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1

TSAM Plus Server, Command, and API Reference

This chapter contains the following sections:

- [Local Monitor Server](#)
- [tlisten Options for JMX Monitoring](#)
- [tadmin Command](#)
- [Call Path Monitoring APIs](#)
- [TSAM Plus Environment Variable](#)
- [TSAM Plus Management Tool](#)

1.1 Local Monitor Server

This section contains the following topics:

- [LMS](#)
- [Name](#)
- [Synopsis](#)
- [Description](#)
- [Options](#)
- [Example\(s\)](#)

1.1.1 LMS

1.1.2 Name

LMS—The Oracle TSAM Plus Agent Local Monitor Server

1.1.3 Synopsis

```
LMS SRVGRP="identifier" SRVID="number" [other_parms]
CLOPT= "-A -- -l tsam-manager-dataserver-url[,tsam-manager-backupdataserver-
url,...][;tsam-manager-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] [-p PayloadFileDIR] [-M conditional-
call-path-metrics-shm-size] [-F flush-interval]"
```

1.1.4 Description

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

- Acts as the local Tuxedo machine 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.
- Plug-in metrics are stored in the LMS before being sent to the Oracle TSAM Plus manager data server. The LMS communicates with Oracle TSAM Plus Manager via HTTP/HTTPS 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.

1.1.5 Options

-l

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:

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

- [protocol] (optional): Use "http://" or "https://". If omitted, the default is "http://".
- 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.
- If the protocol is https, then three SEC_PRINCIPAL* parameters must be set for LMS. It's required by Tuxedo TLS support. Here is an example:

```
LMS SRVGRP=LMSGRP SRVID=100 CLOPT="-A -- -l https://<host>:<port>/
tsam"
        SEC_PRINCIPAL_NAME="wallet_name"
        SEC_PRINCIPAL_LOCATION="<Parent directory of
wallet.<wallet_name>>"
        SEC_PRINCIPAL_PASSVAR="password variable name"
```

Please refer to Generate TLS Keystores in WebLogic Server Deployment in the Deployment Guide.

-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. 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.

-p

Optional parameter. It specifies the local file path where the user payload data is stored. If not specified, the default user payload local file is generated at APPDIR with the main file name payload. If the parameter is specified as a relative path, it is relative to APPDIR. The payload in local file naming format is <domain>_<machine>_<yyyymmddhh24miss>.payload. If the file size is greater than 2G, a new file will be produced.

-F

Optional parameter. It specifies the time interval (in minutes) that LMS flushes payload data to disk only when the user payload data is stored in hadoop. The default value is 20 minutes.

-M

This parameter can be used when a conditional call path policy is enabled. It specifies the size of shared memory used to store conditional call path 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 100MB is used if this option is not specified. The suitable value of "-M" would be set according to the Tuxedo call load and the matching rate of the conditional filter of the policy. The shared memory size does not grow at run time when there is no storage space for new data. In this case the new data overwrites the oldest data stored.

If no conditional call path policy is enabled, you can set the value to 0 to avoid memory allocation.

1.1.6 Example(s)

Listing 1-1 shows the LMS in UBBCONFIG.

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

1.2 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. Table1 lists the jmxaddr address formats.

IPv4	IPv6
rmi://IP:port rmi://hostname:port_number	rmi://[IPv6 address]:port rmi://hostname:port_number
rmi://#. #. #. #:port_number	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.

1.3 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.

1.4 Call Path Monitoring APIs

This section contains the following topics:

- [tpgetcallinfo\(3c\)](#)
- [tsambegin\(3c\)](#)
- [tsamend\(3c\)](#)

1.4.1 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.

1.4.2 tsambegin(3c)

This section contains the following topics:

- [Name](#)
- [Synopsis](#)
- [Description](#)
- [Return Values](#)
- [Errors](#)

1.4.2.1 Name

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

1.4.2.2 Synopsis

```
#include <tsam_ext.h>
long tsambegin(char* type, char * subtype, int argc, char ** argv, int flags)
```

1.4.2.3 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.

1.4.2.4 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.

1.4.2.5 Errors

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

Table 1-1 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_INVALIDSUBTYPE	-5	subtype value is invalid

See Also

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

1.4.3 tsamend(3c)

This section contains the following topics:

- [Name](#)
- [Synopsis](#)
- [Description](#)
- [Return Values](#)
- [Errors](#)

1.4.3.1 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.

1.4.3.2 Synopsis

```
#include <tsam_ext.h>
int tsamend(long cd, int argc, char ** argv, int flags);
```

1.4.3.3 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.

1.4.3.4 Return Values

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

1.4.3.5 Errors

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

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

1.5 TSAM Plus Environment Variable

This section contains the following topics:

- [TSAM_LOG_LEVEL](#)

1.5.1 TSAM_LOG_LEVEL

This section contains the following topics:

- [Description](#)
- [Output and Style](#)
- [Examples](#)

1.5.1.1 Description

The environment variable `TSAM_LOG_LEVEL` specifies the TSAM Plus Agent log level. The following table lists the supported levels. If the environment variable is not set, the Agent log level is set to the default value `INFO`.

Levels	Description
OFF	Does not log messages
ERROR	Only logs ERROR messages

Levels	Description
WARN	Logs ERROR and WARN messages
INFO	Logs ERROR, WARN, and INFO messages
DEBUG	Logs DEBUG, ERROR, WARN, and INFO messages
TRACE	Logs all messages

1.5.1.2 Output and Style

Most of log messages are outputted to ULOG.

The TRACE messages of the metrics generated by Agent plug-in are outputted to the file `raw.agent.log`.

The TRACE messages of the metrics to be reported to Manager are outputted to the file `raw.LMS.log`.

When the log level is "OFF" to "INFO", the log message in ULOG is like this:

```
155843.bjlinux99.cn.oracle.com!LMS.6519.285202160.0: INFO: thread pool init  
success with 1 thread(s)
```

When the log level is TRACE, the log messages in ULOG contain indents:

```
154521.bjlinux99.cn.oracle.com!LMS.6441.2304538352.0: LMS.c:tpsvrinit():2091:  
TRACE: hbinterval(100),rawshmsize(10485760),datathreadcnt(1), maxinterval(60000)
```

```
154521.bjlinux99.cn.oracle.com!LMS.6441.2304538352.0:  
LMS.c:tsam_thrpool_init():416: TRACE: enter
```

```
154521.bjlinux99.cn.oracle.com!LMS.6441.2304538352.0:  
LMS.c:tsam_thrpool_init():433: INFO: thread pool init success with 1 thread(s)
```

```
154521.bjlinux99.cn.oracle.com!LMS.6441.2304538352.0:  
LMS.c:tsam_thrpool_init():435: TRACE: leave
```

1.5.1.3 Examples

To set the log level of LMS to TRACE, set `TSAM_LOG_LEVEL` to TRACE, and then boot (or reboot) LMS in the same console.

To set the log level of Agent plug-in to TRACE, set `TSAM_LOG_LEVEL` to TRACE, and then boot (or reboot) Oracle Tuxedo servers in the same console.

1.6 TSAM Plus Management Tool

This section contains the following topics:

- [tsamadmin](#)

1.6.1 tsamadmin

This section contains the following topics:

- [Synopsis](#)
- [Description](#)

- [Sub Commands](#)

1.6.1.1 Synopsis

```
tsamadmin <sub-command> <options>|<target>
```

1.6.1.2 Description

tsamadmin is a management tool provided by TSAM Plus Agent. It provides the following functions:

- Configures LMS in the Tuxedo UBBCONFIG file and generate a new tuxconfig file automatically.
- Runs a sanity check to check configurations for TSAM Plus Agent and Manager.

Note

Before you can run this command, the following prerequisites must be met:

- The environment variables TUXDIR and TUXCONFIG are set properly.
- The TUXCONFIG file is generated properly and you have the read permission.

1.6.1.3 Sub Commands

```
autoconfig(ac){-s|--static} {-H|--hostname} hostname:port
```

This command is used to configure LMS in the Tuxedo UBBCONFIG file and generate a new tuxconfig file automatically. Only one LMS configuration is allowed on one machine. If the LMS configuration already exists, the command sends a notification and exits.

-s | --static

Uses the static method to generate the tuxconfig.

-H | --hostname

Specifies the hostname and port of TSAM Plus Manager.

For example, suppose you run the command:

```
tsamadmin autoconfig -s -H tsamhost.com:7001
```

A new UBBCONFIG file is created and the LMS is configured in the new-created group (Group1), as shown below:

```
GROUP1 LMID=SITE1 GRPN0=1
```

```
LMS SRVGRP=GROUP1 SRVID=90 CLOPT="-A -- -l tsamhost.com:7001/tsam "
```

Note

The new-created UBBCONFIG file is named "UBB". Before you run `tsamadmin autoconfig`, make sure your existing UBBCONFIG file does not use the same name if you do not want the old file to be overwritten.
After the command is executed successfully, a new `tuxconfig` is generated with the original file name and then the old file is renamed as **<original name>. + timestamp>**.

managercheck(mc)[options]

Checks if TSAM Plus Agent is able to communicate with the Manager. It checks the following configurations in sequence:

1. TSAM agent plug-in is correctly registered in Tuxedo. If the plug-in is not registered yet, `tsamadmin` helps users to register the plug-in.
2. LMS server is configured in UBBCONFIG.
3. Invalid format of LMS CLOPT is configured.
4. The TSAM Manager host and port configured in LMS CLOPT can be reached.

If any step fails, the check is terminated and an error report is shown.

Note

This check can be processed on SHM and MP mode. For the MP mode, only if all the configured domains meet 2), 3) and 4), the check can pass. That is, if any machine is not configured with an LMS, `managercheck` will fail. In MP mode, if `managercheck` is invoked on the slave node, only 1) is checked.

Following are `managercheck` options:

-h | --help

Display `tsamadmin managercheck` usage.

-s | --slave

Run the check on slave node. It only checks TSAM Plus Agent plug-in registration and `tuxconfig` is not required.

2

Enterprise Manager for Tuxedo Target Reference

This chapter contains the following sections:

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

2.1 Understanding Properties and Metrics Tables

This section contains the following topics:

- [Property Characters](#)
- [Metrics Tables](#)
- [Collection Interval](#)

2.1.1 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)

2.1.2 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](#)

2.1.2.1 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:

TA_STATE	Status
ACT MIG CLE RES PAR	1
INA SUS DEA EXI	0

2.1.3 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 menu (Click **target menu > Monitoring > Metric and Collection Settings**).

2.2 Tuxedo Targets

The following table lists all Oracle Tuxedo targets the Enterprise Manager for Oracle Tuxedo supports.

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

Target	Description
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](#)
- [Tuxedo Application Home](#)
- [Tuxedo tlisten](#)
- [Tuxedo Domain](#)
- [Tuxedo Machine](#)
- [Tuxedo Group](#)
- [Tuxedo Server](#)
- [Tuxedo System Server](#)
- [Tuxedo Bridge](#)
- [Tuxedo TMS](#)
- [Tuxedo /T Domain Gateway](#)
- [Tuxedo Workstation Listener](#)
- [Tuxedo Jolt Listener](#)
- [Tuxedo Event Broker](#)
- [Tuxedo LMS](#)
- [TMA Targets](#)
- [TMA TCP Gateway](#)
- [TMA CRM](#)

2.2.1 Tuxedo Home

- [Description](#)
- [Properties](#)

2.2.1.1 Description

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

2.2.1.2 Properties

Name	Display Label	Characters	Description
Name	Name	Visible Editable	[Host Name]: [TUXDIR]

Name	Display Label	Characters	Description
Version	Version	Visible Editable	Tuxedo installation release number, such as 22.1.0.0.0 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

2.2.2 Tuxedo Application Home

Description

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

- [Properties](#)

2.2.2.1 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.

2.2.3 Tuxedo tlisten

Description

This target corresponds to a tuxedo tlisten process.

- [Properties](#)
- [Availability Metrics](#)

2.2.3.1 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.

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.
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_password	sec_principal_password	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.

2.2.3.2 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.

2.2.4 Tuxedo Domain

Description

Tuxedo Domain is a system target type.

- [Properties](#)
- [Availability Metrics](#)
- [Client Number Metrics](#)
- [Domain Metrics](#)
- [Service Metrics](#)

2.2.4.1 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.

Name	Display Label	Characters	Description
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

2.2.4.2 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 all Tuxedo Machines under this domain are inactive. 1: Partly active: When at least a Tuxedo Machine under this domain is inactive. 2: Active: When all Tuxedo Machines under this domain are active. If status>=1, the target is available.

2.2.4.3 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	The number of native clients that are joining the Tuxedo domain. Not NULL Threshold: >

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: >

2.2.4.4 Domain Metrics

Metric Name		DOMAIN_OPERATION_STATISTICS	
Metric Type		TABLE, Repository side	
Metric Display		Domain 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_NUMBER	NUMBER	tpdequeue Per Minute	The invoking times (per minute) of tpdequeue method in Tuxedo domain during the interval. Not NULL Threshold: >
TPENQUEUE_NUMBER	NUMBER	tpenqueue Per Minute	The invoking times (per minute) of tpenqueue method in Tuxedo domain during the interval. Not NULL Threshold: >

TPPOST_NUMBER	NUMBER	tpost 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_NUMBER	NUMBER	Aborted Transactions Per Minute	The number of XA transactions aborted (per minute) in Tuxedo domain during the interval. Not NULL Threshold: >
COMMITTED_TRANSACTION_NUMBER	NUMBER	Committed Transactions Per Minute	The number of XA transactions committed (per minute) in Tuxedo domain during the interval. Not NULL Threshold: >
COMPLETE_TRANSACTION_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_NUMBER+ ABORTED_TRANSACTION_NUMBER 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_WORKLOAD	NUMBER	Completed Workload Per Minute	The work load (per minute) completed in Tuxedo domain during the interval. Not NULL Threshold: >
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2.2.4.5 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	The size of all request messages in bytes (per minute) aggregated by the service name. The value is NULL if no request is served during the interval. Threshold: >
EXECUTION_TIME	NUMBER	Average Execution Time (microsecond)	The average execution time in microsecond aggregated by the service name. The value is NULL if no request is served during the interval. Threshold: >
CPU_TIME	NUMBER	Average CPU Time (microsecond)	The average CPU occupancy time in microsecond aggregated by the service name. The value is 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 (tper rno 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: >

2.2.5 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](#)
- [Associations](#)
- [Availability Metrics](#)
- [Client Number Metrics](#)
- [Machine Metrics](#)
- [Service Metrics](#)

2.2.5.1 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

Name	Display Label	Characters	Description
APPDIR	APPDIR	Visible UBB Parameter	-
ENVFILE	ENVFILE	Visible Editable(*), 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

2.2.5.2 Associations

- installed_at: associates with Tuxedo Home (add links) target where the application runs.
- installed_at: associates with Tuxedo Application Home (add links) 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](#).

2.2.5.3 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 BBL process in this Tuxedo Machine is not running. 1: Active, when BBL process in this Tuxedo Machine is running. If status>=1, the target is available.

