a Tuxedo global transaction manager server entry defined in TUXCONFIG. |
| Tuxedo /T Domain Gateway | This target corresponds to a GWTDOMAIN entry defined in TUXCONFIG. |
| Tuxedo Web Service Gateway | This target corresponds to a GWIDOMAIN entry defined in TUXCONFIG. |
| Tuxedo Web Service Gateway | This target corresponds to a Tuxedo SALT GWWS entry defined in TUXCONFIG. |
| Tuxedo Workstation Listener | This target corresponds to a Tuxedo WSL entry defined in TUXCONFIG. |
| Tuxedo Jolt Listener | This target corresponds to a Tuxedo JSL entry defined in TUXCONFIG. |

Table 3-1 Tuxedo Targets Description

| Target | Description |
|--|---|
| Tuxedo /Q Manager Server | This target is used to monitor Tuxedo /Q, from which you can view queue related statistics information. |
| Tuxedo Event Broker | This target corresponds to a Tuxedo TMSYSEVT or TMUSREVR entry defined in TUXCONFIG. |
| Tuxedo LMS | This target corresponds to an LMS entry defined in TUXCONFIG. |

Tuxedo Home

Description

This target is an installation home target that corresponds to a Tuxedo installation.

Properties

| Name | Display Label | Characters | Description |
|-----------|---------------|---------------------|--|
| Name | Name | Visible Editable | [Host Name] : [TUXDIR] |
| Version | Version | Visible Editable | Tuxedo installation release number, such as 12.1.1.0 Note: This version determines the version of Tuxedo Machine and its subordinate targets. Target version determines which UBB parameters can display on the target homepage. |
| RP Level | RP Level | Visible Editable | Rolling patch package level |
| Directory | Directory | Visible Editable | Tuxedo installation directory |

Tuxedo Application Home

Description

This target is a home directory to deploy Tuxedo applications from Tuxedo add-on.

Properties

| Name | Display Label | Characters | Description |
|-----------|---------------------------|---------------------|---|
| Name | Name | Visible Editable | [Host Name]:[Directory] |
| Directory | Directory | Visible Editable | A root directory to deploy Tuxedo applications. |
| ENV_PATH | PATH Environment variable | Visible Editable | A list of paths separated by ‘:’ and will be used as “PATH” environment variable. |

Associations

`installed_at`: associates with [Tuxedo Home](#) target.

Tuxedo tlisten

Description

This target corresponds to a tuxedo tlisten process.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|-------------------|
| Name | Name | Visible Editable | [nlsaddr]/tlisten |

| | | | |
|------------------------|-----------------------------|------------------------|---|
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| device | device | Visible, CMD Option | Full pathname of the network device. |
| uid | uid | Visible, CMD Option | |
| sec_principal_name | sec_principal_name | Visible CMD Option | |
| sec_principal_location | sec_principal_location | Visible, CMD Option | |
| sec_principal_passvar | sec_principal_passvar | Visible, CMD Option | |
| zbits | zbits | Visible, CMD Option | |
| Zbits | Zbits | Visible, CMD Option | |
| nlsaddr | nlsaddr | Visible, CMD Option | |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |

| | | | |
|------------------|-------------------------|---------|---------------------------------------|
| useSSL | Use SSL | Visible | Use SSL or not |
| tlisten Password | Tuxedo tlisten Password | Visible | Auto discovery uses this to discovery |

Association

`installed_at`: associates with [Tuxedo Home](#) target where application runs.

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0 - Inactive 1 – Active, tlisten will always return 1 If status>=1, then the target is available. |

Tuxedo Domain

Description

Tuxedo Domain is a system target type.

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|--|--|
| Name | Name | Visible Editable | [DOMAINID]:[PMID of the master machine]: [PMID of the backup machine]: [IPCKEY] Note: When making swap operation, the name is not changed. |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associates with the master Tuxedo Machine of the domain. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associates with the master Tuxedo Machine of the domain. |
| DOMAINID | DOMAINID | Visible, Editable(*), UBB Parameter, | DOMAINID parameter in TUXCONFIG |
| IPCKEY | IPCKEY | Visible, Editable(*), UBB Parameter, | IPCKEY parameter in TUXCONFIG |
| MASTER | MASTER | Visible, UBB Parameter | Specifies the LMIDs list of master Tuxedo Machines |
| MODEL | MODEL | Visible, UBB Parameter | MODEL parameter in TUXCONFIG |
| SECURITY | SECURITY | Visible, UBB Parameter | SECURITY parameter in TUXCONFIG |
| OPTIONS | OPTIONS | Visible, UBB Parameter | OPTIONS parameter in TUXCONFIG |

| | | | |
|----------------------|-----------------------------|----------|---|
| RESB | Resource Broker Enabled | Visible | This property is for internal use only. |
| SNMP_PORT | SNMP Receive Port | Editable | Required for Tuxedo Event collection. Domain target uses this port to receive tuxedo event trap from tuxedo event agent. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |

Association

App_composite_contains: Tuxedo Machine target

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|-------------|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |

| | | | |
|--------|--------|--------------|---|
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <p>0: Inactive: When all Tuxedo Machines under this domain are inactive.</p> <p>1: Partly active: When at least a Tuxedo Machine under this domain is inactive.</p> <p>2: Active: When all Tuxedo Machines under this domain are active.</p> <p>If status>=1, the target is available.</p> |

Client Number Metrics

| | | | |
|----------------------------|---------------------------|----------------------|--|
| Metric Name | CLIENT_CONNECTION_NUMBER | | |
| Metric Type | TABLE, Repository side | | |
| Metric Display | Client Connection Number | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| NATIVE_CLIENT_NUMBER | NUMBER | Native Clients | <p>The number of native clients that are joining the Tuxedo domain.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|---------------------------|--------|---------------------|--|
| WORKSTATION_CLIENT_NUMBER | NUMBER | Workstation Clients | The number of workstation clients that are connecting to the Tuxedo domain target. Not NULL Threshold: > |
| JOLT_CLIENT_NUMBER | NUMBER | Jolt Clients | The number of JOLT clients that are connecting to the Tuxedo domain. Not NULL Threshold: > |
| CLIENT_NUMBER | NUMBER | Clients | The total number of clients that are joining or connecting to the Tuxedo domain. Not NULL Value: NATIVE_CLIENT_NUMBER+ WORKSTATION_CLIENT_NUMBER+ JOLT_CLIENT_NUMBER Threshold: > |

Domain Metrics

| | |
|--------------------|-----------------------------|
| Metric Name | DOMAIN_OPERATION_STATISTICS |
| Metric Type | TABLE, Repository side |

| | | | |
|----------------------------|--------------------|-----------------------------|--|
| Metric Display | | Domian Operation Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| TPCONNECT _NUMBER | NUMBER | tpconnect Per Minute | The invoking times (per minute) of tpconnect method in Tuxedo domain during the interval. Not NULL Threshold: > |
| TPDEQUEUE_NUMB ER | NUMBER | tpdequeue Per Minute | The invoking times (per minute) of tpdequeue method in Tuxedo domain during the interval. Not NULL Threshold: > |
| TPENQUEUE_NUMB ER | NUMBER | tpenqueue Per Minute | The invoking times (per minute) of tpenqueue method in Tuxedo domain during the interval. Not NULL Threshold: > |

| | | | |
|------------------------------|--------|-----------------------------------|--|
| TPPOST_NUMBER | NUMBER | tppost Per Minute | The invoking times (per minute) of tppost method in Tuxedo domain during the interval. Not NULL Threshold: > |
| TPCALL_NUMBER | NUMBER | tpcall &tpacall Per Minute | The invoking times (per minute) of tpcall method in Tuxedo domain during the interval. Not NULL Threshold: > |
| TPSUBSCRIBE_NUMBER | NUMBER | tpsubscribe Per Minute | The invoking times (per minute) of tpsubscribe method in Tuxedo domain during the interval. Not NULL Threshold: > |
| INITIATED_TRANSACTION_NUMBER | NUMBER | Initiated Transactions Per Minute | The number of XA transactions initiated (per minute) in Tuxedo domain during the interval. Not NULL Threshold: > |

| | | | |
|--------------------------------------|--------|---|--|
| ABORTED_ TRANSACTION_NUM BER | NUMBER | Aborted Transactions Per Minute | The number of XA transactions aborted (per minute) in Tuxedo domain during the interval. Not NULL Threshold: > |
| COMMITTED_ TRANSACTION_NUM BER | NUMBER | Committed Transactions Per Minute | The number of XA transactions committed (per minute) in Tuxedo domain during the interval. Not NULL Threshold: > |
| COMPLETE_TRANS ACTION_NUMBER | NUMBER | Completed Transactions Per Minute | The number of XA transactions aborted or committed (per minute) in Tuxedo domain during the interval. Not NULL Value: COMMITTED_ TRANSACTION_NUM BER+ ABORTED_ TRANSACTION_NUM BER Threshold: > |

| | | | |
|------------------------|--------|-------------------------------|---|
| REQUEST_NUMBER | NUMBER | Requests Per Minute | The invoking times (per minute) of tpcall, tpacall and tpconnect method in Tuxedo domain during the interval. Internal system calls are counted as well. Not NULL Value: TPCONNECT_NUMBER+ TPCALL_NUMBER |
| COMPLETED_WOR KLOAD | NUMBER | Completed Workload Per Minute | The work load (per minute) completed in Tuxedo domain during the interval. Not NULL Threshold: > |

Service Metrics

This metrics is the repository side metrics, which is aggregated from all Tuxedo Server targets under the Tuxedo Domain in terms of service name.

| | | | |
|----------------------------|------------------------|----------------------|-------------|
| Metric Name | SERVICE_STATISTICS | | |
| Metric Type | TABLE, Repository Side | | |
| Metric Display | Service Statistics | | |
| Collection interval | 15 minutes | | |
| Key Column(s) | SERVICE_NAME | | |
| Column Name | Column Type | Display Label | Note |

| | | | |
|----------------|--------|--------------------------------------|--|
| SERVICE_NAME | STRING | Name | Service name. |
| MESSAGE_SIZE | NUMBER | Message Bytes Per Minute | <p>The size of all request messages in bytes (per minute) aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold: ></p> |
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | <p>The average execution time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold: ></p> |
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | <p>The average CPU occupancy time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold: ></p> |

| | | | |
|-----------------------|--------|----------------------------|--|
| SUCCESS_NUMBER | NUMBER | Successes Per Minute | The successful request number per minute aggregated by the service name. Not NULL Threshold: > |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute | The request number of system failure per minute (tperrno is not TPESVCFail) aggregated by the service name. Not NULL Threshold: > |

| | | | |
|---------------------|--------|--------------------------|--|
| USER_FAILURE_NUMBER | NUMBER | User Failures Per Minute | The request number of user failure per minute (tperrno is TPESVCFAIL) aggregated by the service name. Not NULL Threshold: > |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | The request number per minute aggregated by the service name. Not NULL Value: SUCCESS_NUMBER + SYSTEM_FAILURE_NUMBER + USER_FAILURE_NUMBER Threshold: > |

Tuxedo Machine

Description

This target corresponds to an entry defined in the `MACHINES` section of the `TUXCONFIG` file of monitored Tuxedo domain. Tuxedo Machine is a system target type.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|----------------------|
| Name | Name | Visible Editable | [Domain Name]/[LMID] |

| | | | |
|----------------------|-----------------------------|--|---|
| Host | Host | Editable(*) | Listening IP address or hostname of the tlisten process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | Listening port of the JMX RMI connector embedded in tlisten process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| PMID | PMID | Visible UBB Parameter | Physical machine ID |
| LMID | LMID | Visible Editable(*), UBB Parameter | Logic machine name |
| APPDIR | APPDIR | Visible UBB Parameter | |
| ENVFILE | ENVFILE | Visible UBB Parameter | |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |

Associations

- `installed_at`: associates with [Tuxedo Home](#) target where the application runs.
- `installed_at`: associates with [Tuxedo Application Home](#) target if the Tuxedo machines are deployed through Tuxedo add-on.
- `App_composite_contains`: [Tuxedo Group](#).
- `App_composite_contains`: [Tuxedo Bridge](#).
- `managed_by`: [Tuxedo tlisten](#).

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <p>0: Inactive, when BBL process in this Tuxedo Machine is not running.</p> <p>1: Active, when BBL process in this Tuxedo Machine is running.</p> <p>If status >= 1, the target is available.</p> |

Client Number Metrics

| | | | |
|----------------------------|--------------------|--------------------------|---|
| Metric Name | | CLIENT_CONNECTION_NUMBER | |
| Metric Type | | TABLE | |
| Metric Display | | Client Connections | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| NATIVE_CLIENT_NUMBER | NUMBER | Native Clients | The number of native clients that are joining the Tuxedo machine. Not NULL Threshold: > |
| WORKSTATION_CLIENT_NUMBER | NUMBER | Workstation Clients | The number of workstation clients that are connecting to the Tuxedo machine. Not NULL Threshold: > |

| | | | |
|--------------------|--------|--------------|---|
| JOLT_CLIENT_NUMBER | NUMBER | Jolt Clients | The number of JOLT clients that are connecting to the Tuxedo machine. Not NULL Threshold: > |
| CLIENT_NUMBER | NUMBER | Clients | The total number of clients that are joining or connecting to the Tuxedo machine. Not NULL Value: NATIVE_CLIENT_NUMBER+ WORKSTATION_CLIENT_NUMBER+ JOLT_CLIENT_NUMBER Threshold: > |

Machine Metrics

| | | | |
|----------------------------|------------------------------|----------------------|-------------|
| Metric Name | MACHINE_OPERATION_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Machine Operation Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |

| | | | |
|----------------------|--------|----------------------|--|
| TPCONNECT_NUMB ER | NUMBER | tpconnect Per Minute | <p>The invoking times (per minute) of <code>tpconnect</code> method in Tuxedo machine during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| TPDEQUEUE_NUMB ER | NUMBER | tpdequeue Per Minute | <p>The invoking times (per minute) of <code>tpdequeue</code> method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|----------------------|--------|----------------------|--|
| TPENQUEUE_NUMB ER | NUMBER | tpenqueue Per Minute | <p>The invoking times (per minute) of tpenqueue method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| TPOST_NUMBER | NUMBER | tppost Per Minute | <p>The invoking times (per minute) of tppost method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|--------------------|--------|-----------------------------|--|
| TPCALL_NUMBER | NUMBER | tpcall & tpacall Per Minute | <p>The invoking times (per minute) of tpcall method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| TPSUBSCRIBE_NUMBER | NUMBER | tpsubscribe Per Minute | <p>The invoking times (per minute) of tpsubscribe method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|--------------------------------------|--------|---|---|
| INITIATED_TRANS ACTION_NUMBER | NUMBER | Initiated Transactions Per Minute | <p>The number of XA transactions initiated (per minute) in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| COMMITTED_ TRANSACTION_NU MBER | NUMBER | Committed Transactions Per Minute | <p>The number of XA transactions committed (per minute) in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|-----------------------------|--------|-----------------------------------|---|
| ABORTED_TRANSACTION_NUMBER | NUMBER | Aborted Transactions Per Minute | <p>The number of XA transactions aborted (per minute) in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| COMPLETE_TRANSACTION_NUMBER | NUMBER | Completed Transactions Per Minute | <p>The number of XA transactions aborted or committed (per minute) in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>COMMITTED_TRANSACTION_NUMBER + ABORTED_TRANSACTION_NUMBER</p> <p>Threshold:</p> <p>></p> |

| | | | |
|------------------------|--------|----------------------------------|--|
| REQUEST_NUMBER | NUMBER | Requests Per Minute | <p>The invoking times (per minute) of <code>tpcall</code>, <code>tpacall</code> and <code>tpconnect</code> method in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p><code>TPCONNECT</code> <code>_NUMBER+</code> <code>TPCALL_NUMBER</code></p> <p>Threshold:</p> <p>></p> |
| COMPLETED_WOR KLOAD | NUMBER | Completed Workload Per Minute | <p>The work load (per minute) completed in Tuxedo machine during the interval.</p> <p>interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

Service Metrics

This metrics is repository side metrics, which is aggregated from all Tuxedo Server targets under the Tuxedo Machine in terms of service name.

| | | | |
|----------------------------|--------------------|--------------------------------------|---|
| Metric Name | | SERVICE_STATISTICS | |
| Metric Type | | TABLE, Repository Side | |
| Metric Display | | Service Statistics c | |
| Collection interval | | 15 minutes | |
| Key Column(s) | | SERVICE_NAME | |
| Column Name | Column Type | Display Label | NOTE |
| SERVICE_NAME | STRING | Name | Service name. |
| MESSAGE_SIZE | NUMBER | Message Bytes Per Minute | <p>The size of all request messages in bytes (per minute) aggregated by the service name.</p> <p>The value will be NULL if no request is served during the interval.</p> <p>Threshold: ></p> |
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | <p>The average execution time in microsecond aggregated by the service name.</p> <p>The value will be NULL if no request is served during the interval.</p> <p>Threshold: ></p> |

| | | | |
|-----------------------|--------|-----------------------------------|---|
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | The average CPU occupancy time in microsecond aggregated by the service name. The value will be NULL if no request is served during the interval. Threshold: > |
| SUCCESS_NUMBER | NUMBER | Successes Per Minute | The successful request number per minute aggregated by the service name. Not NULL Threshold: > |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute | The request number of system failure per minute (tperno is not TPESVCFAIL) aggregated by the service name. Not NULL Threshold: > |

| | | | |
|---------------------|--------|--------------------------|--|
| USER_FAILURE_NUMBER | NUMBER | User Failures Per Minute | The request number of user failure per minute (tperrno is TPESVCFail) aggregated by the service name. Not NULL Threshold: > |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | The request number per minute aggregated by the service name. Not NULL Value: SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER Threshold: > |

Tuxedo Group

Description

This target is a repository side target with system target type, which corresponds to an entry defined in the `GROUPS` section of the `TUXCONFIG` file of monitored Tuxedo domain.

Properties

| Name | Display Label | Characters | Description |
|---------------|---------------|--|--|
| Name | Name | Visible Editable | [Domain Name] / [MasterLMID] / [SRVGRP] Note: After group migration, the group with original master LMID (in name) is not deleted. |
| Host | Host | Editable(*) | Listening IP address or hostname of the tlisten process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | Listening port of the JMX RMI connector embedded in tlisten process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| LMID | LMID | Visible UBB Parameter | The current LMID, this property is especially necessary for a group related to two Tuxedo Machines. |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name. |
| GRPNO | GRPNO | Visible Editable UBB Parameter | GRPNO parameter for the group. |
| CICS_Included | CICS_Included | | Indicates whether this group includes ART JES servers. Values: Yes No |

| | | | |
|----------------------|-----------------------------|---------|--|
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |

Associations

App_composite_contains: [Tuxedo Server](#) and all Tuxedo System server except [Tuxedo Bridge](#) targets.

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|-------------|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |

| | | | |
|--------|--------|--------------|--|
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <p>0: Inactive, when none of process in this Tuxedo Machine is running.</p> <p>1: Active, when any processes in this Tuxedo Machine are running.</p> <p>If status>=1, then the target is available.</p> |

Service Metrics

This metrics is a repository side metrics, which is aggregated from all Tuxedo Server targets under the Tuxedo Group in terms of service name.

| | | | |
|----------------------------|------------------------|--------------------------|--|
| Metric Name | SERVICE_STATISTICS | | |
| Metric Type | TABLE, Repository Side | | |
| Metric Display | Service Statistics | | |
| Collection interval | 15 minutes | | |
| Key Column(s) | SERVICE_NAME | | |
| Column Name | Column Type | Display Label | Note |
| SERVICE_NAME | STRING | Name | Service name. |
| MESSAGE_SIZE | NUMBER | Message Bytes Per Minute | <p>The size of all request messages in bytes (per minute) aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold: ></p> |

| | | | |
|-----------------------|--------|--------------------------------------|--|
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | <p>The average execution time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold:</p> <p>></p> |
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | <p>The average CPU occupancy time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold:</p> <p>></p> |
| SUCCESS_NUMBER | NUMBER | Successes Per Minute | <p>The successful request number per minute aggregated by the service name.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute | <p>The request number of system failure per minute (tpereno is not TPESVCFail) aggregated by the service name.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|---------------------|--------|--------------------------|--|
| USER_FAILURE_NUMBER | NUMBER | User Failures Per Minute | The request number of user failure per minute (tperrno is TPESVCFAIL) aggregated by the service name. Not NULL Threshold: > |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | The request number per minute aggregated by the service name. Not NULL Value: SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER Threshold: > |

Tuxedo Server

Description

This target corresponds to an entry defined in the `SERVERS` section of the `TUXCONFIG` file of monitored Tuxedo domain.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|------------------------------|
| Name | Name | Visible Editable | [Group Name]/[AOUT]:[SRVID] |

| | | | |
|----------------------|-----------------------------|--|--|
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Editable(*), Visible UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG (5)</code> |
| AOUT | AOUT | Visible Editable, UBB Parameter | process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | | Response | |
| Metric Type | | TABLE | |
| Metric Display | | Response | |
| Collection Interval | | 5 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <ul style="list-style-type: none"> • 0:Inactive, when no process instance is running • 1:Active, if at least one process instance is running <p>If status>=1, then the target is available.</p> |

Service Metrics

| | | | |
|----------------------------|--------------------|----------------------|---------------|
| Metric Name | | SERVICE_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Service Statistics | |
| Collection interval | | 15 minutes | |
| Key Column(s) | | SERVICE_NAME | |
| Column Name | Column type | Display Label | Note |
| SERVICE_NAME | STRING | Name | Service name. |

| | | | |
|----------------|--------|--------------------------------------|---|
| MESSAGE_SIZE | NUMBER | Message Bytes Per Minute | <p>The size of all request messages in bytes (per minute) aggregated by the service name.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | <p>The average execution time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold:</p> <p>></p> |
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | <p>The average CPU occupancy time in microsecond aggregated by the service name.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold:</p> <p>></p> |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|-----------------------|--------|----------------------------|---|
| SUCCESS_NUMBER | NUMBER | Successes Per Minute | <p>The successful request number per minute aggregated by the service name.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute | <p>The request number of system failure per minute (tperno is not TPESVCFAIL) aggregated by the service name.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|---------------------|--------|--------------------------|--|
| USER_FAILURE_NUMBER | NUMBER | User Failures Per Minute | <p>The request number of user failure per minute (tperrno is TPESVCFAIL) aggregated by the service name.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | <p>The request number per minute aggregated by the service name.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER</p> <p>Threshold:</p> <p>></p> |

IPC Queue Metrics

| | | | |
|----------------------------|--------------------|---------------------------|--|
| Metric Name | | IPC_QUEUE_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | IPC Queue Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | IPC_QUEUE_NAME, SERVER_ID | |
| Column Name | Column Type | Display Label | Note |
| IPC_QUEUE_NAME | STRING | Name | Tuxedo request IPC queue name. |
| SERVER_ID | STRING | Server ID | Tuxedo server ID. For MSSQ server, only one queue is created no matter how many server instances are running and the SRVID parameter is used. |
| QUEUE_DEPTH | NUMBER | Queue Depth | The IPC queue length. Not NULL Threshold: > |

Server Metrics

| | | | |
|----------------------------|--|-------------------|--|
| Metric Name | | SERVER_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Server Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |

| Column Name | Column Type | Display Label | Note |
|------------------------|-------------|----------------------|---|
| INSTANCE_NUMBER | NUMBER | Instances | The active server process number of the Tuxedo server target. Not NULL Threshold: > |
| DISPATCH_THREAD_NUMBER | NUMBER | Dispatch Threads | The total dispatch thread number in all active server processes of the Tuxedo server target. Not NULL A snapshot of total dispatch thread number of all server instances. Threshold: > |
| TPCONNECT_NUMBER | NUMBER | tpconnect Per Minute | The invoking times (per minute) of <code>tpconnect</code> method in Tuxedo server during the interval. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|----------------------|--------|----------------------|---|
| TPDEQUEUE_NUMB ER | NUMBER | tpdequeue Per Minute | <p>The invoking times (per minute) of tpdequeue method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| TPENQUEUE_NUMB ER | NUMBER | tpenqueue Per Minute | <p>The invoking times (per minute) of tpenqueue method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|---------------|--------|----------------------------|---|
| TPPOST_NUMBER | NUMBER | tppost Per Minute | <p>The invoking times (per minute) of <code>tppost</code> method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| TPCALL_NUMBER | NUMBER | tpcall & tpcall Per Minute | <p>The invoking times (per minute) of <code>tpcall</code> method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|-------------------------------|--------|-----------------------------------|--|
| TPSUBSCRIBE_NUMBER | NUMBER | tpsubscribe Per Minute | <p>The invoking times (per minute) of tpsubscribe method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| INITIATED_TRANS_ACTION_NUMBER | NUMBER | Initiated Transactions Per Minute | <p>The number of XA transactions initiated (per minute) in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|--------------------------------------|--------|---|--|
| ABORTED_ TRANSACTION_NU MBER | NUMBER | Aborted Transactions Per Minute | <p>The number of XA transactions aborted (per minute) in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| COMMITTED_ TRANSACTION_NU MBER | NUMBER | Committed Transactions Per Minute | <p>The number of XA transactions committed (per minute) in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|------------------------|--------|----------------------------------|---|
| REQUEST_NUMBER | NUMBER | Requests Per Minute | <p>The invoking times (per minute) of <code>tpcall</code>, <code>tpacall</code> and <code>tpconnect</code> method in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>TPCONNECT _NUMBER+ TPCALL_NUMBER</p> <p>Threshold:</p> <p>></p> |
| COMPLETED_WOR KLOAD | NUMBER | Completed Workload Per Minute | <p>The work load (per minute) completed in Tuxedo server during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

Service Aggregated Metrics

| | | | |
|----------------------------|--------------------|---|---|
| Metric Name | | SERVER_AGGREGATED_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Server Aggregated Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| SERVICE _EXECUTION_TIME | NUMBER | Average Service Execution Time(microsecond) | The average service execution time in microsecond of all services advertised by the Tuxedo server target. The value is NULL if no request is served during the interval. Threshold: > |
| SERVICE _CPU_TIME | NUMBER | Average Service CPU Time (microsecond) | The average CPU occupancy time in microsecond of all services advertised by the Tuxedo server target. The value is NULL if no request is served during the interval. Threshold: > |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|---------------------------------------|--------|----------------------------|---|
| SERVICE _SUCCESS_NUMBE R | NUMBER | Successes Per Minute | <p>The number of successful requests (per minute) on the Tuxedo Server target.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| SERVICE _SYSTEM_FAILURE _NUMBER | NUMBER | System Failures Per Minute | <p>The number of system failure service requests per minute (<code>tperrno</code> is not <code>TPESVCFALL</code>) on the Tuxedo Server target.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|-------------------------------------|--------|-----------------------------|--|
| SERVICE _USER_FAILURE_ NUMBER | NUMBER | User Failures Per Minute | <p>The number of user failure service requests per minute (tperrno is TPESVCFALL) on the Tuxedo Server target.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
|-------------------------------------|--------|-----------------------------|--|

| | | | |
|-----------------------|--------|---------------------|---|
| REQUEST_NUMBER | NUMBER | Requests Per Minute | <p>The number of service requests (per minute) on the Tuxedo Server target.</p> <p>This value will become 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER</p> <p>Threshold: ></p> |
| SERVICE_SUCCESS_RATIO | NUMBER | Success Ratio(%) | <p>The successful ratio of service requests on the Tuxedo server target.</p> <p>This value will become 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>The value is NULL if no request is served during the interval.</p> <p>Threshold: <</p> |

Tuxedo System Server

Description

This target corresponds to an entry defined in the `SERVERS` section of the `TUXCONFIG` file of monitored Tuxedo domain.

