

Enterprise Manager for Oracle® Tuxedo

Reference Guide

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Reference

This chapter contains the following sections:

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

Understanding Properties and Metrics Tables

Property Characters

The following characters are used for describing a property:

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

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

Metrics Tables

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

Status Column

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

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

Collection Interval

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

Tuxedo Targets

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

Table 1 Tuxedo Targets Description

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

Table 1 Tuxedo Targets Description

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

Tuxedo Home

Description

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

Properties

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

Tuxedo Application Home

Description

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

Properties

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

Associations

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

Tuxedo tlisten

Description

This target corresponds to a tuxedo tlisten process.

Properties

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

Reference

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

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

Association

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

Availability Metrics

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

Tuxedo Domain

Description

Tuxedo Domain is a system target type.

Properties

Name	Display Label	Characters	Description
Name	Name	Visible Editable	[DOMAINID]:[PMID of the master machine]: [PMID of the backup machine]: [IPKEY] 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
IPKEY	IPKEY	Visible, Editable(*), UBB Parameter,	IPKEY parameter in TUXCONFIG
MASTER	MASTER	Visible, UBB Parameter	Specifies the LMIDs list of master Tuxedo Machines
MODEL	MODEL	Visible, UBB Parameter	MODEL parameter in TUXCONFIG
SECURITY	SECURITY	Visible, UBB Parameter	SECURITY parameter in TUXCONFIG
OPTIONS	OPTIONS	Visible, UBB Parameter	OPTIONS parameter in TUXCONFIG

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

Association

App_composite_contains: Tuxedo Machine target

Availability Metrics

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

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

Client Number Metrics

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

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

Domain Metrics

Metric Name	DOMAIN_OPERATION_STATISTICS
Metric Type	TABLE, Repository side

Metric Display		Domian Operation Statistics	
Collection Interval		15 minutes	
Key Column(s)		None	
Column Name	Column Type	Display Label	Note
TPCONNECT_NUMBER	NUMBER	tpconnect Per Minute	<p>The invoking times (per minute) of tpconnect method in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
TPDEQUEUE_NUMBER	NUMBER	tpdequeue Per Minute	<p>The invoking times (per minute) of tpdequeue method in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
TPENQUEUE_NUMBER	NUMBER	tpenqueue Per Minute	<p>The invoking times (per minute) of tpenqueue method in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>

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

Reference

ABORTED_TRANSACTION_NUMBER	NUMBER	Aborted Transactions Per Minute	<p>The number of XA transactions aborted (per minute) in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
COMMITTED_TRANSACTION_NUMBER	NUMBER	Committed Transactions Per Minute	<p>The number of XA transactions committed (per minute) in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
COMPLETE_TRANSACTION_NUMBER	NUMBER	Completed Transactions Per Minute	<p>The number of XA transactions aborted or committed (per minute) in Tuxedo domain during the interval.</p> <p>Not NULL</p> <p>Value:</p> <p>COMMITTED_TRANSACTION_NUMBER + ABORTED_TRANSACTION_NUMBER</p> <p>Threshold:</p> <p>></p>

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

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

Reference

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

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

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

Tuxedo Machine

Description

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

Properties

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

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

Associations

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

Availability Metrics

Metric Name		Response	
Metric Type		TABLE	
Metric Display		Response	
Collection Interval		5 minutes	
Key Column(s)		None	
Column Name	Column Type	Display Label	Note
Timing	NUMBER	Elapsed Time	
Status	NUMBER	Status	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.

Client Number Metrics

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

Reference

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

Machine Metrics

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

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

Reference

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

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

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

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

Reference

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

Service Metrics

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

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

Reference

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

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

Tuxedo Group

Description

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

Properties

Name	Display Label	Characters	Description
Name	Name	Visible Editable	[Domain Name] / [MasterLMID] / [SRVGRP] Note: After group migration, the group with original master LMID (in name) is not deleted.
Host	Host	Editable(*)	Listening IP address or hostname of the tlisten process associated with the Tuxedo Machine.
Port	Port	Editable(*)	Listening port of the JMX RMI connector embedded in tlisten process associated with the Tuxedo Machine.
DOMAINID	DOMAINID	Editable(*), UBB Parameter	
IPCKEY	IPCKEY	Editable(*), UBB Parameter	
LMID	LMID	Visible UBB Parameter	The current LMID, this property is especially necessary for a group related to two Tuxedo Machines.
SRVGRP	SRVGRP	Visible Editable(*), UBB Parameter	Group name.
GRPNO	GRPNO	Visible Editable UBB Parameter	GRPNO parameter for the group.