2.2.5.4 Client Number Metrics

Table 2-1 Client Number Metrics

Metric Name	CLIENT_CONNECTION_NUMBER
Metric Type	TABLE
Metric Display	Client Connections
Collection Interval	15 minutes

Table 2-1 (Cont.) Client Number Metrics

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: >

2.2.5.5 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_NUMBER	NUMBER	tpconnect Per Minute	The invoking times (per minute) of tpconnect method in Tuxedo machine 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_NUMBER	NUMBER	tpdequeue Per Minute	The invoking times (per minute) of tpdequeue method in Tuxedo machine 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: >
TPENQUEUE_NUMBER	NUMBER	tpenqueue Per Minute	The invoking times (per minute) of tpenqueue method in Tuxedo machine 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: >
TPPOST_NUMBER	NUMBER	tppost Per Minute	The invoking times (per minute) of tppost method in Tuxedo machine 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: >
TPCALL_NUMBER	NUMBER	tpcall & tpacall Per Minute	The invoking times (per minute) of tpcall method in Tuxedo machine 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: >
TPSUBSCRIBE_NUMBER	NUMBER	tpsubscribe Per Minute	The invoking times (per minute) of tpsubscribe method in Tuxedo machine 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: >

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

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

2.2.5.6 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	The size of all request messages in bytes (per minute) aggregated by the service name. The value will be NULL if no request is served during the interval. Threshold: >
EXECUTION_TIME	NUMBER	Average Execution Time (microsecond)	The average execution time in microsecond aggregated by the service name. The value will be NULL if no request is served during the interval. Threshold: >

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 (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: >

2.2.6 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](#)
- [Availability Metrics](#)
- [Service Metrics](#)

2.2.6.1 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	DOMAIN ID	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 Values 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

Name	Display Label	Characters	Description
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.

2.2.6.2 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 none of process in this Tuxedo Machine is running. 1: Active, when any processes in this Tuxedo Machine are running. If status >=1, then the target is available.

2.2.6.3 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	The size of all request messages in bytes (per minute) aggregated by the service name. The value is NULL if no request is served during the interval. Threshold >
EXECUTION_TIME	NUMBER	Average Execution Time (microsecond)	The average execution time in microsecond aggregated by the service name. The value is NULL if no request is served during the interval. Threshold: >
CPU_TIME	NUMBER	Average CPU Time (microsecond)	The average CPU occupancy time in microsecond aggregated by the service name. The value is 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 (tper rno 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 (tper rno 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: >

2.2.7 Tuxedo Server

Description

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

- [Properties](#)
- [Availability Metrics](#)
- [Service Metrics](#)
- [IPC Queue Metrics](#)
- [Server Metrics](#)
- [Service Aggregated Metrics](#)

2.2.7.1 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	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)
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

2.2.7.2 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, then the target is available.

2.2.7.3 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	The size of all request messages in bytes (per minute) aggregated by the service name. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
EXECUTION_TIME	NUMBER	Average Execution Time (microsecond)	The average execution time in microsecond aggregated by the service name. The value is NULL if no request is served during the interval. Threshold: >
CPU_TIME	NUMBER	Average CPU Time (microsecond)	The average CPU occupancy time in microsecond aggregated by the service name. The value is 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. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
SYSTEM_FAILURE_NUMBER	NUMBER	System Failures Per Minute	The request number of system failure per minute (tper rno is not TPESVCFAIL) aggregated by the service name. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
USER_FAILURE_NUMBER	NUMBER	User Failures Per Minute	The request number of user failure per minute (tper rno is TPESVCFAIL) aggregated by the service name. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
REQUEST_NUMBER	NUMBER	Requests Per Minute	The request number per minute aggregated by the service name. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Value: SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER Threshold: >

2.2.7.4 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: >

2.2.7.5 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 tpconnect 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_NUMBER	NUMBER	tpdequeue Per Minute	The invoking times (per minute) of tpdequeue 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: >
TPENQUEUE_NUMBER	NUMBER	tpenqueue Per Minute	The invoking times (per minute) of tpenqueue 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: >
TPPOST_NUMBER	NUMBER	tppost Per Minute	The invoking times (per minute) of tppost 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: >
TPCALL_NUMBER	NUMBER	tpcall & tpacall Per Minute	The invoking times (per minute) of tpcall 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: >
TPSUBSCRIBE_NUMBER	NUMBER	tpsubscribe Per Minute	The invoking times (per minute) of tpsubscribe 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: >

INITIATED_TRANSACTION_NUMBER	NUMBER	Initiated Transactions Per Minute	The number of XA transactions initiated (per minute) 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: >
ABORTED_TRANSACTION_NUMBER	NUMBER	Aborted Transactions Per Minute	The number of XA transactions aborted (per minute) 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: >
COMMITTED_TRANSACTION_NUMBER	NUMBER	Committed Transactions Per Minute	The number of XA transactions committed (per minute) 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: >
REQUEST_NUMBER	NUMBER	Requests Per Minute	The invoking times (per minute) of tpconnect 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 Value: TPCONNECT_NUMBER+ TPCALL_NUMBER Threshold: >

COMPLETED_WORKLOAD	NUMBER	Completed Workload Per Minute	The work load (per minute) completed 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: >
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2.2.7.6 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: >
SERVICE_SUCCESS_NUMBER	NUMBER	Successes Per Minute	The number of successful requests (per minute) on the Tuxedo Server target. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >

SERVICE _SYSTEM_FAILURE_NUMBER	NUMBER	System Failures Per Minute	The number of system failure service requests per minute (tperrno is not TPESVCFAIL) on the Tuxedo Server target. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
SERVICE_USER_FAILURE_NUMBER	NUMBER	User Failures Per Minute	The number of user failure service requests per minute (tperrno is TPESVCFAIL) on the Tuxedo Server target. This value will become to 0 at the earliest collection after the collection interval or target properties are changed.. Not NULL Threshold: >
REQUEST_NUMBER	NUMBER	Requests Per Minute	The number of service requests (per minute) on the Tuxedo Server target. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL SUCCESS_NUMBER+ SYSTEM_FAILURE_NUMBER+ USER_FAILURE_NUMBER Threshold: >
SERVICE_SUCCESS_RATIO	NUMBER	Success Ratio(%)	The successful ratio of service requests on the Tuxedo server target. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. The value is NULL if no request is served during the interval. Threshold: >

2.2.8 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](#)
- [Availability Metrics](#)
- [Instance Number Metrics](#)

2.2.8.1 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 tlistenprocess associated with the Tuxedo Machine.
DOMAINID	DOMAINID	Editable(*),UBB Parameter	-
IPCKEY	IPCKEY	Editable(*),UBB Parameter	-
SRVGRP	SRVGRP	Visible Editable(*), UBB Parameter	Group name

Name	Display Label	Characters	Description
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

2.2.8.2 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, then the target is available.

2.2.8.3 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_NUMBER	NUMBER	Instances	The active server processes number of the target. Not NULL Threshold: >
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2.2.9 Tuxedo Bridge

Description This target corresponds to a Tuxedo BRIDGE process.

- [Properties](#)
- [Associations](#)
- [Availability Metrics](#)
- [IPC Queue Metrics](#)
- [Remote Link Metrics](#)

2.2.9.1 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 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	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

2.2.9.2 Associations

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

2.2.9.3 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

2.2.9.4 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: >

2.2.9.5 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_MESSAGE_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_MESSAGE_NUMBER	NUMBER	Outbound Network Messages Per Minute	The number of messages transferred to 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: >
INBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Inbound Network Messages Bytes Per Minute	The message size in byte transferred from the remote Tuxedo machine per minute. Not NULL Threshold: >
OUTBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Outbound Network Messages Bytes Per Minute	The message size in byte transferred to 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: >
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: >

2.2.10 Tuxedo TMS

Description

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

- [Properties](#)

- [Availability Metrics Metric Name](#)
- [XA Transaction Metrics](#)

2.2.10.1 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 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
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.

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

2.2.10.2 Availability Metrics Metric Name

(Add Table - Reproduce from the HTML file)

2.2.10.3 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_NUMBER	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_NUMBER	NUMBER	Aborted XA Transactions Per Minute	The number of XA transactions aborted 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: >

COMPLETE_TRANSACTION_NUMBER	NUMBER	Complete Transactions Per Minute	The number of XA transactions aborted or 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 Value: COMMITTED_TRANSACTION_NUMBER+ABORTED_TRANSACTION_NUMBER Threshold: >
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2.2.11 Tuxedo /T Domain Gateway

Description

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

- [Properties](#)
- [XA Transaction Metrics](#)
- [Remote Link Metrics](#)
- [Tuxedo Web Service Gateway](#)
- [Availability Metrics](#)
- [Gateway Metrics](#)

2.2.11.1 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	-

Name	Display Label	Characters	Description
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
GatewayAddress	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](#)

2.2.11.1.1 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.
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2.2.11.2 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	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_NUMBER	NUMBER	Aborted XA Transactions Per Minute	The number of XA transactions aborted 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: >

COMPLETE_TRANSACTION_NUMBER	NUMBER	Complete Transactions Per Minute	The number of XA transactions aborted or 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 Value: COMMITTED_TRANSACTION_NUMBER+ABORTED_TRANSACTION_NUMBER Threshold: >
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2.2.11.3 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 field 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: >

OUTBOUND_MESSAGE_NUMBER	NUMBER	Outbound Network Messages Per Minute	The number of messages transferred to 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: >
INBOUND_NETWORK_MESSAGE_SIZE	NUMBER	InboundNetwork Messages Bytes Per Minute	The message size in byte 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: >
OUTBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Outbound Network Messages Bytes Per Minute	The message size in byte transferred to 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 >
PENDING_NETWORK_MESSAGE_NUMBER	NUMBER	Pending Network Messages	The number of messages that are pending in the network to the remote Tuxedo domain Not NULL The number of messages that are pending in the network Threshold: >

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: >

2.2.11.4 Tuxedo Web Service Gateway

Description

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

- [Properties](#)

2.2.11.4.1 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.

Name	Display Label	Characters	Description
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.
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

2.2.11.5 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.

2.2.11.6 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: >
INBOUND_ONEWAY_SUCCESS_NUMBER	NUMBER	Inbound One-Way Successes Per Minute	The inbound one-way 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_RPC_FAILURE_NUMBER	NUMBER	Inbound RPC Failures Per Minute	The inbound RPC 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: >

INBOUND_RPC_SUCCESS_NUMBER	NUMBER	Inbound RPC Successes Per Minute	The inbound PRC 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: >
OUTBOUND_ONEWAY_FAILURE_NUMBER	NUMBER	Outbound One-Way Failures Per Minute	The outbound 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: >
OUTBOUND_ONEWAY_SUCCESS_NUMBER	NUMBER	Outbound One-Way Successes Per Minute	The outbound one-way 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: >
OUTBOUND_RPC_FAILURE_NUMBER	NUMBER	Outbound RPC Failures Per Minute	The outbound RPC 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: >
OUTBOUND_RPC_SUCCESS_NUMBER	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_NUMBER	NUMBER	Inbound Pending Requests	The number of requests that are waiting for reply from Tuxedo system. Not NULL Threshold: >
OUTBOUND_PENDING_REQUEST_NUMBER	NUMBER	Outbound Pending Requests	The number of requests that are waiting for the reply from outside. Not NULL Threshold: >

2.2.12 Tuxedo Workstation Listener

Description

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

- [Properties](#)
- [Availability Metrics](#)
- [Workstation Listener Metrics](#)

2.2.12.1 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.
Migrated	Is Migrated Target	-	Indicates whether this target has been migrated off.
useSSL	Use SSL	Visible	Use SSL or not

2.2.12.2 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.

2.2.12.3 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	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_REQU EST_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: >

2.2.13 Tuxedo Jolt Listener

Description

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

- [Properties](#)
- [Availability Metrics](#)
- [Jolt Listener Metrics](#)

2.2.13.1 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.

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.
DOMAINID	DOMAINID	Editable(*),UBB Parameter	-
IPCKEY	IPCKEY	Editable(*),UBB Parameter	-
SRVGRP	SRVGRP	VisibleEditable(*),UBB Parameter	Group name
GRPNO	GRPNO	UBB Parameter	GRPNO parameter for the group
SRVID	SRVID	VisibleEditable(*),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.
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

2.2.13.2 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.

2.2.13.3 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: >

2.2.14 Tuxedo Event Broker

Description

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

- [Properties](#)
- [Availability Metrics](#)
- [Event Statistics Metrics](#)

2.2.14.1 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.

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.
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
Migrated	Is Migrated Target	-	Indicates whether this target has been migrated off.

2.2.14.2 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.

2.2.14.3 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	The number of the events notified to Tuxedo service per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
UNSOLICITED_MESSAGE_EVENT_NUMBER	NUMBER	Notified Events by Unsolicited Message Per Minute	The number of the events notified by unsolicited message per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
QUEUE_MESSAGE_EVENT_NUMBER	NUMBER	Notified Events by Queue Message Per Minute	The number of the events notified to /Q per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
COMMAND_LINE_EVENT_NUMBER	NUMBER	Notified Events by Command Line Per Minute	The number of the events notified by command line per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >

USERLOG_MESSAGE_ EVENT_NUMBER	NUMBER	Notified Events by USERLOG Message Per Minute	The number of the events notified by ULOG message per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Threshold: >
EVENT_NUMBER	NUMBER	Notified Events Per Minute	The number of the events notified by all methods per minute. This value will become to 0 at the earliest collection after the collection interval or target properties are changed. Not NULL Value: SERVICE_EVENT_NUMBE R+ UNSOLICITED_MESSAGE _EVENT_NUMBER+ QUEUE_MESSAGE_EVENT _NUMBER+ COMMAND_LINE_EVENT_ NUMBER+ USERLOG_MESSAGE_EVE NT_NUMBER Threshold: >

2.2.15 Tuxedo LMS

This target corresponds to an LMS entry defined in TUXCONFIG.

- [Properties](#)
- [Availability Metrics](#)
- [Tuxedo /Q Manager Server](#)

2.2.15.1 Properties

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

Name	Display Label	Characters	Description
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 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

2.2.15.2 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.
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2.2.15.3 Tuxedo /Q Manager Server

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

- [Properties](#)
- [Availability Metrics](#)
- [Queue Space Statistics Metrics](#)
- [Queue Space Peak Metrics](#)
- [Queue Statistics Metrics](#)

2.2.15.3.1 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(*), VisibleUBB 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)
Qspace name	Qspace Name	VisibleEditable(*)	Qspace name

Name	Display Label	Characters	Description
QMCONFIG	Queue space path	VisibleEditable(*)	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

2.2.15.3.2 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.

2.2.15.3.3 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: >
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_CURMEMNONPERSIST 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_CURTMPQUEUES Not NULL Threshold: >
TRANS	NUMBER	Current Transactions	TA_CURTRANS Not NULL Threshold: >

2.2.15.3.4 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_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_HWMEMNONPERSI ST 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: >

2.2.15.3.5 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_CURNONPERSIST BYTES Not NULL Threshold: >
PENDING_MSG	NUMBER	Pending Messages	TA_CURMSG+TA_CURNONPERSISTMSG Not NULL Threshold: >

2.2.16 TMA Targets

- [TMA SNA Gateway](#)
- [Properties](#)
- [Availability Metrics](#)
- [XA Transaction Metrics](#)
- [Remote Link Metrics](#)

2.2.16.1 TMA SNA Gateway

This target corresponds to a GWSNAX entry defined in TUXCONFIG.