The following system servers contain the Tuxedo System Server target type.

- ARTJESADM
- ARTJESINITIATOR
- ARTJESCONV
- ARTJESPURGE
- AUTHSVR
- BBL
- DBBL
- DMADM
- GAUTHSVR
- GWADM
- JREPSVR
- KAUTHSVR
- LAUTHSVR
- LMS
- TMMETADATA
- TMQFORWARD
- TMQUEUE

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|--|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |

| | | | |
|----------------------|-----------------------------|--|--|
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group. |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG (5) . |
| AOUT | AOUT | Visible Editable UBB Parameter | Process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | |
|--------------------|----------|
| Metric Name | Response |
| Metric Type | TABLE |

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <p>0:Inactive, when no process instance is running</p> <p>1:Active, if at least one process instance is running</p> <p>If status>=1, then the target is available.</p> |

Instance Number Metrics

| | | | |
|----------------------------|-----------------------|----------------------|---|
| Metric Name | SYSTEM_SERVER_NUMBER | | |
| Metric Type | TABLE | | |
| Metric Display | System Server Metrics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| INSTANCE_NUMBE R | NUMBER | Instances | <p>The active server processes number of the target.</p> <p>Not NULL</p> <p>Threshold: ></p> |

Tuxedo Bridge

Description

This target corresponds to a Tuxedo BRIDGE process.

Properties

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|-------------------------------|---|
| Name | Name | Visible Editable | [Domain Name] / [LMID] / BRIDGE |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the <code>JMX_RMI</code> connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| LMID | LMID | Editable(*), UBB Parameter | Logical machine of the Tuxedo Machine where the bridge is running. |
| NADDR | NADDR | Visible UBB Parameter | Specifies the complete network listening address for the Bridge process. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Used to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Used to get metric data. |
| useSSL | Use SSL | Visible | Use SSL or not |

Associations

`communicates_to`: Peers of Tuxedo Bridge on other [Tuxedo Machine](#).

Availability Metrics

| | | | |
|----------------------------|------------------------|----------------------|--|
| Metric Name | | Response | |
| Metric Type | | TABLE | |
| Metric Display | | Response | |
| Collection Interval | | 5 minutes | |
| Key Column(s) | | None | |
| instance_number | Instance Number | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

IPC Queue Metrics

| | | | |
|----------------------------|--|-------------------------|--|
| Metric Name | | BRIDGE_QUEUE_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Bridge Queue Statistics | |
| Collection Interval | | 15 minutess | |
| Key Column(s) | | None | |

| Column Name | Column Type | Display Label | Note |
|----------------|-------------|--------------------|--|
| IPCQUEUE_DEPTH | NUMBER | Depth of IPC Queue | The IPC queue length. Not NULL Threshold: > |

Remote Link Metrics

| | | | |
|----------------------------|------------------------|--|--|
| Metric Name | REMOTE_LINK_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Remote Link Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | LMID | | |
| Column Name | Column Type | Display Label | NOTE |
| LMID | STRING | LMID | LMID of the remote Tuxedo machine |
| INBOUND_MESSAG E_NUMBER | NUMBER | Inbound Network Messages Per Minute | The number of messages transferred from the remote Tuxedo machine per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|-------------------------------|--------|--|---|
| OUTBOUND_MESS GE_NUMBER | NUMBER | Outbound Network Messages Per Minute | <p>The number of messages transferred to the remote Tuxedo machine per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| INBOUND_NETWORK_MESSAGE_SIZE | NUMBER | Inbound Network Messages Bytes Per Minute | <p>The message size in byte transferred from the remote Tuxedo machine per minute.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| OUTBOUND_NETWORK_MESSAGE_SIZE | NUMBER | Outbound Network Messages Bytes Per Minute | <p>The message size in byte transferred to the remote Tuxedo machine per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|--------------------------------|--------|--------------------------------|---|
| PENDING_NETWORK_MESSAGE_NUMBER | NUMBER | Pending Network Messages | The number of messages that are pending in the network to the remote Tuxedo machine. Not NULL Threshold: > |
| PENDING_NETWORK_MESSAGE_SIZE | NUMBER | Pending Network Messages Bytes | The total message size in byte that are pending in the network to the remote Tuxedo machine. Not NULL Threshold: > |

Tuxedo TMS

Description

This target corresponds to a Tuxedo global transaction manager server entry defined in TUXCONFIG.

Properties

| Name | Display Label | Characters | Description |
|---------|---------------|--------------------------|---|
| Name | Name | Visible Editable | For TMS defined in GROUPS section the name is [Group Name] / [AOUT]. For TMS defined in RMS section, the name is [Group Name] / [AOUT] : [RMSNAME] |
| RMSName | RMS Name | Visible UBB Parameter | For TMS defined in RMS section, it means Resource manager name. For TMS defined in GROUPS section the name, it will be empty. |

| | | | |
|----------------------|-----------------------------|--|--|
| RMID | RMID | Visible UBB Parameter | For TMS defined in RMS section, it means Resource manager ID. For TMS defined in GROUPS section the name, it is empty. |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| AOUT | AOUT | Visible Editable(*), UBB Parameter | Process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | | Response | |
| Metric Type | | TABLE | |
| Metric Display | | Response | |
| Collection Interval | | 5 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

XA Transaction Metrics

| | | | |
|----------------------------|--------------------|----------------------------|-------------|
| Metric Name | | TMS_TRANSACTION_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | TMS Transaction Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |

| | | | |
|--------------------------------------|--------|--|--|
| ACTIVE_INSTANCE _NUMBER | NUMBER | Active Instances | The number of active processes. Not NULL Threshold: > |
| COMMITTED_ TRANSACTION_NU MBER | NUMBER | Committed XA Transactions Per Minute | The number of XA transactions committed per minute during the interval. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|------------------------------------|--------|--|---|
| ABORTED_ TRANSACTION_NUM BER | NUMBER | Aborted XA Transactions Per Minute | <p>The number of XA transactions aborted per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| COMPLETE_TRANS ACTION_NUMBER | NUMBER | Complete Transactions Per Minute | <p>The number of XA transactions aborted or committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value: COMMITTED_ TRANSACTION_NUMB ER+ ABORTED_ TRANSACTION_NUMB ER</p> <p>Threshold: ></p> |

Tuxedo /T Domain Gateway

Description

This target corresponds to a Tuxedo `GWTDOMAIN` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|------------------|----------------------|--|---|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the <code>JMX_RMI</code> connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable, UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG (5)</code> |
| AOUT | AOUT | Visible Editable, UBB Parameter | Process name |
| GatewayAddresses | Gateway Address | Visible | Listening address of the domain gateway |
| GatewayPort | Gateway Port | Visible | Listening port of the domain gateway |

| | | | |
|----------------------|-----------------------------|---------|--|
| is_migrated_target | Is Migrated Target | | Indicates this is a migrated target that doesn't exist in Tuxedo side. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| Migrated | Is Migrated Target | | Indicates whether this target been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Associations

`communicates_to`: the Tuxedo /T Domain Gateway peer on other Tuxedo Domain.

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

XA Transaction Metrics

| | | | |
|------------------------------|---------------------------------------|--------------------------------------|---|
| Metric Name | DOMAIN_GATEWAY_TRANSACTION_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Domain Gateway Transaction Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| COMMITTED_TRANSACTION_NUMBER | NUMBER | Committed XA Transactions Per Minute | <p>The number of XA transactions committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|-----------------------------|--------|------------------------------------|---|
| ABORTED_TRANSACTION_NUMBER | NUMBER | Aborted XA Transactions Per Minute | <p>The number of XA transactions aborted per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| COMPLETE_TRANSACTION_NUMBER | NUMBER | Complete Transactions Per Minute | <p>The number of XA transactions aborted or committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>COMMITTED_TRANSACTION_NUMBER+ ABORTED_TRANSACTION_NUMBER</p> <p>Threshold:</p> <p>></p> |

Remote Link Metrics

| | | | |
|----------------------------|--------------------|-------------------------------------|---|
| Metric Name | | REMOTE_LINK_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Remote Link Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | REMOTE_DOMAIN_ID | |
| Column Name | Column Type | Display Label | Note |
| REMOTE_DOMAIN_ID | STRING | Remote Domain ID | The remote domain ID. |
| CONNECTION_STATUS | STRING | Connection Status | The connection status to the remote domain. TA_STATE filed of T_DM_CONNECTION class, DM_MIB. Value: {ACT SUS INI INA UNK} |
| INBOUND_MESSAGE_NUMBER | NUMBER | Inbound Network Messages Per Minute | The number of messages transferred from the remote Tuxedo domain per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|--------------------------------------|--------|---|--|
| OUTBOUND_MESSA GE_NUMBER | NUMBER | Outbound Network Messages Per Minute | <p>The number of messages transferred to the remote Tuxedo domain per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| INBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Inbound Network Messages Bytes Per Minute | <p>The message size in byte transferred from the remote Tuxedo domain per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|---------------------------------------|--------|--|--|
| OUTBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Outbound Network Messages Bytes Per Minute | <p>The message size in byte transferred to the remote Tuxedo domain per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| PENDING_NETWORK_MESSAGE_NUMBER | NUMBER | Pending Network Messages | <p>The number of messages that are pending in the network to the remote Tuxedo domain.</p> <p>Not NULL</p> <p>The number of messages that are pending in the network</p> <p>Threshold: ></p> |

| | | | |
|------------------------------------|--------|--------------------------------|---|
| PENDING_NETWORK_MESSAGE_SIZE | NUMBER | Pending Network Messages Bytes | The total messages size in byte that are pending in the network to the remote Tuxedo domain. Not NULL Total size (bytes) of messages that are pending in the network Threshold: > |
| OUTSTANDING_NETWORK_REQUEST_NUMBER | NUMBER | Outstanding Network Requests | The number of requests that are waiting for reply from the remote Tuxedo domain. Not NULL Threshold: > |

Tuxedo Web Service Gateway

Description

This target corresponds to a Tuxedo `SALT GWWS` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|--|
| Name | Name | Visible Editable | [Group Name]/[AOUT]:[SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |

| | | | |
|----------------------|-----------------------------|--|--|
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group. |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> . |
| AOUT | AOUT | Visible UBB Parameter | Process name. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| Migrated | Is Migrated Target | | Indicates whether this target been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | | Response | |
| Metric Type | | TABLE | |
| Metric Display | | Response | |
| Collection Interval | | 5 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

Gateway Metrics

| | | | |
|----------------------------|--------------------|--------------------------------|-------------|
| Metric Name | | WEBSERVICE_GATEWAY_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Web Service Gateway Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | None | |
| Column Name | Column Type | Display Label | Note |

| | | | |
|-------------------------------|--------|---|---|
| ACTIVE_THREAD_NUMBER | NUMBER | Active Threads | The number of working threads in the pool. Not NULL Threshold: > |
| INBOUND_PROCESS_TIME | NUMBER | Average Inbound Process Time (microsecond) | The average response time in microsecond for inbound requests. The value is NULL if no request is served during the interval. Threshold: > |
| OUTBOUND_PROCESS_TIME | NUMBER | Average Outbound Process Time (microsecond) | The average response time in microsecond for outbound requests. The value is NULL if no request is served during the interval. Threshold: > |
| INBOUND_ONEWAY_FAILURE_NUMBER | NUMBER | Inbound One-Way Failures Per Minute | The inbound one-way failure number per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|--|---------------|---|--|
| <p>INBOUND_ONEWAY _SUCCESS_NUMBE R</p> | <p>NUMBER</p> | <p>Inbound One-Way Successes Per Minute</p> | <p>The inbound one-way success number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| <p>INBOUND_RPC _FAILURE_NUMBER</p> | <p>NUMBER</p> | <p>Inbound RPC Failures Per Minute</p> | <p>The inbound PRC failure number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| <p>INBOUND_RPC _SUCCESS_NUMBE R</p> | <p>NUMBER</p> | <p>Inbound RPC Successes Per Minute</p> | <p>The inbound PRC success number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|---------------------------------|--------|---------------------------------------|--|
| OUTBOUND_ONWAY_FAILURE_NUMBER | NUMBER | Outbound One-Way Failures Per Minute | <p>The outbound one-way failure number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| OUTBOUND_ONWAY_SUCCESSES_NUMBER | NUMBER | Outbound One-Way Successes Per Minute | <p>The outbound one-way success number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| OUTBOUND_RPC_FAILURE_NUMBER | NUMBER | Outbound RPC Failures Per Minute | <p>The outbound RPC failure number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|---|--------|--------------------------------------|---|
| OUTBOUND_RPC _SUCCESS_NUMBE R | NUMBER | Outbound RPC Successes Per Minute | The outbound RPC success number per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |
| INBOUND_PENDING _REQUEST_NUMBE R | NUMBER | Inbound Pending Requests | The number of requests that are waiting for reply from Tuxedo system. Not NULL Threshold: > |
| OUTBOUND_PENDI NG_REQUEST_NUM BER | NUMBER | Outbound Pending Requests | The number of requests that are waiting for the reply from outside. Not NULL Threshold: > |

Tuxedo Workstation Listener

Description

This target corresponds to a Tuxedo `WSL` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|--|--|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> . |
| AOUT | AOUT | Visible UBB Parameter | Process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |

| | | | |
|----------|--------------------|---------|--|
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, the target is available. |

Workstation Listener Metrics

| | | | |
|----------------------------|---------------------------------|--|--|
| Metric Name | WORKSTATION_LISTENER_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Workstation Listener Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |

| Column Name | Column Type | Display Label | Note |
|---------------------------|-------------|-----------------|---|
| ACTIVE_HANDLER_ NUMBER | NUMBER | Active Handlers | The number of the active handlers spawned by the listener. Not NULL Threshold: > |
| CLIENT_NUMBER | NUMBER | Clients | The number of the clients that are connecting with the handlers spawned by the listener. Not NULL Threshold: > |

| | | | |
|----------------------------|--------|----------------------|--|
| REQUEST_NUMBER | NUMBER | Request Per Minute | <p>The number of the requests that are sent to the handlers spawned by the listener per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| OUTSTANDING_REQUEST_NUMBER | NUMBER | Outstanding Requests | <p>The number of the requests that are waiting for the reply on the handlers spawned by the listener.</p> <p>Not NULL</p> <p>Threshold: ></p> |

Tuxedo Jolt Listener

Description

This target corresponds to a Tuxedo JSL entry defined in TUXCONFIG.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|---------------------------------|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |

| | | | |
|----------------------|-----------------------------|--|--|
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> |
| AOUT | AOUT | Visible UBB Parameter | Process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, the target is available. |

Jolt Listener Metrics

| | | | |
|----------------------------|--------------------------|----------------------|-------------|
| Metric Name | JOLT_LISTENER_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Jolt Listener Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |

| | | | |
|----------------------------|--------|----------------------|---|
| ACTIVE_HANDLER_NUMBER | NUMBER | Active Handlers | The number of the active handlers spawned by the listener. Not NULL Threshold: > |
| CLIENT_NUMBER | NUMBER | Clients | The number of the clients that are connecting with the handlers spawned by the listener. Not NULL Threshold: > |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | The number of the requests that are sent to the handlers spawned by the listener per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |
| OUTSTANDING_REQUEST_NUMBER | NUMBER | Outstanding Requests | The number of the requests that are waiting for the reply on the handlers spawned by the listener. Not NULL Threshold: > |

Tuxedo Event Broker

Description

This target corresponds to a Tuxedo `TMSYSEVT` or `TMUSREVR` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|--|--|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> |

| | | | |
|----------|-----------------------|--------------------------|--|
| AOUT | AOUT | Visible UBB Parameter | Process name |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running. If status>=1, then the target is available. |

Event Statistics Metrics

| | | | |
|----------------------------|------------------|--|--|
| Metric Name | EVENT_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Event Statistics | | |
| Collection Interval | 15 minutes | | |

| Key Column(s) | | None | |
|----------------------------------|-------------|---|--|
| Column Name | Column Type | Display Label | Note |
| SERVICE_EVENT_NUMBER | NUMBER | Notified Events by Service Per Minute | <p>The number of the events notified to Tuxedo service per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| UNSOLICITED_MESSAGE_EVENT_NUMBER | NUMBER | Notified Events by Unsolicited Message Per Minute | <p>The number of the events notified by unsolicited message per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|--------------------------------|--------|---|---|
| QUEUE_MESSAGE_ EVENT_NUMBER | NUMBER | Notified Events by Queue Message Per Minute | <p>The number of the events notified to /Q per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| COMMAND_LINE_E VENT_NUMBER | NUMBER | Notified Events by Command Line Per Minute | <p>The number of the events notified by command line per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|--|---------------|--|--|
| <p>USERLOG_MESSAG E_EVENT_NUMBER</p> | <p>NUMBER</p> | <p>Notified Events by USERLOG Message Per Minute</p> | <p>The number of the events notified by ULOG message per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| <p>EVENT_NUMBER</p> | <p>NUMBER</p> | <p>Notified Events Per Minute</p> | <p>The number of the events notified by all methods per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value: SERVICE_EVENT_NU MBER+ UNSOLICITED_MESS AGE_EVENT_NUMBER + QUEUE_MESSAGE_EV ENT_NUMBER+ COMMAND_LINE_EVE NT_NUMBER+ USERLOG_MESSAGE_ EVENT_NUMBER</p> <p>Threshold: ></p> |

Tuxedo LMS

This target corresponds to an LMS entry defined in TUXCONFIG.

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|--|--|
| Name | Name | Visible, Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> |
| AOUT | AOUT | Visible Editable UBB Parameter | Process name |

| | | | |
|----------------------|-----------------------------|---------|--|
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| TUXCONFIG | TUXCONFIG | Visible | |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when no process instance is running 1:Active, if at least one process instance is running If status>=1, the target is available. |

Tuxedo /Q Manager Server

This target is used to monitor Tuxedo /Q, from which you can view queue related statistics information.

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|---------------------------------------|---|
| Name | Name | Visible, Editable | [Group Name]/[AOUT]:[SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| LMID | LMID | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Editable(*), Visible UBB Parameter | group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible, Editable(*) UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG(5) |

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|---------------------------------------|---|
| Qspace name | Qspace Name | Visible Editable(*) | Qspace name |
| QMCONFIG | Queue space path | Visible Editable(*) | Absolute pathname of the file or device where the application queue space is located. |
| AOUT | AOUT | Visible Editable, UBB Parameter | process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |

Associations

Tuxedo Group App_composite_contains Tuxedo /Q Manager Server

Availability Metrics

| | |
|----------------------------|-----------|
| Metric Name | Response |
| Metric Type | TABLE |
| Metric Display | Response |
| Collection Interval | 5 minutes |

| Key Column(s) | | None | |
|----------------------|--------------------|----------------------|---|
| Column Name | Column type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0: Inactive, When /Q Manager Server process is not running. 1: Active, when /Q Manager Server is running. If status >= 1, then the target is available. |

Queue Space Statistics Metrics

| Metric Name | | QUEUE_SPACE_STATISTICS | |
|----------------------------|--------------------|------------------------|--|
| Metric Type | | TABLE | |
| Metric Display | | Queue Space Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | QSPACE_NAME, STATE | |
| Column Name | Column Type | Display Label | Note |
| QSPACE_NAME | STRING | Name | TA_APPQSPACENAME |
| STATE | STRING | State | TA_STATE |
| ACTIONS | NUMBER | Current Actions | TA_CURACTIONS Not NULL Threshold: > |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|---------------|--------|---|--|
| CURSORS | NUMBER | Current Cursors | TA_CURCURSORS Not NULL Threshold: > |
| HANDLES | NUMBER | Current Handles | TA_CURHANDLES Not NULL Threshold: > |
| MEMNONPERSIST | NUMBER | Memory of Non-persistent Messages | TA_CURMEMNONP ERSIST Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Total Pending Messages | TA_CURMSG Not NULL Threshold: > |
| PROCS | NUMBER | Current Processes | TA_CURPROC Not NULL Threshold: > |
| QUEUES | NUMBER | Current Queues | TA_CURQUEUES Not NULL Threshold: > |

| | | | |
|---------|--------|----------------------|--|
| TQUEUES | NUMBER | Current Temp Queues | TA_CURTMPQUEUE S Not NULL Threshold: > |
| TRANS | NUMBER | Current Transactions | TA_CURTRANS Not NULL Threshold: > |

Queue Space Peak Metrics

| | | | |
|----------------------------|--------------------|------------------------|---|
| Metric Name | | QUEUE_SPACE_PEAK | |
| Metric Type | | TABLE | |
| Metric Display | | Queue Space Peak Value | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | QSPACE_NAME | |
| Column Name | Column Type | Display Label | Note |
| QSPACE_NAME | STRING | Queue Space Name | TA_APPQSPACENAME Not NULL Threshold: > |
| ACTIONS | NUMBER | Concurrent Actions | TA_HW ACTIONS Not NULL Threshold: > |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|---------------|--------|---|---|
| CURSORS | NUMBER | Concurrent Cursors | TA_HWCURSORS Not NULL Threshold: > |
| HANDLES | NUMBER | Concurrent Handles | TA_HWHANDLES Not NULL Threshold: > |
| MEMNONPERSIST | NUMBER | Memory Consumed by Non-persist Message Memory | TA_HWMEMNONPE RSIST Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Pending Messages | TA_HWMSG Not NULL Threshold: > |
| OWNERS | NUMBER | Concurrent Owners | TA_HWOWNERS Not NULL Threshold: > |
| PROCS | NUMBER | Concurrent Processes | TA_HWPROC Not NULL Threshold: > |
| QUEUES | NUMBER | Queues | TA_HWQUEUES Not NULL Threshold: > |

| | | | |
|---------|--------|-------------------------|---|
| TQUEUES | NUMBER | Temp Queues | TA_HWTMPQUEUES Not NULL Threshold: > |
| TRANS | NUMBER | Concurrent Transactions | TA_HWTRANS Not NULL Threshold: > |

Queue Statistics Metrics

| | | | |
|----------------------------|--------------------|-------------------------|---|
| Metric Name | | QUEUE_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Queue Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | QUEUE_NAME, QSPACE_NAME | |
| Column Name | Column Type | Display Label | Note |
| QUEUE_NAME | STRING | Name | TA_APPQNAME Not NULL Threshold: > |
| QSPACE_NAME | STRING | Queue Space Name | TA_APPQSPACENAME Not NULL Threshold: > |

| | | | |
|----------------|--------|--|--|
| BLOCKS | NUMBER | Disk Pages | TA_CURBLOCKS Not NULL Threshold: > |
| NONPERSIST_MEM | NUMBER | Memory Bytes Consumed by Non-persistent Messages | TA_CURNONPERSISTBYTES Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Pending Messages | TA_CURMSG+TA_CURNONPERSISTMSG Not NULL Threshold: > |

TMA Targets

TMA SNA Gateway

This target corresponds to a `GWSNAX` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|---|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>listen</code> process associated with the Tuxedo Machine. |

| | | | |
|----------------------|-----------------------------|--|--|
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG(5)</code> |
| AOUT | AOUT | Visible UBB Parameter | Process name |
| GatewayAddress | Gateway Address | Visible | Listening address of the domain gateway |
| GatewayPort | Gateway Port | Visible | Listening port of the domain gateway |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |

| | | | |
|----------|--------------------|---------|--|
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

XA Transaction Metrics

| | |
|----------------------------|---|
| Metric Name | SNA_DOMAIN_GATEWAY_TRANSACTION_STATISTICS |
| Metric Type | TABLE |
| Metric Display | SNA Domain Gateway Transaction Statistics |
| Collection Interval | 15 minutes |

| Key Column(s) | | None | |
|------------------------------|-------------|-------------------------------------|---|
| Column Name | Column Type | Display Label | Note |
| COMMITTED_TRANSACTION_NUMBER | NUMBER | Committed XA Transaction Per Minute | <p>The number of XA transactions committed (per minute) during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|-----------------------------|--------|-----------------------------------|---|
| ABORTED_TRANSACTION_NUMBER | NUMBER | Aborted XA Transaction Per Minute | <p>The number of XA transactions aborted per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| COMPLETE_TRANSACTION_NUMBER | NUMBER | Complete Transaction Per Minute | <p>The number of XA transactions aborted or committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value: COMMITTED_TRANSACTION_NUMBER+ ABORTED_TRANSACTION_NUMBER</p> <p>Threshold: ></p> |

Remote Link Metrics

| | | | |
|----------------------------|--------------------|------------------------------------|--|
| Metric Name | | REMOTE_LINK_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Remote Link Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | REMOTE_DOMAIN_ID | |
| Column Name | Column Type | Display Label | Note |
| REMOTE_DOMAIN_ID | STRING | Remote Domain ID | The remote domain ID. |
| CONNECTION_STATUS | STRING | Connection Status | The connection to the remote Mainframe domain status. TA_STATE filed of T_DM_CONNECTION class, DM_MIB. Value: {ACT SUS INI INA UNK} |
| INBOUND_MESSAGE_NUMBER | NUMBER | Inbound Network Message Per Minute | The number of messages transferred from the remote Mainframe domain per minute. This value becomes to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|---------------------------------------|--------|---|---|
| OUTBOUND_MESSA GE_NUMBER | NUMBER | Outbound Network Message Per Minute | <p>The number of messages transferred to the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| INBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Inbound Network Message Bytes Per Minute | <p>The message size (in byte) transferred from the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |
| OUTBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Outbound Network Message Bytes Per Minute | <p>The message size (in byte) transferred to the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|------------------------------------|--------|-------------------------------|--|
| PENDING_NETWORK_MESSAGE_NUMBER | NUMBER | Pending Network Message | The number of messages that are pending in the network to the remote Mainframe domain. Not NULL Threshold: > |
| PENDING_NETWORK_MESSAGE_SIZE | NUMBER | Pending Network Message Bytes | The total messages size (in byte) that are pending in the network to the remote Mainframe domain. Not NULL Threshold: > |
| OUTSTANDING_NETWORK_REQUEST_NUMBER | NUMBER | Outstanding Network Request | The number of requests that are waiting for reply from the remote Mainframe domain. Not NULL Threshold: > |

TMA TCP Gateway

This target corresponds to a `GWIDOMAIN` entry defined in `TUXCONFIG`.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|---------------------------------|
| Name | Name | Visible Editable | [Group Name] / [AOUT] : [SRVID] |

| | | | |
|----------------------|-----------------------------|--|--|
| Host | Host | Editable(*) | The listening IP address or hostname of the <code>tlisten</code> process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in <code>tlisten</code> process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | Group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG(5)</code> |
| AOUT | AOUT | Visible UBB Parameter | Process name |
| GatewayAddress | Gateway Address | Visible | Listening address of the domain gateway. |
| GatewayPort | Gateway Port | Visible | Listening port of the domain gateway. |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data. |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data. |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data. |

| | | | |
|----------|--------------------|---------|--|
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

XA Transaction Metrics

| | |
|----------------------------|---|
| Metric Name | TCP_DOMAIN_GATEWAY_TRANSACTION_STATISTICS |
| Metric Type | TABLE |
| Metric Display | TCP Domain Gateway Transaction Statistics |
| Key Column(s) | None |
| Collection Interval | 15 minutes |