CICS_Included	CICS_Included		Indicates whether this group includes ART JES servers. Values: Yes No
Migrated	Is Migrated Target		Indicates whether this target has been migrated off.
User Name	Tuxedo User	Visible	Use this Tuxedo User to get metric data
User Password	Tuxedo User Password	Visible	Use this Tuxedo User to get metric data
Application Password	Tuxedo Application Password	Visible	Use this Tuxedo User to get metric data
useSSL	Use SSL	Visible	Use SSL or not

Associations

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

Availability Metrics

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

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

Service Metrics

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

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

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

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

Tuxedo Server

Description

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

Properties

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

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

Availability Metrics

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

Service Metrics

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

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

Reference

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

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

IPC Queue Metrics

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

Server Metrics

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

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

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

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

Reference

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

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

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

Service Aggregated Metrics

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

Reference

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

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

Tuxedo System Server

Description

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

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

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

Properties

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

Reference

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

Availability Metrics

Metric Name	Response
Metric Type	TABLE

Metric Display		Response	
Collection Interval		5 minutes	
Key Column(s)		None	
Column Name	Column Type	Display Label	Note
Timing	NUMBER	Elapsed Time	
Status	NUMBER	Status	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.

Instance Number Metrics

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

Tuxedo Bridge

Description

This target corresponds to a Tuxedo BRIDGE process.

Properties

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

Associations

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

Availability Metrics

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

IPC Queue Metrics

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

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

Remote Link Metrics

Metric Name		REMOTE_LINK_STATISTICS	
Metric Type		TABLE	
Metric Display		Remote Link Statistics	
Collection Interval		15 minutes	
Key Column(s)		LMID	
Column Name	Column Type	Display Label	NOTE
LMID	STRING	LMID	LMID of the remote Tuxedo machine
INBOUND_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_MESS GE_NUMBER	NUMBER	Outbound Network Messages Per Minute	<p>The number of messages transferred to the remote Tuxedo machine per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
INBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Inbound Network Messages Bytes Per Minute	<p>The message size in byte transferred from the remote Tuxedo machine per minute.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
OUTBOUND_NETWORK_MESSAGE_SIZE	NUMBER	Outbound Network Messages Bytes Per Minute	<p>The message size in byte transferred to the remote Tuxedo machine per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>

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

Tuxedo TMS

Description

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

Properties

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

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

Availability Metrics

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

XA Transaction Metrics

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

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

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

Tuxedo /T Domain Gateway

Description

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

Properties

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

Reference

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

Associations

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

Availability Metrics

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

XA Transaction Metrics

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

Reference

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

Remote Link Metrics

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

Reference

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

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

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

Tuxedo Web Service Gateway

Description

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

Properties

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

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

Availability Metrics

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

Gateway Metrics

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

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

Reference

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

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

Reference

OUTBOUND_RPC _SUCCESS_NUMBER	NUMBER	Outbound RPC Successes Per Minute	<p>The outbound RPC success number per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
INBOUND_PENDING _REQUEST_NUMBER	NUMBER	Inbound Pending Requests	<p>The number of requests that are waiting for reply from Tuxedo system.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
OUTBOUND_PENDING_REQUEST_NUMBER	NUMBER	Outbound Pending Requests	<p>The number of requests that are waiting for the reply from outside.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>

Tuxedo Workstation Listener

Description

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

Properties

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

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

Availability Metrics

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

Workstation Listener Metrics

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

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

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

Tuxedo Jolt Listener

Description

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

Properties

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

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

Availability Metrics

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

Jolt Listener Metrics

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

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

Tuxedo Event Broker

Description

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

Properties

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

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

Availability Metrics

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

Event Statistics Metrics

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

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

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

USERLOG_MESSAGE_EVENT_NUMBER	NUMBER	Notified Events by USERLOG Message Per Minute	<p>The number of the events notified by ULOG message per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>
EVENT_NUMBER	NUMBER	Notified Events Per Minute	<p>The number of the events notified by all methods per minute.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>Value:</p> <p>SERVICE_EVENT_NUMBER+UNSOLICITED_MESSAGE_EVENT_NUMBER+QUEUE_MESSAGE_EVENT_NUMBER+COMMAND_LINE_EVENT_NUMBER+USERLOG_MESSAGE_EVENT_NUMBER</p> <p>Threshold:</p> <p>></p>

Tuxedo LMS

This target corresponds to an LMS entry defined in TUXCONFIG.