2.2.16.2 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(5)
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

2.2.16.3 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.

2.2.16.4 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	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_NUMBER	NUMBER	Aborted XA Transaction Per Minute	The number of XA transactions aborted 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: >

COMPLETE_TRANSACTION_NUMBER	NUMBER	Complete Transaction Per Minute	The number of XA transactions aborted or 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 Value: COMMITTED_TRANSACTION_NUMBER+ABORTED_TRANSACTION_NUMBER Threshold: >
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2.2.16.5 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_MESSAGE_NUMBER	NUMBER	Outbound Network Message Per Minute	The number of messages transferred to 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: >
INBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Inbound Network Message Bytes Per Minute	The message size (in byte) 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_NETWORK_MESSAGE_SIZE	NUMBER	Outbound Network Message Bytes Per Minute	The message size (in byte) transferred to 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: >
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: >
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2.2.17 TMA TCP Gateway

This target corresponds to a GWIDOMAIN entry defined in TUXCONFIG

- [Properties](#)
- [Availability Metrics](#)
- [XA Transaction Metrics](#)
- [Remote Link Metrics](#)

2.2.17.1 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(5)
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.

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

2.2.17.2 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.

2.2.17.3 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	
Column Name	Column Type	Display Label	Note
COMMITTED_TRANSACTION_NUMBER	NUMBER	Committed XA Transaction 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_NUMBER	NUMBER	Aborted XA Transaction Per Minute	The number of XA transactions aborted 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 >
COMPLETE_TRANSACTION_NUMBER	NUMBER	Complete Transaction Per Minute	The number of XA transactions aborted or 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 Value:COMMITTED_TRANSACTION_NUMBER+ABORTED_TRANSACTION_NUMBER Threshold: >

2.2.17.4 Remote Link Metrics

Metric Name		REMOTE_LINK_STSTISTICS	
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_MESSAGE_NUMBER	NUMBER	Outbound Network Message Per Minute	The number of messages transferred to 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: >
INBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Inbound Network Message Bytes Per Minute	The message size (in byte) 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_NETWORK_MESSAGE_SIZE	NUMBER	Outbound Network Message Bytes Per Minute	The message size (in byte) transferred to 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: >

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: >

2.2.18 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](#)
- [Availability Metrics](#)
- [Trace Status Metrics](#)
- [Remote Link Status Metrics](#)
- [Remote Link Statistics Metrics](#)

2.2.18.1 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

2.2.18.2 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	0: Inactive, when the service metrics has not been collected from source target. 1:Active, when the service metrics has been collected from source target. If status>=1, then the target is available.

2.2.18.3 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_TRACE	STRING	Appc Stack Trace	-
TRACE_LEVEL	STRING	Trace Level	-

2.2.18.4 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

2.2.18.5 Remote Link Statistics Metrics

Metric Name	REMOTE_LINK_STATISTICS
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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: >

2.3 ART CICS Targets

This section contains the following topics:

- [Tuxedo CICS Region](#)
- [Tuxedo ART CICS Transaction](#)
- [ART CICS TSQ Server](#)
- [ART CICS TDQ Server](#)

2.3.1 Tuxedo CICS Region

"Tuxedo CICS Region" is a system target type.

Associations

Tuxedo Domain App_composite_contains: Tuxedo CICS Region
targetsApp_composite_contains: Tuxedo CICS Transaction targets

- [Properties](#)
- [ART CICS Statistics Metrics](#)

2.3.1.1 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.

2.3.1.2 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_SUCC ESS_NUMBER	NUMBER	Transaction Successes Per Minute	Not NULL Value: Sum(service_statistics. success_number) Threshold >
TRANSACTION_FAILU RE_NUMBER	NUMBER	Transaction Failures Per Minute	Not NULL Value: Sum(service_statist ics. system_failure_num ber+ service_statistics user_failure_number) Threshold: >
FAILED_TRANSACTION_ RATIO	NUMBER	Failed Transaction ratio(%)	The value will be NULL if no request is served during the interval. Value: (100* transaction_failure_num ber/ transaction_number) Threshold: >

2.3.2 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](#)
- [ART CICS Transaction Metrics](#)

2.3.2.1 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(*)	-

2.3.2.2 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		TABLERepository 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.
EXECUTION_TIME	NUMBER	Average Execution Time (microsecond)	The value will be NULL if no request is served during the interval. Value: 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: >
SUCCESS_NUMBER	NUMBER	Successes Per Minute	Not NULL Value:Sum(service_statistics.success_number) Threshold: >

SYSTEM_FAILURE_NUMBER	NUMBER	System Failures Per Minute	Not NULL Value: Sum(service_statistics. system_failure_number) Threshold: >
USER_FAILURE_NUMBER	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 / request_number) Threshold: >

2.3.3 ART CICS TSQ Server

This section contains the following topics:

- [Properties](#)
- [Availability Metrics](#)
- [ART TSQ Metrics](#)

2.3.3.1 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
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

2.3.3.2 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	-

Metric Name	Response		
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.

2.3.3.3 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.

2.3.4 ART CICS TDQ Server

This section contains the following topics:

- [Properties](#)
- [Availability Metrics](#)

- [ART TDQ Metrics](#)

2.3.4.1 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	VisibleEditable(*), UBB Parameter	group name
GRPNO	GRPNO	UBB Parameter	GRPNO parameter for the group
SRVID	SRVID	VisibleEditable(*), UBB Parameter	SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG
AOUT	AOUT	VisibleUBB 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

2.3.4.2 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	-

Metric Name	Response		
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.

2.3.4.3 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.

2.4 ART Batch Targets

This section contains the following topics:

- [Tuxedo Batch System](#)

2.4.1 Tuxedo Batch System

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

- [Properties](#)
- [Availability Metrics](#)
- [Job Aggregated Statistics](#)

2.4.1.1 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

Name	Display Label	Characters	Description
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.
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(*)	-

2.4.1.2 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

2.4.1.3 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)	-

2.5 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](#)
- [Availability Metrics](#)
- [Queue Space Statistics Metrics](#)
- [Queue Space Peak Metrics](#)
- [Queue Statistics Metrics](#)

2.5.1 Properties

Name	Display Label	Characters	Description
Name	Name	Visible, Editable	[Groupm 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	-
SRVGRP	Group Name	Editable(*), VisibleUBB Parameter	Group name
GRPNO	Group Number	UBB Parameter	Group Number for the group
SRVID	SRVID	VisibleEditable(*)UBB Parameter	SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG(5)

Name	Display Label	Characters	Description
Queue server name	AOUT	VisibleEditable	OTMQ server name
Qspace name	Queue Space Name	VisibleEditable(*)	OTMQ Qspace name
QMCONFIG	Queue space path	VisibleEditable(*)	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

2.5.2 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.

2.5.3 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_CURMEMNONPERSIST 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_CURTMPQUEUES 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: >

2.5.4 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_HWMEMNONPERSIST 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: >
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2.5.5 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_CURBLOCKSNot NULLThreshold:>
NONPERSIST_MEM	NUMBER	Memory Bytes Consumed by Non- persistent Messages	TA_CURNONPERSIST BYTESNot NULLThreshold:>
SENT_MSG	NUMBER	Send Messages Per Minute	TA_MSGSENTNot NULLThreshold:>
RECV_MSG	NUMBER	Receive Messages Per Minute	TA_MSGRCVNot NULLThreshold:>
PENDING_MSG	NUMBER	Pending Messages	TA_CURMSG+TA_CUR NONPERSISTMSGNot NULLThreshold:>

2.6 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 \(OTMQ\)](#)

2.6.1 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
MAXACCESSERS	MAXACCESSERS	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
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_REQUIRED	SIGNATURE_REQUIRED	STRING	32	N
ENCRYPTION_REQUIRED	ENCRYPTION_REQUIRED	STRING	32	N

2.6.2 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
APPPDIR	APPPDIR	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
MAXACCESSERS	MAXACCESSERS	NUMBER	10	N
MAXWSCLIENTS	MAXWSCLIENTS	NUMBER	10	N
MAXACLCACHE	MAXACLCACHE	NUMBER	10	N
MAXCONV	MAXCONV	NUMBER	10	N
MAXPENDINGBYTES	MAXPENDINGBYTES	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_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_REQUIRED	SIGNATURE_REQUIRED	STRING	64	N
ENCRYPTION_REQUIRED	ENCRYPTION_REQUIRED	STRING	64	N
SICACHEENTRIESMAX	SICACHEENTRIESMAX	STRING	64	N

2.6.3 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_REQUIRED	SIGNATURE_REQUIRED	STRING	64	N
ENCRYPTION_REQUIRED	ENCRYPTION_REQUIRED	STRING	64	N
OPENINFO	OPENINFO	STRING	256	N

CLOSEINFO	CLOSEINFO	STRING	256	N
MRM	MRM	STRING	64	N

2.6.4 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_ACCESS	SYSTEM_ACCESS	STRING	64	N
MAXDISPATCHTHREADS	MAXDISPATCHTHREADS	NUMBER	10	N
MINDISPATCHTHREADS	MINDISPATCHTHREADS	NUMBER	10	N
THREADSTACKSIZE	THREADSTACKSIZE	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
SICACHEENTRIESMAX	SICACHEENTRIESMAX	STRING	64	N
CONCURR_STRATEGY	CONCURR_STRATEGY	STRING	64	N

2.6.5 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
MINENCRYPTBIT S	MINENCRYPTBIT S	STRING	10	N
MAXENCRYPTBIT S	MAXENCRYPTBIT S	STRING	10	N

2.6.6 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.

2.6.7 Tuxedo /Q

This section contains the following topics:

- [Queue Space](#)
- [Queue](#)

2.6.7.1 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
APPQSPACE NAME	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
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2.6.7.2 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
APPQSPACE NAME	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

2.6.8 Tuxedo Message Queue (OTMQ)

This section contains the following topics:

- [Queue Space](#)
- [Queue](#)
- [QSpace Alias](#)

2.6.8.1 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
APPQSPACE NAME	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
MAXQUEUE S	Max Queue Number	NUMBER	10	N	TA_MAXQUEUE S
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

2.6.8.2 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
APPQSPACE NAME	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_PRIMQUE

2.6.8.3 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
APPQSPACE NAME	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
OTMQALIAS SCOPE	Queue Alias Scope	STRING	16	N	TA_OTMQALIASSCOPE

2.7 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.

The following listing shows a complete XML schema of Properties.xml

Listing 3-1 Properties.xml

```
<?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="rmidtype">
    <xs:restriction base="xs:integer">
      <xs:minInclusive value="1"/>
      <xs:maxInclusive value="31"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="srvidtype">
    <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" type="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 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: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="booleantype"
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>
<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="booleantype" minOccurs="0"
maxOccurs="1"/>
        <xs:element name="SIGNATURE_REQUIRED" type="booleantype"
minOccurs="0"
maxOccurs="1"/>
        <xs:element name="ENCRYPTION_REQUIRED" type="booleantype"
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:element name="TuxedoWordSize" type="wordsize" 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>

```

3

TSAM Plus Database Metadata

This chapter contains the following sections:

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

3.1 Tuxedo Configuration Information

This section contains the following:

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

3.1.1 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo domain: • 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.

3.1.2 MACHINE

Tuxedo machine information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	-
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (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: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
TUXVERSION	VARCHAR2(255)	YES	-	11.1.1.1.0	Tuxedo version
TSAMVERSION	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.
SERVERNAME	VARCHAR(1023)	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

3.1.3 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: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved

3.1.4 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: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore. • STD: Standby
CLOPT	VARCHAR2(1023)	YES	-	11.1.1.2.0	CLOPT parameter in UBB
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.1.5 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: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.1.6 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
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (ID)	11.1.1.1.0	-
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.1.7 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: • 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.

3.1.8 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
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (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: • 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
TRANCLASSEDESC	VARCHAR2(4000)	YES	-	12.1.1.0	The content of file tranclasses.desc
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.1.9 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.

3.1.10 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: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.1.11 ARTTRAN

Tuxedo application runtime for CICS transaction information

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	-
ARTRESGROUPID	NUMBER	NO	FK to ARTRESGROUP (ID)	11.1.1.1.0	-

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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: • 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.

3.1.12 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
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.
TUXDOMAINID	NUMBER	NO	PK, FK to TUXDOMAIN (ID)	12.1.3	Domain ID

3.1.13 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.
TUXDOMAINID	NUMBER	NO	PK, FK to TUXDOMAIN (ID)	12.1.3	Domain ID

3.2 Tuxedo Monitoring Information

This section contains the following:

- [POLICY](#)
- [ALERT_DEFINITION](#)
- [ALERT](#)
- [MON_CPSEGMENT](#)
- [MON_PAYLOAD](#)
- [MON_XA](#)
- [MON_SERVICE](#)
- [MON_GWTDOMAIN](#)
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- [MON_BRIDGE](#)
- [MON_BRGLINK](#)
- [MON_GWWS](#)
- [MON_ARTTCP](#)
- [MON_JESJOB](#)
- [MON_CLOB](#)
- [MON_IMS_DETAIL](#)
- [REPLAYDEFINITION](#)

3.2.1 POLICY

Monitoring policy information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	-
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (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: • enabled • disabled
AGENTTYPE	VARCHAR2(255)	YES	-	11.1.1.1.0	Policy type: • tuxedo: Tuxedo monitoring policy. • art: Tuxedo application runtime for CICS monitoring policy.
CREATEDTIME	TIMESTAMP	NO	-	11.1.1.1.0	Create time
MODIFIEDTIME	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.

3.2.2 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: • enabled • disabled

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
SEVERITY	VARCHAR2(31)	NO	-	11.1.1.1.0	Alert definition severity: • informat ion warn • critical • fatal
TYPE	VARCHAR2(255)	NO	-	11.1.1.1.0	Alert definition type: • callpath • svc • xatran • gwtdomain • bridge • gwws • arttran • arttcp • jesjob • jesmetrics
AGENTTYPE	VARCHAR2(255)	YES	-	11.1.1.1.0	Alert definition agent type: • 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: • 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
RESFILTERMODE	NUMBER	NO	-	11.1.1.1.0	Alert definition resource filter mode: • 0 (Selection) • 1 (advance)

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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

3.2.3 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.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
SEVERITY	VARCHAR2(31)	NO	-	11.1.1.1.0	Alert definition severity: • informat ion • warn • critical • fatal
ALERTTYPE	VARCHAR2(31)	NO	-	11.1.1.1.0	Alert definition type: • callpath • svc • xatran • gwt domain • bridge • gwsw • 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: • 0 (new) • 1 (cleared)
TSAMVERSION	VARCHAR2(255)	YES	-	11.1.1.1.0	TSAM Plus agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.2.4 MON_CPSEGMENT

Call path detail information.