Enterprise Manager for Tuxedo Target Reference

| Column Name | Column Type | Display Label | Note |
|----------------------------------|-------------|--|---|
| COMMITTED_TRAN SACTION_NUMBER | NUMBER | Committed XA Transaction Per Minute | <p>The number of XA transactions committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold: ></p> |

| | | | |
|-----------------------------|--------|-----------------------------------|---|
| ABORTED_TRANSACTION_NUMBER | NUMBER | Aborted XA Transaction Per Minute | <p>The number of XA transactions aborted per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| COMPLETE_TRANSACTION_NUMBER | NUMBER | Complete Transaction Per Minute | <p>The number of XA transactions aborted or committed per minute during the interval.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>COMMITTED_TRANSACTION_NUMBER+ ABORTED_TRANSACTION_NUMBER</p> <p>Threshold:</p> <p>></p> |

Remote Link Metrics

| | | | |
|----------------------------|--------------------|------------------------------------|--|
| Metric Name | | REMOTE_LINK_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Remote Link Statistics | |
| Collection Interval | | 15 minutes | |
| Key Column(s) | | REMOTE_DOMAIN_ID | |
| Column Name | Column Type | Display Label | Note |
| REMOTE_DOMAIN_ID | STRING | Remote Domain ID | The remote domain ID. |
| CONNECTION_STATUS | STRING | Connection Status | The connection to the remote Mainframe domain status. TA_STATE filed of T_DM_CONNECTION class, DM_MIB. Value: {ACT SUS INI INA UNK} |
| INBOUND_MESSAGE_NUMBER | NUMBER | Inbound Network Message Per Minute | The number of messages transferred from the remote Mainframe domain per minute. This value becomes to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: > |

| | | | |
|---------------------------------------|--------|---|--|
| OUTBOUND_MESSA GE_NUMBER | NUMBER | Outbound Network Message Per Minute | <p>The number of messages transferred to the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| INBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Inbound Network Message Bytes Per Minute | <p>The message size (in byte) transferred from the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |
| OUTBOUND _NETWORK_MESSA GE_SIZE | NUMBER | Outbound Network Message Bytes Per Minute | <p>The message size (in byte) transferred to the remote Mainframe domain per minute.</p> <p>This value becomes to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p> |

| | | | |
|------------------------------------|--------|-------------------------------|--|
| PENDING_NETWORK_MESSAGE_NUMBER | NUMBER | Pending Network Message | The number of messages that are pending in the network to the remote Mainframe domain. Not NULL Threshold: > |
| PENDING_NETWORK_MESSAGE_SIZE | NUMBER | Pending Network Message Bytes | The total messages size (in byte) that are pending in the network to the remote Mainframe domain. Not NULL Threshold: > |
| OUTSTANDING_NETWORK_REQUEST_NUMBER | NUMBER | Outstanding Network Request | The number of requests that are waiting for the reply from the remote Mainframe domain. Not NULL Threshold: > |

TMA CRM

Description

The Communications Resource Manager (CRM) is the Oracle Tuxedo Mainframe Adapter for SNA component that manages communications resources. The CRM coordinates the flow of data between applications running on an ATMI platform and applications running on a mainframe.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|---------------------|-------------------|
| Name | Name | Visible Editable | CRM/[Host]:[Port] |
| Host | Host | Editable | CRM address. |
| Port | Port | Editable | CRM host. |
| AOUT | AOUT | Visible Editable | Process name |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 1 minute | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | <p>0: Inactive, when the service metrics has not been collected from source target.</p> <p>1:Active, when the service metrics has been collected from source target.</p> <p>If status>=1, then the target is available.</p> |

Trace Status Metrics

| | | | |
|----------------------------|--------------------|----------------------|-------------|
| Metric Name | TRACE_STATUS | | |
| Metric Type | TABLE | | |
| Metric Display | Trace Status | | |
| Collection Interval | 10 minutes | | |
| Key Column(s) | | | |
| Column Name | Column Type | Display Label | Note |
| APPC_STACK_TRAC E | STRING | Appc Stack Trace | |
| TRACE_LEVEL | STRING | Trace Level | |

Remote Link Status Metrics

| | | | |
|----------------------------|--------------------|----------------------|-------------|
| Metric Name | REMOTE_LINK_STATUS | | |
| Metric Type | TABLE | | |
| Metric Display | Remote Link Status | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | REMOTE_LINK_ID | | |
| Column Name | Column Type | Display Label | Note |
| REMOTE_LINK_ID | STRING | ID | |
| MAX_COUNT | NUMBER | Max | Not NULL |
| ACTIVE_COUNT | NUMBER | Active | Not NULL |
| IN_USE_COUNT | NUMBER | In Use | Not NULL |

Remote Link Statistics Metrics

| | | | |
|----------------------------|--------------------|---------------------------------|-----------------------------|
| Metric Name | | REMOTE_LINK_STATISTICS | |
| Metric Type | | TABLE | |
| Metric Display | | Remote Link Statistics | |
| Collection Interval | | 5 minutes | |
| Key Column(s) | | REMOTE_LINK_ID | |
| Column Name | Column Type | Display Label | Note |
| REMOTE_LINK_ID | STRING | ID | |
| INPUT_CONVERSATION_COUNT | NUMBER | Input Conversations Per Minute | Not NULL Threshold: > |
| INPUT_MESSAGE_COUNT | NUMBER | Input Messages Per Minute | Not NULL Threshold: > |
| INPUT_DATA_SIZE | NUMBER | Input Data Per Minute | Not NULL Threshold: > |
| OUTPUT_CONVERSATION_COUNT | NUMBER | Output Conversations Per Minute | Not NULL Threshold: > |
| OUTPUT_MESSAGE_COUNT | NUMBER | Output Messages Per Minute | Not NULL Threshold: > |
| OUTPUT_DATA_SIZE | NUMBER | Output Data Per Minute | Not NULL Threshold: > |

ART CICS Targets

Tuxedo CICS Region

"Tuxedo CICS Region" is a system target type.

Associations

Tuxedo Domain App_composite_contains: Tuxedo CICS Region targets

App_composite_contains: Tuxedo CICS Transaction targets

Properties

| Name | Display Label | Characters | Description |
|------|---------------|------------------------|---|
| Name | Name | Visible Editable(*) | Name of the region. When first discovery, the CICS Region name will be [Domain Name]/CICS_Region User is able to give a new name when they redefine the ART CICS region. |

ART CICS Statistics Metrics

| | | | |
|----------------------------|----------------------------|----------------------|------------------|
| Metric Name | ART_CICS_REGION_STATISTICS | | |
| Metric Type | Repository | | |
| Metric Display | ART CICS Region Statistics | | |
| Collection interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |
| TRANSACTION_NAME | String | Name | Transaction Name |

| | | | |
|----------------------------|--------|--------------------------------------|--|
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | The value will be NULL if no request is served during the interval. AVG(service_statistics.avg_execution_time) Threshold: > |
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | The value will be NULL if no request is served during the interval. Value: AVG(service_statistics.CPU_time) Threshold: > |
| TRANSACTION_NUMBER | NUMBER | Transactions Per Minute | Not NULL Value: transaction_success_number+ transaction_failure_number Threshold: > |
| TRANSACTION_SUCCESS_NUMBER | NUMBER | Transaction Successes Per Minute | Not NULL Value: Sum(service_statistics.success_number) Threshold: > |

| | | | |
|--------------------------------|--------|------------------------------------|--|
| TRANSACTION_FAI LURE_NUMBER | NUMBER | Transaction Failures Per Minute | Not NULL Value: Sum(service_statistics. system_failure_number + service_statistics user_failure_number) Threshold: > |
| FAILED_TRANSACT ION_RATIO | NUMBER | Failed Transaction ratio(%) | The value will be NULL if no request is served during the interval. Value: (100* transaction_failure_nu mber/ transaction_number) Threshold: > |

Tuxedo ART CICS Transaction

"Tuxedo ART CICS Transaction" is defined in the ART CICS resource file "transactions.desc"; on Enterprise Manager side. Metrics of an ART transaction are aggregated from all associated Tuxedo servers.

Properties

| Name | Display Label | Characters | Description |
|------|---------------|------------------------|--|
| Name | Name | Visible Editable(*) | [ART CICS Region Name] / [Transaction Name] |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |

| Name | Display Label | Characters | Description |
|-----------------|------------------|-------------|---|
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| TransactionName | Transaction Name | Editable(*) | |

ART CICS Transaction Metrics

This metrics is repository side metrics, which is aggregated from all "ART Transaction Server" targets under the ART CICS Region in terms of service name.

| | | | |
|----------------------------|---------------------------------|--------------------------|---|
| Metric Name | ART_CICS_TSANSACTION_STATISTICS | | |
| Metric Type | TABLE Repository Side | | |
| Metric Display | ART CICS Transaction Statistics | | |
| Collection interval | 15 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| MESSAGE SIZE | NUMBER | Message Bytes Per Minute | The value will be NULL if no request is served during the interval. |

Enterprise Manager for Tuxedo Target Reference

| | | | |
|-----------------------|--------|--------------------------------------|--|
| EXECUTION_TIME | NUMBER | Average Execution Time (microsecond) | <p>The value will be NULL if no request is served during the interval.</p> <p>Value: AVG(service_statistics.avg_execution_time)</p> <p>Threshold: ></p> |
| CPU_TIME | NUMBER | Average CPU Time (microsecond) | <p>The value will be NULL if no request is served during the interval.</p> <p>Value: AVG(service_statistics.CPU_time)</p> <p>Threshold: ></p> |
| SUCCESS_NUMBER | NUMBER | Successes Per Minute | <p>Not NULL</p> <p>Value: Sum(service_statistics.success_number)</p> <p>Threshold: ></p> |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute | <p>Not NULL</p> <p>Value: Sum(service_statistics.system_failure_number)</p> <p>Threshold: ></p> |

| | | | |
|--------------------------|--------|---------------------------------|--|
| USER_FAILURE_NUM BER | NUMBER | User Failures Per Minute | Not NULL Value: Sum(service_statistics. user_failure_number) Threshold: > |
| REQUEST_NUMBER | NUMBER | Requests Per Minute | Not NULL Value: Sum(service_statistics. success_number + service_statistics. system_failure_number +service_statistics. user_failure_number) Threshold: > |
| FAILED_TRANSACTION_RATIO | NUMBER | Failed Transactions ratio(%) | The value will be NULL if no request is served during the interval. Value: (100* success_number r/ request_number) Threshold: > |

ART CICS TSQ Server

Properties

| Name | Display Label | Characters | Description |
|-----------|---------------|--|---|
| Name | Name | Visible, Editable | [Group Name]/[AOUT]:[SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG |
| AOUT | AOUT | Visible, UBB Parameter | process name |
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|------------|---|
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

ART TSQ Metrics

| | |
|-----------------------|--------------------|
| Metric Name | ARTTSQ_STATISTICS |
| Metric Type | TABLE |
| Metric Display | ART TSQ Statistics |

| | | | |
|----------------------------|--------------------|---------------------------------|--|
| Collection Interval | 15 minutes | | |
| Key Column(s) | TSQUEUE_NAME | | |
| Column Name | Column type | Display Label | Note |
| TSQUEUE_NAME | STRING | Name | |
| TOTAL_LENGTH | NUMBER | All Items Length (Bytes) | Indicates the total length in bytes of all the items in the temporary storage queue. |
| MAXITEMLEN | NUMBER | Largest Item Length (Bytes) | Indicates the length in bytes of the largest item in the temporary storage queue. |
| MINITEMLEN | NUMBER | Smallest Item Length (Bytes) | Indicates the length in bytes of the smallest item in the temporary storage queue. |
| NUMITEMS | NUMBER | Items | Indicates the number of items in the temporary storage queue. |
| WRITEQSUM | NUMBER | WRITEQ Commands Per Minute | Indicates the total number of WRITEQ commands performed of this TSQUEUE. |
| REWRITESUM | NUMBER | REWRITEQ Commands Per Minute | Indicates the total number of REWRITEQ commands performed of this TSQUEUE. |
| READQSUM | NUMBER | READQ Commands Per Minute | Indicates the total number of READQ commands performed of this TSQUEUE. |

ART CICS TDQ Server

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|---------------------------------------|---|
| Name | Name | Visible, Editable | [Group Name]/[AOUT]:[SRVID] |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| DOMAINID | DOMAINID | Editable(*), UBB Parameter | |
| IPCKEY | IPCKEY | Editable(*), UBB Parameter | |
| SRVGRP | SRVGRP | Visible Editable(*), UBB Parameter | group name |
| GRPNO | GRPNO | UBB Parameter | GRPNO parameter for the group |
| SRVID | SRVID | Visible Editable(*), UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG |
| AOUT | AOUT | Visible UBB Parameter | process name |

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|------------|---|
| User Name | Tuxedo User | Visible | Use this Tuxedo User to get metric data |
| User Password | Tuxedo User Password | Visible | Use this Tuxedo User to get metric data |
| Application Password | Tuxedo Application Password | Visible | Use this Tuxedo User to get metric data |
| useSSL | Use SSL | Visible | Use SSL or not |

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|--|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0:Inactive, when the process is running 1:Active, if the process instance is running If status>=1, then the target is available. |

ART TDQ Metrics

| | | | |
|----------------------------|--------------------|----------------------------|--|
| Metric Name | ARTTDQ_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | ART TDQ Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | TDQUEUE_NAME | | |
| Column Name | Column Type | Display Label | Note |
| TDQUEUE_NAME | STRING | TDQUEUE Name | |
| WRITEQSUM | NUMBER | WRITEQ commands Per Minute | Indicates the total number of WRITEQ commands performed of this TSQUEUE. |
| READQSUM | NUMBER | READQ commands Per Minute | Indicates the total number of READQ commands performed of this TSQUEUE. |

ART Batch Targets

Tuxedo Batch System

This is a system type target that is used to monitor the metrics generated by JES jobs.

Properties

| Name | Display Label | Characters | Description |
|----------------------|-----------------------------|----------------------------|--|
| Name | Name | Visible, Editable | Name of the Batch System. When first discovery, the Batch System name will be [Domain Name]/Batch_System |
| Host | Host | Editable(*) | The listening IP address or hostname of the 'listen' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'listen' process associated with the Tuxedo Machine. |
| domain_id | DOMAINID | Editable(*), UBB Parameter | |
| IPC_key | IPCKEY | Editable(*), UBB Parameter | |
| snmp_agent_port | Receive Port for SNMP Agent | Editable(*) OPTIONAL | |
| UserName | User Name | Editable(*) OPTIONAL | |
| password | User Password | Editable(*) OPTIONAL | |
| application_password | Application Password | Editable(*) OPTIONAL | |
| useSSL | Use SSL | Editable(*) | |

Availability Metrics

| | |
|--------------------|----------|
| Metric Name | Response |
| Metric Type | TABLE |

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0: Inactive, When no ARTJESADM server is active. 1: Active, when at least one ARTJESADM server is active |

Job Aggregated Statistics

| | | | |
|----------------------------|---------------------------|--------------------------------------|-------------|
| Metric Name | JOB_AGGREGATED_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Job Aggregated Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | | | |
| Column Name | Column type | Display Label | Note |
| SUBMITTED_NUMBER | NUMBER | Submitted Jobs Per Minute | |
| SUCCESSFUL_NUMBER | NUMBER | Successes Per Minute | |
| FAILED_NUMBER | NUMBER | Failures Per Minute | |
| WAITING_NUMBER | NUMBER | WAITING Jobs | |
| AVERAGE_USRCPU | NUMBER | Average User CPU Time (milliseconds) | |

| | | |
|------------------------|--------|--|
| AVERAGE_SYSCPU | NUMBER | Average System CPU Time (milliseconds) |
| AVERAGE_CPU | NUMBER | Average CPU Time (milliseconds) |
| AVERAGE_EXECUTION_TIME | NUMBER | Average Execution Time (second) |

OTMQ Manager Server

This target is used to monitor OTMQ, from which you can view queue related statistics information. Target type is tuxedo_OTMQ_server.

Properties

| Name | Display Label | Characters | Description |
|----------|---------------|----------------------------|---|
| Name | Name | Visible, Editable | [Group Name] / [AOUT] : [SRVID] |
| Host | Hostname | Editable(*) | The listening IP address or hostname of the 'tlisten' process associated with the Tuxedo Machine. |
| Port | Port | Editable(*) | The listening port of the JMX RMI connector embedded in 'tlisten' process associated with the Tuxedo Machine. |
| DOMAINID | Domain ID | Editable(*), UBB Parameter | |
| IPCKEY | IPC Key | Editable(*), UBB Parameter | |
| LMID | LMID | Editable(*), UBB Parameter | |

| Name | Display Label | Characters | Description |
|----------------------|----------------------|---|---|
| SRVGRP | Group Name | Editable(*), Visible UBB Parameter | Group name |
| GRPNO | Group Number | UBB Parameter | Group Number for the group |
| SRVID | SRVID | Visible Editable(*) UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG(5) |
| Queue server name | AOUT | Visible Editable | OTMQ server name |
| Qspace name | Queue Space Name | Visible Editable(*) | OTMQ Qspace name |
| QMCONFIG | Queue space path | Visible Editable(*) | Absolute pathname of the file or device where the application queue space is located. |
| Migrated | Is Migrated Target | | Indicates whether this target has been migrated off. |
| User Name | User Name | Editable | Use this Tuxedo User to get metric data |
| User Password | User Password | Editable | Tuxedo User password |
| Application Password | Application Password | Editable | Tuxedo Application password |
| useSSL | Use SSL | Editable | Use SSL or not |

Associations

Tuxedo Group App_composite_contains OTMQ Manager Server

Availability Metrics

| | | | |
|----------------------------|--------------------|----------------------|---|
| Metric Name | Response | | |
| Metric Type | TABLE | | |
| Metric Display | Response | | |
| Collection Interval | 5 minutes | | |
| Key Column(s) | None | | |
| Column Name | Column Type | Display Label | Note |
| Timing | NUMBER | Elapsed Time | |
| Status | NUMBER | Status | 0: Inactive, When OTMQ Manager Server process is not running. 1: Active, when OTMQ Manager Server is running. If status >= 1, then the target is available. |

Queue Space Statistics Metrics

| | | | |
|----------------------------|------------------------|----------------------|------------------|
| Metric Name | QUEUE_SPACE_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Queue Space Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | QSPACE_NAME | | |
| Column Name | Column Type | Display Label | Note |
| QSPACE_NAME | STRING | Name | TA_APPQSPACENAME |

| | | | |
|---------------|--------|---|--|
| STATE | STRING | State | TA_STATE |
| ACTIONS | NUMBER | Current Actions | TA_CURACTIONS Not NULL Threshold: > |
| CURSORS | NUMBER | Current Cursors | TA_CURCURSORS Not NULL Threshold: > |
| HANDLES | NUMBER | Current Handles | TA_CURHANDLES Not NULL Threshold: > |
| MEMNONPERSIST | NUMBER | Memory of Non-persistent Messages | TA_CURMEMNONP ERSIST Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Total Pending Messages | TA_CURMSG Not NULL Threshold: > |
| PROCS | NUMBER | Current Processes | TA_CURPROC Not NULL Threshold: > |
| QUEUES | NUMBER | Current Queues | TA_CURQUEUEES Not NULL Threshold: > |

| | | | |
|----------|--------|-----------------------------|--|
| TQUEUES | NUMBER | Current Temp Queues | TA_CURTMPQUEUE S Not NULL Threshold: > |
| TRANS | NUMBER | Current Transactions | TA_CURTRANS Not NULL Threshold: > |
| SENT_MSG | NUMBER | Send Messages Per Minute | TA_MSGSENT Not NULL Threshold: > |
| RECV_MSG | NUMBER | Receive Messages Per Minute | TA_MSGRCV Not NULL Threshold: > |

Queue Space Peak Metrics

| | | | |
|----------------------------|------------------------|----------------------|------------------|
| Metric Name | QUEUE_SPACE_PEAK | | |
| Metric Type | TABLE | | |
| Metric Display | Queue Space Peak Value | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | QSPACE_NAME | | |
| Column Name | Column type | Display Label | Note |
| QSPACE_NAME | STRING | Queue Space Name | TA_APPQSPACENAME |

| | | | |
|---------------|--------|---|---|
| ACTIONS | NUMBER | Concurrent Actions | TA_HWACTIONS Not NULL Threshold: > |
| CURSORS | NUMBER | Concurrent Cursors | TA_HWCURSORS Not NULL Threshold: > |
| HANDLES | NUMBER | Concurrent Handles | TA_HWHANDLES Not NULL Threshold: > |
| MEMNONPERSIST | NUMBER | Memory Consumed by Non-persist Message Memory | TA_HWMEMNONPE RSIST Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Pending Messages | TA_HWMSG Not NULL Threshold: > |
| OWNERS | NUMBER | Concurrent Owners | TA_HWOWNERS Not NULL Threshold: > |
| PROCS | NUMBER | Concurrent Processes | TA_HWPROC Not NULL Threshold: > |

| | | | |
|---------|--------|-------------------------|---|
| QUEUES | NUMBER | Queues | TA_HWQUEUES Not NULL Threshold: > |
| TQUEUES | NUMBER | Temp Queues | TA_HWTMPQUEUES Not NULL Threshold: > |
| TRANS | NUMBER | Concurrent Transactions | TA_HWTRANS Not NULL Threshold: > |

Queue Statistics Metrics

| | | | |
|----------------------------|-------------------------|----------------------|------------------|
| Metric Name | QUEUE_STATISTICS | | |
| Metric Type | TABLE | | |
| Metric Display | Queue Statistics | | |
| Collection Interval | 15 minutes | | |
| Key Column(s) | QUEUE_NAME, QSPACE_NAME | | |
| Column Name | Column type | Display Label | Note |
| QUEUE_NAME | STRING | Name | TA_APPQNAME |
| QSPACE_NAME | STRING | Queue Space Name | TA_APPQSPACENAME |
| CUR_PID | NUMBER | Owner Process ID | TA_PID |
| ATTACH_STATE | STRING | Attach State | TA_STATE |

| | | | |
|----------------|--------|--|--|
| BLOCKS | NUMBER | Disk Pages | TA_CURBLOCKS Not NULL Threshold: > |
| NONPERSIST_MEM | NUMBER | Memory Bytes Consumed by Non-persistent Messages | TA_CURNONPERSISTBYTES Not NULL Threshold: > |
| SENT_MSG | NUMBER | Send Messages Per Minute | TA_MSGSENT Not NULL Threshold: > |
| RECV_MSG | NUMBER | Receive Messages Per Minute | TA_MSGRCV Not NULL Threshold: > |
| PENDING_MSG | NUMBER | Pending Messages | TA_CURMSG+TA_CURNONPERSISTMSG Not NULL Threshold: > |

ECM Tables

Enterprise Manager Configuration Management (ECM) primarily deals with collection and storage of the configuration data of hardware and software components managed and monitored by Enterprise Manager.

For Enterprise Manager for Oracle Tuxedo, ECM is used to collect and demonstrate configuration information of all Tuxedo Target types.

This section covers the following ECM tables:

- [Tuxedo Domain](#)
- [Tuxedo Machine](#)
- [Tuxedo Group](#)
- [Tuxedo Server](#)
- [Tuxedo Bridge](#)
- [Tuxedo TMS](#)
- [Tuxedo /Q](#)
- [Tuxedo Message Queue \(OTMQ\)](#)

Tuxedo Domain

| | | | | |
|-----------------------|---------------------|-------------|--------------------|---------------|
| TARGET_TYPE | tuxedo_domain | | | |
| UI_IGNORE | N | | | |
| HISTORY_IGNORE | N | | | |
| COMPARE_IGNORE | N | | | |
| TABLE NAME | TUXEDO_ECM_DOMAIN | | | |
| SINGLE_ROW | Y | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| AUTOTRAN | AUTOTRAN | STRING | 64 | N |
| TRANTIME | TRANTIME | NUMBER | 10 | N |
| IPCKEY | IPCKEY | NUMBER | 10 | N |
| MASTER | MASTER | STRING | 64 | N |
| MODEL | MODEL | STRING | 32 | N |
| DOMAINID | DOMAINID | STRING | 64 | N |
| USERID | UID | NUMBER | 10 | N |

| | | | | |
|--------------|--------------|--------|----|---|
| GID | GID | NUMBER | 10 | N |
| PERM | PERM | NUMBER | 10 | N |
| MAXACCESSES | MAXACCESSES | NUMBER | 10 | N |
| MAXSERVERS | MAXSERVERS | NUMBER | 10 | N |
| MAXSERVICES | MAXSERVICES | NUMBER | 10 | N |
| MAXGROUPS | MAXGROUPS | NUMBER | 10 | N |
| MAXNETGROUPS | MAXNETGROUPS | NUMBER | 10 | N |
| MAXMACHINES | MAXMACHINES | NUMBER | 10 | N |
| MAXQUEUES | MAXQUEUES | NUMBER | 10 | N |
| MAXACLGROUPS | MAXACLGROUPS | NUMBER | 10 | N |
| MAXGTT | MAXGTT | NUMBER | 10 | N |
| MAXCONV | MAXCONV | NUMBER | 10 | N |
| MAXBUFTYPE | MAXBUFTYPE | NUMBER | 10 | N |
| MAXBUFSTYPE | MAXBUFSTYPE | NUMBER | 10 | N |
| MAXDRT | MAXDRT | NUMBER | 10 | N |
| MAXRFT | MAXRFT | NUMBER | 10 | N |
| MAXRTDATA | MAXRTDATA | NUMBER | 10 | N |
| MAXSPDATA | MAXSPDATA | NUMBER | 10 | N |
| MAXTRANTIME | MAXTRANTIME | NUMBER | 10 | N |
| CMTRET | CMTRET | STRING | 32 | N |

Enterprise Manager for Tuxedo Target Reference

| | | | | |
|------------------------|------------------------|--------|----|---|
| LDBAL | LDBAL | STRING | 32 | N |
| SYSTEM_ACCESS | SYSTEM_ACCESS | STRING | 32 | N |
| OPTIONS | OPTIONS | STRING | 32 | N |
| USIGNAL | USIGNAL | STRING | 32 | N |
| SECURITY | SECURITY | STRING | 32 | N |
| SSL_RENEGOTIATION | SSL_RENEGOTIATION | NUMBER | 10 | N |
| AUTHSVC | AUTHSVC | STRING | 32 | N |
| SCANUNIT | SCANUNIT | NUMBER | 10 | N |
| SANITYSCAN | SANITYSCAN | NUMBER | 10 | N |
| DBBLWAIT | DBBLWAIT | NUMBER | 10 | N |
| BBLQUERY | BBLQUERY | NUMBER | 10 | N |
| BLOCKTIME | BLOCKTIME | NUMBER | 10 | N |
| NOTIFY | NOTIFY | STRING | 32 | N |
| SEC_PRINCIPAL_NAME | SEC_PRINCIPAL_NAME | STRING | 32 | N |
| SEC_PRINCIPAL_LOCATION | SEC_PRINCIPAL_LOCATION | STRING | 32 | N |
| SEC_PRINCIPAL_PASSVAR | SEC_PRINCIPAL_PASSVAR | STRING | 32 | N |
| SIGNATURE_AHEAD | SIGNATURE_AHEAD | NUMBER | 10 | N |
| SIGNATURE_BEHIND | SIGNATURE_BEHIND | NUMBER | 10 | N |

| | | | | |
|-------------------------|-------------------------|--------|----|---|
| SIGNATURE_R EQUIRED | SIGNATURE_R EQUIRED | STRING | 32 | N |
| ENCRYPTION_ REQUIRED | ENCRYPTION_ REQUIRED | STRING | 32 | N |