Properties

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

Reference

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

Availability Metrics

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

Tuxedo /Q Manager Server

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

Properties

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

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

Associations

Tuxedo Group App_composite_contains Tuxedo /Q Manager Server

Availability Metrics

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

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

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	<p>TA_CURACTIONS</p> <p>Not NULL</p> <p>Threshold:</p> <p>></p>

Reference

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

TQUEUES	NUMBER	Current Temp Queues	TA_CURTMPQUEUES Not NULL Threshold: >
TRANS	NUMBER	Current Transactions	TA_CURTRANS Not NULL Threshold: >

Queue Space Peak Metrics

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

Reference

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

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

Queue Statistics Metrics

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

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

TMA Targets

TMA SNA Gateway

This target corresponds to a GWSNAX entry defined in TUXCONFIG.

Properties

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

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

Reference

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

Availability Metrics

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

XA Transaction Metrics

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

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

Reference

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

Remote Link Metrics

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

Reference

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

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

TMA TCP Gateway

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

Properties

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

Reference

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

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

Availability Metrics

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

XA Transaction Metrics

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

Reference

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

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

Remote Link Metrics

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

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

TMA CRM

Description

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

Properties

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

Availability Metrics

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

Trace Status Metrics

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

Remote Link Status Metrics

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

Remote Link Statistics Metrics

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

ART CICS Targets

Tuxedo CICS Region

"Tuxedo CICS Region" is a system target type.

Associations

Tuxedo Domain App_composite_contains: Tuxedo CICS Region targets

App_composite_contains: Tuxedo CICS Transaction targets

Properties

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

ART CICS Statistics Metrics

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

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

TRANSACTION_FAILURE_NUMBER	NUMBER	Transaction Failures Per Minute	Not NULL Value: Sum(service_statistics. system_failure_number + 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_number/ transaction_number) Threshold: >

Tuxedo ART CICS Transaction

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

Properties

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

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

ART CICS Transaction Metrics

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

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

Reference

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

USER_FAILURE_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 r/ request_number) Threshold: >

ART CICS TSQ Server

Properties

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

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

Availability Metrics

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

ART TSQ Metrics

Metric Name	ARTTSQ_STATISTICS
Metric Type	TABLE
Metric Display	ART TSQ Statistics

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

ART CICS TDQ Server

Properties

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

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

Availability Metrics

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

ART TDQ Metrics

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

ART Batch Targets

Tuxedo Batch System

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

Properties

Name	Display Label	Characters	Description
Name	Name	Visible, Editable	Name of the Batch System. When first discovery, the Batch System name will be [Domain Name]/Batch_System
Host	Host	Editable(*)	The listening IP address or hostname of the '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(*)	

Availability Metrics

Metric Name	Response
Metric Type	TABLE

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

Job Aggregated Statistics

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

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

OTMQ Manager Server

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

Properties

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

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

Associations

Tuxedo Group App_composite_contains OTMQ Manager Server

Availability Metrics

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

Queue Space Statistics Metrics

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

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

Reference

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

Queue Space Peak Metrics

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

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

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

Queue Statistics Metrics

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

BLOCKS	NUMBER	Disk Pages	TA_CURBLOCKS Not NULL Threshold: >
NONPERSIST_MEM	NUMBER	Memory Bytes Consumed by Non-persistent Messages	TA_CURNONPERSIS TBYTES Not NULL Threshold: >
SENT_MSG	NUMBER	Send Messages Per Minute	TA_MSGSENT Not NULL Threshold: >
RECV_MSG	NUMBER	Receive Messages Per Minute	TA_MSGRCV Not NULL Threshold: >
PENDING_MSG	NUMBER	Pending Messages	TA_CURMSG+TA_C URNONPERSISTMS G Not NULL Threshold: >