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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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 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: • null • 1
MSGTYPE	VARCHAR2(16)	YES	-	11.1.1.1.0	Message type: • ARP • ARQ
MSGSIZE	NUMBER	YES	-	11.1.1.1.0	Message size
MSGSTAGE	VARCHAR2(16)	YES	-	11.1.1.1.0	Message stage: • STM0 • ME2NET • NET2ME • ME2Q • Q2ME • ME2QFAIL
MSGQUEUED	NUMBER	YES	-	11.1.1.1.0	Message queue length
LOCALGTRID	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Local GTRID
MSGID	VARCHAR2(255)	YES	-	11.1.1.1.0	Message ID
CALLMODE	NUMBER	YES	-	11.1.1.1.0	Call mode: • 1 (tpacall) • 2 (tpcall) • 3 (tpforward)
CALLFLAG	NUMBER	YES	-	11.1.1.1.0	Call flag

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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: • 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: • 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
MSGCVTTIME	NUMBER	YES	-	11.1.1.1.0	Message convert time
ATTRIBUTES	VARCHAR2(4000)	YES	-	11.1.1.1.0	Reserved.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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
EXTCORRSEQ	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_C P
MD5_DTL	VARCHAR(40)	YES	-	12.1.3 RP008	MD5 in MON_CLOB_C P DTL

3.2.5 MON_PAYLOAD

User payload data.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	-	12.2.2	auto-generated ID
DOMAINID	VARCHAR2(30)	yes	-	12.2.2	Domain ID, it is null when no DOMAINID is set in UBBCONFIG
LMID	VARCHAR2(30)	NO	-	12.2.2	Machine LMID
GROUPID	SMALLINT	NO	-	12.2.2	Tuxedo group number
SERVERID	SMALLINT	NO	-	12.2.2	Server ID
SVCNAME	VARCHAR2(127)	NO	-	12.2.2	Service name
CORRELATIONID	VARCHAR2(255)	YES	-	12.2.2	Call path CORRELATIONID
ECID	VARCHAR2(1024)	YES	-	12.2.2	Tuxedo call ECID
TPERRNO	SMALLINT	NO	-	12.2.2	tperrno

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
valueTypeIndex	SMALLINT	NO	-	12.2.2	Tuxedo buffer type index, defined in weblogic.wtc.jatmi.StandardTypes CARRAY : 16 STRING : 17 FML : 18 VIEW : 19 X_OCTET : 20 X_C_TYPE : 21 X_COMMON : 22 FML32 : 23 VIEW32 : 24 XML : 25 MBSTRING : 26
valueSubType	VARCHAR2(127)	YES	-	12.2.2	Tuxedo sub buffer type. It is the view or view32 name
PAYLOADTYPE	SMALLINT	NO	-	12.2.2	1 means request; 2 means reply
value	BLOB	NO	-	12.2.2	User payload value
LOGTIME	Date	No	-	12.2.2	-

3.2.6 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
PROCTYPE	NUMBER	YES	-	11.1.1.1.0	Tuxedo process type: • 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
REMOTEGTRID	VARCHAR2(255)	YES	-	11.1.1.1.0	Remote GTRID
RMID	NUMBER	YES	-	11.1.1.1.0	RMID

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
XANAME	VARCHAR2(255)	YES	-	11.1.1.1.0	The transaction routine name: • tpbegin • tpcommit • tprollback • tpabort • xa_commit • xa_commit • xa_start • xa_prepare • xa_rollback • xa_end • tms_msg_xxx GWTDOMAIN XA transaction activities) • xa_msg_xxx GWTDOMAIN XA (for transaction activities)
LDM	VARCHAR2(255)	YES	-	11.1.1.1.0	Ldm name: Ldm ID
RDM	VARCHAR2(255)	YES	-	11.1.1.1.0	Rdm name: Rdm ID
MSGCVTTIME	NUMBER	YES	-	11.1.1.1.0	Message convert time
EXECTIME	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: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.2.7 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: • 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
MSGTYPE	VARCHAR2(6)	YES	-	11.1.1.1.0	Message type : • ARP • ARQ
MSGQUEUED	NUMBER	YES	-	11.1.1.1.0	Message queue length
MSGWAITTIME	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
EXEETIME	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: • 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	-

3.2.8 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
PID	NUMBER	NO		11.1.1.1.0	Tuxedo process ID
LDOM	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Ldom name: Ldom ID
LOGTIME	TIMESTAMP	NO	Indexed	11.1.1.1.0	Log time
LINKNUMBER	NUMBER	YES		11.1.1.1.0	Link number
MSGQUEUED	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: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

3.2.9 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_GWTDOMAINID	NUMBER	NO	FK to MON_GWTDOMAIN (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: • 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ACCBYTES	NUMBER	YES	-	11.1.1.1.0	Network Message Bytes
WAITREPLYNUMBER	NUMBER	YES	-	11.1.1.1.0	Network Outstanding Requests
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved.

3.2.10 MON_BRIDGE

Tuxedo bridge 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
MSGQUEUED	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: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved

3.2.11 MON_BRGLINK

Tuxedo bridge 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: 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: - null (11g or above) 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	-

3.2.12 MON_GWWS

Tuxedo GWWS performance statistics information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	-
ACTCLIENTNUM	NUMBER	YES	-	11.1.1.1.0	Active client number
ACTTHREADNUMBER	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
AVGOUTTIME	NUMBER	YES	-	11.1.1.1.0	Average Outbound Process Time
DOMAIN	VARCHAR2(255)	NO	-	11.1.1.1.0	Tuxedo domain name

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
TUXGROUP	VARCHAR2(255)	YES	-	11.1.1.1.0	Tuxedo group number
GWWSID	VARCHAR2(255)	NO	-	11.1.1.1.0	GWWS ID
INBOUNDPENDING	NUMBER	YES	-	11.1.1.1.0	Inbound Pending Request
OUTBOUNDPENDING	NUMBER	YES	-	11.1.1.1.0	Outbound Pending Request
INOWFAILNUM	NUMBER	YES	-	11.1.1.1.0	Inbound One-Way Failure Number
INOWSUCCNUM	NUMBER	YES	-	11.1.1.1.0	Inbound One-Way Success Number
INRPCFAILNUM	NUMBER	YES	-	11.1.1.1.0	Inbound RPC Failure Number
INRPCSUCCNUM	NUMBER	YES	-	11.1.1.1.0	Inbound RPC Success Number
MACHINE	VARCHAR2(255)	NO	-	11.1.1.1.0	Tuxedo machine LMID
OUTOWFAILNUM	NUMBER	YES	-	11.1.1.1.0	Outbound One-Way Failure Number
OUTOWSUCCNUM	NUMBER	YES	-	11.1.1.1.0	Outbound One-Way Success Number
OUTRPCFAILNUM	NUMBER	YES	-	11.1.1.1.0	Outbound RPC Failure Number
OUTRPCSUCCNUM	NUMBER	YES	-	11.1.1.1.0	Outbound RPC Success 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	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
TSAMVERSION	VARCHAR2(255)	YES	-	11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)

3.2.13 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
TRANSUCCNUM	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)

3.2.14 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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
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: • 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

3.2.15 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

3.2.16 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
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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ELAPSED_TIME	NUMBER	YES	-	12.1.3	Transaction/ Program elapsed time
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(10 23)	YES	-	12.1.3	Reserved

3.2.17 REPLAYDEFINITION

Test load generator database table.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
NAME	VARCHAR2(25 5 BYTE)	NO	PK	12.2.2	-
REPLAYDEFINITION	CLOB	-	-	12.2.2	-
CREATEDTIME	TIMESTAMP	-	-	12.2.2	-
MODIFIEDTIME	TIMESTAMP	-	-	12.2.2	-
ATTRIBUTES	VARCHAR2(10 23 BYTE)	-	-	12.2.2	-

3.3 TSAM Plus Management Information

This section contains the following:

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

3.3.1 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

3.3.2 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

3.3.3 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 hash
FULLNAME	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	User full name

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
DESCRIPTION	VARCHAR2(255)	YES	-	11.1.1.1.0	User description
MODIFIEDTIME	TIMESTAMP	YES	-	11.1.1.1.0	User modification time
ATTRIBUTES	VARCHAR2(1023)	YES	-	11.1.1.1.0	Reserved
SAVEDQUERIES	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.

4

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](#)

4.1 Admin MBean

MBean Name

DefaultJMXDomain:type=adminBean

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 deactive 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, SYSEException, 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, SYSEException,
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,
SYSEException, 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.

① 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, SYSEException, TUXException, JMXConnectionException
```

Boot Server

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

① 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, SYSEException, 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, SYSEException, TUXException

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.

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, SYSEException, TUXException

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, SYSEException, 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
```

4.2 Tuxedo Domain MBean

- [MBean Name](#)

4.2.1 MBean Name

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

- [Operations](#)

4.2.1.1 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, SYSEException, JMXConnectionException,
MBeanException;
```

SetParameters

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,
SYSEException, TUXException, JMXConnectionException, MBeanException;
```

Get Routings

Get the routings from T_ROUTING class.

Signature

```
TabularData getRoutings () throws SYSEException, 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

Parameter Name	Corresponding MIB Attribute
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
```

4.3 Tuxedo Machine MBean

This section contains the following topics:

- [MBean Name](#)

4.3.1 MBean Name

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

- [Operations](#)

4.3.1.1 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](#)

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

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

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

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	-
TA_STATE	-
TA_TIMEOUT	-
TA_GRPCount	-
TA_GRPINDEX	-
TA_GRPNO	-
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(StringTPTRANID, 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 hhmmss

`endTime`: The latest time to be considered when accessing this user log 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`

4.4 Tuxedo Group MBean

This section contains the following topics:

- [MBean Name](#)

4.4.1 MBean Name

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

- [Operations](#)

4.4.1.1 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

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

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, SYSEException, 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](#)

Signature

```
Object setParameters(CompositeData parameters) throws USGException,  
SYSEException, 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, SYSEException, 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 RESTART=Y must be configured in ubbconfig for all the servers which need migration. must be configured in ubbconfig for all the servers which need migration.

Signature

`void migrate()throws Exception`

4.5 Tuxedo Server MBean

This section contains the following topics:

- [MBean Name](#)

4.5.1 MBean Name

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

- [Operations](#)

4.5.1.1 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, MBeanExcepti

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](#)

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

4.6 Tuxedo System Server Mbean

Following server be modeled as system server MBean.

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](#)

4.6.1 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, SYSEException, JMXConnectionException;

GetParameters

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

Signature

CompositeData getParameters() throws SYSEException, 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, SYSEException, 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](#)

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;

4.7 Tuxedo Bridge MBean

- [MBean Name](#)

4.7.1 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](#)

4.7.1.1 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, SYSException, 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,  
SYSException, 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,  
SYSException, JMXConnectionException
```

4.8 Tuxedo TMS Mbean

- [MBean Name](#)

4.8.1 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](#)

4.8.1.1 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](#)"

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;

4.9 Tuxedo /T Domain Gateway

- [MBean Name](#)

4.9.1 MBean Name

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

- [Operations](#)

4.9.1.1 Operations

GetParameters

Refer to [GetParameters](#)

SetParameter

Refer to [SetParameter](#)

SetParameters

Refer to [SetParameters](#)

Delete

Refer to [Delete](#)

4.10 Tuxedo Mainframe Adapter Gateway for SNA

- [MBean Name](#)

4.10.1 MBean Name

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

- [Operations](#)

4.10.1.1 Operations

GetParameter

Refer to [GetParameter](#)

GetParameters

Refer to [GetParameters](#)

SetParameter

Refer to [SetParameter](#)

SetParameters

Refer to [SetParameters](#)

Delete

Refer to [Delete](#)

4.11 Tuxedo Mainframe Adapter Gateway for TCP

- [MBean Name](#)
- [Operations](#)

4.11.1 MBean Name

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

4.11.2 Operations

GetParameter

Refer to [GetParameter](#)

GetParameters

Refer to [Operations](#)

SetParameter

Refer [SetParameter](#)

SetParameters

Refer to [SetParameters](#)

Delete

Refer to [Delete](#)

4.12 Tuxedo Web Service Gateway

- [MBean Name](#)

4.12.1 MBean Name

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

- [Operations](#)

4.12.1.1 Operations

GetParameter

Refer to [GetParameter](#)

GetParameters

Refer to [GetParameters](#)

SetParameter

Refer to [SetParameter](#)

SetParameters

Refer to [SetParameters](#)

Delete

Refer to [Delete](#)

4.13 Tuxedo Workstation Listener

- [MBean Name](#)

4.13.1 MBean Name

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

- [Operations](#)

4.13.1.1 Operations

GetParameter

Get value for the attribute in T_WSL .

Input:

parameterName: The MIB attribute name.

Signature

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

GetParameters

Get all attribute and values in T_ WSL.

Signature

CompositeData getParameters() throws SYSEException, 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, SYSEException, JMXConnectionException, MBeanException;

SetParameters**Input**

Refer to the input for [SetParameters](#)

Set value for the attributes in T_WSL.

Refer to the input for [SetParameters](#)

Input

Refer to the input for [SetParameters](#)

Signature

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

Delete

Refer to [Delete](#)

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 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 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;
```

4.14 Tuxedo Jolt Listener

- [MBean Name](#)

4.14.1 MBean Name

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

- [Operations](#)

4.14.1.1 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, SYSEException, JMXConnectionException,  
MBeanException;
```

setParameters

Set value for the attributes in T_JSL.

Input

Refer to the input for "[SetParameters](#)"

Signature

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

Delete JSL

Refer to [Delete](#)

Get Handlers

Get all handlers associated with the JSL.

Signature

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

Suspend Handler

Change the State of JSH to "SUSPended".

Input

clientId: Client identifier for JSH.

Signature

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

Resume Handler

Activate a SUSPended JSH object.

Input

clientId: Client identifier for JSH.

Signature

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

4.15 Tuxedo Event Broker

- [MBean Name](#)

4.15.1 MBean Name

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

- [Operations](#)

4.15.1.1 Operations

GetParameter

Refer to "[GetParameter](#)"

GetParameters

Refer to "[GetParameters](#)"

SetParameter

Refer to "[SetParameter](#)"

SetParameters

Refer to "[SetParameters](#)"

Delete

Refer to "[Delete](#)"

4.16 Tuxedo Queue Server

- [MBean Name](#)

4.16.1 MBean Name

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

- [Operations](#)

4.16.1.1 Operations

GetParameter

Refer to [GetParameter](#)

GetParametersRefer to [GetParameters](#)**SetParameter**Refer to [SetParameter](#)**SetParameters**Refer to [SetParameters](#)**Delete**Refer to [Delete](#)

4.17 Tuxedo QTMQ Server

- [MBean Name](#)

4.17.1 MBean Name

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

- [Operations](#)

4.17.1.1 Operations

GetParameterRefer to "[GetParameter](#)"**GetParameters**[SetParameter](#)**GetParameters**Refer to [GetParameters](#)**SetParameter**Refer to [SetParameter](#)**SetParameters**Refer to "[SetParameters](#)".**Create Queue**

Parameter Name	Value	Note
qname	string [1..127]	Queue Name. Required input field.
qorder	PRIOR 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.