Tuxedo Machine

| | | | | |
|-----------------------|---------------------|-------------|--------------------|---------------|
| TARGET_TYPE | tuxedo_machine | | | |
| HISTORY_IGNORE | N | | | |
| TABLE NAME | TUXEDO_ECM_MACHINE | | | |
| UI_IGNORE | N | | | |
| COMPARE_IGNORE | N | | | |
| SINGLE_ROW | N | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| ADDRESS | ADDRESS | STRING | 64 | N |
| LMID | LMID | STRING | 64 | Y |
| APPDIR | APPDIR | STRING | 256 | N |
| TUXCONFIG | TUXCONFIG | STRING | 256 | N |
| TUXDIR | TUXDIR | STRING | 256 | N |
| USERID | USERID | NUMBER | 10 | N |
| GID | GID | NUMBER | 10 | N |
| PERM | PERM | NUMBER | 10 | N |
| BRTHREADS | BRTHREADS | STRING | 64 | N |
| MAXACCESSES | MAXACCESSES | NUMBER | 10 | N |

| | | | | |
|----------------------------|----------------------------|--------|------|---|
| MAXWSCLIEN TS | MAXWSCLIEN TS | NUMBER | 10 | N |
| MAXACLCACH E | MAXACLCACH E | NUMBER | 10 | N |
| MAXCONV | MAXCONV | NUMBER | 10 | N |
| MAXPENDING BYTES | MAXPENDING BYTES | NUMBER | 10 | N |
| MAXGTT | MAXGTT | NUMBER | 10 | N |
| TYPE | TYPE | STRING | 64 | N |
| CMPLIMIT | CMPLIMIT | STRING | 64 | N |
| NETLOAD | CMPLIMIT | NUMBER | 10 | N |
| SPINCOUNT | SPINCOUNT | NUMBER | 10 | N |
| TLOGDEVICE | TLOGDEVICE | STRING | 256 | N |
| TLOGOFFSET | TLOGOFFSET | NUMBER | 10 | N |
| TLOGNAME | TLOGNAME | STRING | 64 | N |
| TLOGSIZE | TLOGSIZE | NUMBER | 10 | N |
| ULOGPFX | ULOGPFX | STRING | 256 | N |
| TUXOFFSET | TUXOFFSET | NUMBER | 10 | N |
| ENVFILE | ENVFILE | STRING | 256 | N |
| SEC_PRINCIPA L_NAME | SEC_PRINCIPA L_NAME | STRING | 512 | N |
| SEC_PRINCIPA L_LOCATION | SEC_PRINCIPA L_LOCATION | STRING | 1024 | N |
| SEC_PRINCIPA L_PASSVAR | SEC_PRINCIPA L_PASSVAR | STRING | 64 | N |
| SIGNATURE_R EQUIRED | SIGNATURE_R EQUIRED | STRING | 64 | N |

| | | | | |
|-------------------------|-------------------------|--------|----|---|
| ENCRYPTION_ REQUIRED | ENCRYPTION_ REQUIRED | STRING | 64 | N |
| SICACHEENTRI ESMAX | SICACHEENTRI ESMAX | STRING | 64 | N |

Tuxedo Group

| | | | | |
|----------------------------|----------------------------|-------------|--------------------|---------------|
| TARGET_TYPE | tuxedo_group | | | |
| UI_IGNORE | N | | | |
| HISTORY_IGNORE | N | | | |
| COMPARE_IGNORE | N | | | |
| TABLE NAME | TUXEDO_ECM_GROUPS | | | |
| SINGLE_ROW | N | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| GROUPNAME | GROUPNAME | STRING | 64 | Y |
| LMID | LMID | STRING | 64 | N |
| GRPNO | GRPNO | NUMBER | 10 | N |
| TMSNAME | TMSNAME | STRING | 256 | N |
| ENVFILE | ENVFILE | STRING | 256 | N |
| TMSCOUNT | TMSCOUNT | NUMBER | 10 | N |
| SEC_PRINCIPAL_ NAME | SEC_PRINCIPAL_ NAME | STRING | 512 | N |
| SEC_PRINCIPAL_ LOCATION | SEC_PRINCIPAL_ LOCATION | STRING | 1024 | N |
| SEC_PRINCIPAL_ PASSVAR | SEC_PRINCIPAL_ PASSVAR | STRING | 64 | N |

| | | | | |
|-------------------------|-------------------------|--------|-----|---|
| SIGNATURE_REQ UIRED | SIGNATURE_REQ UIRED | STRING | 64 | N |
| ENCRYPTION_RE QUIRED | ENCRYPTION_RE QUIRED | STRING | 64 | N |
| OPENINFO | OPENINFO | STRING | 256 | N |
| CLOSEINFO | CLOSEINFO | STRING | 256 | N |
| MRM | MRM | STRING | 64 | N |

Tuxedo Server

| | | | | |
|-----------------------|---------------------|-------------|--------------------|---------------|
| TARGET_TYPE | tuxedo_server | | | |
| UI_IGNORE | N | | | |
| HISTORY_IGNORE | N | | | |
| COMPARE_IGNORE | N | | | |
| TABLE NAME | TUXEDO_ECM_SERVERS | | | |
| SINGLE_ROW | N | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| AOUT | AOUT | STRING | 256 | N |
| SRVGRP | SRVGRP | STRING | 64 | Y |
| SRVID | SRVID | NUMBER | 10 | Y |
| CLOPT | CLOPT | STRING | 1024 | N |
| SEQUENCE | SEQUENCE | NUMBER | 10 | N |
| MIN | MIN | NUMBER | 10 | N |
| MAX | MAX | NUMBER | 10 | N |
| ENVFILE | ENVFILE | STRING | 256 | N |

| | | | | |
|----------------------------|----------------------------|--------|------|---|
| CONV | CONV | STRING | 64 | N |
| RQADDR | RQADDR | STRING | 64 | N |
| RQPERM | RQPERM | NUMBER | 10 | N |
| REPLYQ | REPLYQ | STRING | 64 | N |
| RPPERM | RPPERM | NUMBER | 10 | N |
| RCMD | RCMD | STRING | 256 | N |
| MAXGEN | MAXGEN | NUMBER | 10 | N |
| GRACE | GRACE | NUMBER | 10 | N |
| RESTART | RESTART | STRING | 64 | N |
| SYSTEM_ACC ESS | SYSTEM_ACC ESS | STRING | 64 | N |
| MAXDISPAC HTHEADS | MAXDISPAC HTHEADS | NUMBER | 10 | N |
| MINDISPATC THREADS | MINDISPATC THREADS | NUMBER | 10 | N |
| THREADSTAC KSIZE | THREADSTAC KSIZE | NUMBER | 10 | N |
| SEC_PRINCIPA L_NAME | SEC_PRINCIPA L_NAME | STRING | 512 | N |
| SEC_PRINCIPA L_LOCATION | SEC_PRINCIPA L_LOCATION | STRING | 1024 | N |
| SEC_PRINCIPA L_PASSVAR | SEC_PRINCIPA L_PASSVAR | STRING | 64 | N |
| SICACHEENTR IESMAX | SICACHEENTR IESMAX | STRING | 64 | N |
| CONCURR_ST RATEGY | CONCURR_ST RATEGY | STRING | 64 | N |

Tuxedo Bridge

| | | | | |
|-----------------------|---------------------|-------------|--------------------|---------------|
| TARGET_TYPE | tuxedo_bridge | | | |
| UI_IGNORE | N | | | |
| HISTORY_IGNORE | N | | | |
| COMPARE_IGNORE | N | | | |
| TABLE NAME | TUXEDO_ECM_BRIDGE | | | |
| SINGLE_ROW | N | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| LMID | LMID | STRING | 64 | Y |
| NADDR | NADDR | STRING | 256 | N |
| BRIDGE | BRIDGE | STRING | 256 | N |
| NLSADDR | NLSADDR | STRING | 256 | N |
| FADDR | FADDR | STRING | 256 | N |
| FRANGE | FRANGE | NUMBER | 10 | N |
| MINENCRYPT BITS | MINENCRYPT BITS | STRING | 10 | N |
| MAXENCRYPT BITS | MAXENCRYPT BITS | STRING | 10 | N |

Tuxedo TMS

| | |
|-----------------------|------------|
| TARGET_TYPE | tuxedo_TMS |
| UI_IGNORE | N |
| HISTORY_IGNORE | N |

| | | | | |
|-----------------------|---------------------|----------------|--------------------|---------------|
| COMPARE_IGNORE | | N | | |
| TABLE NAME | | TUXEDO_ECM_TMS | | |
| SINGLE_ROW | | N | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY |
| GROUPNAME | GROUPNAME | STRING | 64 | N |
| GRPNO | GRPNO | NUMBER | 10 | N |
| LMID | LMID | STRING | 64 | N |
| TMSNAME | TMSNAME | STRING | 256 | Y |
| TMSCOUNT | TMSCOUNT | NUMBER | 10 | N |
| OPENINFO | OPENINFO | STRING | 256 | N |
| CLOSEINFO | CLOSEINFO | STRING | 256 | N |

Note: Only the TMS configuration in the `GROUPS` section can be monitored from ECM perspective. TMS configuration in the `RMS` section cannot be monitored.

Tuxedo /Q

Queue Space

| | |
|-----------------------|-------------------------------|
| TARGET_TYPE | tuxedo_queue_server |
| UI_NAME | Tuxedo /Q QSPACE |
| UI_IGNORE | N |
| HISTORY_IGNORE | N |
| COMPARE_IGNORE | N |
| TABLE NAME | TUXEDO_ECM_SLASH_QUEUE_QSPACE |
| SINGLE_ROW | Y |

| MIB CLASS | | T_APPQSPACE | | | |
|--------------------|----------------------|--------------------|--------------------|---------------|------------------|
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY | MIB FIELD |
| APPQSPACENAME | Queue Space Name | STRING | 16 | N | TA_APPQSPACENAME |
| QMCONFIG | Queue Space pathname | STRING | 128 | N | TA_QMCONFIG |
| LMID | LMID | STRING | 32 | N | TA_LMID |
| IPCKEY | IPC Key | NUMBER | 10 | N | TA_IPCKEY |
| ERRORQNAME | Error Queue Name | STRING | 128 | N | TA_ERRORQNAME |
| MAXACTIONS | Max Action Number | NUMBER | 10 | N | TA_MAXACTIONS |
| MAXCURSORS | Max Cursor Number | NUMBER | 10 | N | TA_MAXCURSORS |
| MAXHANDLES | Max Handle Number | NUMBER | 10 | N | TA_MAXHANDLES |
| MAXMSG | Max Message Number | NUMBER | 10 | N | TA_MAXMSG |
| MAXOWNERS | Max Owner Number | NUMBER | 10 | N | TA_MAXOWNERS |
| MAXPAGES | Max Page Number | NUMBER | 10 | N | TA_MAXPAGES |
| MAXPROC | Max Process Number | NUMBER | 10 | N | TA_MAXPROC |
| MAXQUEUES | Max Queue Number | NUMBER | 10 | N | TA_MAXQUEUES |

| | | | | | |
|---------------|--------------------------------|--------|----|---|------------------|
| MAXTMPQUEUES | Max Temp Queue Number | NUMBER | 10 | N | TA_MAXTMPQUEUES |
| MAXTRANS | Max Transaction Number | NUMBER | 10 | N | TA_MAXTRANS |
| MEMNONPERSIST | Non-persistent Messages Memory | STRING | 32 | N | TA_MEMNONPERSIST |

Queue

| | | | | | |
|-----------------------|------------------------------|-------------|--------------------|---------------|------------------|
| TARGET_TYPE | tuxedo_queue_server | | | | |
| UI_NAME | Tuxedo /Q QUEUE | | | | |
| UI_IGNORE | N | | | | |
| HISTORY_IGNORE | N | | | | |
| COMPARE_IGNORE | N | | | | |
| TABLE NAME | TUXEDO_ECM_SLASH_QUEUE_QUEUE | | | | |
| SINGLE_ROW | N | | | | |
| MIB CLASS | T_APPQ | | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY | MIB FIELD |
| APPQNAME | Queue Name | STRING | 128 | Y | TA_APPQNAME |
| APPQSPACENAME | Queue Space Name | STRING | 16 | Y | TA_APPQSPACENAME |
| QMCONFIG | Queue Space pathname | STRING | 128 | Y | TA_QMCONFIG |

| | | | | | |
|-----------|-----------------|--------|----|---|--------------|
| LMID | LMID | STRING | 32 | Y | TA_LMID |
| APPQORDER | App Queue Order | STRING | 64 | N | TA_APPQORDER |

Tuxedo Message Queue (OTMQ)

Queue Space

| | | | | | |
|-----------------------|-------------------------|-------------|--------------------|---------------|------------------|
| TARGET_TYPE | tuxedo_OTMQ_server | | | | |
| UI_NAME | Tuxedo OTMQ QSPACE | | | | |
| UI_IGNORE | N | | | | |
| HISTORY_IGNORE | N | | | | |
| COMPARE_IGNORE | N | | | | |
| TABLE NAME | TUXEDO_ECM_OTMQ_QSPACE | | | | |
| SINGLE_ROW | Y | | | | |
| MIB CLASS | T_OTMQSPACE | | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY | MIB FIELD |
| APPQSPACENAME | Queue Space Name | STRING | 16 | N | TA_APPQSPACENAME |
| QMCONFIG | Queue Space pathname | STRING | 128 | N | TA_QMCONFIG |
| LMID | LMID | STRING | 32 | N | TA_LMID |
| IPCKEY | IPC Key | NUMBER | 10 | N | TA_IPCKEY |
| FIRSTTMPQ | First temp queue number | NUMBER | 10 | N | TA_FIRSTTMPQ |

| | | | | | |
|---------------|--------------------------------|--------|-----|---|------------------|
| ERRORQNAME | Error Queue Name | STRING | 128 | N | TA_ERRORQNAME |
| MAXACTIONS | Max Action Number | NUMBER | 10 | N | TA_MAXACTIONS |
| MAXCURSORS | Max Cursor Number | NUMBER | 10 | N | TA_MAXCURSORS |
| MAXHANDLES | Max Handle Number | NUMBER | 10 | N | TA_MAXHANDLES |
| MAXMSG | Max Message Number | NUMBER | 10 | N | TA_MAXMSG |
| MAXOWNERS | Max Owner Number | NUMBER | 10 | N | TA_MAXOWNERS |
| MAXPAGES | Max Page Number | NUMBER | 10 | N | TA_MAXPAGES |
| MAXPROC | Max Process Number | NUMBER | 10 | N | TA_MAXPROC |
| MAXQUEUES | Max Queue Number | NUMBER | 10 | N | TA_MAXQUEUES |
| MAXTMPQUEUES | Max Temp Queue Number | NUMBER | 10 | N | TA_MAXTMPQUEUES |
| MAXTRANS | Max Transaction Number | NUMBER | 10 | N | TA_MAXTRANS |
| MEMNONPERSIST | Non-persistent Messages Memory | STRING | 32 | N | TA_MEMNONPERSIST |

Queue

| | | | | | |
|-----------------------|-----------------------|-------------|--------------------|---------------|------------------|
| TARGET_TYPE | tuxedo_OTMQ_server | | | | |
| UI_NAME | Tuxedo OTMQ QUEUE | | | | |
| UI_IGNORE | N | | | | |
| HISTORY_IGNORE | N | | | | |
| COMPARE_IGNORE | N | | | | |
| TABLE NAME | TUXEDO_ECM_OTMQ_QUEUE | | | | |
| SINGLE_ROW | N | | | | |
| MIB CLASS | T_OTMQ | | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY | MIB FIELD |
| APPQNAME | Queue Name | STRING | 128 | Y | TA_APPQNAME |
| APPQSPACENAME | Queue Space Name | STRING | 16 | Y | TA_APPQSPACENAME |
| QMCONFIG | Queue Space pathname | STRING | 128 | Y | TA_QMCONFIG |
| LMID | LMID | STRING | 32 | Y | TA_LMID |
| APPQORDER | App Queue Order | STRING | 64 | N | TA_APPQORDER |
| QUETYPE | Queue Type | STRING | 64 | N | TA_QUETYPE |
| ACTIVESTATE | Permanent Active | STRING | 16 | N | TA_ACTIVESTATE |
| PRIMQUE | Primary Queue | STRING | 64 | N | TA_PRIMQUEUE |

QSpace Alias

| | | | | | |
|-----------------------|-------------------------|-------------|--------------------|---------------|-------------------|
| TARGET_TYPE | tuxedo_OTMQ_server | | | | |
| UI_NAME | Tuxedo OTMQ QUEUE ALIAS | | | | |
| UI_IGNORE | N | | | | |
| HISTORY_IGNORE | N | | | | |
| COMPARE_IGNORE | N | | | | |
| TABLE NAME | TUXEDO_ECM_OTMQ_ALIAS | | | | |
| SINGLE_ROW | N | | | | |
| MIB CLASS | T_OTMQNAMING | | | | |
| COLUMN NAME | DISPLAY NAME | TYPE | TYPE_FORMAT | IS_KEY | MIB FIELD |
| APPQSPACENAME | Queue Space Name | STRING | 32 | Y | TA_APPQSPACENAME |
| APPQNAME | Queue Name | STRING | 128 | Y | TA_APPQNAME |
| OTMQALIAS | Queue Name Alias | STRING | 1024 | Y | TA_OTMQALIAS |
| OTMQALIASSCOPE | Queue Alias Scope | STRING | 16 | N | TA_OTMQALIASSCOPE |

Properties.xml Schema

Properties.xml file is a group-level UBBCONFIG file which describes the relationship and parameters of all the servers within groups in an application package. It contains properties in the GROUPS, RMS, SERVERS, and SERVICES sections of a complete UBBCONFIG file and can have multiple groups.

The Properties.xml file is used to generate the final UBBCONFIG file when deploying the application package to a machine and its content can be modified at that time.

[Listing 3-1](#) shows a complete XML schema of Properties.xml:

Listing 3-1 Properties.xml Schema

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="packagetype">
    <xs:restriction base="xs:string">
      <xs:pattern value="TUX"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="stringtype">
    <xs:restriction base="xs:string"/>
  </xs:simpleType>
  <xs:simpleType name="stringtype249">
    <xs:restriction base="xs:string">
      <xs:maxLength value="64"/>
      <xs:pattern value="[^:*,]+\.(zip)"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="inttype">
    <xs:restriction base="xs:positiveInteger"/>
  </xs:simpleType>
  <xs:simpleType name="rmdtype">
    <xs:restriction base="xs:integer">
      <xs:minInclusive value="1"/>
    </xs:restriction>
  </xs:simpleType>
</xs:schema>
```

```
        <xs:maxInclusive value="31"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="svidtype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="1"/>
        <xs:maxInclusive value="30000"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="grpnotype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="1"/>
        <xs:maxInclusive value="29999"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="booleantype">
    <xs:restriction base="xs:string">
        <xs:pattern value="Y|N"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="wordsize">
    <xs:restriction base="xs:string">
        <xs:pattern value="32|64"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="buftypeconvtype">
    <xs:restriction base="xs:string">
```

```

        <xs:pattern value="XML2FML|XML2FML32" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="versionselect">
    <xs:restriction base="xs:string">
        <xs:pattern value="1[1-9](\.[0-9]){3,4}(_VS([0-9]){4}){0,1}" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="rqpermttype">
    <xs:restriction base="xs:string">
        <xs:pattern value="0?[0-7]{3}" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="maxgentype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="1" />
        <xs:maxInclusive value="255" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="gracetype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="0" />
        <xs:maxInclusive value="2147483647" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tsstype">
    <xs:restriction base="xs:integer">

```



```

        <xs:minInclusive value="0" />
        <xs:maxInclusive value="2147483647" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="trantimetype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="0" />
        <xs:maxInclusive value="2147483647" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="maxdistype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="1" />
        <xs:maxInclusive value="999" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="mindistype">
    <xs:restriction base="xs:integer">
        <xs:minInclusive value="0" />
        <xs:maxInclusive value="999" />
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="sicachetype">
    <xs:restriction base="xs:string">
        <xs:pattern
value="DEFAULT|0|[1-9][0-9]{0,3}|[12][0-9]{4}|3[01][0-9]{3}|32[0-6][0-9]{2
}|327[0-5][0-9]|3276[0-7]" />
    </xs:restriction>

```

```
</xs:simpleType>
<xs:simpleType name="loadtype">
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="32767" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="blocktimetype">
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="32767" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="systemaccesstype">
  <xs:restriction base="xs:string">
    <xs:pattern value="FASTPATH|PROTECTED" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="sessionroletype">
  <xs:restriction base="xs:string">
    <xs:pattern value="BEGIN|END|NONE" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="affscopetype">
  <xs:restriction base="xs:string">
    <xs:pattern value="MACHINE|GROUP|SERVER" />
  </xs:restriction>
</xs:simpleType>
```

```

</xs:simpleType>
<xs:simpleType name="affstricttype">
  <xs:restriction base="xs:string">
    <xs:pattern value="MANDATORY|PRECEDENT" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="priotype">
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="100" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tmscounttype">
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="2" />
    <xs:maxInclusive value="256" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="svctotype">
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="0" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="openinfotype">
  <xs:restriction base="xs:string">
    <xs:minLength value="1" />
    <xs:maxLength value="256" />
  </xs:restriction>

```

```

        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="clopttype">
        <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="1024"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="rqaddrtype">
        <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="30"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="minmaxtype">
        <xs:restriction base="xs:integer">
            <xs:minInclusive value="1"/>
            <xs:maxInclusive value="1000"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:complexType name="servicesection">
        <xs:all>
            <xs:element name="BUFTYPE" type="stringtype" minOccurs="0"
maxOccurs="1"/>
            <xs:element name="BUFTYPECONV" type="buftypeconvtype" minOccurs="0"
maxOccurs="1"/>
            <xs:element name="SIGNATURE_REQUIRED" type="boolean" minOccurs="0"
maxOccurs="1"/>

```

```

    <xs:element name="ENCRYPTION_REQUIRED" type="booleanType"
minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="LOAD" type="loadType" minOccurs="0" maxOccurs="1"/>
    <xs:element name="PRIO" type="prioType" minOccurs="0" maxOccurs="1"/>
    <xs:element name="BLOCKTIME" type="blockTimeType" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="SVCTIMEOUT" type="svctotype" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="SESSIONROLE" type="sessionroletype" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="AFFINITYSCOPE" type="affscopetype" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="AFFINITYSTRICT" type="affstricttype" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="AUTOTRAN" type="booleanType" minOccurs="0"
                maxOccurs="1"/>
    <xs:element name="TRANTIME" type="trantimetype" minOccurs="0"
                maxOccurs="1"/>
</xs:all>
    <xs:attribute name="SVCNM" type="stringType" use="required"/>
</xs:complexType>
<xs:complexType name="serversection">
    <xs:all>
        <xs:element name="ENVFILE" type="stringType" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="RCMD" type="stringType" minOccurs="0"
maxOccurs="1"/>

```

```
<xs:element name="CONV" type="booleanType" minOccurs="0"
maxOccurs="1" />
<xs:element name="CLOPT" type="cloptType" minOccurs="0"
maxOccurs="1" />
<xs:element name="SEQUENCE" type="intType" minOccurs="0"
maxOccurs="1" />
<xs:element name="RQADDR" type="rqaddrType" minOccurs="0"
maxOccurs="1" />
<xs:element name="MIN" type="minmaxType" minOccurs="0" maxOccurs="1" />
<xs:element name="MAX" type="minmaxType" minOccurs="0" maxOccurs="1" />
<xs:element name="RQPERM" type="rqpermType" minOccurs="0"
maxOccurs="1" />
<xs:element name="REPLYQ" type="booleanType" minOccurs="0"
maxOccurs="1" />
<xs:element name="RPPERM" type="rqpermType" minOccurs="0"
maxOccurs="1" />
<xs:element name="MAXGEN" type="maxgenType" minOccurs="0"
maxOccurs="1" />
<xs:element name="GRACE" type="graceType" minOccurs="0"
maxOccurs="1" />
<xs:element name="RESTART" type="booleanType" minOccurs="0"
maxOccurs="1" />
<xs:element name="SYSTEM_ACCESS" type="systemAccessType" minOccurs="0"
maxOccurs="1" />
<xs:element name="MAXDISPATCHTHREADS" type="maxdistype" minOccurs="0"
maxOccurs="1" />
<xs:element name="MINDISPATCHTHREADS" type="mindistype" minOccurs="0"
maxOccurs="1" />
<xs:element name="THREADSTACKSIZE" type="tsstype" minOccurs="0"
maxOccurs="1" />
```

```

    <xs:element name="SICACHEENTRIESMAX" type="sicachetype" minOccurs="0"
        maxOccurs="1" />
</xs:all>
<xs:attribute name="AOUT" type="stringtype" use="required" />
<xs:attribute name="SRVID" type="srvidtype" use="required" />
</xs:complexType>
<xs:complexType name="rmssection">
    <xs:all>
        <xs:element name="TMSNAME" type="stringtype" minOccurs="0"
maxOccurs="1" />
        <xs:element name="OPENINFO" type="openinfotype" minOccurs="0"
            maxOccurs="1" />
        <xs:element name="CLOSEINFO" type="openinfotype" minOccurs="0"
            maxOccurs="1" />
        <xs:element name="TMSCOUNT" type="tmscounttype" minOccurs="0"
            maxOccurs="1" />
        <xs:element name="AUTO" type="booleantype" minOccurs="0"
maxOccurs="1" />
    </xs:all>
    <xs:attribute name="RMSNAME" type="stringtype" use="required" />
    <xs:attribute name="RMID" type="rmidtype" use="required" />
</xs:complexType>
<xs:complexType name="servicesections">
    <xs:sequence>
        <xs:element name="ServiceSection" type="servicesection" minOccurs="1"
            maxOccurs="unbounded" />
    </xs:sequence>
</xs:complexType>

```

Enterprise Manager for Tuxedo Target Reference

```
<xs:complexType name="serversections">
  <xs:sequence>
    <xs:element name="ServerSection" type="serversection" minOccurs="1"
      maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>

<xs:complexType name="rmssections">
  <xs:sequence>
    <xs:element name="RmsSection" type="rmssection" minOccurs="1"
      maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>

<xs:complexType name="groupsection">
  <xs:all>
    <xs:element name="ENVFILE" type="stringtype" minOccurs="0"
      maxOccurs="1" />
    <xs:element name="TMSNAME" type="stringtype" minOccurs="0"
      maxOccurs="1" />
    <xs:element name="MRM" type="boolean" minOccurs="0"
      maxOccurs="1" />
    <xs:element name="SIGNATURE_REQUIRED" type="boolean" minOccurs="0"
      maxOccurs="1" />
    <xs:element name="ENCRYPTION_REQUIRED" type="boolean"
      minOccurs="0"
      maxOccurs="1" />
    <xs:element name="OPENINFO" type="openinfotype" minOccurs="0"
      maxOccurs="1" />
    <xs:element name="CLOSEINFO" type="openinfotype" minOccurs="0"
```



```

        maxOccurs="1" />
    <xs:element name="TMSCOUNT" type="tmscounttype" minOccurs="0"
        maxOccurs="1" />
    <xs:element name="RmsSections" type="rmssections" minOccurs="0"
        maxOccurs="1" />
    <xs:element name="ServerSections" type="serversections" minOccurs="0"
        maxOccurs="1" />
    <xs:element name="ServiceSections" type="servicesections"
minOccurs="0"
        maxOccurs="1" />
</xs:all>
<xs:attribute name="GROUPNAME" type="stringtype" use="required" />
<xs:attribute name="GRPNO" type="grpnotype" use="required" />
</xs:complexType>
<xs:complexType name="groups">
    <xs:sequence>
        <xs:element name="GroupSection" type="groupsection" minOccurs="1"
            maxOccurs="unbounded" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="applicationproperties">
    <xs:all>
        <xs:element name="PackageName" type="stringtype249" minOccurs="1"
            maxOccurs="1" />
        <xs:element name="TuxedoVersion" type="versionselect" minOccurs="1"
            maxOccurs="1" />
        <xs:element name="SupportedOS" type="stringtype" minOccurs="1"
            maxOccurs="1" />
    </xs:all>

```

Enterprise Manager for Tuxedo Target Reference