ECM Tables

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

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

This section covers the following ECM tables:

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

Tuxedo Domain

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

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

Reference

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

SIGNATURE_REQUIRED	SIGNATURE_REQUIRED	STRING	32	N
ENCRYPTION_REQUIRED	ENCRYPTION_REQUIRED	STRING	32	N

Tuxedo Machine

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

Reference

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

ENCRYPTION_ REQUIRED	ENCRYPTION_ REQUIRED	STRING	64	N
SICACHEENTRI ESMAX	SICACHEENTRI ESMAX	STRING	64	N

Tuxedo Group

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

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

Tuxedo Server

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

CONV	CONV	STRING	64	N
RQADDR	RQADDR	STRING	64	N
RQPERM	RQPERM	NUMBER	10	N
REPLYQ	REPLYQ	STRING	64	N
RPPERM	RPPERM	NUMBER	10	N
RCMD	RCMD	STRING	256	N
MAXGEN	MAXGEN	NUMBER	10	N
GRACE	GRACE	NUMBER	10	N
RESTART	RESTART	STRING	64	N
SYSTEM_ACCESS	SYSTEM_ACCESS	STRING	64	N
MAXDISPATCH_THREADS	MAXDISPATCH_THREADS	NUMBER	10	N
MINDISPATCH_THREADS	MINDISPATCH_THREADS	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

Tuxedo Bridge

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

Tuxedo TMS

TARGET_TYPE		tuxedo_TMS		
UI_IGNORE		N		
HISTORY_IGNORE		N		

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

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

Tuxedo /Q

Queue Space

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

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

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

Queue

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

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

Tuxedo Message Queue (OTMQ)

Queue Space

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

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

Queue

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

QSpace Alias

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

Properties.xml Schema

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

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

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

Listing 1 Properties.xml Schema

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

```

        <xs:maxInclusive value="31"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="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="xs:string">
    <xs:restriction base="xs:string">
        <xs:pattern value="32|64"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="buftypeconvtype">
    <xs:restriction base="xs:string">

```

Reference

```
<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>

```

Reference

```
</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>

```

Reference

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

```

        <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"/>

```

Reference

```
<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"/>
```

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        <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>

```

Reference

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

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

<xs:complexType name="groupsection">
  <xs:all>
    <xs:element name="ENVFILE" type="stringtype" minOccurs="0"
maxOccurs="1"/>

    <xs:element name="TMSNAME" type="stringtype" minOccurs="0"
maxOccurs="1"/>

    <xs:element name="MRM" type="boolean" minOccurs="0"
maxOccurs="1"/>

    <xs:element name="SIGNATURE_REQUIRED" type="boolean" minOccurs="0"
      maxOccurs="1"/>

    <xs:element name="ENCRYPTION_REQUIRED" type="boolean"
minOccurs="0"
      maxOccurs="1"/>

    <xs:element name="OPENINFO" type="openinfotype" minOccurs="0"
      maxOccurs="1"/>

    <xs:element name="CLOSEINFO" type="openinfotype" minOccurs="0"
```

```

        maxOccurs="1"/>
    <xs:element name="TMSCOUNT" type="tmscounttype" minOccurs="0"
        maxOccurs="1"/>
    <xs:element name="RmsSections" type="rmssections" minOccurs="0"
        maxOccurs="1"/>
    <xs:element name="ServerSections" type="serversections" minOccurs="0"
        maxOccurs="1"/>
    <xs:element name="ServiceSections" type="servicesections"
minOccurs="0"
        maxOccurs="1"/>
</xs:all>
<xs:attribute name="GROUPNAME" type="stringtype" use="required"/>
<xs:attribute name="GRPN0" type="grpnotype" use="required"/>
</xs:complexType>
<xs:complexType name="groups">
    <xs:sequence>
        <xs:element name="GroupSection" type="groupsection" minOccurs="1"
            maxOccurs="unbounded"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="applicationproperties">
    <xs:all>
        <xs:element name="PackageName" type="stringtype249" minOccurs="1"
            maxOccurs="1"/>
        <xs:element name="TuxedoVersion" type="versionselect" minOccurs="1"
            maxOccurs="1"/>
        <xs:element name="SupportedOS" type="stringtype" minOccurs="1"
            maxOccurs="1"/>
    </xs:all>

```

Reference

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