Parameter Name	Value	Note
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;
```


4.18 Tuxedo ART Batch System Target

- [MBean Name](#)

4.18.1 MBean Name

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

- [Operations](#)

4.18.1.1 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
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

Column Name	Note
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 getBatchs(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
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

batchEJR0ption: EJR option

batchShellOption: shell option

batchDBLogin: database connection (MT_DB_LOGIN)

batchMTEnv: 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 batchMTEnv) throws TUXException, SYSException,
JMXConnectionException, USGException,

cancelBatch

Cancels job(s)

Input:

Refer to the input of [getBatchs](#)

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 [getBatchs](#)

Output:

Refer to the output of [cancelBatch](#)

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 [getBatchs](#)

Output:

Refer to the output of [cancelBatch](#)

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 [getBatchs](#)

Output:

Refer to the output of [cancelBatch](#)

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

Column Name	Note
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 batchID, String fileName) throws
MBeanException

5

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](#)

5.1 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.

5.2 Browse Commands

This section contains the following commands:

- [cd](#)
- [prompt](#)
- [pwd](#)

5.2.1 cd

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.2.1.1 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`.

5.2.1.2 Syntax

`cd(mbeanName)`

Argument	Definition
mbeanName	Path to the bean in the namespace.

5.2.1.3 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:/>
```

5.2.2 prompt

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.2.2.1 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`.

5.2.2.2 Syntax

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

Argument	Definition
onoff	Optional. Hides or displays TXST prompt. Valid values include off or on. The off argument hides the TXST prompt. 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 with the path information. To disable the path information, enter <code>prompt()</code> again, or enter <code>prompt('off')</code>. The on argument displays the default TXST prompt, including the path information. In this case, if you subsequently enter the prompt command without arguments, TXST displays the TXST command prompt without the path information. To display the path information, enter <code>prompt()</code> again or enter <code>prompt('on')</code>.

5.2.2.3 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>
```

5.2.3 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'
```

- [Description](#)

5.2.3.1 Description

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'
```

5.3 Control Commands

- [connect](#)
- [connectDomain](#)
- [disconnectDomain](#)
- [disconnect](#)
- [exit](#)

5.3.1 connect

Use with TXST: offline

- [Description](#)
- [Syntax](#)
- [SECURITY](#)

5.3.1.1 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.

5.3.1.2 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.

5.3.1.3 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 'tpsysadm', otherwise connect will fail with authentication.
In the event of an error, the command returns a TXSTException.
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.

5.3.2 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](#)

5.3.2.1 Examples

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

5.3.3 disconnectDomain

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.3.3.1 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.

5.3.3.2 Syntax

```
disconnectDomain()
```

5.3.3.3 Examples

```
txst:simpapp_38075:/simple/GR0UP1>disconnectDomain()
txst:bjlinux16.cn.oracle.com_5037>
```

5.3.4 disconnect

Use with TXST: online

- [Description](#)
- [Examples](#)

5.3.4.1 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()
```

5.3.4.2 Examples

```
txst:simpapp_38075:/simple/GR0UP1>disconnect()
```

```
txst: /offline>
```

5.3.5 exit

Use with TXST: online or offline

- [Description](#)
- [Syntax](#)

5.3.5.1 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.

5.3.5.2 Syntax

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

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

Examples

```
txst:simpapp_38075:/>exit(1);
```

```
c:\jython\bin>
```

5.4 Editing Commands

This section contains the following commands:

- [create](#)
- [delete](#)
- [get](#)
- [set](#)

5.4.1 create

Use with TXST: online(connected to domain)

- [Description](#)

- [Syntax](#)
- [Examples](#)

5.4.1.1 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`.

5.4.1.2 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 <code>childtype:Machine->pmid</code> . <code>Group->groupName</code> . <code>Bridge->lmid</code> . <code>Group->groupName</code> . <code>Server->aout</code> . <code>TMS->tmsName</code> . <code>Queue->qname</code> .
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
 - confirmStyle

5.4.1.3 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("simserv", "SERVER", srvID
=40)
txst:simpapp_38075:/simple/GROUP1> ls('c')
childBean:
server simpserv_1
server simpserv_2
server simpserv_40
```

5.4.2 delete

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.4.2.1 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.

5.4.2.2 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.

5.4.2.3 Examples

The following example deletes the bean of type server named simpserv_1:

```
txst:simpapp_38075:/simple/GROUP1>delete("simpserv_40") txst:simpapp_38075:/  
simple/GROUP1>ls('c')
```

childBean:

server simpserv_1

server simpserv_2

5.4.3 get

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.4.3.1 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').

5.4.3.2 Syntax

```
get(attrs=None, path=None)
```

Argument	Definition
attrs	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. You can specify a set of attribute's name, if so, the attribute's name must not include pathname. You also needn't specify the attributes, if so, get() will return all the attributes' value.
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 displayed for the current object.

5.4.3.3 Examples

```
txst:simpapp_38075:/simple/GROUP1>delete("simpserv_40")
txst:simpapp_38075:/simple/GROUP1>ls('c')
childBean:
server simpserv_1
server simpserv_2
```

5.4.4 set

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Attributes](#)
- [Examples](#)

5.4.4.1 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.

5.4.4.2 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.

5.4.4.3 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

5.4.4.4 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")
```

5.5 Information Commands

- [find](#)
- [getMBean](#)
- [getPath](#)
- [getPath\(bean\)](#)
- [lookup](#)
- [redirect](#)
- [ls](#)
- [startRecording](#)
- [stopRecording](#)
- [easeSyntax](#)

5.5.1 find

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.1.1 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.

5.5.1.2 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.

5.5.1.3 Examples

```
txst:simpapp_38075:/simple/GR0UP1>find(name='simpserv',type='server')  
/simple/GR0UP1/simpserv_1  
/simple/GR0UP1/simpserv_2
```

5.5.2 getMBean

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.2.1 Description

Returns the MBean by browsing to the specified path.

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

5.5.2.2 Syntax

```
getMBean(path)
```

Argument	Definition
path	Path name to the MBean in the current hierarchy.

5.5.2.3 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'
```

5.5.3 getPath

This section contains the following topics:

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.3.1 Description

Returns the MBean's path for the specified MBean instance

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

5.5.3.2 Syntax

```
getPath(bean)
```

Table 5-1 getPath Argument Definition

Argument	Definition
bean	MBean instance for which you want to return the MBean path.

5.5.3.3 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
```

5.5.4 getPath(bean)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.4.1 Description

Returns the MBean's path for the specified MBean instance

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

5.5.4.2 Syntax

```
getPath(bean)
```

Argument	Definition
bean	MBean instance for which you want to return the MBean path.

5.5.4.3 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
```

5.5.5 lookup

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.5.1 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.

5.5.5.2 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\$"

Argument	Definition
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'

5.5.5.3 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'
```

5.5.6 redirect

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Limitation:](#)
- [Examples](#)

5.5.6.1 Description

Redirects TXST output to the specified filename.

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

5.5.6.2 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.

Argument	Definition
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.

5.5.6.3 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.

5.5.6.4 Examples

The following example begins redirects TXST output to thelogs/txst.log file in the current directory:

```
txst:simpapp_38075:/ redirect('./logs/txst.log')
```

5.5.7 ls

Use with TXST: online(connected to domain)

- [Description](#)
- [Examples](#)

5.5.7.1 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.

Argument	Definition
Path	Optional. Path name to the MBean in the current hierarchy for which you want to list all child beans and attributes.

5.5.7.2 Examples

The following example displays all the child beans, and attribute names and values for the MBean GROUP1:

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

5.5.8 startRecording

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Limitation](#)
- [Examples](#)

5.5.8.1 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.

5.5.8.2 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.

5.5.8.3 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.

5.5.8.4 Examples

The following example begins recording commands in the record.py
file:txst:simpapp_38075:/> startRecording('c:/myScripts/record.py')

5.5.9 stopRecording

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Limitation](#)
- [Examples](#)

5.5.9.1 Description

Stops recording TXST commands. For information about starting a recording
In the event of an error, the command returns a TXSTException.

5.5.9.2 Syntax

```
stopRecording()
```

5.5.9.3 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.

5.5.9.4 Examples

```
txst:simpapp_38075:/> stopRecording()
```

5.5.10 easeSyntax

Use with TXST: online or offline

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.5.10.1 Description

This command allow users to invoke some commands without typing the parentheses.

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.
```

5.5.10.2 Syntax

```
easeSyntax()
```

Examples

```
txst:simpapp_58103:/>easeSyntax()
```

```
easeSyntax on now.
```



```
txst:simpapp_58103:/>ls c
childBean:
tuxedo_machine L1
```

5.5.10.3 Examples

```
txst:simpapp_58103:/>easeSyntax()
easeSyntax on now.
txst:simpapp_58103:/>ls c
childBean:
tuxedo_machine L1
```

5.6 Life Cycle Commands

This section contains the following commands:

- [migrate](#)
- [resume](#)
- [shutdownDomain](#)
- [startDomain](#)
- [shutdown](#)
- [start](#)
- [suspend](#)

5.6.1 migrate

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.1.1 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.

5.6.1.2 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.

5.6.1.3 Examples

```
txst:simpapp_38075:/simple/GROUP1> migrate()  
or  
txst:simpapp_38075:/> migrate("/simple/GROUP1")
```

5.6.2 resume

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.2.1 Description

Resume an object that is suspended.

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

5.6.2.2 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

5.6.2.3 Examples

Resume the client named 'clientID' which belongs to machine 'simple':

```
txst:simpapp_38075:/simple> resume("clientID")  
or  
txst:simpapp_38075:/> resume("clientID", "/simple")
```

5.6.3 shutdownDomain

Use with TXST: online(connected to domain)

- [Description](#)

- [Syntax](#)
- [Examples](#)

5.6.3.1 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.

① Note

- JMX client must connect to master node, otherwise this command will fail.
- TXST must connect to domain, otherwise this command will fail.

5.6.3.2 Syntax

```
shutdownDomain()
```

5.6.3.3 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>
```

5.6.4 startDomain

Use with TXST: online(connected to JMX agent)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.4.1 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.

① Note

- TXST must connect to JMX agent, otherwise this command will fail.
- This command will fail if TXST is connected to domain.

5.6.4.2 Syntax

```
startDomain(tuxconfig)
```

Argument	Definition
tuxconfig	The TUXCONFIG of tuxedo instance.

5.6.4.3 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>
```

5.6.5 shutdown

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.5.1 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.

5.6.5.2 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

5.6.5.3 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.
```

5.6.6 start

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.6.1 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.

5.6.6.2 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

5.6.6.3 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.
```

5.6.7 suspend

Use with TXST: online(connected to domain)

- [Description](#)
- [Syntax](#)
- [Examples](#)

5.6.7.1 Description

Suspends the specified object.

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

5.6.7.2 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

5.6.7.3 Examples

Suspend the client named 'clientID' which belongs to machine 'simple'
txst:simpapp_38075:/simple> suspend("clientID")
or
txst:simpapp_38075:/> suspend("clientID", "simple")

5.7 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.

5.8 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](#)
- [DomainMbean](#)
- [GroupMbean](#)
- [BridgeMbean](#)
- [ServerMbean](#)
- [SystemServerMbean](#)
- [TDomainGatewayMbean](#)
- [EventBrokerMbean](#)
- [QueueServerMbean](#)
- [WebServiceGatewayMbean](#)
- [WorkstationListenerMbean](#)
- [JoltListenerMbean](#)
- [ARTBatchSystemMbean](#)

5.8.1 Mbean

This is the root class for other classes in TXST. It provides a set of basic operation.

- [getName](#)
- [getType](#)
- [getMbeanName](#)

5.8.1.1 getName

get the object's name

5.8.1.2 getType

get the object's type

5.8.1.3 getMbeanName

get the MBean's objectName.

5.8.2 DomainMbean

Inherited from MBean

- [CreateMachine](#)
- [GetParameters](#)

- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [GetRoutings](#)
- [Add Routing](#)
- [DeleteRouting](#)
- [SetRoutingParameter](#)
- [SetRoutingParameters](#)
- [GetRoutingParameter](#)
- [Swap](#)
- [Tuxedo_Domain](#)
- [MachineMbean](#)

5.8.2.1 CreateMachine

- [Syntax](#)

5.8.2.1.1 Syntax

CreateMachine(pmid, lmid, tuxconfig, tuxdir, appdir)

This function invokes JMX interface createMachine of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.2 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.2.1 Syntax

GetParameter(name)

This function invokes JMX interface getParameter of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.2.2 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](#).

5.8.2.3 GetParameter

- [Syntax](#)
- [Output](#)

5.8.2.3.1 Syntax

```
GetParameters()
```

5.8.2.3.2 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](#).

5.8.2.4 SetParameters

- [Syntax](#)
- [Input](#)

5.8.2.4.1 Syntax

```
SetParameters(data)
```

5.8.2.4.2 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](#).

5.8.2.5 SetParameter

- [Syntax](#)

5.8.2.5.1 Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface `setParameter` of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.6 GetRoutings

- [Syntax](#)
- [Output](#)

5.8.2.6.1 Syntax

```
GetRoutings()
```

5.8.2.6.2 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](#).

5.8.2.7 Add Routing

- [Syntax](#)

5.8.2.7.1 Syntax

AddRouting(routingName, routingType, bufType, field, ranges)

This function invokes JMX interface addRouting of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.8 DeleteRouting

- [Syntax](#)

5.8.2.8.1 Syntax

DeleteRouting(routingName, buftype, field, type)

This function invokes JMX interface deleteRouting of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.9 SetRoutingParameter

- [Syntax](#)

5.8.2.9.1 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](#).

5.8.2.10 SetRoutingParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.2.10.1 Syntax

SetRoutingParameters(routingName, buftype, field, ta_type, attrs)

5.8.2.10.2 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](#).

5.8.2.11 GetRoutingParameter

- [Syntax](#)
- [Output](#)

5.8.2.11.1 Syntax

```
GetRoutingParameter(routingName, buftype, field, type, parameterName)
```

5.8.2.11.2 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](#).

5.8.2.12 Swap

- [Syntax](#)

5.8.2.12.1 Syntax

```
Swap()
```

This function invokes JMX interface swap of Domain Mbean. For more information, refer to [Tuxedo Domain MBean](#).

5.8.2.13 Tuxedo_Domain

- [Syntax](#)
- [Output](#)

5.8.2.13.1 Syntax