```
<xs:element name="TuxedoWordSize" type="wordsize" minOccurs="1"
    maxOccurs="1" />
<xs:element name="MachineArch" type="stringtype" minOccurs="1"
    maxOccurs="1" />
<xs:element name="LibPath" type="stringtype" minOccurs="0"
maxOccurs="1" />
<xs:element name="Groups" type="groups" minOccurs="1" maxOccurs="1" />
</xs:all>
<xs:attribute name="type" type="packagetype" use="optional" />
</xs:complexType>
<xs:element name="ApplicationProperties" type="applicationproperties" />
</xs:schema>
```

MBeans and JMX Operations

This chapter lists all the MBeans and related operations in JMX Agent.

- [Admin MBean](#)
- [Tuxedo Domain MBean](#)
- [Tuxedo Machine MBean](#)
- [Tuxedo Group MBean](#)
- [Tuxedo Server MBean](#)
- [Tuxedo System Server Mbean](#)
- [Tuxedo Bridge MBean](#)
- [Tuxedo TMS Mbean](#)
- [Tuxedo /T Domain Gateway](#)
- [Tuxedo Mainframe Adapter Gateway for SNA](#)
- [Tuxedo Mainframe Adapter Gateway for TCP](#)
- [Tuxedo Web Service Gateway](#)
- [Tuxedo Workstation Listener](#)
- [Tuxedo Jolt Listener](#)
- [Tuxedo Event Broker](#)

- [Tuxedo Queue Server](#)
- [Tuxedo QTMQ Server](#)
- [Tuxedo ART Batch System Target](#)

Admin MBean

MBean Name

`DefaultJMXDomain:type=adminBean`

Operations

Boot Domain

Change the domain to active state.

Note: You must connect the JMX Agent in the master machine, and add `NONTUXAUTH` in the credential list. After it is booted successfully, you must reconnect the JMX Agent without `NONTUXAUTH` in the credential list to invoke other JMX methods.

Input:

`tuxconfig`: The `tuxconfig` path of master machine.

`onlyAppServers`: All servers listed in the `SERVERS` section are booted

`onlyAdminServers`: All administrative servers are booted.

Signature:

```
void bootDomain(String tuxconfig, Boolean onlyAppServers,  
boolean onlyAdminServers) throws USGException, SYSException,  
TUXException
```

Shutdown Domain

Make the domain to deactivate state. When `onlyAppServers` and `onlyAdminServers` are false, this method stops all administrative, TMS, and gateway servers, and servers listed in the `SERVERS` section of the configuration file named by the `TUXCONFIG` environment variable, and removes the IPC resources associated with them. For each group, all servers in the `SERVERS` section, if any, are shut down, followed by any associated gateway servers (for foreign groups) and TMS servers. Administrative servers are shut down last.

Application servers without `SEQUENCE` parameters are shut down first in reverse order of the server entries in the configuration file, followed by servers with `SEQUENCE` parameters that are shut down from high to low sequence number. If two or more servers in the `SERVERS` section of the configuration file have the same `SEQUENCE` parameter,

this method may shut down these servers in parallel. Each entry in the `SERVERS` section may have an optional `MIN` and `MAX` parameter.

Note: Must connect the JMX Agent in the master machine.

Input:

`tuxconfig`: The `tuxconfig` path of master machine.

`onlyAppServers`: All servers listed in the `SERVERS` section are shut down.

`onlyAdminServers`: All administrative servers are shut down.

`delay`: Suspends all selected servers immediately and waits for shutdown confirmation for only `delay` seconds before forcing the server to shut down by sending a `SIGTERM` and then a `SIGKILL` signal to the server.

`signal`: {`null` | "" | `TERM` | `KILL`}. `null` is treated as `TERM`.

`force` : Shuts down BBLs even if clients are still attached.

Signature:

```
void shutdownDomain(String tuxconfig, Boolean onlyAppServers,
boolean onlyAdminServers, Integer delay, String signal, boolean
force) throws USGException, SYSException, TUXException,
JMXConnectionException
```

Boot Machine

For each group whose associated `LMID` parameter is `lmid`, all TMS and gateway servers associated with the group are booted and all servers in the `SERVERS` section associated with those groups are executed.

Note: Must connect the JMX Agent in the master machine, and add “`NONTUXAUTH`” in the credential list. After it is booted successfully, you must reconnect the JMX Agent without `NONTUXAUTH` in the credential list to invoke other JMX methods.

Input

`tuxconfig`: The `tuxconfig` path of master machine.

`lmid`: The `lmid` of machine.

`isBootBBL`: Specify whether the BBL should be started on with logical name `lmid`.

Signature

```
void bootMachine(String tuxconfig, String lmid, Boolean
isBootBBL) throws USGException, SYSException, TUXException
```

Shutdown Machine

For each group whose associated `LMID` parameter is `lmid`, all servers in the `SERVERS` section associated with the group are shut down, followed by any TMS and gateway servers associated with the group.

Note: Must connect the JMX Agent in the master machine.

Input:

tuxconfig: The tuxconfig path of master machine.

lmid: The lmid of machine.

delay: Suspends all selected servers immediately and waits for shutdown confirmation for only delay seconds before forcing the server to shut down by sending a SIGTERM and then a SIGKILL signal to the server.

signal: {null | "" | TERM | KILL}. null"" is treated as TERM.

force : Shuts down BBLs even if clients are still attached.

Signature

```
void shutdownMachine (String tuxconfig, String lmid, Integer delay, String signal, Boolean force) throws USGException, SYSException, JMXConnectionException, TUXException
```

Boot Group

All TMS and gateway servers for the group whose SRVGRP parameter is grpname are started, followed by all servers in the SERVERS section associated with that group. TMS servers are started based on the TMSNAME and TMSCOUNT parameters for the group entry.

Note: Must connect the JMX Agent in the master machine.

Input

tuxconfig: The tuxconfig path of the machine which group is located in.

grpname: The name of Tuxedo group.

Signature

```
void bootGroup(String tuxconfig, String grpname) throws USGException, SYSException, TUXException
```

Shutdown Group

All servers in the SERVERS section associated with the specified group (that is, for which the SRVGRP parameter is set to grpname) are shut down, followed by all TMS and gateway servers for the group. TMS servers are shut down based on the TMSNAME and TMSCOUNT parameters for the group entry. For a foreign group, the gateway servers for the associated entry in the HOST section are shut down based on GATENAME and GATECOUNT. Shutting down a gateway implies not only that the process itself is stopped; it also implies that the administrative service for the gateway and all advertised foreign services are unadvertised.

Note: Must connect the JMX Agent in the master machine.

Input

tuxconfig: The tuxconfig path of the machine which group is located in.

grpname: The name of group.

delay: Suspends all selected servers immediately and waits for shutdown confirmation for only delay seconds before forcing the server to shut down by sending a SIGTERM and then a SIGKILL signal to the server. Because the SIGKILL signal cannot be trapped, any process that receives it is terminated immediately, regardless of the code being executed by the process at that time. Such behavior may cause structural damage to the bulletin board if the process being stopped was updating the bulletin board when it was terminated.

signal:{null | "" | TERM | KILL}. null is treated as TERM.

Signature

```
void shutdownGroup(String tuxconfig, String grpname, Integer
delay, String signal)throws USGException, SYSException,
TUXException, JMXConnectionException
```

Boot Server

All servers in the SERVERS section whose SRVID parameter is serverID are executed.

Note: Must connect the JMX Agent in the master machine.

Input

tuxconfig: The tuxconfig path of the machine which group is located in.

groupname: The namename of Tuxedo group.

serverID: The SVRID

Signature

```
void bootServer(String tuxconfig, String groupname, Integer
serverID) throws USGException, SYSException, TUXException
```

Activate All Servers with Same Name

All servers in the SERVERS section are executed by server name and MIN value. Servers with a MIN=0 value are not executed.

Note: Must connect the JMX Agent in the master machine.

Input

tuxconfig: The tuxconfig path of the machine which the group is located in.

aout: The Tuxedo server name

Signature

```
void bootServer(String tuxconfig, String aout)throws
USGException, SYSException, TUXException
```

Shutdown Server

All servers in the `SERVERS` section for which the `SRVID` parameter is set to `serverID` are shut down. Do not enter a value for `SRVID` greater than 30,000; this indicates system processes (that is, TMSs or gateway servers) that should only be shut down via the `shutdownMachine` or `shutdownGroup`.

Note: Must connect the JMX Agent in the master machine.

Input

`tuxconfig`: The `tuxconfig` path of the machine which the server is located in.

`grpname`: The name of Tuxedo group.

`serverid`: The `SVRID`

`delay`: Suspends all selected servers immediately and waits for shutdown confirmation for only `delay` seconds before forcing the server to shut down by sending a `SIGTERM` and then a `SIGKILL` signal to the server. Because the `SIGKILL` signal cannot be trapped, any process that receives it is terminated immediately, regardless of the code being executed by the process at that time. Such behavior may cause structural damage to the bulletin board if the process being stopped was updating the bulletin board when it was terminated.

`signal`:`{null | " " |TERM|KILL}`. `null` is treated as `TERM`.

Signature

```
void shutdownServer(String tuxconfig, String groupname, Integer  
serverId, Integer delay, String signal)throws USGException,  
SYSException, TUXException
```

Shutdown All the Servers with Same Name

All servers listed in the `SERVERS` section with the name `aout` are shut down. This method can also be used to shut down System server, TMS and gateway servers.

Note: Must connect the JMX Agent in the master machine.

Input

`tuxconfig`: The `tuxconfig` path of the machine which group is located in.

`aout`: The Tuxedo server name.

`delay`: Suspends all selected servers immediately and waits for shutdown confirmation for only `delay` seconds before forcing the server to shut down by sending a `SIGTERM` and then a `SIGKILL` signal to the server. Because the `SIGKILL` signal cannot be trapped, any process that receives it is terminated immediately, regardless of the code being executed by the process at that time. Such behavior may cause structural damage to the bulletin board if the process being stopped was updating the bulletin board when it was terminated.

`signal`:`{null | " " |TERM|KILL}`. `null` is treated as `TERM`.

Signature

```
void shutdownServer(String tuxconfig, String aout, Integer
delay, String signal) throws USGException, SYSException,
TUXException
```

Tuxedo Domain MBean

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=tuxedo_domain".
```

Operations**CreateMachine**

Create a Tuxedo machine instance and an MBean with `tuxedo_machine` type. The machine target will not be booted after the creation action. You need to create the bridge target then boot the machine.

Input:

`pmid` The machine `pmid`.

`lmid` The machine `lmid`.

`tuxconfig` The machine `tuxconfig`.

`tuxdir` The Tuxedo installation directory in the created machine.

`appdir` The application directory for the machine application.

Signature

```
void createMachine (String pmid, String lmid, String tuxconfig,
String tuxdir, String appdir) throws MBeanException,
SYSException, TUXException, JMXConnectionException, USGException
```

GetParameters

Get values for the attributes in `T_DOMAIN` which has the same `IPCKEY` with this MBean.

Signature

```
CompositeData getParameters() throws SYSException,
JMXConnectionException, TUXException, OpenDataException;
```

GetParameter

Get value for the attribute in `T_DOMAIN` which has the same `IPCKEY` with this MBean.

Input:

`parameterName`: The MIB attribute name.

Signature

```
Object getParameter(String parameterName) throws USGException,  
TUXException, SYSException, JMXConnectionException;
```

setParameter

Set value for the attribute in T_DOMAIN which has the same IPCKEY with this MBean.

Input:

parameterName The MIB attribute name.
parameterValue The MIB attribute value.

Signature

```
void setParameter(String parameterName, Object parameterValue)  
throws TUXException, USGException, SYSException,  
JMXConnectionException, MBeanException;
```

setParameterValues

Set value for the attributes in T_DOMAIN which has the same IPCKEY with this MBean.

Input

parameters: The list of parameters and values in the format of CompositeData. The itemNames for parameters is the MIB attributes name which are start with "TA_". The itemTypes is the OpenType corresponding to the MIB attributes type. And the values are the parameter's value.

Following is the type mapping between OpenType and MIB Field Type.

| MIB attribute Type | OpenType |
|--------------------|----------|
| string | String |
| int | Integer |
| short | Short |
| long | Long |
| carray | String |

Signature

```
Object setParameters(CompositeData parameters) throws  
USGException, SYSException, TUXException,  
JMXConnectionException, MBeanException;
```

Get Routings

Get the routings from T_ROUTING class.

Signature

TabularData getRoutings () throws SYSException, TUXException, JMXConnectionException;

Add Routing

Add routing to T_ROUTING class. Please make sure the MAXRFT and MAXDRT is validate for add routing.

Input:

| Parameter Name | Corresponding MIB Attribute |
|----------------|-----------------------------|
| routingName | TA_ROUTINGNAME |
| routingType | TA_ROUTINGTYPE |
| bufType | TA_BUFTYPE |
| field | TA_FIELD |
| ranges | TA_RANGES |

Signature

void addRouting(String routingName, String routingType, String bufType, String field, String ranges) throws SYSException, TUXException, JMXConnectionException, OpenDataException;

Delete Routing

Delete routing from this domain.

Input:

| Parameter Name | Corresponding MIB Attribute |
|----------------|-----------------------------|
| routingName | TA_ROUTINGNAME |
| bufType | TA_BUFTYPE |
| field | TA_FIELD |
| type | TA_TYPE |

Signature

void deleteRouting(String routingName, String buftype , String field, String type) throws SYSException, TUXException, JMXConnectionException;

Set Routing Parameters

Set the attributes value in T_ROUTING.

Input:

| Parameter Name | Corresponding MIB Attribute |
|----------------|---|
| routingName | TA_ROUTINGNAME |
| bufType | TA_BUFTYPE |
| field | TA_FIELD |
| type | TA_TYPE |
| parameters | The list of MIB attributes and values in the format of CompositeData. |

Signature

```
void setRoutingParameters (String routingName, String buftype,
String field, String type, CompositeData parameters) throws
USGException, TUXException, JMXConnectionException,
SYSException;
```

Set Routing Parameter

Set the attribute value in T_ROUTING.

Input:

| Parameter Name | Corresponding MIB Attribute |
|----------------|-----------------------------|
| routingName | TA_ROUTINGNAME |
| bufType | TA_BUFTYPE |
| field | TA_FIELD |
| type | TA_TYPE |
| parameterName | The MIB attribute Name |
| parameterValue | The MIB attribute value |

Signature

```
void setRoutingParameter(String routingName, String buftype,
String field, String type, String parameterName, String
parameterValue) throws JMXConnectionException, SYSException,
USGException, TUXException;
```

Get Routing Parameter

Get the attribute's value in T_ROUTING.

Input:

| Parameter Name | Corresponding MIB Attribute |
|----------------|-----------------------------|
| routingName | TA_ROUTINGNAME |
| bufType | TA_BUFTYPE |
| field | TA_FIELD |
| type | TA_TYPE |
| parameterName | The MIB attribute Name |

Signature:

```
Object getRoutingParameter(String routingName, String buftype,
String field, String type, String parameterName) USGException,
TUXException, JMXConnectionException, SYSException;
```

Swap

Swap the master and backup which is configured in MASTER parameter.

Signature

```
void swap() throws TUXException,
JMXConnectionException, SYSException
```

Tuxedo Machine MBean

MBean Name

```
"<DOMAINID>_<IPCKEY>:type= tuxedo_machine,LMID=<LMID>"
```

Operations

Create Group

Create a Tuxedo group instance and an MBean with `tuxedo_group` type. The created target is not active. You need to invoke the active method for the activation.

Signature

```
void createGroup (String groupName, Integer groupNo) throws  
SYSException, MBeanException, USGException, TUXException,  
JMXConnectionException
```

Create Bridge

Create a Tuxedo Bridge instance and an MBean with `tuxedo_bridge` type. The created target is not active. You need to invoke the active method for the activation.

Signature

```
void createBridge (String lmid, String naddr, String nlsaddr)  
throws SYSException, MBeanException, USGException,  
TUXException, JMXConnectionException
```

GetParameter

Get value for the attribute in `T_MACHINE` which has the same LMID with this MBean.

Input:

`parameterName`: The MIB attribute name.

Signature

```
Object getParameter(String parameterName) throws USGException,  
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get value for all attributes in `T_MACHINE` which has the same LMID with this MBean.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in `T_MACHINE` which has the same LMID with this MBean.

Input:

`parameterName` The MIB attribute name.
`parameterValue` The MIB attribute value.

Signature

```
void setParameter(String parameterName, String parameterValue)
throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_MACHINE which has the same LMID with this MBean.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

deleteRecursively

Delete all the Tuxedo instances and child instances associated with the MBean

Signature

```
void deleteRecursively () throws MBeanException, TUXException,
JMXConnectionException, SYSException, USGException;
```

Delete

Delete the Tuxedo instances associated with this MBean.

Note: All MBeans which located at the same machine with this target must be deleted first.

Signature

```
void delete() throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

Migrate

All servers running on the machine are migrated to their alternate location. RESTART=Y must be configured in server section for all the servers which need be migrated.

Signature

```
void migrate() throws Exception
```

Clean

Initiate cleanup/scanning activities on and relating to the indicated machine. If there are dead clients or servers on the machine, they will be detected at this time. If the machine has been partitioned from the application MASTER site, global bulletin board entries for that machine will be removed. This combination is allowed when the application is in the ACTIVE state and the machine is in either the ACTIVE or PARTITIONED state. Successful

return for a non-partitioned machine leaves the state unchanged. Successful return for a partitioned machine leaves the object in the INActive state.

Signature

```
void clean() throws MBeanException, JMXConnectionException,  
TUXException, SYSException
```

Get Native Clients

Get all the native clients which are running on the machine.

Output

TablarData columns:

| Column Name | Note |
|--------------|------|
| TA_CLIENTID | Key |
| TA_CLTNAME | |
| TA_USRNAME | |
| TA_TIMESTART | |
| TA_IDLETIME | |
| TA_STATE | |

Signature

```
TabularData getNativeClients() throws TUXException,  
JMXConnectionException, SYSException
```

Suspend

Suspend the client from making service requests (tpcall() or tpacall()), initiating conversations (tpconnect()), beginning transactions (tpbegin()), and enqueueing new requests (tpenqueue()). Clients within a transaction will be permitted to make these calls until they abort or commit the current transaction, at which time they will become suspended. Invocations of these routines will result in a TPESYSTEM error return and a system log message being generated indicating the situation. State change allowed only when in the ACTIVE state. Successful return leaves the object in the SUSPended state.

Input

clientId: Client identifier.

Signature

```
void suspend(String clientId) throws TUXException, SYSException,
JMXConnectionException
```

Resume

Change the client's state from "SUSPended" to "ACTive". Successful return leaves the object in the "ACTive" state.

Input

clientId: Client identifier.

Signature

```
void resume(String clientId) throws TUXException, SYSException,
JMXConnectionException
```

Kill Client

Abortively deactivate the client. State change allowed only when in the "ACTive" or "SUSPended" state. Limitation: The system may not be able to kill the client due to platform or signaling restrictions. In this case, a native client will be abortively terminated at its next access to ATMI.

Input

clientId: Client identifier.

Signature

```
void killClient(String clientId) throws TUXException,
SYSException, JMXConnectionException
```

Get Transactions

Get all the transactions which belong to the machine. Note that transaction attributes are primarily kept local to a site and coordinated via common transaction identifiers by transaction management servers (TMSs).

Output

TablarData columns:

| Column Name | Note |
|--------------|------|
| TA_COORDLMID | |
| TA_TPTRANID | Key |
| TA_XID | |

| Column Name | Note |
|--------------|------|
| TA_STATE | |
| TA_TIMEOUT | |
| TA_GRP_COUNT | |
| TA_GRP_INDEX | |
| TA_GRP_NO | |
| TA_GSTATE | |

Signature

```
TabularData getTransactions() throws TUXException,
JMXConnectionException, SYSEXception;
```

Abort Transaction

Abort the transaction for the application. State change allowed only when in the ACTIVE, ABORTONLY, or COMCALLED states. Successful return leaves the transaction in the ABORTED state.

Input

TPTRANID: (TA_TPTRANID) Transaction identifier as returned from tpsuspend() mapped to a string representation.

XID: TA_XID Transaction identifier as returned from tx_info() mapped to a string representation.

Signature

```
void abortTransaction(String TPTRANID, String XID) throws
TUXException, JMXConnectionException, SYSEXception
```

Get ULOGs

Get ULOGs in the machine.

Input

date: Date of user log file found or to be accessed. In the format of MMDDYY
startTime: The time of the user log message represented by this object. The value of this attribute is formed by multiplying the hour by 10,000, adding to that the minute multiplied by 100, and finally adding in the seconds. When used as a key field, this attribute represents the start of the time range to be accessed for messages. In the format of hhhmmss

endTime: The latest time to be considered when accessing this userlog file. In the format of hhmmss

line: The line number of the user log message returned/requested within the user log file. When used as a key field for retrieval, this value indicates the starting line within the log file.

uLogCat: Catalog name from which the message was derived, if any.

serverity: Severity of message, if any.

totalLine: Total Line number for request.

Output

| Column Name | Note |
|---------------|------|
| INDEX | Key |
| TA_MMDDYY | |
| TA_ULOGTIME | |
| TA_ULOGLINE | |
| TA_ULOGMSG | |
| TA_TPTRANID | |
| TA_XID | |
| TA_PID | |
| TA_THREADID | |
| TA_CONTEXTID | |
| TA_SEVERITY | |
| TA_ULOGCAT | |
| TA_ULOGMSGNUM | |
| TA_ULOGPROCNM | |

Signature

TabularData getULog(Integer date, Integer startTime, Integer endTime, Integer line, String uLogCat, String serverity, Integer totalLine) throws JMXConnectionException, TUXException, SYSException

Tuxedo Group MBean

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=tuxedo_group,group_name=<GROUPNAME>" .
```

Operations

Create Server

Create a Tuxedo Server instance and an MBean with tuxedo_server/tuxedo_system_server/ tuxedo_domain_gateway/ tuxedo_event_broker/ tuxedo_jolt_listener/ tuxedo_TMA_gateway_SNA/ tuxedo_TMA_gateway_TCP/ tuxedo_LMS/ tuxedo_webservice_gateway/ tuxedo_workstation_listener type depends on the aoutserver name.

Signature

```
void createServer (String aout, Integer srvID) throws  
SYSException, MBeanException, USGException, TUXException,  
JMXConnectionException;
```

GetParameter

Get value for the attribute in T_GROUP which has the same group name with this MBean.

Input:

parameterName: The MIB attribute name.

Signature

```
Object getParameter (String parameterName) throws USGException,  
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get values for all attribute in T_GROUP which has the same group name with this MBean.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_GROUP which has the same group name with this MBean.

Input:

parameterName: The MIB attribute name.

parameterValue: The MIB attribute value.

Signature:

```
void setParameter (String parameterName, String parameterValue)  
throws TUXException, USGException, SYSException,  
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_ GROUP which has the same group name with this MBean.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

CreateTMS

Create TMS.

Input

| Parameter Name | Corresponding MIB Attribute | Notes |
|----------------|-----------------------------|--|
| rmsName | TA_RMSNAME | Those fields can be set to null for the TMS configured on Group section. |
| rmid | TA_RMID | |
| tmsName | TA_TMSNAME | |

Signature

```
void createTMS (String rmsName, Integer rmid, String tmsName);
```

deleteRecursively

Delete all the Tuxedo instances and Child instances associated with the MBean

Signature

```
void deleteRecursively () throws MBeanException, TUXException,
JMXConnectionException, SYSException, USGException;
```

Delete

Delete all Tuxedo instances associated with the MBean.

Note: All MBeans located at this group must be deleted first.

Signature

```
void delete() throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

Migrate

If the configuration file specifies the MIGRATE option and an alternate location for the group, all servers in the group are migrated to the alternate location.

Note: The RESTRART=Y must be configured in ubbconfig for all the servers which need migration.

Signature

```
void migrate() throws Exception
```

Tuxedo Server MBean

MBean Name

```
"<DOMAINID>_<IPCKEY>: tuxedo_server,group_name=< SRVGRP>, SRVID=<SRVID>".
```

Operations

GetParameter

Get value for the attribute in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input:

parameterName: The MIB attribute name. For example: "TA_MAX".

Signature

```
Object getParameter(String parameterName) throws USGException,  
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_SERVER with the MBean's SRVID and SRVGRP.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input:

parameterName: The MIB attribute name.
parameterValue: The MIB attribute value.

Signature:

```
void setParameter(String parameterName, String parameterValue)
throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

Delete

Delete both the MBean and all Tuxedo instances associated with the MBean.

Signature

```
void delete() throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

Set Service parameter

Set value for the attribute in T_SERVICE which has the same SRVID and SRVGRP with this MBean.

Input

serviceName: name of service.
parameterName: The MIB attribute name.
parameterValue: The MIB attribute value.

Signature

```
void setServiceParameter(String serviceName, String
parameterName, String parameterValue) throws TUXException,
SYSException, JMXConnectionException, USGException;
```

Get Service Parameter

Get the value of attribute in T_SERVICE which has the same SRVID and SRVGRP with this MBean.

Input

serviceName: name of service.
parameterName: The MIB attribute name.

Signature

Object getServiceParameter(String serviceName, String parameterName) throws MBeanException, TUXException, JMXConnectionException, SYSException;

Delete Service

Delete service from T_SERVICE.

Input

serviceName: name of Tuxedo service.

Signature

Object deleteService (String serviceName) throws SYSException, TUXException, USGException, JMXConnectionException, MBeanException;

Get Service

Get all the services from T_SERVICE

Output

TablarData columns:

| Column Name | Note |
|----------------|------|
| TA_ROUTINGNAME | |
| TA_BUFTYPE | |
| TA_STATE | |
| TA_AUTOTRAN | |
| TA_LOAD | |
| TA_PRIO | |
| TA_SVCTIMEOUT | |
| TA_TRANTIME | |
| TA_SVCTYPE | |
| TA_SVCRNAM | |

Signature

```
TabularData getServices() throws SYSException, TUXException,
JMXConnectionException
```

Suspend Service

Limitation: State change not permitted for service names (TA_SERVICENAME) beginning with the reserved string “_”.

Input

serviceName: TA_SERVICENAME Service name.

Signature

```
void suspendService(String serviceName) throws USGException,
JMXConnectionException, TUXException, SYSException
```

Resume Service

Activate (advertise) the service instance. State change allowed only when in the “INActive”, “SUSPended” or “INValid” states. For the purpose of determining permissions for this state transition, the active object permissions are considered (that is, --x--x--x). Successful return leaves the object in the “ACTive” state.

Limitation: State change not permitted for service names (TA_SERVICENAME) beginning with the reserved string “.”.