```
Tuxedo_Domain()
```

5.8.2.13.2 Output

Field Name	Description
TA_AUTOTRAN	Refer to Oracle® Tuxedo Reference Guide
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	
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	

5.8.2.14 MachineMbean

Inherited from MBean

- [CreateGroup](#)
- [CreateBridge](#)
- [GetParameters](#)
- [GetParameter](#)

- [SetParameters](#)
- [SetParameter](#)
- [DeleteRecursively](#)
- [Delete](#)
- [Migrate](#)
- [Clean](#)
- [GetNativeClients](#)
- [Suspend](#)
- [Resume](#)
- [KillClient](#)
- [GetTransactions](#)
- [AbortTransaction](#)
- [GetUlog](#)
- [Client_Connections](#)
- [Machine_Operation_Statistics](#)
- [Tuxedo_machines](#)

5.8.2.14.1 CreateGroup

- [Syntax](#)

5.8.2.14.1.1 Syntax

CreateGroup(groupName, groupNo)

This function invokes JMX interface createGroup of Machine Mbean.

5.8.2.14.2 CreateBridge

- [Syntax](#)

5.8.2.14.2.1 Syntax

CreateBridge(lmid, naddr, nlsaddr)

This function invokes JMX interface createBridge of Machine Mbean.

5.8.2.14.3 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.14.3.1 Syntax

GetParameters()

5.8.2.14.3.2 Output

A dictionary which includes all attributes and values.

This function invokes JMX interface `getParameters` of Machine Mbean.

5.8.2.14.4 GetParameter

- [Syntax](#)

5.8.2.14.4.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter` of Machine Mbean.

5.8.2.14.5 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.2.14.5.1 Syntax

`SetParameters(data)`

5.8.2.14.5.2 Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of Machine Mbean.

5.8.2.14.6 SetParameter

- [Syntax](#)

5.8.2.14.6.1 Syntax

`SetParameter(name, value)`

This function invokes JMX interface `setParameter` of Machine Mbean.

5.8.2.14.7 DeleteRecursively

- [Syntax](#)

5.8.2.14.7.1 Syntax

`DeleteRecursively()`

Invokes JMX interface `deleteRecursively` of Machine Mbean.

5.8.2.14.8 Delete

- [Syntax](#)

5.8.2.14.8.1 Syntax

`Delete()`

Invokes JMX interface delete of Machine Mbean.

5.8.2.14.9 Migrate

- [Syntax](#)

5.8.2.14.9.1 Syntax

`Migrate()`

Invokes JMX interface migrate of Machine Mbean.

5.8.2.14.10 Clean

- [Syntax](#)

5.8.2.14.10.1 Syntax

`Clean()`

Invokes JMX interface clean of Machine Mbean.

5.8.2.14.11 GetNativeClients

- [Syntax](#)

5.8.2.14.11.1 Syntax

`GetNativeClients()`

Invokes JMX interface getNativeClients of Machine Mbean.

5.8.2.14.12 Suspend

This section contains the following topics:

- [Syntax](#)

5.8.2.14.12.1 Syntax

`Suspend(clientId)`

Invokes JMX interface suspend of Machine Mbean.

5.8.2.14.13 Resume

This section contains the following topics:

- [Syntax](#)

5.8.2.14.13.1 Syntax

`Resume(clientId)`

Invokes JMX interface resume of Machine Mbean.

5.8.2.14.14 KillClient

This section contains the following topics:

- [Syntax](#)

5.8.2.14.14.1 Syntax

KillClient(clientId)

Invokes JMX interface killClient of Machine Mbean.

5.8.2.14.15 GetTransactions

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.14.15.1 Syntax

GetTransactions()

5.8.2.14.15.2 Output

A list includes all transactions' attributes.

This function invokes JMX interface get Transactions of Machine Mbean.

5.8.2.14.16 AbortTransaction

- [Syntax](#)

5.8.2.14.16.1 Syntax

AbortTransaction(transId, xId)

Invokes JMX interface abortTransaction of Machine Mbean.

5.8.2.14.17 GetUlog

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.14.17.1 Syntax

GetUlog(date, startTime, endTime, line, ulogCat, serverity, totalLine)

5.8.2.14.17.2 Output

A list includes all attributes of ulogs.

Invokes JMX interface getULog of Machine Mbean.

5.8.2.14.18 Client_Connections

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.14.18.1 Syntax

```
Client_Connections()
```

5.8.2.14.18.2 Output

```
CLIENT_CONNECTION_NUMBER_MBEAN
```

Field Name	Description
TA_CURCLIENTS	Native Clients Number
TA_CURWSCLIENTS	Workstation Clients Number
TA_CURJOLTCLIENTS	Jolt Clients Number

5.8.2.14.19 Machine_Operation_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output:](#)

5.8.2.14.19.1 Syntax

```
Machine_Operation_Statistics ()
```

5.8.2.14.19.2 Output:

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	

5.8.2.14.20 Tuxedo_machines

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.2.14.20.1 Syntax

Tuxedo_machines()

5.8.2.14.20.2 Output

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	

5.8.3 GroupMbean

Inherited from MBean

- [CreateServer](#)
- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [CreateTMS](#)
- [DeleteRecursively](#)
- [Delete](#)
- [Migrate](#)
- [Tuxedo_groups](#)

5.8.3.1 CreateServer

This section contains the following topics:

- [Syntax](#)

5.8.3.1.1 Syntax

`CreateServer(aout, srvID)`

Invokes JMX interface `createServer` of Group Mbean.

5.8.3.2 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.3.2.1 Syntax

`GetParameters()`

5.8.3.2.2 Output

A dictionary which includes all attributes and values.

This function invokes JMX interface `getParameters` of Group Mbean.

5.8.3.3 GetParameter

- [Syntax](#)

5.8.3.3.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter` of Group Mbean.

5.8.3.4 SetParameters

- [Syntax](#)
- [Input](#)

5.8.3.4.1 Syntax

`SetParameters(data)`

5.8.3.4.2 Input

`data`: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of Group Mbean.

5.8.3.5 SetParameter

- [Syntax](#)

5.8.3.5.1 Syntax

`SetParameter(name, value)`

This function invokes JMX interface `setParameter` of Group Mbean.

5.8.3.6 CreateTMS

Syntax

`CreateTMS(rmsName, rmid, tmsName)`

Invokes JMX interface `createTMS` of Group Mbean.

- [Syntax:](#)

5.8.3.6.1 Syntax:

`CreateTMS(rmsName, rmid, tmsName)`

Invokes JMX interface `createTMS` of Group Mbean.

5.8.3.7 DeleteRecursively

Syntax

`DeleteRecursively()`

Invokes JMX interface `deleteRecursively` of Group Mbean.

5.8.3.8 Delete

- [Syntax](#)

5.8.3.8.1 Syntax

Delete()

Invokes JMX interface delete of Group Mbean.

5.8.3.9 Migrate

- [Syntax](#)

5.8.3.9.1 Syntax

Migrate()

Invokes JMX interface migrate of Group Mbean.

5.8.3.10 Tuxedo_groups

- [Syntax](#)
- [Output](#)

5.8.3.10.1 Syntax

Tuxedo_groups()

5.8.3.10.2 Output

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	

5.8.4 BridgeMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [GetRemoteLinks](#)
- [GetRemoteLinkParameter](#)
- [SetRemoteLinkParameters](#)
- [SuspendRemoteLink](#)
- [ResumeRemoteLink](#)
- [DeactivateRemoteLink](#)
- [Bridge_Remote_Link_Statistics](#)
- [Bridge_Queue_Statistics](#)
- [Tuxedo_ECM_Bridge](#)

5.8.4.1 GetParameters

Syntax

GetParameters()

- [Output](#)

5.8.4.1.1 Output

A dictionary which includes the attributes.

This function invokes JMX interface getParameters() of Bridge Mbean.

5.8.4.2 GetParameter

Syntax

GetParameter(name)

This function invokes JMX interface getParameter() of Bridge Mbean.

5.8.4.3 GetRemoteLinks

- [Syntax](#)
- [Output](#)

5.8.4.3.1 Syntax

GetRemoteLinks ()

5.8.4.3.2 Output

A list which includes the attributes.

This function invokes JMX interface `getRemoteLinks ()` of Bridge Mbean.

5.8.4.4 GetRemoteLinkParameter

This section contains the following topics:

- [Syntax](#)

5.8.4.4.1 Syntax

`GetRemoteLinkParameter (lmid, name)`

This function invokes JMX interface `getRemoteLinkParameter ()` of Bridge Mbean.

5.8.4.5 SetRemoteLinkParameters

This section contains the following topics:

- [Syntax](#)

5.8.4.5.1 Syntax

`SetRemoteLinkParameters (lmid, data)`

Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setRemoteLinkParameters ()` of Bridge Mbean.

5.8.4.6 SuspendRemoteLink

This section contains the following topics:

- [Syntax](#)

5.8.4.6.1 Syntax

`SuspendRemoteLink (lmid)`

This function invokes JMX interface `suspend ()` of Bridge Mbean.

5.8.4.7 ResumeRemoteLink

Syntax

`ResumeRemoteLink (lmid)`

This function invokes JMX interface `resume ()` of Bridge Mbean.

5.8.4.8 DeactivateRemoteLink

This section contains the following topics:

- [Syntax](#)

5.8.4.8.1 Syntax

`DeactivateRemoteLink (lmid)`

This function invokes JMX interface `deactive ()` of Bridge Mbean.

5.8.4.9 Bridge_Remote_Link_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.4.9.1 Syntax

`Bridge_Remote_Link_Statistics()`

5.8.4.9.2 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_SENDDNUM	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

5.8.4.10 Bridge_Queue_Statistics

This section contains the following topics:

- [Syntax](#)

- [Output](#)

5.8.4.10.1 Syntax

Bridge_Queue_Statistics()

5.8.4.10.2 Output

BRIDGE_QUEUE_STATISTICS_MBEAN

Field Name	Description
TA_MSG_QNUM	Number of messages currently on the queue.

5.8.4.11 Tuxedo_ECM_Bridge

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.4.11.1 Syntax

Tuxedo_ECM_Bridge()

5.8.4.11.2 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	

5.8.5 ServerMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [Delete](#)
- [SetServiceParam](#)

- [GetServiceParam](#)
- [DeleteService](#)
- [GetServices](#)
- [SuspendService](#)
- [ResumeService](#)
- [Server_Statistics](#)
- [Service_Statistics](#)
- [IPC_Queue_Statistics](#)
- [Tuxedo_servers](#)

5.8.5.1 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.5.1.1 Syntax

`GetParameters()`

5.8.5.1.2 Output

A dictionary which includes all attributes and values.

This function invokes JMX interface `getParameters` of Server Mbean.

5.8.5.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.5.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter` of Server Mbean.

5.8.5.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.5.3.1 Syntax

`SetParameters(data)`

5.8.5.3.2 Input

data: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface setParameters of Server Mbean.

5.8.5.4 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.5.4.1 Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface setParameter of Server Mbean.

5.8.5.5 Delete

- [Syntax](#)

5.8.5.5.1 Syntax

```
Delete()
```

This function invokes JMX interface delete of Server Mbean.

5.8.5.6 SetServiceParam

- [Syntax](#)

5.8.5.6.1 Syntax

```
SetServiceParam(serviceName, parameterName, parameterValue)
```

Invokes JMX interface setServiceParameter of Server Mbean.

5.8.5.7 GetServiceParam

- [Syntax](#)
- [Output](#)

5.8.5.7.1 Syntax

```
GetServiceParam(serviceName, parameterName)
```

5.8.5.7.2 Output

A dictionary includes the attribute name and value.

Invokes JMX interface getServiceParameter of Server Mbean.

5.8.5.8 DeleteService

- [Syntax](#)

5.8.5.8.1 Syntax

`DeleteService(serviceName)`

Invokes JMX interface `deleteService` of Server Mbean.

5.8.5.9 GetServices

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.5.9.1 Syntax

`GetServices()`

5.8.5.9.2 Output

A list includes all services' attributes.

Invokes JMX interface `getServices` of Server Mbean.

5.8.5.10 SuspendService

This section contains the following topics:

- [Syntax](#)

5.8.5.10.1 Syntax

`SuspendService(serviceName)`

Invokes JMX interface `suspendService` of Server Mbean.

5.8.5.11 ResumeService

This section contains the following topics:

- [Syntax](#)

5.8.5.11.1 Syntax

`ResumeService(serviceName)`

Invokes JMX interface `resumeService` of Server Mbean.

5.8.5.12 Server_Statistics

This section contains the following topics:

- [Syntax](#)

- [Output](#)

5.8.5.12.1 Syntax

```
Server_Statistics()
```

5.8.5.12.2 Output

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	

5.8.5.13 Service_Statistics

This section contains the following topics:

- [Syntax:](#)
- [Output](#)

5.8.5.13.1 Syntax:

```
Service_Statistics()
```

5.8.5.13.2 Output

```
SERVICE_STATISTICS_MBEAN
```

Field Name	Description
TA_SERVICENAME	Service name
TA_SRVID	Unique (within the server group) server identification number.
TA_TOTMSGSIZEMEGA	Total Message size since service was started. The unit is Mega
TA_TOTMSGSIZEBYTE	Total Message size, since service was started, in byte mod 1048576.

Field Name	Description
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_TOTUFAILNUM	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.

5.8.5.14 IPC_Queue_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.5.14.1 Syntax

```
IPC_Queue_Statistics()
```

5.8.5.14.2 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.

5.8.5.15 Tuxedo_servers

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.5.15.1 Syntax

Tuxedo_servers()

5.8.5.15.2 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	
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_PASSVAR	
TA_SICACHEENTRIESMAX	
TA_CONCURR_STRATEGY	

5.8.6 SystemServerMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)

- [Delete](#)
- [System_Server_Number](#)
- [TMSMbean](#)
- [TMS_Transaction_Statistics](#)
- [Tuxedo_TMS](#)

5.8.6.1 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output:](#)

5.8.6.1.1 Syntax

`GetParameters()`

5.8.6.1.2 Output:

A dictionary which includes all attributes and values.

This function invokes JMX interface `getParameters` of System Server Mbean.

5.8.6.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.6.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter` of System Server Mbean.

5.8.6.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.6.3.1 Syntax

`SetParameters(data)`

5.8.6.3.2 Input

data: A dictionary which includes the attributes and values to be set.

This function invokes JMX interface `setParameters` of System Server Mbean.

5.8.6.4 SetParameter

This section contains the following parameters:

- [Syntax](#)

5.8.6.4.1 Syntax

```
SetParameter(name, value)
```

This function invokes JMX interface setParameter of System Server Mbean.

5.8.6.5 Delete

This section contains the following topic:

- [Syntax](#)

5.8.6.5.1 Syntax

```
Delete()
```

This function invokes JMX interface delete of System Server Mbean.

5.8.6.6 System_Server_Number

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.6.6.1 Syntax

```
System_Server_Number()
```

5.8.6.6.2 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	

5.8.6.7 TMSMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)

5.8.6.7.1 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.6.7.1.1 Syntax

`GetParameters()`

5.8.6.7.1.2 Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of TMS Mbean.

5.8.6.7.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.6.7.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter()` of TMS Mbean.

5.8.6.7.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.6.7.3.1 Syntax

`SetParameters(data)`

5.8.6.7.3.2 Input

`data`: A dictionary which includes the attributes.

This function invokes JMX interface `setParameters()` of TMS Mbean.

5.8.6.7.4 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.6.7.4.1 Syntax

`SetParameter(name, value)`

This function invokes JMX interface `setParameter()` of TMS Mbean.

5.8.6.8 TMS_Transaction_Statistics

This section contains the following topics:

- [Syntax:](#)
- [Output:](#)

5.8.6.8.1 Syntax:

```
TMS_Transaction_Statistics()
```

5.8.6.8.2 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	

5.8.6.9 Tuxedo_TMS

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.6.9.1 Syntax

```
Tuxedo_TMS()
```

5.8.6.9.2 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	

5.8.7 TDomainGatewayMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [Delete](#)
- [GetACLs](#)
- [AddACL](#)
- [DeleteACL](#)
- [UpdateACL](#)
- [GetEventIns](#)
- [AddEventIn](#)
- [DeleteEventIn](#)
- [GetEventOuts](#)
- [AddEventOut](#)
- [DeleteEventOut](#)
- [GetExports](#)
- [AddExport](#)
- [DeleteExport](#)
- [UpdateExport](#)
- [GetImports](#)
- [AddImport](#)
- [DeleteImport](#)
- [UpdateImport](#)
- [GetLocals](#)
- [AddLocal](#)
- [DeleteLocal](#)
- [UpdateLocal](#)
- [GetPasswords](#)
- [AddPassword](#)
- [DeletePassword](#)
- [ReCryptPasswords](#)
- [GetRemotes](#)
- [AddRemote](#)
- [DeleteRemote](#)

- [UpdateRemote](#)
- [GetResources](#)
- [SetResources](#)
- [GetRoutings](#)
- [AddRouting](#)
- [DeleteRouting](#)
- [UpdateRouting](#)
- [GetTDomain](#)
- [AddTDomain](#)
- [DeleteTDomain](#)
- [SetTDomain](#)
- [Remote_Link_Statistics](#)
- [Domain_Gateway_Transaction_Statistics](#)

5.8.7.1 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.7.1.1 Syntax

`GetParameters()`

5.8.7.1.2 Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of /T domain gateway Mbean.

5.8.7.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.7.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter()` of /T domain gateway Mbean.

5.8.7.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.3.1 Syntax

SetParameters(data)

5.8.7.3.2 Input

data: A dictionary which includes the attributes.

This function invokes JMX interface setParameters() of /T domain gateway Mbean.

5.8.7.4 SetParameter

- [Syntax](#)

5.8.7.4.1 Syntax

SetParameter(name, value)

This function invokes JMX interface setParameter() of /T domain gateway Mbean.

5.8.7.5 Delete

This section contains the following topics:

- [Syntax](#)

5.8.7.5.1 Syntax

Delete()

This function invokes JMX interface delete() of /T domain gateway Mbean.

5.8.7.6 GetACLs

This section contains the following topics:

- [Input](#)
- [Output:](#)

5.8.7.6.1 Input

Section

GetACLs(filter)

filter: A dictionary which includes the attributes and values.

5.8.7.6.2 Output:

ACL list

This function invokes JMX interface getACLs() of /T domain gateway Mbean.

5.8.7.7 AddACL

Syntax

AddACL(parameters)

- [Syntax](#)
- [Input](#)

5.8.7.7.1 Syntax

AddACL(parameters)

5.8.7.7.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface addACL() of /T domain gateway Mbean.

5.8.7.8 DeleteACL

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.8.1 Syntax

DeleteACL(ACLName)

5.8.7.8.2 Input

ACLName: name of ACL which is to be deleted.

This function invokes JMX interface deleteACL () of /T domain gateway Mbean.

5.8.7.9 UpdateACL

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.9.1 Syntax

UpdateACL(ACLName, parameters)

5.8.7.9.2 Input

ACLName: name of ACL which is to be updated.

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface updateACL () of /T domain gateway Mbean.

5.8.7.10 GetEventIns

This section contains the following topics:

- [Syntax](#)

- [Input](#)
- [Output](#)

5.8.7.10.1 Syntax

`GetEventIns(filter)`

5.8.7.10.2 Input

filter: A dictionary which includes the attributes and values.

5.8.7.10.3 Output

Events list

This function invokes JMX interface `getEventInss()` of /T domain gateway Mbean.

5.8.7.11 AddEventIn

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.11.1 Syntax

`AddEventIn(parameters)`

5.8.7.11.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface `addEventIn()` of /T domain gateway Mbean.

5.8.7.12 DeleteEventIn

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.12.1 Syntax

`DeleteEventIn(eventName, lAccessPoint)`

5.8.7.12.2 Input

eventName: name of a particular remote event, which should be subscribed by local domain subscriber.

lAccessPoint: the name of a local domain access point, which is allowed to receive this event from remote domain(s)

This function invokes JMX interface `deleteEventIn ()` of /T domain gateway Mbean.

5.8.7.13 GetEventOuts

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.13.1 Syntax

`GetEventOuts(filter)`

5.8.7.13.2 Input

filter: A dictionary which includes the attributes and values.

5.8.7.13.3 Output

Events list

This function invokes JMX interface `getEventOutss()` of /T domain gateway Mbean.

5.8.7.14 AddEventOut

- [Syntax](#)
- [Input](#)

5.8.7.14.1 Syntax

`AddEventOut(parameters)`

5.8.7.14.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface `addEventOut()` of /T domain gateway Mbean.

5.8.7.15 DeleteEventOut

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.15.1 Syntax

`DeleteEventOut(eventName, lAccessPoint, rAccessPointList)`

5.8.7.15.2 Input

- `eventName`: the name of a particular local event, which can be posted to remote domains.
- `lAccessPoint`: the name of a local domain access point, which is allowed to send this event to remote domains.

- `rAccessPointList`: the remote domain access point which this event is sent to.

This function invokes JMX interface `deleteEventOut ()` of /T domain gateway Mbean.

5.8.7.16 GetExports

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.16.1 Syntax

`GetExports(filter)`

5.8.7.16.2 Input

`filter`: A dictionary which includes the attributes and values.

5.8.7.16.3 Output

Local resources list

This function invokes JMX interface `getExports()` of /T domain gateway Mbean.

5.8.7.17 AddExport

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.17.1 Syntax

`AddExport(parameters)`

5.8.7.17.2 Input

`parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `addExport()` of /T domain gateway Mbean.

5.8.7.18 DeleteExport

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.18.1 Syntax

`DeleteExport(resourceName, lAccessPoint)`

5.8.7.18.2 Input

- `resourceName`: The local resource name
- `lAccessPoint`: The local access point name through which this local resource is available.

This function invokes JMX interface `deleteExport ()` of /T domain gateway Mbean.

5.8.7.19 UpdateExport

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.19.1 Syntax

```
UpdateExport (resourceName, lAccessPoint, parameters)
```

5.8.7.19.2 Input

- `resourceName`: The local resource name.
- `lAccessPoint`: The local access point name through which this local resource is available.
- `parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `updateExport ()` of /T domain gateway Mbean.

5.8.7.20 GetImports

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.20.1 Syntax

```
GetImports(filter)
```

5.8.7.20.2 Input

`filter`: A dictionary which includes the attributes and values.

5.8.7.20.3 Output

Remote resources list

This function invokes JMX interface `getImports()` of /T domain gateway Mbean.

5.8.7.21 AddImport

- [Syntax](#)
- [Input](#)

5.8.7.21.1 Syntax

`AddImport(parameters)`

5.8.7.21.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface `addImport()` of /T domain gateway Mbean.

5.8.7.22 DeleteImport

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.22.1 Syntax

`DeleteImport(resourceName, lAccessPoint, rAccessPointList)`

5.8.7.22.2 Input

- `resourceName`: The remote resource name used for entries of resource type SERVICE (the service name), QSPACE (the queue space name), and QNAME (the queue name).
- `lAccessPoint`: The name of the local domain access point through which this remote resource should be made available.
- `rAccessPointList`: the remote domain access point through which this remote resource should be imported.

This function invokes JMX interface `deleteImport()` of /T domain gateway Mbean.

5.8.7.23 UpdateImport

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.23.1 Syntax

`UpdateImport (resourceName, lAccessPoint, rAccessPointList,
parameters)`

5.8.7.23.2 Input

- `resourceName`: The remote resource name used for entries of resource type SERVICE (the service name), QSPACE (the queue space name), and QNAME (the queue name).
- `lAccessPoint`: The name of the local domain access point through which this remote resource should be made available.
- `rAccessPointList`: the remote domain access point through which this remote resource should be imported.

- parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface `updateImport ()` of /T domain gateway Mbean.

5.8.7.24 GetLocals

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.24.1 Syntax

`GetLocals(filter)`

5.8.7.24.2 Input

filter: A dictionary which includes the attributes and values.

5.8.7.24.3 Output

local domain access points list

This function invokes JMX interface `getLocals()` of /T domain gateway Mbean.

5.8.7.25 AddLocal

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.25.1 Syntax

`AddLocal(parameters)`

5.8.7.25.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface `addLocal()` of /T domain gateway Mbean.

5.8.7.26 DeleteLocal

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.26.1 Syntax

`DeleteLocal(accessPoint)`

5.8.7.26.2 Input

accessPoint: a user-specified local domain access point identifier

This function invokes JMX interface deleteLocal () of /T domain gateway Mbean.

5.8.7.27 UpdateLocal

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.27.1 Syntax

UpdateLocal (accessPoint, parameters)

5.8.7.27.2 Input

- accessPoint: a user-specified local domain access point identifier
- parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface updateLocal () of /T domain gateway Mbean.

5.8.7.28 GetPasswords

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.28.1 Syntax

GetPasswords(filter)

5.8.7.28.2 Input

filter: A dictionary which includes the attributes and values.

5.8.7.28.3 Output

Password list

This function invokes JMX interface getPasswords() of /T domain gateway Mbean.

5.8.7.29 AddPassword

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.29.1 Syntax

AddPassword(parameters)

5.8.7.29.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface addPassword() of /T domain gateway Mbean.

5.8.7.30 DeletePassword

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.30.1 Syntax

DeletePassword(lAccessPoint, rAccessPoint)

5.8.7.30.2 Input

- lAccessPoint: The name of the local domain access point to which the password applies.
- rAccessPoint: The name of the remote domain access point to which the password applies.

This function invokes JMX interface deletePassword () of /T domain gateway Mbean.

5.8.7.31 ReCryptPasswords

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.31.1 Syntax

ReCryptPasswords(lAccessPoint, rAccessPoint)

5.8.7.31.2 Input

- lAccessPoint: The name of the local domain access point to which the password applies.
- rAccessPoint: The name of the remote domain access point to which the password applies.

This function invokes JMX interface deletePassword () of /T domain gateway Mbean.

5.8.7.32 GetRemotes

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.32.1 Syntax

`GetRemotes(filter)`

5.8.7.32.2 Input

`filter`: A dictionary which includes the attributes and values.

5.8.7.32.3 Output

Remote domain access points list

This function invokes JMX interface `getRemotes()` of /T domain gateway Mbean.

5.8.7.33 AddRemote

- [Syntax](#)
- [Input](#)

5.8.7.33.1 Syntax

`AddRemote(parameters)`

5.8.7.33.2 Input

`parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `addRemote()` of /T domain gateway Mbean.

5.8.7.34 DeleteRemote

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.34.1 Syntax

`DeleteRemote(accessPoint, dmtype)`

5.8.7.34.2 Input

- `accessPoint`: a user-specified remote domain access point identifier
- `dmtype` : The type of domain for this remote domain access point

This function invokes JMX interface `deleteRemote ()` of /T domain gateway Mbean.

5.8.7.35 UpdateRemote

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.35.1 Syntax

`UpdateRemote (accessPoint,dmtype,parameters)`

5.8.7.35.2 Input

- `accessPoint`: a user-specified remote domain access point identifier
- `dmtype` : The type of domain for this remote domain access point
- `parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `updateRemote ()` of /T domain gateway Mbean.

5.8.7.36 GetResources

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.36.1 Syntax

`GetResources(filter)`

5.8.7.36.2 Input

`filter`: A dictionary which includes the attributes and values.

5.8.7.36.3 Output

Resource list

This function invokes JMX interface `getResources()` of /T domain gateway Mbean.

5.8.7.37 SetResources

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.37.1 Syntax

`SetResources(parameters)`

5.8.7.37.2 Input

`parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `setResources()` of /T domain gateway Mbean.

5.8.7.38 GetRoutings

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.38.1 Syntax

`GetRoutings(filter)`

5.8.7.38.2 Input

`filter`: A dictionary which includes the attributes and values.

5.8.7.38.3 Output

Routing list

This function invokes JMX interface `getRoutings()` of /T domain gateway Mbean.

5.8.7.39 AddRouting

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.39.1 Syntax

`AddRouting(parameters)`

5.8.7.39.2 Input

`parameters`: A dictionary which includes the attributes and values.

This function invokes JMX interface `addRouting()` of /T domain gateway Mbean.

5.8.7.40 DeleteRouting

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.40.1 Syntax

`DeleteRouting(routingName, bufType)`

5.8.7.40.2 Input

- `routingName`: The name of the routing criteria table entry

- bufType: The type of buffer

This function invokes JMX interface deleteRouting () of /T domain gateway Mbean.

5.8.7.41 UpdateRouting

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.41.1 Syntax

UpdateRouting (routingName, bufType, parameters)

5.8.7.41.2 Input

- routingName: The name of the routing criteria table entry
- bufType: The type of buffer
- parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface updateRouting () of /T domain gateway Mbean.

5.8.7.42 GetTDomain

This section contains the following topics:

- [Syntax](#)
- [Input](#)
- [Output](#)

5.8.7.42.1 Syntax

GetTDomains(filter)

5.8.7.42.2 Input

filter: A dictionary which includes the attributes and values.

5.8.7.42.3 Output

TDomain specific configuration list

This function invokes JMX interface getTDomain() of /T domain gateway Mbean.

5.8.7.43 AddTDomain

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.43.1 Syntax

AddTDomain(parameters)

5.8.7.43.2 Input

parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface addTDomain() of /T domain gateway Mbean.

5.8.7.44 DeleteTDomain

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.44.1 Syntax

DeleteTDomain (accessPoint, nwaddr, lAccessPoint)

5.8.7.44.2 Input

- accessPoint: The local or remote domain access point name for which this entry provides the TDomain-specific configuration data. bufType: The type of buffer
- nwaddr: Specifies the network address associated with the access point
- lAccessPoint: a local domain access point found in the DM_LOCAL section for a TDomain session record in the BDMCONFIG file.

This function invokes JMX interface deleteTDomain () of /T domain gateway Mbean.

5.8.7.45 SetTDomain

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.7.45.1 Syntax

SetTDomain (accessPoint, nwaddr, lAccessPoint, parameters)

5.8.7.45.2 Input

- accessPoint: The local or remote domain access point name for which this entry provides the TDomain-specific configuration data.
- nwaddr: Specifies the network address associated with the access point
- lAccessPoint: a local domain access point found in the DM_LOCAL section for a TDomain session record in the BDMCONFIG file.
- parameters: A dictionary which includes the attributes and values.

This function invokes JMX interface SetTDomain () of the /T domain gateway Mbean.

5.8.7.46 Remote_Link_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.7.46.1 Syntax

```
Remote_Link_Statistics()
```

5.8.7.46.2 Output

REMOTE_LINK_STATISTICS_MBEAN

Field Name	Description
TA_DMRAccessSPoINT	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

5.8.7.47 Domain_Gateway_Transaction_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.7.47.1 Syntax