Input

serviceName: TA_SERVICENAME

Signature

```
void resumeService(String serviceName) throws USGException,
JMXConnectionException, TUXException, SYSException
```

Tuxedo System Server Mbean

Following server be modeled as system server MBean.

| |
|------------|
| AUTHSVR |
| GAUTHSVR |
| KAUTHSVR |
| LAUTHSVR |
| TMMETADATA |

| |
|------------|
| TMQFORWARD |
| DMADM |
| GWADM |
| JREPSVR |

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=tuxedo_system_server,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Get value for the attribute in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input:

parameterName: The MIB attribute name. For example: "TA_MAX".

Signature

```
Object getParameter(String parameterName) throws USGException,  
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input:

parameterName: The MIB attribute name.

parameterValue: The MIB attribute value.

Signature:

```
void setParameter(String parameterName, String parameterValue)
throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_SERVER which has the same SRVID and SRVGRP with this MBean.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

Delete

Delete both the MBean and all Tuxedo instances associated with the MBean.

Signature

```
void delete() throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

Tuxedo Bridge MBean

MBean Name

```
"<DOMAINID>_<IPCKEY>:type= tuxedo_bridge, LMID=<LMID>"
```

LMID: specify the LMID parameter associated with the Tuxedo Machine where the bridge is running.

Operations**GetParameter**

Get value for the attribute in T_BRIDGE which has the same LMID with this MBean.

Input:

parameterName: The MIB attribute name. For example: “TA_SENTNUM”.

Signature

```
Object getParameter(String parameterName) throws USGException,
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_BRIDGE with which has the same LMID with this MBean.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

Get Remote Link Parameter

Get remote link`s parameter value.

Input:

remoteLMID: The LMID for remote machine.

parameterName: The MIB attribute Name in T_BRIDGE

Signature

```
Object getRemoteLinkParameter(String remoteLMID, String  
parameterName) throws TUXException, JMXConnectionException,  
SYSException;
```

Get Remote Links

Get all network connections in this bridge server.

Output

| Column Name | Note |
|-------------|--------|
| TA_LMID | Key |
| TA_STATE | String |

Signature

```
TabularData getRemoteLinks ()throws TUXException,  
JMXConnectionException, SYSException
```

Set Remote Link Parameters

Set the parameter for remote link in T_BRIDGE class

Signature

```
setRemoteLinkParameters(String remoteLMID, CompositeData  
parameters) throws TUXException, JMXConnectionException,  
SYSException, USGException
```

Suspend Remote Link

Suspend the remote link by closing the connection between the indicated logical machines. State change allowed only when in the ACTIVE state. Successful return leaves the object in the SUSPENDED state. Limitation: Note that since the statistics reported are from the viewpoint of the source logical machine, resetting those statistics will cause them to be out of sync with the statistics reported by the destination logical machine for the same connection.

Input

remoteLmid: Remote machine's LMID.

Signature

```
void suspend (String remoteLmid) throws USGException,
TUXException, SYSEException, JMXConnectionException;
```

Resume Remote Link

Reactivate the connection. This operation will fail if remoteLmid is null, if the remoteLmid is equals to the bridge Mean's lmid, if either of the two machines is not active, or if the source logical machine is not reachable. For the purpose of determining permissions for this state transition, the active object permissions are considered (that is, --x--x--x). Successful return leaves the object in the PENDING state.

Input

remoteLmid: Remote machine's LMID.

Signature

```
void resume(String remoteLmid) throws USGException,
TUXException, SYSEException, JMXConnectionException
```

Deactivate Remote Link

Close the connection between the indicated logical machines. This operation will fail if only remoteLmid is null, if the remoteLmid is equals to the bridge mbean's lmid or if the two machines are not connected. State change allowed only when in the ACTIVE state. Successful return leaves the object in the INACTIVE state.

Input

remoteLmid: Remote machine's LMID.

Signature

```
void deactivate(String remoteLmid) throws USGException,
TUXException, SYSEException, JMXConnectionException
```

Tuxedo TMS Mbean

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=tuxedo_TMS,group_name=<GROUPNAME>,aout=<TMSNAME>,rmsname=<RMSNAME>" .
```

RMSNAME: specifies the RMSNAME parameter associated with the Tuxedo TMS.

Operations

GetParameter

Get value for the attribute in T_SERVER which has the same SRVID, SRVGRP, RMSNAME and TMSNAME with this MBean.

Input:

parameterName: The MIB attribute name.

Signature

```
Object getParameter(String parameterName) throws USGException, TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_SERVER which has the same SRVID, SRVGRP, RMSNAME and TMSNAME with this MBean.

Signature

```
CompositeData getParameters() throws SYSException, JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_SERVER which has the same SRVID, SRVGRP, RMSNAME and TMSNAME with this MBean.

Input:

parameterName: The MIB attribute name.

parameterValue: The MIB attribute value.

Signature:

```
void setParameter(String parameterName, String parameterValue) throws TUXException, USGException, SYSException, JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_SERVER which has the same SRVID, SRVGRP, RMSNAME and TMSNAME with this MBean.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

Delete

Delete both the MBean and all Tuxedo instances associated with the MBean.

Signature

```
void delete() throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

Tuxedo /T Domain Gateway

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_domain_gateway,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations**GetParameter**

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21](#).

Tuxedo Mainframe Adapter Gateway for SNA

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_TMA_gateway_SNA,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21](#).

Tuxedo Mainframe Adapter Gateway for TCP

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_TMA_gateway_TCP,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21](#).

Tuxedo Web Service Gateway**MBean Name**

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_webservice_gateway,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations**GetParameter**

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21](#).

Tuxedo Workstation Listener**MBean Name**

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_workstation_listener,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations**GetParameter**

Get value for the attribute in T_WSL .

Input:

parameterName: The MIB attribute name.

Signature

```
Object getParameter (String parameterName) throws USGException,
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_ WSL.

Signature

```
CompositeData getParameters() throws SYSException,  
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_ WSL.

Input:

parameterName: The MIB attribute name.
parameterValue: The MIB attribute value.

Signature:

```
void setParameter(String parameterName, String parameterValue)  
throws TUXException, USGException, SYSException,  
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_ WSL.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws  
USGException, SYSException, TUXException,  
JMXConnectionException, MBeanException;
```

Delete

Refer to [“Delete” on page 4-21](#).

Get Handler Parameter

Get attribute value in T_ WSH.

Input:

clientId: TA_CLIENTID
parameterName: The MIB attribute name. For example: “TA_HWCLIENTS”.

Signature

```
Object getHandlerParameter(String clientId, String  
parameterName) throw USGException, TUXException,  
JMXConnectionException, SYSException;
```

Get Handlers

Get all handlers associated with the WSL.

Input

clientId: If clientId is null, all handlers will be return.

Signature

```
TabularData getHandlers(String clientId) throws TUXException,
JMXConnectionException, SYSException;
```

Suspend Handler

Change the State of WSH to “SUSPended”. Note: State changes to the “SUSPended” state are transitive to all clients associated with this WSH as is the resetting of a “SUSPended” WSH to “ACTive”. Additionally, “SUSPended” WSH clients will not be assigned any additional incoming clients by the WSL.

Input:

clientId: Client identifier for this WSH.

Signature:

```
void suspendHandler (String clientId) throws TUXException,
JMXConnectionException, SYSException, USGException,
MBeanException;
```

Resume Handler

Set the State of WSH to “ACTive”.

Input

clientId: Client identifier for this WSH.

Signature

```
void resumeHandler (String clientId) throws TUXException,
JMXConnectionException, SYSException, USGException,
MBeanException;
```

Kill Handler

Set the State of WSH to “DEAD”, and all connections being handled by the targeted WSH to be dropped abortively.

Input

clientId: Client identifier for this WSH.

Signature

```
void killHandler (String clientId) throws TUXException,
JMXConnectionException, SYSException, MBeanException,
USGException;
```

Get Clients

Get all the clients associated with the WSH.

Input

wshClientID: WSH's identifier.

Signature

```
TabularData getWSClients(String wshClientID) throws  
TUXException, JMXConnectionException, SYSException
```

Suspend Client

Suspend the client object from making service requests (tpcall() or tpcall()), initiating conversations (tpconnect()), beginning transactions (tpbegin()), and enqueueing new requests (tpenqueue()). Clients within a transaction will be permitted to make these calls until they abort or commit the current transaction, at which time they will become suspended. Invocations of these routines will result in a TPESYSTEM error return and a system log message being generated indicating the situation. State change allowed only when in the ACTIVE state. Successful return leaves the object in the SUSPENDED state.

Input:

clientId: Client identifier.

Signature

```
Void suspendClient(String clientId) throws TUXException,  
JMXConnectionException, SYSException;
```

Resume Client

Activate a SUSPENDED client object. State change allowed only when in the SUSPENDED state. Successful return leaves the object in the ACTIVE state.

Input:

clientId: Client identifier.

Signature:

```
void resumeClient (String clientId) throws TUXException,  
JMXConnectionException, SYSException;
```

Kill Client

Abortively deactivate the client object. State change allowed only when in the ACTIVE or SUSPENDED state. The system may not be able to kill the client due to platform or signaling restrictions. In this case, a Workstation client's connection to a WSH will be preemptively torn down.

Input

clientId: Client identifier.

Signature

```
Void killClient(String clientId) throws TUXException,
JMXConnectionException, SYSException;
```

Tuxedo Jolt Listener

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_jolt_listener,group_name=<GROUPNAME>,SRVID=<SRVID>".
```

Operations**GetParameter**

Get value for the attribute in T_JSL .

Input:

parameterName: The MIB attribute name.

Signature

```
Object getParameter(String parameterName) throws USGException,
TUXException, SYSException, JMXConnectionException;
```

GetParameters

Get all attribute and values in T_ JSL.

Signature

```
CompositeData getParameters() throws SYSException,
JMXConnectionException, TUXException, OpenDataException;
```

SetParameter

Set value for the attribute in T_ JSL.

Input:

parameterName: The MIB attribute name.

parameterValue: The MIB attribute value.

Signature:

```
void setParameter(String parameterName, String parameterValue)
throws TUXException, USGException, SYSException,
JMXConnectionException, MBeanException;
```

SetParameters

Set value for the attributes in T_JSL.

Input

Refer to the input for [“SetParameters” on page 4-8](#).

Signature

```
Object setParameters(CompositeData parameters) throws
USGException, SYSException, TUXException,
JMXConnectionException, MBeanException;
```

Delete JSL

Refer to [“Delete” on page 4-21](#).

Get Handlers

Get all handlers associated with the JSL.

Signature

```
TabularData getHandlers() throws TUXException,
JMXConnectionException, SYSException;
```

Suspend Handler

Change the State of JSH to “SUSPended”.

Input

clientId: Client identifier for JSH.

Signature

```
void suspendHandler (String clientId) throws TUXException,
JMXConnectionException, SYSException;
```

Resume Handler

Activate a SUSPended JSH object.

Input

clientId: Client identifier for JSH.

Signature

```
void resumeHandler (String clientId) throws TUXException,
JMXConnectionException, SYSException;
```

Tuxedo Event Broker

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_event_broker,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21](#).

Tuxedo Queue Server

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_queue_server,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Refer to [“GetParameter” on page 4-20](#).

GetParameters

Refer to [“GetParameters” on page 4-20](#).

SetParameter

Refer to [“SetParameter” on page 4-20](#).

SetParameters

Refer to [“SetParameters” on page 4-21](#).

Delete

Refer to [“Delete” on page 4-21.](#)

Tuxedo QTMQ Server

MBean Name

```
"<DOMAINID>_<IPCKEY>:type=
tuxedo_OTMQ_server,group_name=<GROUPNAME>,SRVID=<SRVID>" .
```

Operations

GetParameter

Refer to [“GetParameter” on page 4-20.](#)

GetParameters

Refer to [“GetParameters” on page 4-20.](#)

SetParameter

Refer to [“SetParameter” on page 4-20.](#)

SetParameters

Refer to [“SetParameters” on page 4-21.](#)

Delete

Refer to [“Delete” on page 4-21.](#)

Create Queue

Input

| Parameter Name | Value | Note |
|----------------|--|--|
| qname | string [1..127] | Queue Name. Required input field. |
| qorder | PRIO TIME LIFO FIFO EXPIR null | Queue order. Optional input field. The default value is FIFO. |
| outoforder | NONE TOP MSGID null | Out-of-ordering enqueueing. Optional input field. The default value is NONE. |
| maxRetries | A number and >= 0 && <= 4 byte long. | Max Retry number. Optional input field. The default value is 0. |

| | | |
|-----------------------|---|--|
| retryDelay | A number and ≥ 0 && ≤ 4 byte long | Retry delay in seconds. Optional input field. The default value is 0. |
| defaultDeliveryPolicy | persist nonpersist null | Default delivery policy. Optional input field. The default value is persist |
| cmd | string[0..127] null | The command to be automatically executed when the high water mark for persistent (disk-based) messages is reached. Optional input field. |
| defaultExpirationTime | {+seconds NONE} | Expiration time for messages enqueued with no explicit expiration time. Optional input field. The format is +seconds where seconds is the number of seconds allowed to lapse between the time that the queue manager successfully completes the operation and the time that the message is to expire. If seconds is set to zero (0) the message expires immediately. The value of this attribute may also be set to the string NONE. The NONE string indicates that messages enqueued to the queue with no explicit expiration time do not expire. You may change the expiration time for messages already in a queue with the TA_EXPIRETIME attribute of the T_OTMQMSG class in the APPQ_MIB. |
| qType | {P S M U null} | Optional input field. The default value is U. |
| primaryQueue | string[1..127] null | Primary Queue. Optional input field. |
| isPermanentActive | {Y N null} | Permanent Active/or not. Optional input field. The default value is "Y". |
| confirmStyle | {EO EI II null} | Confirm style. Optional input field. The default value is EO |

Signature

```
Void createQueue(String qname, String qorder, String outoforder,
Integer maxRetries, Integer retryDelay, String
defaultDeliveryPolicy, String cmd, String
defaultExpirationTime, String qType, String primaryQueue,
Boolean isPermanentActive, String confirmStyle) throws
TUXException, JMXConnectionException, SYSException,
USGException;
```

Tuxedo ART Batch System Target

MBean Name

```
"<DOMAINID>_<IPCKEY>:type= tuxedo_batch_system,name=Batch_System".
```

Operations

getBatches

Displays the existing jobs.

Input:

```
batchName: job name
batchID: job id
batchClass: jobs class
batchOwner: job owner
```

Output:

| Column Name | Note |
|---------------------|---|
| JES2_JOB_ID | Job ID |
| JES2_JOB_NAME | Job Name |
| JES2_JOB_STATUS | Job Status |
| JES2_JOB_SUBMITTIME | The time when the job is submitted |
| JES2_JOB_EXEETIME | The time when the job is executed |
| JES2_JOB_ENDTIME | The time when the job is ended |
| JES2_JOB_CLASS | Job class |
| JES2_JOB_TYPRUN | Job TYPRUN definition |
| JES2_JOB_PRTY | Job priority |
| JES2_JOB_SCRIPT | Job script file name |
| JES2_JOB_OWNER | Job owner |
| JES2_JOB_EXECMAC | The machine name that the job is/was running on |
| JES2_JOB_CURRENT | Current running step |

| Column Name | Note |
|---------------------|--------------------------------|
| JES2_JOB_EXECSTATUS | Job executing status |
| JES2_JOB_MSG | Job executing message |
| JES2_JOB_FILEINFO | Job file accessing information |
| JES2_JOB_TYPE | Job type |
| JES2_JOB_CPUINFO | CPU usage in each step |
| JES2_JOB_USRSEC | User CPU usage seconds |
| JES2_JOB_USRUSEC | User CPU usage microseconds |
| JES2_JOB_SYSSEC | System CPU usage seconds |
| JES2_JOB_SYSUSEC | System CPU usage microseconds |

Signature:

```
TabularData getBatches(String batchName, Integer batchID, String
batchClass, String batchOwner) throws MBeanException
```

getBatchFiles

Gets job script files under the job repository.

Output:

| Column Name | Note |
|------------------------|-----------------------|
| JES2_JOB_SCRIPT | Job script file name |
| JES2_JOB_NAME | Job name |
| JES2_JOB_PRTY | Job priority |
| JES2_JOB_CLASS | Job class |
| JES2_JOB_RESTARTOPTION | Restart Option |
| JES2_JOB_TYPRUN | Job TYPRUN definition |

| Column Name | Note |
|---------------------|-----------------|
| JES2_JOB_VERSION | Job version |
| JES2_JOB_STARTLABEL | Job start label |

Signature:

`TabularData getBatchFiles() throws MBeanException`

submitBatch

Submits a job

Input:

batchScript: job script file name
 batchOwner: job owner
 batchEJROption: EJROption
 batchShellOption: shell option
 batchDBLogin: database connection (MT_DB_LOGIN)
 batchMTEEnv: environment variables

Output:

| Column Name | Note |
|-----------------|----------------------------|
| JES2_JOB_ID | Job ID |
| JES2_JOB_NAME | Job name |
| JES2_JOB_TYPRUN | Job TYPRUN definition |
| JES2_JOB_ERROR | Error message when failing |

Signature:

`TabularData submitBatch(String batchScript, String batchOwner, String batchEJROption, String batchShellOption, String batchDBLogin, String batchMTEEnv) throws TUXException, SYSException, JMXConnectionException, USGException,`

cancelBatch

Cancels job(s)

Input:

Refer to the input of [“getBatches” on page 4-40](#).

Output:

| Column Name | Note |
|----------------|----------------------------|
| JES2_JOB_ID | Job ID |
| JES2_JOB_NAME | Job name |
| JES2_JOB_ERROR | Error message when failing |

Signature:

```
TabularData cancelBatch(String batchName, Integer batchId,
String batchClass, String batchOwner) throws SYSException,
TUXException, JMXConnectionException
```

purgeBatch

Purges job(s)

Input:

Refer to the input of [“getBatches” on page 4-40](#).

Output:

Refer to the output of [“cancelBatch” on page 4-42](#).

Signature:

```
TabularData purgeBatch(String batchName, Integer batchId,
String batchClass, String batchOwner) throws SYSException,
TUXException, JMXConnectionException
```

holdBatch

Holds job(s)

Input:

Refer to the input of [“getBatches” on page 4-40](#)

Output:

Refer to the output of [“cancelBatch” on page 4-42](#)

Signature:

```
TabularData holdBatch(String batchName, Integer batchId,
String batchClass, String batchOwner) throws SYSException,
TUXException, JMXConnectionException
```

releaseBatch

Releases job(s)

Input:

Refer to the input of “[getBatches](#)” on page 4-40

Output:

Refer to the output of “[cancelBatch](#)” on page 4-42

Signature:

```
TabularData releaseBatch(String batchName, Integer batchId,  
String batchClass, String batchOwner) throws SYSException,  
TUXException, JMXConnectionException
```

getBatchSysOuts

Gets the job sysout

Input:

batchID: job id

Output:

| Column Name | Note |
|--------------------|----------------------|
| JES2_JOB_SCRIPT | Job log file name |
| JES2_FILE_CONTENT | Job log file content |

Signature:

```
TabularData getBatchSysOuts(Integer batchId) throws MBeanException
```

getGDGFiles

Gets the job GDG file content.

Input:

batchID: job id
filename: GDG file name

Output:

| Column Name | Note |
|--------------------|------------------|
| JES2_JOB_STATUS | Job status |
| JES2_FILE_CONTENT | GDG file content |

Signature:

`CompositeData getGDGFiles(String bachID, String fileName)` throws
`MBeanException`

MBeans and JMX Operations

TXST Command and Variable Reference

This chapter contains the following sections:

- [TXST Command Categories Overview](#)
- [Browse Commands](#)
- [Control Commands](#)
- [Editing Commands](#)
- [Information Commands](#)
- [Life Cycle Commands](#)
- [TXST Variable Reference](#)
- [Jython Class for Tuxedo Mbeans](#)

TXST Command Categories Overview

TXST commands are divided into the following categories.

| Command Category | Description |
|------------------|--|
| Browse Commands | Navigate the hierarchy of configuration or runtime beans and control the prompt display. |

| | |
|----------------------|--|
| Control Commands | Connect to or disconnect from JMX agent or Tuxedo Domain. Exit TXST. |
| Editing Commands | Create or delete Mbean. Get or set parameters of Mbean. |
| Information Commands | Interrogate Mbeans and configuration of TXST. |
| Life Cycle Commands | Start, stop, suspend, resume, and migrate specified Mbean. |

Browse Commands

cd

Use with TXST: `online(connected to domain)`

Description

Navigates the hierarchy of beans. This command uses a model that is similar to navigating a file system in a Windows or UNIX command shell. For example, to navigate back to a bean, enter `cd('../')`. The character string `../` (dot-dot), refers to the directory immediately above the current directory. To get back to the root bean after navigating to a bean that is deep in the hierarchy, enter `cd('/')`.

You can navigate to beans in the current hierarchy and to any child or instance.

The `cd` command returns a stub of the bean instance, if one exists. In the event of an error, the command returns a `TXSTException`.

Syntax

```
cd (mbeanName)
```

| Argument | Definition |
|-----------|------------------------------------|
| mbeanName | Path to the bean in the namespace. |

Examples

The following example navigates the hierarchy of beans. The first command navigates to the simple bean instance, the second, to the GROUP1 bean instance, and the last back up two levels to the original directory location.

```
txst:simpapp_38075:/> cd('lmid1')
txst:simpapp_38075:/lmid1> cd('lmid1')
txst:simpapp_38075:/lmid1> cd('GROUP1')
txst:simpapp_38075:/lmid1/GROUP1> cd('../..')
txst:simpapp_38075:/>
```

prompt

Use with TXST: online(connected to domain)

Description

Toggles the display of path information at the prompt, when entered without an argument. This command is useful when the prompt becomes too long due to the length of the path.

You can also explicitly specify on or off as an argument to the command. When you specify off, TXST hides the TXST prompt and defaults to the Jython prompt. By default, the TXST prompt displays the navigation path information.

When you disable the prompt details, to determine your current location in the hierarchy, you can use the pwd command, as described in pwd.

Syntax

```
prompt (onoff = None)
```

| Argument | Definition |
|----------|---|
| onoff | <p>Optional. Hides or displays TXST prompt. Valid values include off or on.</p> <p>The off argument hides the TXST prompt.</p> <p>If you run <code>prompt('off')</code>, when using TXST online, the prompt defaults to the Jython prompt. You can create a new prompt using Jython syntax. For more information about programming using Jython, see http://www.jython.org. In this case, if you subsequently enter the prompt command without arguments, TXST displays the TXST command prompt without the path information. To redisplay the path information, enter <code>prompt()</code> again, or enter <code>prompt('on')</code>.</p> <p>The on argument displays the default TXST prompt, including the path information.</p> |

Examples

The following example hides and then redisplay the path information at the prompt.

```
txst:simpapp_38075> cd('simple')
txst: simpapp_38075/simple> cd('GROUP1')

txst: simpapp_38075/simple/GROUP1> prompt('off')
>>>prompt()
txst: simpapp_38075/simple/GROUP1>
```

pwd

Use with TXST: offline or online

Description

Displays the current location in the bean hierarchy. This command is useful when you have turned off the prompt display of the path information using the `prompt` command, as described in `prompt`.

Syntax

```
pwd()
```

Examples

The following example displays the current location in the bean hierarchy.

```
txst:simpapp_38075/simple/GROUP1> pwd()
' /simple/GROUP1'
```

Control Commands

connect

Use with TXST: offline

Description

Connects TXST to a Tuxedo Domain or JMX agent.

If the monitored Tuxedo domain enables authentication and Authorization, TXST must provide credentials when it attaches a Tuxedo domain. If authentication passed, the following tasks are executed afterwards. If authentication failed, the connection is rejected. For now, we only support plaintext password.

SECURITY

- APP_PW

Provide tuxedo application password for authentication.

- USR_AUTH,ACL,MANDATORY_ACL

Provide application password, user name and user password for authentication

The client name of Tuxedo users used by TXST must be 'tpsadm', otherwise connect will fail with authentication.

The client must connect master machine, otherwise it might have no right to execute 'start' command.

In the event of an error, the command returns a TXSTException.

Syntax

```
connect(url, domainId, ipckey, appPassword, userName, password)
```

| Argument | Definition |
|-----------|--|
| url | Listen address and listen port of the server instance, specified using the following format: [protocol://]listen-address:listen-port. If you only supply the argument url, it will connect to jmx instead of domain. |
| domainId | [optional]The domain's id defined in UBB. |
| ipckey | [optional]The ipckey defined in UBB. Value is string. |
| userName | [optional]Name representing the client. |
| password | [optional]Used for user authentication. |
| appPasswd | [optional]Application password. |

Examples

```
txst: /offline> connect('//slce04cn03.us.oracle.com:5037', 'simpapp', '38075')
```

```
txst:simpapp_38075:/>
```

Above example shows how to connect to domain.

Or

```
txst: /offline> connect('//slce04cn03.us.oracle.com:5037')
```

```
txst: slce04cn03.us.oracle.com_5037:/>
```

This is an instance of connecting to jmx.

connectDomain

Use with TXST: online(connected to JMX agent)

Description

Connects TXST to a Tuxedo Domain from JMX agent. You must connect to jmx before invoking this command. Except without argument url, for the other information, please refer connect.

Syntax

```
connectDomain(domainId, ipckey, appPassword, userName, password)
```

| Argument | Definition |
|-----------|---|
| domainId | The domain's id defined in UBB. |
| ipckey | The ipckey defined in UBB. |
| userName | [optional]Name representing the client. |
| password | [optional]Used for user authentication. |
| appPasswd | [optional]Application password. |

Examples

```
txst:bjlinux16.cn.oracle.com_5037>connectDomain('simpapp', '58103')
txst:simpapp_58103:/>
```

disconnectDomain

Use with TXST: online(connected to domain)

Description

Disconnect TXST from a Tuxedo domain instance and go back to jmx agent connection.

In the event of an error, the command returns a TXSTException.

Syntax

```
disconnectDomain()
```

Examples

```
txst:simpapp_38075:/simple/GROUP1>disconnectDomain()
txst:bjlinux16.cn.oracle.com_5037>
```

disconnect

Use with TXST: online

Description

Disconnects TXST from a Tuxedo instance. The disconnect command does not cause TXST to exit the interactive scripting shell; it closes the current Tuxedo instance connection and resets all the variables while keeping the interactive shell alive.

In the event of an error, the command returns a TXSTException.

Syntax

```
disconnect()
```

Examples

```
txst:simpapp_38075:/simple/GROUP1>disconnect()  
txst:/offline>
```

exit

Use with TXST: online or offline

Description

Exits TXST from the user session and closes the scripting shell. By default, TXST calls `system.exit(0)`. If you would like to exit with a different exit code, you can specify a value using the `exitcode` argument.

Syntax

```
exit( [exitcode])
```

| Argument | Definition |
|----------|---|
| exitcode | Optional. Exit code to set when exiting TXST. |

Examples

```
txst:simpapp_38075:/>exit(1);  
c:\jython\bin>
```


Editing Commands

create

Use with TXST: `online(connected to domain)`

Description

Creates a bean of the specified type for the current bean.

The create command returns a stub for the newly created bean except for queue.

In the event of an error, the command returns a `TXSTException`.

Syntax

```
create(name, childtype, **argv)
```

| Argument | Definition |
|-----------|--|
| name | Name of the bean that you are creating. You can specify the full pathname of bean. Meaning of name is different from childtype: Machine->pmid. Group->groupName. Bridge->lmid. Server->aout. TMS->tmsName. Queue->qname. |
| childtype | Type of bean that you are creating. The valid value should be MACHINE, GROUP, BRIDGE, SERVER, TMS or QUEUE. |
| argv | The other additional parameters for this bean. |

Note: argv, the additional parameters depend on the `childMBeanType`.

Except creating queue, the return value will be the instance of `Mbean` which you create. For queue, the return value will be `None`.

- Machine
 - lmid
 - tuxconfig
 - tuxdir
 - appdir
- Group
 - groupNo
- Bridge
 - naddr
 - nlsaddr
- Server
 - srvID
- TMS
 - rmsName
 - rmid
- Queue
 - qorder
 - outoforder
 - maxRetries
 - retryDelay
 - defaultDeliveryPolicy
 - cmd
 - defaultExpirationTime
 - qType
 - primaryQueue
 - isPermanentActive
 - comfirmStyle

Examples

The following example creates a bean of type `server` named `simpserv` for the current bean, storing the stub as `server1`:

```
txst:simpapp_38075:/simple/GROUP1> srv1 = create("simpserv", "SERVER",
srvID =40)
```

```
txst:simpapp_38075:/simple/GROUP1> ls(`c`)
```

```
childBean:
```

```

server                                simpserv_1
server                                simpserv_2
server                                simpserv_40
```

delete

Use with TXST: `online`(connected to domain)

Description

Deletes an instance of a bean of the specified type for the current bean.

In the event of an error, the command returns a `TXSTException`.

Note: All targets which belong to this bean must be deleted first.

Syntax

```
delete(name, force)
```

| Argument | Definition |
|----------|--|
| name | Name of the bean to delete. |
| force | [Optional] If force is True, it will delete the specified bean and all the targets belong to it. Otherwise, it will fail if there are targets belong to this bean. The default value for this argument is False. |

Examples

The following example deletes the bean of type `server` named `simpserv_1`:

```
txst:simpapp_38075:/simple/GROUP1>delete("simplserv_40")
txst:simpapp_38075:/simple/GROUP1>ls('c')

childBean:
      server                simplserv_1
      server                simplserv_2
```

get

Use with TXST: online(connected to domain)

Description

Returns the value of the specified attribute, or the dictionary of the specified attributes

In the event of an error, the command returns a TXSTException.

Note: You can list all attributes and their current values by entering ls('b').

Syntax

```
get(attrs=None, path=None)
```

| Argument | Definition |
|----------|---|
| attrs | <p>Name of the attribute to be displayed. You can specify the full pathname of the attribute. If no pathname is specified, the attribute is displayed for the current object. If fullpath is set, attrs must not include pathname.</p> <p>You can specify a set of attribute's name, if so, the attribute's name must not include pathname.</p> <p>You also needn't specify the attributes, if so, get() will return all the attributes' value.</p> |
| path | <p>Optional. You can specify the object's pathname. The object can be others rather than current object. If not setting pathname, the attribute is displayed for the current object.</p> |

Examples

```
txst:simpapp_38075:/simple/GROUP1> dic = get(["TA_CURLMID", "TA_STATE"])
```

```
txst:simpapp_38075:/simple/GROUP1> print dic
{'TA_CURLMID': u'simple', 'TA_STATE': u'ACTIVE'}
```

Or

```
txst:simpapp_38075:/> dic = get(["TA_CURLMID", "TA_STATE"],
path="/simple/GROUP1")
txst:simpapp_38075:/> print dic
{'TA_CURLMID': u'simple', 'TA_STATE': u'ACTIVE'}
```

set

Use with TXST: online(connected to domain)

Description

Sets the specified attribute value for the specified bean

You can list all attributes and their current values by entering ls('b')

In the event of an error, the command returns a TXSTException.

Syntax

```
set(attrs, [path])
```

| Argument | Definition |
|----------|---|
| attrs | The dictionary which stores the attributes and their values. |
| path | Optional. You can specify the object's pathname. The object can be others rather than current object. If not setting pathname, the attribute is set for the current object. |

Attributes:

| | |
|----------|---|
| attrName | Name of the attribute to be set. It is the key in dictionary |
| value | Value of the attribute to be set. It is the value in dictionary |

Examples

```
txst:simpapp_38075:/simple/>a = {"TA_SEC_PRINCIPAL_NAME":"SEC"}
```

```
txst:simpapp_38075:/simple/>set (a)
```

or

```
txst:simpapp_38075:/>a = {"TA_SEC_PRINCIPAL_NAME":"SEC"}
```

```
txst:simpapp_38075:/>set (a, "/simple")
```

Information Commands

find

Use with TXST: online(connected to domain)

Description

Finds MBeans in the hierarchy.

TXST returns the pathname to the MBean that is specified by name.

In the event of an error, the command returns a `TXSTException`.

Syntax

```
find([name], [beanType], [path])
```

| Argument | Definition |
|----------|---|
| name | Name of the MBean that you want to find. It is a Jython regular expression. If you want to match the name entirely, please add "^" at the beginning and add "\$" at the end. For example. "^simpserv_1\$" |
| beanType | Optional. Type of the MBean to find. If type is not set, it will search for all Mbeans which is specified by name. 'machine', 'group' or 'server' is valid. |
| path | Optional. You can specify the object's pathname. The object can be others rather than current object. If not setting pathname, the attribute is set for the current object. |

Examples

```
txst:simpapp_38075:/simple/GROUP1>find(name='simpserv',type='server')
/simple/GROUP1/simpserv_1
/simple/GROUP1/simpserv_2
```

getMBean

Use with TXST: online(connected to domain)

Description

Returns the MBean by browsing to the specified path.

In the event of an error, the command returns a TXSTException.

Syntax

```
getMBean(path)
```

| Argument | Definition |
|----------|--|
| path | Path name to the MBean in the current hierarchy. |

Examples

The following example returns the MBean specified by the path.

```
txst:simpapp_38075:/simple/GROUP1>com=getMBean("/simple/GROUP1/simpserv_1"
)
txst:simpapp_38075:/simple/GROUP1>com.getType()
'server'
```

getPath

Description

Returns the MBean's path for the specified MBean instance

In the event of an error, the command returns a TXSTException.

Syntax

```
getPath(bean)
```

| Argument | Definition |
|----------|---|
| bean | MBean instance for which you want to return the MBean path. |

Examples

The following example returns the MBean specified by the path.

```
txst:simpapp_38075:/simple/GROUP1>com=getMBean("/simple/GROUP1/simpserv_1"
)
txst:simpapp_38075:/simple/GROUP1>cd('.')
txst:simpapp_38075:/simple>path=getPath(com)
txst:simpapp_38075:/simple>print path
GROUP1/simpserv_1
```

lookup

Use with TXST: online(connected to domain)

Description

Looks up the specified MBean. The MBean must be a child of the current MBean

In the event of an error, the command returns a TXSTException.

Syntax

```
lookup(name, [childtype])
```


| Argument | Definition |
|-----------|---|
| name | Name of the MBean that you want to lookup. It is a Jython regular expression. If you want to match the name entirely, please add "^" at the beginning and add "\$" at the end. For example. "^simpserv_1\$" |
| childtype | Optional. The type of the MBean that you want to lookup. The type which depends on current MBean should be as below: Domain->'machine' Machine->'bridge', 'group' Group->'server' |

Examples

The following example looks up the specified server, `simpserv_1`, and stores the returned stub in the `sbean` variable.

```
txst:simpapp_38075:/simple/GROUP1>sbean=lookup('^simpserv_1$', 'server')
txst:simpapp_38075:/simple/GROUP1>sbean[0].getName()
'simpserv_1'
```

or

```
txst:simpapp_38075:/simple/GROUP1>sbean=lookup("simpserv", 'server')
txst:simpapp_38075:/simple/GROUP1>sbean[0].getName()
'simpserv_1'
txst:simpapp_38075:/simple/GROUP1>sbean[1].getName()
'simpserv_2'
```

ls

Use with TXST: `online(connected to domain)`

Description

Lists all the child beans and/or attributes for the current bean.

You can optionally control the output by specifying an argument. If no argument is specified, the command lists all child beans and attributes in the domain. The output is returned as a string.

In the event of an error, the command returns a `TXSTException`.

Syntax

```
ls( ['a' | 'c' | 'b' ], [path] )
```

| Argument | Definition |
|----------|--|
| a | Optional. Displays all the attribute names and values for the current bean. |
| c | Optional. Displays all the child beans that are contained in the current bean. This argument is the default. |
| b | Optional. Displays all parameter names and values for the current bean. |
| s | Optional. Display additional info for the current Mbean. Each type mbean may have different additional info. |
| Path | Optional. Path name to the MBean in the current hierarchy for which you want to list all child beans and attributes. |

Examples

The following example displays all the child beans, and attribute names and values for the MBean `GROUP1`:

```
txst:simpapp_38075:/simple/GROUP1>ls()
```

redirect

Use with `TXST: online(connected to domain)`

Description

Redirects `TXST` output to the specified filename.

In the event of an error, the command returns a `TXSTException`.

Syntax

```
redirect(outputFile, [toStdOut])
```

| Argument | Definition |
|------------|--|
| outputFile | Name of the file to which you want to record the TXST commands. The filename can be absolute or relative to the directory from which you enter the command. |
| toStdOut | Optional. Boolean value specifying whether the output should be sent to stdout. This argument defaults to true, indicating that the output will be sent to stdout. |

Limitation:

After invoking `redirect` when `toStdOut` is `TRUE`, `sys.stdout` is assigned to TXST's internal Pyobject which only supports the following functions: `write()`, `writelines()`, `flush()`, `close()`

After invoking `redirect` when `toStdOut` is `FALSE`, `sys.stdout` is assigned to `FileOutputStream`'s object.

Examples

The following example begins redirects TXST output to the `logs/txst.log` file in the current directory:

```
txst:simpapp_38075:/> redirect('./logs/txst.log')
```

startRecording

Use with TXST: `online(connected to domain)`

Description

Records all user interactions with TXST. This command is useful for capturing commands for replay. In the event of an error, the command returns a `TXSTException`.

Limitation:

This command doesn't take effect when TXST works as a Jython Module, because the interpreter is `InteractiveInterpreter` but not `TXSTInterpreter`. This command depends on `TXSTInterpreter`.

Syntax

```
startRecording(recordFile)
```

| Argument | Definition |
|------------|---|
| recordFile | Name of the file to which you want to record the commands. The filename can be absolute or relative to the directory from which you invoked TXST. |

Examples

The following example begins recording commands in the record.py file:

```
txst:simpapp_38075: /> startRecording('c:/myScripts/record.py')
```

stopRecording

Use with TXST: online(connected to domain)

Description

Stops recording TXST commands. For information about starting a recording

In the event of an error, the command returns a TXSTException.

Limitation:

This command doesn't take effect when TXST works as a Jython Module, because the interpreter is InteractiveInterpreter but not TXSTInterpreter. This command depends on TXSTInterpreter.

Syntax

```
stopRecording()
```

Examples

```
txst:simpapp_38075: /> stopRecording()
```

stopRedirect

Use with TXST: online(connected to domain)

Description

Stops the redirection of TXST output to a file, if redirection is in progress.

In the event of an error, the command returns a TXSTException.

Syntax

```
stopRedirect()
```

Examples

```
txst:simpapp_38075: /> stopRedirect()
```

easeSyntax

Use with TXST: online or offline

Description

This command allow users to invoke some commands without typing the parenthese.

If you want to turn off the easy syntax mode, just simply issue this command again.

The supported commands are as follows:

```
cd, ls, find, connect, startRecording, migrate, resume, shutdown, start,
suspend, prompt, disconnect, pwd, stopRecording, stopRedirect, easeSyntax,
exit.
```

Syntax

```
easeSyntax()
```

Examples

```
txst:simpapp_58103: /> easeSyntax()
```

```
easeSyntax on now.
```

```
txst:simpapp_58103: /> ls c
```

```
childBean:
```

```
    tuxedo_machine
```

```
L1
```

Life Cycle Commands

migrate

Use with TXST: online(connected to domain)

Description

Migrates the servers in the specified scope to an alternate location. This command only is supported by Machine MBean and Group's.

In the event of an error, the command returns a TXSTException.

Syntax

```
migrate( name )
```

| Argument | Definition |
|----------|--|
| name | Optional. Name of the Machine MBean or Group's in which the server should be migrated. If not specified, this argument default is current MBean. |

Examples

```
txst:simpapp_38075:/simple/GROUP1> migrate()
```

or

```
txst:simpapp_38075:/> migrate("/simple/GROUP1")
```

resume

Use with TXST: online(connected to domain)

Description

Resume an object that is suspended.

In the event of an error, the command returns a TXSTException.

Syntax

```
resume( targetName, Mbean )
```

| Argument | Definition |
|------------|---|
| targetName | The Name of object to resume Machine->client Server->service Bridge->remoteLmid WSH->handler JSH->handler |
| Mbean | Optional. Name of the MBean which object will be suspend. The argument defaults to the current MBean. Support the following MBeans: Machine, Server, Bridge, WSH, JSH |

Examples

Resume the client named 'clientID' which belongs to machine 'simple':

```
txst:simpapp_38075:/simple> resume("clientID")
```

or

```
txst:simpapp_38075:/> resume("clientID", "/simple")
```

shutdownDomain

Use with TXST: online(connected to domain)

Description

Gracefully shutdown the tuxedo domain. If domain is shutdown successfully, TXST will disconnect from domain and go back to connect jmx.

In the event of an error, the command returns a TXSTException.

Notes:

- JMX client must connect to master node, otherwise this command will fail.
- TXST must connect to domain, otherwise this command will fail.

Syntax

```
shutdownDomain()
```

Examples

```
txst:simpapp_58103:/>shutdownDomain()
Shutting down server processes ...
      Server Id = 1 Group Id = GROUP1 Machine = L1:      SIGTERM
Shutting down admin processes ...
      Server Id = 0 Group Id = L1 Machine = L1:          shutdown succeeded
2 processes stopped.
txst:bjlinux16.cn.oracle.com_5037>
```

startDomain

Use with TXST: online(connected to JMX agent)

Description

Start the tuxedo domain. If invoking is success, you can connect to domain.

In the event of an error, the command returns a TXSTException.

Notes:

- TXST must connect to JMX agent, otherwise this command will fail.
- This command will fail if TXST is connected to domain.

Syntax

```
startDomain(tuxconfig)
```

| Argument | Definition |
|-----------|-----------------------------------|
| tuxconfig | The TUXCONFIG of tuxedo instance. |

Examples

```
txst:bjlinux16.cn.oracle.com_5037>startDomain('/nfs/users/bosguo/workspace
/txst/simpapp/tuxconfig')
INFO: Oracle Tuxedo, Version 12.1.3.0.0 beta, 64-bit, Patch Level (none)
Booting admin processes ...
exec BBL -A :
    process id=1996 ... Started.
Booting server processes ...
exec server -A :
    process id=1999 ... Started.
2 processes started.
txst:bjlinux16.cn.oracle.com_5037>
```

shutdown

Use with TXST: online(connected to domain)

Description

Gracefully shuts down the specified object

In the event of an error, the command returns a TXSTException.

Note: JMX client must connect to master node, otherwise this command will fail.

Syntax

```
shutdown( name )
```

| Argument | Definition |
|----------|---|
| name | Optional. Name of the MBean to shutdown. This argument specifies the MBean with two ways. First, name could be the valid path of the Mbean. For instance, '/SITE1/QUEGRP' is a path of group. If no specified, this argument default is current MBean. TMS is not supported by this method. Second, name could contain the information of 'AOUT' and the location which the related servers are located in. These two parts must be connected by ':'. And this method is only valid for Server. For instance, '/SITE1:simpserv' means the servers which belong to 'SITE1'. Support the following MBeans: Machine, Group, Server |

Examples

```
shutdown the server 'simpserv_01'
txst:simpapp_38075:/simple/GROUP1/simpserv_01> shutdown()

#simpserv_01 is shutdown.

or

shutdown the servers which AOUT is 'simpserv' in machine simple
txst:simpapp_38075:/simple>shutdown("/simple:simpserv")

#simpserv_01, simpserv_02 are shutdown.
```

start

Use with TXST: online(connected to domain)

Description

Start the specified object

In the event of an error, the command returns a TXSTException.

Note: JMX client must connect to master node, otherwise this command will fail.

Syntax

```
start ( name)
```

| Argument | Definition |
|----------|---|
| name | Optional. Name of the MBean to start. This argument specifies the MBean with two ways. First, name could be the valid path of the Mbean. For instance, '/SITE1/QUEGRP' is a path of group. If no specified, this argument default is current MBean. TMS is not supported by this method. Second, name could contain the information of 'AOUT' and the location which the related servers are located in. These two parts must be connected by '.'. This method is only valid for Server . For instance, '/SITE1:simpserv' means the servers which belong to 'SITE1'. Support the following MBeans: Machine, Group, Server |

Examples

```
boot the server 'simpserv_01'
txst:simpapp_38075:/simple/GROUP1/simpserv_01> start()

#simpserv_01 is booted.

or

boot the server which AOUT is 'simpserv'
txst:simpapp_38075:/simple>start("/simple:simpserv")

#simpserv_01, simpserv_02 are booted.
```

suspend

Use with TXST: online(connected to domain)

Description

Suspends the specified object.

In the event of an error, the command returns a TXSTException.

Syntax

```
suspend(targetName, Mbean)
```

| Argument | Definition |
|------------|---|
| targetName | The Name of object to suspend Machine->client Server->service Bridge->remoteLmid WSH->handler JSH->handler |
| Mbean | Optional. Name of the MBean which object will be suspend. The argument defaults to the current MBean. Support the following MBeans: Machine, Server, Bridge, WSH, JSH |

Examples

Suspend the client named 'clientID' which belongs to machine 'simple'

```
txst:simpapp_38075:/simple> suspend("clientID")
```

or

```
txst:simpapp_38075:/> suspend("clientID", "simple")
```

TXST Variable Reference

Following table describes TXST variables and their common usage.

| Variable | Description |
|-------------|--|
| cmo | Current Management Object. The cmo variable is set to the bean instance to which you navigate using TXST. You use this variable to perform any create, get, set, or invoke method on the current bean instance. By default, this variable is initialized to the root of all configuration management objects, DomainMBean. |
| connected | Boolean value specifying whether TXST is connected to a running server. TXST sets this variable to true when connected to a running server; otherwise, TXST sets it to false. |
| domainMbean | Name of the domain to which TXST is connected. |
| exitonerror | Boolean value specifying whether TXST terminates script execution when it encounters an exception. This variable defaults to true, indicating that script execution is terminated when TXST encounters an error. This variable is not applicable when running TXST in interactive mode. |
| mbsc | MBeanServerConnection object that corresponds to the current location in the hierarchy. |
| recording | Boolean value specifying whether TXST is recording commands. TXST sets this variable to true when the startRecording command is entered; otherwise, TXST sets this variable to false. |

Jython Class for Tuxedo Mbeans

In TXST, all the Tuxedo Mbeans have corresponding Jython class. Jython class has a set of function to implements corresponding Mbean's operations. This section describes the Jython class in TXST.

Mbean

This is the root class for other classes in TXST. It provides a set of basic operation.

getName

get the object's name

getType

get the object's type

getMbeanName

get the MBean's objectName.

DomainMbean

Inherited from MBean

CreateMachine

Syntax

```
CreateMachine (pmid, lmid, tuxconfig, tuxdir, appdir)
```

This function invokes JMX interface createMachine of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

GetParameters

Syntax

```
GetParameters ()
```

Output

A dictionary which includes all attributes and values.

This function invokes JMX interface getParameters of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

SetParameters

Syntax

```
SetParameters (data)
```

Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

GetRoutings

Syntax

```
GetRoutings ()
```

Output

A list includes all attributes and values of all routings.

This function invokes JMX interface `getRouting` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

Add Routing

Syntax

```
AddRouting (routingName, routingType, bufType, field, ranges)
```

This function invokes JMX interface `addRouting` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

DeleteRouting

Syntax

```
DeleteRouting (routingName, bufType, field, type)
```

This function invokes JMX interface `deleteRouting` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

SetRoutingParameter

Syntax

```
SetRoutingParameter (routingName, bufType, field, type,  
parameterName, parameterValue)
```

This function invokes JMX interface `setRoutingParameter` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

SetRoutingParameters

Syntax

```
SetRoutingParameters (routingName, bufType, field, ta_type, attrs)
```

Input

`attrs`: A dictionary includes the attributes and values to be set.

This function invokes JMX interface `setRoutingParameters` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

GetRoutingParameter

Syntax

```
GetRoutingParameter (routingName, buftype, field, type, parameterName)
```

Output

A dictionary includes the attribute and the value.

This function invokes JMX interface `getRoutingParameter` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

Swap

Syntax

```
Swap ( )
```

This function invokes JMX interface `swap` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

Tuxedo_Domain

Syntax

```
Tuxedo_Domain()
```

Output

```
TUXEDO_ECM_DOMAIN_MBEAN
```

| Field Name | Description |
|------------|-------------|
|------------|-------------|

TXST Command and Variable Reference

| | |
|-----------------|---|
| TA_AUTOTRAN | For information about these MIB attributes in T_DOMAIN refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_TRANTIME | |
| TA_IPCKEY | |
| TA_MASTER | |
| TA_MODEL | |
| TA_DOMAINID | |
| TA_UID | |
| TA_GID | |
| TA_PERM | |
| TA_MAXACCESSERS | |
| TA_MAXSERVERS | |
| TA_MAXSERVICES | |
| TA_MAXGROUPS | |
| TA_MAXNETGROUPS | |
| TA_MAXMACHINES | |
| TA_MAXQUEUES | |
| TA_MAXACLGROUPS | |
| TA_MAXGTT | |
| TA_MAXCONV | |
| TA_MAXBUFTYPE | |
| TA_MAXBUFSTYPE | |
| TA_MAXDRT | |
| TA_MAXRFT | |
| TA_MAXRTDATA | |
| TA_MAXSPDATA | |

| | |
|---------------------------|---|
| TA_MAXTRANTIME | For information about these MIB attributes in T_DOMAIN refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_CMTRET | |
| TA_LDBAL | |
| TA_SYSTEM_ACCESS | |
| TA_OPTIONS | |
| TA_USIGNAL | |
| TA_SECURITY | |
| TA_SSL_RENEGOTIATION | |
| TA_AUTHSVC | |
| TA_SCANUNIT | |
| TA_SANITYSCAN | |
| TA_DBBLWAIT | |
| TA_BBLQUERY | |
| TA_BLOCKTIME | |
| TA_NOTIFY | |
| TA_SEC_PRINCIPAL_NAME | |
| TA_SEC_PRINCIPAL_LOCATION | |
| TA_SEC_PRINCIPAL_PASSVAR | |
| TA_SIGNATURE_AHEAD | |
| TA_SIGNATURE_BEHIND | |
| TA_SIGNATURE_REQUIRED | |
| TA_ENCRYPTION_REQUIRED | |

MachineMbean

Inherited from MBean

CreateGroup

Syntax

```
CreateGroup (groupName, groupNo)
```

This function invokes JMX interface createGroup of Machine Mbean.

CreateBridge

Syntax

```
CreateBridge(lmid,naddr,nlsaddr)
```

This function invokes JMX interface createBridge of Machine Mbean.

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes all attributes and values.

This function invokes JMX interface getParameters of Machine Mbean.

GetParameter

Syntax

```
GetParameter(name)
```

This function invokes JMX interface getParameter of Machine Mbean.

SetParameters

Syntax

```
SetParameters(data)
```

Input

data: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface setParameters of Machine Mbean.

SetParameter

Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface setParameter of Machine Mbean.

DeleteRecursively

Syntax

```
DeleteRecursively()
```

Invokes JMX interface deleteRecursively of Machine Mbean.

Delete

Syntax

```
Delete()
```

Invokes JMX interface delete of Machine Mbean.

Migrate

Syntax

```
Migrate()
```

Invokes JMX interface migrate of Machine Mbean.

Clean

Syntax

```
Clean()
```

Invokes JMX interface clean of Machine Mbean.

GetNativeClients

Syntax

```
GetNativeClients()
```

Invokes JMX interface `getNativeClients` of Machine Mbean.

Suspend

Syntax

```
Suspend(clientId)
```

Invokes JMX interface `suspend` of Machine Mbean.

Resume

Syntax

```
Resume(clientId)
```

Invokes JMX interface `resume` of Machine Mbean.

KillClient

Syntax

```
KillClient(clientId)
```

Invokes JMX interface `killClient` of Machine Mbean.

GetTransactions

Syntax

```
GetTransactions()
```

Output

A list includes all transactions' attributes.

This function invokes JMX interface `get Transactions` of Machine Mbean.

AbortTransaction

Syntax

```
AbortTransaction(transId,xId)
```

Invokes JMX interface abortTransaction of Machine Mbean.

GetUlog

Syntax

```
GetUlog(date, startTime, endTime, line, ulogCat, serverity, totalLine)
```

Output

A list includes all attributes of ulogs.

Invokes JMX interface getULog of Machine Mbean.

Client_Connections

Syntax

```
Client_Connections()
```

Output

```
CLIENT_CONNECTION_NUMBER_MBEAN
```

| Field Name | Description |
|-------------------|----------------------------|
| TA_CURCLIENTS | Native Clients Number |
| TA_CURWSCLIENTS | Workstation Clients Number |
| TA_CURJOLTCLIENTS | Jolt Clients Number |

Machine_Operation_Statistics

Syntax

```
Machine_Operation_Statistics ()
```

Output:

MACHINE_OPERATION_STATISTICS_MBEAN

| Field Name | Description |
|-----------------|---|
| TA_NUMCONV | Following MIB attribute in T_Machine is returned. For information about attribute definition, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_NUMDEQUEUE | |
| TA_NUMENQUEUE | |
| TA_NUMPOST | |
| TA_NUMREQ | |
| TA_NUMSUBSCRIBE | |
| TA_NUMTRAN | |
| TA_NUMTRANABT | |
| TA_NUMTRANCMT | |
| TA_WKCOMPLETED | |
| TA_TIMESTART | |
| TA_CURTIME | |

Tuxedo_machines

Syntax

Tuxedo_machines()

Output

TUXEDO_ECM_MACHINE_MBEAN

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|--------------------|---|
| TA_P MID | For information about these MIB attributes in T_MACHINE, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_L MID | |
| TA_APPDIR | |
| TA_TUXCONFIG | |
| TA_TUXDIR | |
| TA_UID | |
| TA_GID | |
| TA_PERM | |
| TA_BRTHREADS | |
| TA_MAXACCESSERS | |
| TA_MAXWSCLIENTS | |
| TA_MAXACLCACHE | |
| TA_MAXCONV | |
| TA_MAXPENDINGBYTES | |
| TA_MAXGTT | |
| TA_TYPE | |
| TA_CMPLIMIT | |
| TA_TMNETLOAD | |
| TA_SPINCOUNT | |
| TA_TLOGDEVICE | |
| TA_TLOGOFFSET | |
| TA_TLOGNAME | |
| TA_TLOGSIZE | |
| TA_ULOGPFX | |
| TA_TUXOFFSET | |

| | |
|---------------------------|---|
| TA_ENVFILE | For information about these MIB attributes in T_MACHINE, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_SEC_PRINCIPAL_NAME | |
| TA_SEC_PRINCIPAL_LOCATION | |
| TA_SEC_PRINCIPAL_PASSVAR | |
| TA_SIGNATURE_REQUIRED | |
| TA_ENCRYPTION_REQUIRED | |
| TA_SICACHEENTRIESMAX | |

GroupMbean

Inherited from MBean

CreateServer

Syntax

```
CreateServer(aout, srvID)
```

Invokes JMX interface createServer of Group Mbean.

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes all attributes and values.

This function invokes JMX interface getParameters of Group Mbean.