```
Domain_Gateway_Transaction_Statistics()
```

5.8.7.47.2 Output

Field Name	Description
TA_NUMTRANCMT	For information about the MIB attributes, refer to Oracle® Tuxedo Reference Guide .
TA_NUMTRANABT	
TA_TIMERESTART	
TA_CURTime	

5.8.8 EventBrokerMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [Delete](#)
- [Event_Statistics](#)

5.8.8.1 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.8.1.1 Syntax

`GetParameters()`

5.8.8.1.2 Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of event broker Mbean.

5.8.8.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.8.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter()` of event broker Mbean.

5.8.8.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.8.3.1 Syntax

`SetParameters(data)`

5.8.8.3.2 Input

data: A dictionary which includes the attributes.

This function invokes JMX interface `setParameters()` of event broker Mbean.

5.8.8.4 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.8.4.1 Syntax

`SetParameter(name, value)`

This function invokes JMX interface `setParameter()` of event broker Mbean.

5.8.8.5 Delete

This section contains the following topics:

- [Syntax](#)

5.8.8.5.1 Syntax

`Delete()`

This function invokes JMX interface `delete()` of event broker Mbean.

5.8.8.6 Event_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.8.6.1 Syntax

`Event_Statistics()`

5.8.8.6.2 Output

Field Name	Description
TA_MONEVTSVCNUM	Notified Events
TA_MONEVTUNSOLNUM	Notified Events by Unsolicited Message
TA_MONEVTQUENUM	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

5.8.9 QueueServerMbean

Inherited from MBean

- [GetParameters](#)
- [GetParameter](#)
- [SetParameters](#)
- [SetParameter](#)
- [Delete](#)
- [Queue_Space_Statistics](#)
- [Queue_Space_Peak](#)
- [Queue_Statistics](#)
- [Tuxedo_Q_QSPACE](#)
- [Tuxedo_Q_QUEUE](#)

5.8.9.1 GetParameters

- [Syntax](#)
- [Output](#)

5.8.9.1.1 Syntax

`GetParameters()`

5.8.9.1.2 Output

A dictionary which includes the attributes.

This function invokes JMX interface `getParameters()` of OTMQ Mbean.

5.8.9.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.9.2.1 Syntax

`GetParameter(name)`

This function invokes JMX interface `getParameter()` of OTMQ Mbean.

5.8.9.3 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.9.3.1 Syntax

SetParameters(data)

5.8.9.3.2 Input

data: A dictionary which includes the attributes.

This function invokes JMX interface setParameters() of OTMQ Mbean.

5.8.9.4 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.9.4.1 Syntax

SetParameter(name, value)

This function invokes JMX interface setParameter() of OTMQ Mbean.

5.8.9.5 Delete

- [Syntax](#)

5.8.9.5.1 Syntax

Delete()

This function invokes JMX interface delete() of OTMQ Mbean.

5.8.9.6 Queue_Space_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.9.6.1 Syntax

Queue_Space_Statistics()

5.8.9.6.2 Output

Field Name	Description
TA_APPQSPACENAME	Following MIB Attributes in T_APPQSPACE is returned. For information about the attributes, refer to Oracle® Tuxedo Reference Guide
TA_STATE	
TA_CURACTIONS	
TA_CURCURSORS	
TA_CURHANDLES	
TA_CURMEMNONPERSIST	

Field Name	Description
TA_CURMSG	
TA_CURPROC	
TA_CURQUEUES	
TA_CURTMPQUEUES	
TA_CURTRANS	

5.8.9.7 Queue_Space_Peak

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.9.7.1 Syntax

```
Queue_Space_Peak()
```

5.8.9.7.2 Output

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_HWMSG	
TA_HWOWNERS	
TA_HWPROC	
TA_HWQUEUES	
TA_HWTMPQUEUES	
TA_HWTRANS	

5.8.9.8 Queue_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.9.8.1 Syntax

```
Queue_Statistics()
```

5.8.9.8.2 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	

5.8.9.9 Tuxedo_Q_QSPACE

- [Syntax](#)
- [Output](#)

5.8.9.9.1 Syntax

Tuxedo_Q_QSPACE()

5.8.9.9.2 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	

5.8.9.10 Tuxedo_Q_QUEUE

- [Syntax](#)
- [Output](#)

5.8.9.10.1 Syntax

Tuxedo_Q_QUEUE()

5.8.9.10.2 Output

Field Name	Description
TA_APPQNAME	Following MIB Attributes in T_APPQ is returned. For information about the attributes, refer to Oracle® Tuxedo Reference Guide .
TA_APPQSPACENAME	
TA_QMCONFIG	
TA_LMID	
TA_APPQORDER	

5.8.10 WebServiceGatewayMbean

This section contains the following topics:

- [GetParameter](#)
- [GetParameter](#)
- [SetParameter](#)
- [SetParameters](#)
- [Delete](#)
- [Web_Service_Gateway_Statistics](#)

5.8.10.1 GetParameter

This section contains the following topic:

- [Syntax](#)

5.8.10.1.1 Syntax

GetParameter(parameterName)

This function invokes JMX interface getParameter(parameterName) of Tuxedo Web Service Gateway Mbean.

5.8.10.2 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.10.2.1 Syntax

GetParameters(parameterName)

This function invokes JMX interface getParameters(parameterName) of Tuxedo Web Service Gateway Mbean.

5.8.10.3 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.10.3.1 Syntax

```
SetParameter(parameterName, parameterValue)
```

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Web Service Gateway Mbean.

5.8.10.4 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input](#)

5.8.10.4.1 Syntax

```
SetParameters(data)
```

5.8.10.4.2 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.

5.8.10.5 Delete

This section contains the following topic:

- [Syntax](#)

5.8.10.5.1 Syntax

```
Delete()
```

This function invokes JMX interface `delete()` of Tuxedo Web Service Gateway Mbean.

5.8.10.6 Web_Service_Gateway_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.10.6.1 Syntax

```
Web_Service_Gateway_Statistics()
```

5.8.10.6.2 Output

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

5.8.11 WorkstationListenerMbean

This section contains the following topic

- [GetParameter](#)
- [GetParameters](#)
- [SetParameter](#)
- [SetParameters](#)
- [Delete](#)
- [Get Handler Parameter](#)
- [Get Handlers](#)
- [Suspend Handler](#)
- [Resume Handler](#)
- [Kill Handler](#)
- [Get Clients](#)
- [Suspend Client](#)
- [Resume Client](#)
- [Kill Client](#)
- [Workstation_Listener_Statistics](#)

5.8.11.1 GetParameter

The section contains the following topic:

- [Syntax](#)

5.8.11.1.1 Syntax

`GetParameter(parameterName)`

This function invokes JMX interface `getParameter(parameterName)` of Tuxedo Workstation Listener Mbean.

5.8.11.2 GetParameters

This section contains the following topic:

- [Syntax](#)
- [Output](#)

5.8.11.2.1 Syntax

`GetParameters()`

5.8.11.2.2 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.

5.8.11.3 SetParameter

This section contains the following topics:

- [Syntax](#)

5.8.11.3.1 Syntax

`SetParameter(parameterName, parameterValue)`

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Workstation Listener Mbean.

5.8.11.4 SetParameters

- [Syntax](#)
- [Input](#)

5.8.11.4.1 Syntax

`SetParameters(date)`

5.8.11.4.2 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.

5.8.11.5 Delete

This section contains the following topics:

- [Syntax](#)

5.8.11.5.1 Syntax

Delete()

This function invokes JMX interface delete() of Tuxedo Workstation Listener Mbean.

5.8.11.6 Get Handler Parameter

The section contains the following topic:

- [Syntax](#)

5.8.11.6.1 Syntax

GetHandlerParameter(clientId, parameterName)

This function invokes JMX interface getHandlerParameter() of Tuxedo Workstation Listener Mbean.

5.8.11.7 Get Handlers

The section contains the following topic:

- [Syntax](#)
- [Output](#)

5.8.11.7.1 Syntax

GetHandlers(ClientId)

5.8.11.7.2 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.

5.8.11.8 Suspend Handler

The section contains the following topic:

- [Syntax](#)

5.8.11.8.1 Syntax

`SuspendHandler(clientId)`

This function invokes JMX interface `suspendHandler(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.9 Resume Handler

The section contains the following topic:

- [Syntax](#)

5.8.11.9.1 Syntax

`ResumeHandler(clientId)`

This function invokes JMX interface `resumeHandler(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.10 Kill Handler

This section contains the following topic:

- [Syntax](#)

5.8.11.10.1 Syntax

`KillHandler(clientId)`

This function invokes JMX interface `killHandler(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.11 Get Clients

This section contains the following topic:

- [Syntax](#)
- [Output](#)

5.8.11.11.1 Syntax

`GetClients(wshClientID)`

5.8.11.11.2 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.

5.8.11.12 Suspend Client

This section contains the following topic:

- [Syntax](#)

5.8.11.12.1 Syntax

`SuspendClient(clientId)`

This function invokes JMX interface `suspendClient(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.13 Resume Client

This section contains the following topic:

- [Syntax](#)

5.8.11.13.1 Syntax

`ResumeClient(clientId)`

This function invokes JMX interface `resumeClient(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.14 Kill Client

This section contains the following topic:

- [Syntax](#)

5.8.11.14.1 Syntax

`KillClient(clientId)`

This function invokes JMX interface `killClient(clientId)` of Tuxedo Workstation Listener Mbean.

5.8.11.15 Workstation_Listener_Statistics

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.11.15.1 Syntax

`Workstation_Listener_Statistics()`

5.8.11.15.2 Output

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

Field Name	Description
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

5.8.12 JoltListenerMbean

This section contains the following topics:

- [GetParameter](#)
- [GetParameters](#)
- [SetParameter](#)
- [SetParameters](#)
- [Delete JSL](#)
- [Get Handlers](#)
- [Suspend Handler](#)
- [Resume Handler](#)
- [Jolt Listener Statistics](#)

5.8.12.1 GetParameter

This section contains the following topics:

- [Syntax](#)

5.8.12.1.1 Syntax

`GetParameter(parameterName)`

This function invokes JMX interface `getParameter(parameterName)` of Tuxedo Jolt Listener Mbean.

5.8.12.2 GetParameters

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.12.2.1 Syntax

`GetParameters()`

5.8.12.2.2 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.

5.8.12.3 SetParameter

This section contains the following topics::

- [Syntax](#)

5.8.12.3.1 Syntax

```
SetParameter(parameterName, parameterValue)
```

This function invokes JMX interface `setParameter(parameterName, parameterValue)` of Tuxedo Jolt Listener Mbean.

5.8.12.4 SetParameters

This section contains the following topics:

- [Syntax](#)
- [Input:](#)

5.8.12.4.1 Syntax

```
SetParameters(data)
```

5.8.12.4.2 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.

5.8.12.5 Delete JSL

- [Syntax](#)

5.8.12.5.1 Syntax

```
Delete ()
```

This function invokes JMX interface `delete()` of Tuxedo Jolt Listener Mbean.

5.8.12.6 Get Handlers

- [Syntax](#)
- [Output](#)

5.8.12.6.1 Syntax

```
GetHandlers()
```

5.8.12.6.2 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.

5.8.12.7 Suspend Handler

- [Syntax](#)

5.8.12.7.1 Syntax

`SuspendHandler(clientId)`

This function invokes JMX interface `suspendHandler(clientId)` of Tuxedo Jolt Listener Mbean.

5.8.12.8 Resume Handler

- [Syntax](#)

5.8.12.8.1 Syntax

`ResumeHandler(clientId)`

This function invokes JMX interface `resumeHandler(clientId)` of Tuxedo Jolt Listener Mbean.

5.8.12.9 Jolt_Listener_Statistics

- [Syntax](#)
- [Output](#)

5.8.12.9.1 Syntax

`Jolt_Listener_Statistics()`

5.8.12.9.2 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

5.8.13 ARTBatchSystemMbean

Inherited from MBean

- [GetBatchs](#)
- [CancelBatch](#)
- [PurgeBatch](#)

- [HoldBatch](#)
- [ReleaseBatch](#)
- [GetBatchSysOuts](#)
- [SubmitBatch](#)
- [GetGDGFiles](#)
- [GetBatchFiles](#)

5.8.13.1 GetBatches

This section contains the following topics:

- [Syntax](#)
- [Output](#)

5.8.13.1.1 Syntax

```
GetBatches(batchName, batchID, batchClass,  
           batchOwner)
```

5.8.13.1.2 Output

A list which contains result.

This function invokes JMX interface `getBatches()` of ART batch system Mbean.

5.8.13.2 CancelBatch

- [Syntax](#)
- [Output](#)

5.8.13.2.1 Syntax

```
CancelBatch(batchName, batchID, batchClass,  
            batchOwner)
```

5.8.13.2.2 Output

A list which contains result.

This function invokes JMX interface `cancelBatch()` of ART batch system.

5.8.13.3 PurgeBatch

- [Syntax](#)
- [Output](#)

5.8.13.3.1 Syntax

```
PurgeBatch(batchName, batchID, batchClass,  
            batchOwner)
```

5.8.13.3.2 Output

A list which contains result.

This function invokes JMX interface `purgeBatch()` of ART batch system Mbean.

5.8.13.4 HoldBatch

- [Syntax](#)
- [Output](#)

5.8.13.4.1 Syntax

```
HoldBatch(batchName, batchID, batchClass,  
           batchOwner)
```

5.8.13.4.2 Output

A list which contains result.

This function invokes JMX interface `holdBatch ()` of ART batch system Mbean.

5.8.13.5 ReleaseBatch

- [Syntax](#)
- [Output](#)

5.8.13.5.1 Syntax

```
ReleaseBatch(batchName, batchID, batchClass,  
              batchOwner)
```

5.8.13.5.2 Output

A list which contains result.

This function invokes JMX interface `releaseBatch()` of ART batch system Mbean.

5.8.13.6 GetBatchSysOuts

- [Syntax](#)
- [Output](#)

5.8.13.6.1 Syntax

`GetBatchSys0uts(batchID)`

5.8.13.6.2 Output

A list which contains result.

This function invokes JMX interface `getBatchSys0uts()` of ART batch system Mbean.

5.8.13.7 SubmitBatch

- [Syntax](#)
- [Output](#)

5.8.13.7.1 Syntax

`SubmitBatch (batchScript, batchOwner,
batchEJR0ption,

batchShell0ption, batchDBLogin, batchMTEnv)`

5.8.13.7.2 Output

A list which contains result.

This function invokes JMX interface `submitBatch()` of ART batch system Mbean.

5.8.13.8 GetGDGFiles

- [Syntax](#)
- [Output](#)

5.8.13.8.1 Syntax

`GetGDGFiles(batched, fileName)`

5.8.13.8.2 Output

A dictionary which contains result.

This function invokes JMX interface `getGDGFiles()` of ART batch system Mbean.

5.8.13.9 GetBatchFiles

- [Syntax](#)
- [Output](#)

5.8.13.9.1 Syntax

`GetBatchFiles()`

5.8.13.9.2 Output

A list which contains result.

This function invokes JMX interface `getBatchFiles ()` of ART batch system Mbean.