GetParameter

Syntax

```
GetParameter(name)
```

This function invokes JMX interface `getParameter` of Group Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of Group Mbean.

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter` of Group Mbean.

CreateTMS

Syntax

```
CreateTMS (rmsName, rmid, tmsName)
```

Invokes JMX interface `createTMS` of Group Mbean.

DeleteRecursively

Syntax:

```
DeleteRecursively ()
```

Invokes JMX interface `deleteRecursively` of Group Mbean.

Delete

Syntax

```
Delete ()
```

Invokes JMX interface delete of Group Mbean.

Migrate

Syntax

```
Migrate()
```

Invokes JMX interface migrate of Group Mbean.

Tuxedo_groups

Syntax

```
Tuxedo_groups()
```

Output

```
TUXEDO_ECM_GROUPS_MBEAN
```

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|---------------------------|---|
| TA_SRVGRP | For information about these MIB attributes in T_GROUP, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_LMID | |
| TA_GRPNO | |
| TA_TMSNAME | |
| TA_ENVFILE | |
| TA_TMSCOUNT | |
| TA_SEC_PRINCIPAL_NAME | |
| TA_SEC_PRINCIPAL_LOCATION | |
| TA_SEC_PRINCIPAL_PASSVAR | |
| TA_SIGNATURE_REQUIRED | |
| TA_ENCRYPTION_REQUIRED | |
| TA_OPENINFO | |
| TA_CLOSEINFO | |
| TA_MRM | |

BridgeMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of Bridge Mbean.

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter()` of Bridge Mbean.

GetRemoteLinks

Syntax

```
GetRemoteLinks ()
```

Output

A list which includes the attributes.

This function invokes JMX interface `getRemoteLinks ()` of Bridge Mbean.

GetRemoteLinkParameter

Syntax

```
GetRemoteLinkParameter(lmid, name)
```

This function invokes JMX interface `getRemoteLinkParameter ()` of Bridge Mbean.

SetRemoteLinkParameters

Syntax

```
SetRemoteLinkParameters (lmid, data)
```

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setRemoteLinkParameters ()` of Bridge Mbean.

SuspendRemoteLink

Syntax

```
SuspendRemoteLink (lmid)
```

This function invokes JMX interface suspend () of Bridge Mbean.

ResumeRemoteLink

Syntax

```
ResumeRemoteLink (lmid)
```

This function invokes JMX interface resume () of Bridge Mbean.

DeactivateRemoteLink

Syntax

```
DeactivateRemoteLink (lmid)
```

This function invokes JMX interface deactive () of Bridge Mbean.

Bridge_Remote_Link_Statistics

Syntax

```
Bridge_Remote_Link_Statistics()
```

Output

```
REMOTE_LINK_STATISTICS_MBEAN
```

| Field Name | Description |
|-------------------|--|
| TA_LMID | Destination logical machine identifier (LMID2) for network connection. |
| TA_MONINBOUNDNUM | Total Inbound Network Messages since bridge was started. |
| TA_MONOUTBOUNDNUM | Total Outbound Network Messages since bridge was started. |

| | |
|-------------------|--|
| TA_MONINBOUNDBYT | Total Inbound Network Messages size in bytes since bridge was stated. |
| TA_MONOUTBOUNDBYT | Total Outbound Network Messages size in bytes since bridge was stated. |
| TA_SENTNUM | Number of messages sent from the source logical machine to the destination logical machine. |
| TA_SENTBYT | Number of bytes sent from the source logical machine to the destination logical machine. |
| TA_SEDNUM | Number of messages sends from the source logical machine to the destination logical machine. |
| TA_SENDBYT | Number of bytes sends from the source logical machine to the destination logical machine. |
| TA_TIMERESTART | Restart Time, in seconds, since 00:00:00 UTC, January 1, 1970 |
| TA_CURTIME | Current time, in seconds, since 00:00:00 UTC, January 1, 1970 |
| TA_CONTIME | Connection time, in seconds, since 00:00:00 UTC, January 1, 1970 |

Bridge_Queue_Statistics

Syntax

```
Bridge_Queue_Statistics()
```

Output

```
BRIDGE_QUEUE_STATISTICS_MBEAN
```

| Field Name | Description |
|-------------|--|
| TA_MSG_QNUM | Number of messages currently on the queue. |

Tuxedo_ECM_Bridge

Syntax

```
Tuxedo_ECM_Bridge()
```

Output

```
TUXEDO_ECM_BRIDGE_MBEAN
```

| Field Name | Description |
|-------------------|---|
| TA_LMID | For information about these MIB attributes in T_MACHINE, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_NADDR | |
| TA_BRIDGE | |
| TA_NLSADDR | |
| TA_FADDR | |
| TA_FRANGE | |
| TA_MINENCRYPTBITS | |
| TA_MAXENCRYPTBITS | |

ServerMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes all attributes and values.

This function invokes JMX interface getParameters of Server Mbean.

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter` of Server Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of Server Mbean.

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter` of Server Mbean.

Delete

Syntax

```
Delete ()
```

This function invokes JMX interface `delete` of Server Mbean.

SetServiceParam

Syntax

```
SetServiceParam (serviceName, parameterName, parameterValue)
```

Invokes JMX interface `setServiceParameter` of Server Mbean.

GetServiceParam

Syntax

```
GetServiceParam(serviceName,parameterName)
```

Output

A dictionary includes the attribute name and value.

Invokes JMX interface getServiceParameter of Server Mbean.

DeleteService

Syntax

```
DeleteService(serviceName)
```

Invokes JMX interface deleteService of Server Mbean.

GetServices

Syntax

```
GetServices()
```

Output

A list includes all services' attributes.

Invokes JMX interface getServices of Server Mbean.

SuspendService

Syntax

```
SuspendService(serviceName)
```

Invokes JMX interface suspendService of Server Mbean.

ResumeService

Syntax

```
ResumeService (serviceName)
```

Invokes JMX interface resumeService of Server Mbean.

Server_Statistics

Syntax

```
Server_Statistics()
```

Output

```
SERVER_STATISTICS_MBEAN
```

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|-----------------------|--|
| TA_BASESRVID | For information about these MIB attributes in T_SERVER, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_SRVID | |
| TA_STATE | |
| TA_NUMDISPATCHTHREADS | |
| TA_NUMCONV | |
| TA_NUMDEQUEUE | |
| TA_NUMENQUEUE | |
| TA_NUMPOST | |
| TA_NUMREQ | |
| TA_NUMSUBSCRIBE | |
| TA_NUMTRAN | |
| TA_NUMTRANABT | |
| TA_NUMTRANCMT | |
| TA_TOTWORKL | |
| TA_TIMERESTART | |
| TA_CURTIME | |

Service_Statistics

Syntax:

```
Service_Statistics()
```

Output

```
SERVICE_STATISTICS_MBEAN
```

| Field Name | Description |
|--------------------|---|
| TA_SERVICENAME | Service name |
| TA_SRVID | Unique (within the server group) server identification number. |
| TA_TOTMSGSIEMEGA | Total Message size since service was started. The unit is Mega |
| TA_TOTMSGSIZEBYTE | Total Message size, since service was started, in byte mod 1048576. |
| TA_TOTEXECTIMESEC | Total execution time since service was started. The unit is seconds. |
| TA_TOTEXECTIMEUSEC | Total execution time, since service was started, in microseconds mod 1000000. |
| TA_TOTCPUIMESEC | Total CPU time since service was started. The unit is seconds. |
| TA_TOTCPUIMEUSEC | Total CPU time, since service was started, in microseconds mod 1000000. |
| TA_TOTSUCCNUM | Total successes request number since service was started. |
| TA_TOTSFAILNUM | Total system failure request number since service was started. |
| TA_TOTUFALLNUM | Total user failure request number since service was started. |
| TA_TIMERESTART | Time, in seconds, since 00:00:00 UTC, January 1, 1970, as returned by the time(2) system call on T_SERVER:TA_LMID, when the server was last started or restarted. |
| TA_CURTIME | Current time, in seconds, since 00:00:00 UTC, January 1, 1970, as returned by the time(2) system call on T_SERVER:TA_LMID. |

IPC_Queue_Statistics

Syntax

```
IPC_Queue_Statistics()
```

Output

IPC_QUEUE_STATISTICS_MBEAN

| Field Name | Description |
|-------------|---|
| TA_RQADDR | Symbolic address of the request queue for an active server offering this service. See T_SERVER:TA_RQADDR for more information on this attribute. |
| TA_SRVID | Unique (within the server group) server identification number for an active server offering this service. See T_SERVER:TA_SRVID for more information on this attribute. |
| TA_MSG_QNUM | Number of messages currently on the queue. |

Tuxedo_servers

Syntax

Tuxedo_servers()

Output

TUXEDO_ECM_SERVERS_MBEAN

| Field Name | Description |
|---------------|--|
| TA_SERVERNAME | For information about these MIB attributes in T_SERVER, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_SRVGRP | |
| TA_SRVID | |
| TA_CLOPT | |
| TA_SEQUENCE | |
| TA_MIN | |
| TA_MAX | |
| TA_ENVFILE | |

| | |
|---------------------------|--|
| TA_CONV | For information about these MIB attributes in T_SERVER, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_RQADDR | |
| TA_RQPERM | |
| TA_REPLYQ | |
| TA_RPPERM | |
| TA_RCMD | |
| TA_MAXGEN | |
| TA_GRACE | |
| TA_RESTART | |
| TA_SYSTEM_ACCESS | |
| TA_MAXDISPATCHTHREADS | |
| TA_MINDISPATCHTHREADS | |
| TA_THREADSTACKSIZE | |
| TA_SEC_PRINCIPAL_NAME | |
| TA_SEC_PRINCIPAL_LOCATION | |
| TA_SEC_PRINCIPAL_PASSWORD | |
| TA_SICACHEENTRIESMAX | |
| TA_CONCURR_STRATEGY | |

SystemServerMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output:

A dictionary which includes all attributes and values.

This function invokes JMX interface `getParameters` of System Server Mbean.

GetParameter

Syntax

```
GetParameter(name)
```

This function invokes JMX interface `getParameter` of System Server Mbean.

SetParameters

Syntax

```
SetParameters(data)
```

Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of System Server Mbean.

SetParameter

Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface `setParameter` of System Server Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface delete of System Server Mbean.

System_Server_Number

Syntax

```
System_Server_Number()
```

Output

```
SYSTEM_SERVER_NUMBER_MBEAN
```

| Field Name | Description |
|--------------|--|
| TA_SRVID | For information about these MIB attributes in T_SERVER, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_BASESRVID | |
| TA_STATE | |

TMSMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes the attributes.

This function invokes JMX interface getParameters() of TMS Mbean.

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter()` of TMS Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setParameters()` of TMS Mbean.

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter()` of TMS Mbean.

Delete

Syntax:

```
Delete()
```

This function invokes JMX interface `delete()` of TMS Mbean.

TMS_Transaction_Statistics

Syntax:

```
TMS_Transaction_Statistics()
```

Output:

TMS_TRANSACTION_STATISTICS_MBEAN

| Field Name | Description |
|----------------|--|
| TA_SRVID | For information about these MIB attributes in T_SERVER, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_BASESRVID | |
| TA_GRPNO | |
| TA_NUMTRANABT | |
| TA_NUMTRANCMT | |
| TA_TIMERESTART | |
| TA_CURTIME | |
| TA_STATE | |

Tuxedo_TMS

Syntax

Tuxedo_TMS ()

Output

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|--------------|--|
| TA_SRVGRP | For information about the MIB attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_GRPNO | |
| TA_LMID | |
| TA_TMSNAME | |
| TA_TMSCOUNT | |
| TA_OPENINFO | |
| TA_CLOSEINFO | |

TDomainGatewayMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of /T domain gateway Mbean.

GetParameter

Syntax

```
GetParameter(name)
```

This function invokes JMX interface `getParameter()` of /T domain gateway Mbean.

SetParameters

Syntax

```
SetParameters(data)
```

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface setParameters() of /T domain gateway Mbean.

SetParameter

Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface setParameter() of /T domain gateway Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface delete() of /T domain gateway Mbean.

Remote_Link_Statistics

Syntax

```
Remote_Link_Statistics()
```

Output

REMOTE_LINK_STATISTICS_MBEAN

| Field Name | Description |
|-------------------|---------------------------------------|
| TA_DMRACCESSPOINT | Remote Domain ID |
| TA_STATE | Connection Status |
| TA_MONINBOUNDNUM | Number of inbound network messages |
| TA_MONOUTBOUNDNUM | Number of outbound network messages |
| TA_MONINBOUNDBYT | Inbound network message size in bytes |

| | |
|-------------------|--|
| TA_MONOUTBOUNDBYT | Outbound network message size in bytes |
| TA_MONNUMPEND | Pending Network Messages |
| TA_MONBYTESPEND | Pending Network Messages Bytes |
| TA_MONNUMWAITRPLY | Outstanding Network Requests |
| TA_CONTIME | Connection time, in seconds, since 00:00:00 UTC, January 1, 1970 |

Domain_Gateway_Transaction_Statistics

Syntax:

```
Domain_Gateway_Transaction_Statistics()
```

Output:

```
DOMAIN_GATEWAY_TRANSACTION_STATISTICS_MBEAN
```

| Field Name | Description |
|----------------|--|
| TA_NUMTRANCMT | For information about the MIB attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_NUMTRANABT | |
| TA_TIMERESTART | |
| TA_CURTIME | |

EventBrokerMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of event broker Mbean.

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter()` of event broker Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setParameters()` of event broker Mbean.

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter()` of event broker Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface `delete()` of event broker Mbean.

Event_Statistics

Syntax

```
Event_Statistics()
```

Output

```
EVENT_STATISTICS_MBEAN
```

| Field Name | Description |
|-------------------|---|
| TA_MONEVTSVCNUM | Notified Events |
| TA_MONEVTUNSOLNUM | Notified Events by Unsolicited Message |
| TA_MONEVTQUEENUM | Notified Events by Queue Message |
| TA_MONEVTCMDNUM | Notified Events by Command Line |
| TA_MONEVTULOGNUM | Notified Events by USERLOG |
| TA_TIMERESTART | Restart Time, in seconds, since 00:00:00 UTC, January 1, 1970 |
| TA_CURTIME | Current time, in seconds, since 00:00:00 UTC, January 1, 1970 |

QueueServerMbean

Inherited from MBean

GetParameters

Syntax

```
GetParameters()
```

Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of OTMQ Mbean.

GetParameter

Syntax

```
GetParameter (name)
```

This function invokes JMX interface `getParameter()` of OTMQ Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setParameters()` of OTMQ Mbean.

SetParameter

Syntax

```
SetParameter (name, value)
```

This function invokes JMX interface `setParameter()` of OTMQ Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface `delete()` of OTMQ Mbean.

Queue_Space_Statistics

Syntax

```
Queue_Space_Statistics()
```

Output

QUEUE_SPACE_STATISTICS_MBEAN

| Field Name | Description |
|---------------------|---|
| TA_APPQSPACENAME | Following MIB Attributes in T_APPQSPACE is returned. For information about the attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_STATE | |
| TA_CURACTIONS | |
| TA_CURCURSORS | |
| TA_CURHANDLES | |
| TA_CURMEMNONPERSIST | |
| TA_CURMSG | |
| TA_CURPROC | |
| TA_CURQUEUES | |
| TA_CURTMPQUEUES | |
| TA_CURTRANS | |

Queue_Space_Peak

Syntax

Queue_Space_Peak ()

Output

QUEUE_SPACE_PEAK_MBEAN

| Field Name | Description |
|------------|-------------|
|------------|-------------|

| | |
|--------------------|---|
| TA_APPQSPACENAME | Following MIB Attributes in T_APPQSPACE is returned. For information about the attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_HWACTIONS | |
| TA_HWCURSORS | |
| TA_HWHANDLES | |
| TA_HWMEMNONPERSIST | |
| TA_HWMMSG | |
| TA_HWOWNERS | |
| TA_HWPROC | |
| TA_HWQUEUES | |
| TA_HWTMPQUEUES | |
| TA_HWTRANS | |

Queue_Statistics

Syntax

```
Queue_Statistics()
```

Output

```
QUEUE_STATISTICS_MBEAN
```

| Field Name | Description |
|-----------------------|--|
| TA_APPQNAME | Following MIB Attributes in T_APPQ is returned. For information about the attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_APPQSPACENAME | |
| TA_CURBLOCKS | |
| TA_CURNONPERSISTBYTES | |
| TA_CURMSG | |
| TA_CURNONPERSISTMSG | |
| TA_CURNONPERSISTMSG | |

Tuxedo_Q_QSPACE

Syntax

```
Tuxedo_Q_QSPACE()
```

Output

```
TUXEDO_ECM_SLASH_QUEUE_QSPACE_MBEAN
```

| Field Name | Description |
|------------------|---|
| TA_APPQSPACENAME | Following MIB Attributes in T_APPQSPACE is returned. For information about the attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_QMCONFIG | |
| TA_LMID | |
| TA_IPCKEY | |
| TA_ERRORQNAME | |
| TA_MAXACTIONS | |
| TA_MAXCURSORS | |
| TA_MAXHANDLES | |
| TA_MAXMSG | |
| TA_MAXOWNERS | |
| TA_MAXPAGES | |
| TA_MAXPROC | |
| TA_MAXQUEUES | |
| TA_MAXTMPQUEUES | |
| TA_MAXTRANS | |
| TA_MEMNONPERSIST | |

Tuxedo_Q_QUEUE

Syntax

```
Tuxedo_Q_QUEUE ( )
```

Output

```
TUXEDO_ECM_SLASH_QUEUE_QUEUE_MBEAN
```

| Field Name | Description |
|------------------|--|
| TA_APPQNAME | Following MIB Attributes in T_APPQ is returned. For information about the attributes, refer to Oracle Tuxedo File Formats, Data Descriptions, MIBs, and System Processes Reference . |
| TA_APPQSPACENAME | |
| TA_QMCONFIG | |
| TA_LMID | |
| TA_APPQORDER | |

WebServiceGatewayMbean

GetParameter

Syntax

```
GetParameter (parameterName)
```

This function invokes JMX interface `getParameter(parameterName)` of Tuxedo Web Service Gateway Mbean.

GetParameters

Syntax

```
GetParameters (parameterName)
```

This function invokes JMX interface `getParameters(parameterName)` of Tuxedo Web Service Gateway Mbean.

SetParameter

Syntax

```
SetParameter(parameterName, parameterValue)
```

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Web Service Gateway Mbean.

SetParameters

Syntax

```
SetParameters(date)
```

Input

The parameter “data” type is dictionary which includes parameter names and values. It’ll be converted to `CompositeData` type to invoke JMX interface.

This function invokes JMX interface `setParameters(parameters)` of Tuxedo Web Service Gateway Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface `delete()` of Tuxedo Web Service Gateway Mbean.

Web_Service_Gateway_Statistics

Syntax

```
Web_Service_Gateway_Statistics()
```

Output

```
WEBSERVICE_GATEWAY_STATISTICS_MBEAN
```

TXST Command and Variable Reference

| Field Name | Description |
|--------------------|---|
| TA_MONTHRNUM | Active Threads |
| TA_MONINTALTIME | Inbound Process Time |
| TA_MONINREQNUM | Inbound request number |
| TA_MONOUTREQNUM | Outbound request number |
| TA_MONOUTALTIME | Outbound Process Time |
| TA_MONINOWFAIL | Inbound One-Way Failures |
| TA_MONINOWSUCC | Inbound One-Way Successes |
| TA_MONINRPCFAIL | Inbound RPC Failures |
| TA_MONINRPCSUCC | Inbound RPC Successes |
| TA_MONOUTOWFAIL | Outbound One-Way Failures |
| TA_MONOUTOWSUCC | Outbound One-Way Successes |
| TA_MONOUTRPCFAIL | Outbound RPC Failures |
| TA_MONOUTRPCSUCC | Outbound RPC Successes |
| TA_MONINBOUNDPEND | Inbound Pending Requests |
| TA_MONOUTBOUNDPEND | Outbound Pending Requests |
| TA_TIMERESTART | Restart Time, in seconds, since 00:00:00 UTC, January 1, 1970 |
| TA_CURTIME | Current time, in seconds, since 00:00:00 UTC, January 1, 1970 |

WorkstationListenerMbean

GetParameter

Syntax

```
GetParameter (parameterName)
```

This function invokes JMX interface `getParameter(parameterName)` of Tuxedo Workstation Listener Mbean.

GetParameters

Syntax

```
GetParameters ()
```

Output

The original type is `CompositeData` and the final output type is converted to dictionary.

This function invokes JMX interface `getParameters()` of Tuxedo Workstation Listener Mbean.

SetParameter

Syntax

```
SetParameter (parameterName, parameterValue)
```

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Workstation Listener Mbean.

SetParameters

Syntax

```
SetParameters (data)
```

Input

The parameter “data” type is dictionary which includes parameter names and values. It'll be converted to `CompositeData` type to invoke JMX interface.

This function invokes JMX interface `setParameters(parameters)` of Tuxedo Workstation Listener Mbean.

Delete

Syntax

```
Delete()
```

This function invokes JMX interface `delete()` of Tuxedo Workstation Listener Mbean.

Get Handler Parameter

Syntax

```
GetHandlerParameter(clientId, parameterName)
```

This function invokes JMX interface `getHandlerParameter()` of Tuxedo Workstation Listener Mbean.

Get Handlers

Syntax

```
GetHandlers(ClientId)
```

Output

The original type is `TabularData` and the final output type is converted to list.

This function invokes JMX interface `getHandlers(clientId)` of Tuxedo Workstation Listener Mbean.

Suspend Handler

Syntax

```
SuspendHandler(clientId)
```

This function invokes JMX interface `suspendHandler(clientId)` of Tuxedo Workstation Listener Mbean.

Resume Handler

Syntax

```
ResumeHandler (clientId)
```

This function invokes JMX interface `resumeHandler(clientId)` of Tuxedo Workstation Listener Mbean.

Kill Handler

Syntax

```
KillHandler (clientId)
```

This function invokes JMX interface `killHandler(clientId)` of Tuxedo Workstation Listener Mbean.

Get Clients

Syntax

```
GetClients (wshClientID)
```

Output

The original type is `TabularData` and the final output type is converted to list.

This function invokes JMX interface `getWSClients(clientId)` of Tuxedo Workstation Listener Mbean.

Suspend Client

Syntax

```
SuspendClient (clientId)
```

This function invokes JMX interface `suspendClient(clientId)` of Tuxedo Workstation Listener Mbean.

Resume Client

Syntax

```
ResumeClient(clientId)
```

This function invokes JMX interface `resumeClient(clientId)` of Tuxedo Workstation Listener Mbean.

Kill Client

Syntax

```
KillClient(clientId)
```

This function invokes JMX interface `killClient(clientId)` of Tuxedo Workstation Listener Mbean.

Workstation_Listener_Statistics

Syntax

```
Workstation_Listener_Statistics()
```

Output

```
LISTENER_STATISTICS_MBEAN
```

| Field Name | Description |
|----------------|--|
| TA_CURHANDLERS | This field displays the number of currently active handlers associated with this workstation listener (WSL). |
| TA_CURCLIENTS | This field displays the number of clients, both native and workstation, currently logged in to this machine. |
| TA_TOTNUMREQ | Total Request Number |
| TA_OUTSREQNUM | Outstanding Requests |

| | |
|----------------|---|
| TA_TIMERESTART | This field displays the amount of time since restart. |
| TA_CURTIME | This field displays the current time (in seconds) since 00:00:00 UTC, January 1, 1970 |

JoltListenerMbean

GetParameter

Syntax

```
GetParameter(parameterName)
```

This function invokes JMX interface `getParameter(parameterName)` of Tuxedo Jolt Listener Mbean.

GetParameters

Syntax

```
GetParameters()
```

Output

The original type is `CompositeData` and the final output type is converted to dictionary.

This function invokes JMX interface `getParameters()` of Tuxedo Jolt Listener Mbean.

SetParameter

Syntax

```
setParameter(parameterName, parameterValue)
```

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Jolt Listener Mbean.

SetParameters

Syntax

```
SetParameters (date)
```

Input:

The parameter “data” type is dictionary which includes parameter names and values. It’ll be converted to CompositeData type to invoke JMX interface.

This function invokes JMX interface setParameters(parameters) of Tuxedo Jolt Listener Mbean.

Delete JSL

Syntax

```
Delete ()
```

This function invokes JMX interface delete() of Tuxedo Jolt Listener Mbean.

Get Handlers

Syntax

```
GetHandlers ()
```

Output

The original type is TabularData and the final output type is converted to list.

This function invokes JMX interface getHandlers() of Tuxedo Jolt Listener Mbean.

Suspend Handler

Syntax

```
SuspendHandler (clientId)
```

This function invokes JMX interface suspendHandler(clientId) of Tuxedo Jolt Listener Mbean.

Resume Handler

Syntax

```
ResumeHandler (clientId)
```

This function invokes JMX interface `resumeHandler(clientId)` of Tuxedo Jolt Listener Mbean.

Jolt_Listener_Statistics

Syntax

```
Jolt_Listener_Statistics ()
```

Output

```
LISTENER_STATISTICS_MBEAN
```

| Field Name | Description |
|----------------|---|
| TA_CURHANDLERS | Active Handlers |
| TA_CURCLIENTS | Clients |
| TA_TOTREQNUM | Requests |
| TA_OUTSREQNUM | Outstanding Requests |
| TA_TIMERESTART | Restart Time, in seconds, since 00:00:00 UTC, January 1, 1970 |
| TA_CURTIME | Current time, in seconds, since 00:00:00 UTC, January 1, 1970 |

ARTBatchSystemMbean

Inherited from MBean

GetBatches

Syntax

```
GetBatches (batchName, batchID, batchClass, batchOwner)
```

Output

A list which contains result.

This function invokes JMX interface `getBatches()` of ART batch system Mbean.

CancelBatch

Syntax

```
CancelBatch(batchName, batchID, batchClass, batchOwner)
```

Output

A list which contains result.

This function invokes JMX interface `cancelBatch()` of ART batch system.

PurgeBatch

Syntax

```
PurgeBatch(batchName, batchID, batchClass, batchOwner)
```

Output

A list which contains result.

This function invokes JMX interface `purgeBatch()` of ART batch system Mbean.

HoldBatch

Syntax

```
HoldBatch(batchName, batchID, batchClass, batchOwner)
```

Output

A list which contains result.

This function invokes JMX interface `holdBatch ()` of ART batch system Mbean.

ReleaseBatch

Syntax

```
ReleaseBatch(batchName, batchID, batchClass, batchOwner)
```

Output

A list which contains result.

This function invokes JMX interface `releaseBatch()` of ART batch system Mbean.

GetBatchSysOuts

Syntax

```
GetBatchSysOuts(batchID)
```

Output

A list which contains result.

This function invokes JMX interface `getBatchSysOuts()` of ART batch system Mbean.

SubmitBatch

Syntax

```
SubmitBatch (batchScript, batchOwner, batchEJROption,  
             batchShellOption, batchDBLogin, batchMTEnv)
```

Output

A list which contains result.

This function invokes JMX interface `submitBatch()` of ART batch system Mbean.

GetGDGFiles

Syntax

```
GetGDGFiles(batched, fileName)
```

Output

A dictionary which contains result.

This function invokes JMX interface `getGDGFiles()` of ART batch system Mbean.

GetBatchFiles

Syntax

```
GetBatchFiles()
```

Output

A list which contains result.

This function invokes JMX interface `getBatchFiles ()` of ART batch system Mbean.