

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

**Table 1 Tuxedo Targets Description**

| Target                                   | Description   |
|--|---|
| <a href="#">Tuxedo /Q Manager Server</a> | This target is used to monitor Tuxedo /Q, from which you can view queue related statistics information. |
| <a href="#">Tuxedo Event Broker</a>      | This target corresponds to a Tuxedo TMSYSEVT or TMUSREVR entry defined in TUXCONFIG.                    |
| <a href="#">Tuxedo LMS</a>               | 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<br>Editable | [Host Name] : [TUXDIR]   |
| Version   | Version       | Visible<br>Editable | Tuxedo installation release number, such as 12.1.1.0<br><br><b>Note:</b> 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<br>Editable | Rolling patch package level  |
| Directory | Directory     | Visible<br>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<br>Editable | [Host Name]:[Directory]   |
| Directory | Directory                 | Visible<br>Editable | A root directory to deploy Tuxedo applications.                                   |
| ENV_PATH  | PATH Environment variable | Visible<br>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<br>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,<br>CMD Option | Full pathname of the network device.  |
| uid                    | uid                         | Visible,<br>CMD Option |   |
| sec_principal_name     | sec_principal_name          | Visible<br>CMD Option  |   |
| sec_principal_location | sec_principal_location      | Visible,<br>CMD Option |   |
| sec_principal_passvar  | sec_principal_passvar       | Visible,<br>CMD Option |   |
| zbits                  | zbits                       | Visible,<br>CMD Option |   |
| Zbits                  | Zbits                       | Visible,<br>CMD Option |   |
| nlsaddr                | nlsaddr                     | Visible,<br>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

|                            |                    |                      |   |
|----------------------------|--------------------|----------------------|---|
| <b>Metric Name</b>         |                    | Response             |   |
| <b>Metric Type</b>         |                    | TABLE                |   |
| <b>Metric Display</b>      |                    | Response             |   |
| <b>Collection Interval</b> |                    | 5 minutes            |   |
| <b>Key Column(s)</b>       |                    | None                 |   |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b> | <b>Note</b>   |
| Timing                     | NUMBER             | Elapsed Time         |   |
| Status                     | NUMBER             | Status               | 0 - Inactive<br>1 – Active, tlisten will always return 1<br>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<br>Editable                        | [DOMAINID]:[PMID of the master machine]: [PMID of the backup machine]: [IPKEY]<br><br><b>Note:</b> 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,<br>Editable(*),<br>UBB Parameter, | DOMAINID parameter in TUXCONFIG   |
| IPKEY    | IPKEY         | Visible,<br>Editable(*),<br>UBB Parameter, | IPKEY parameter in TUXCONFIG  |
| MASTER   | MASTER        | Visible,<br>UBB Parameter                  | Specifies the LMIDs list of master Tuxedo Machines  |
| MODEL    | MODEL         | Visible,<br>UBB Parameter                  | MODEL parameter in TUXCONFIG  |
| SECURITY | SECURITY      | Visible,<br>UBB Parameter                  | SECURITY parameter in TUXCONFIG   |
| OPTIONS  | OPTIONS       | Visible,<br>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.<br><br>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&gt;=1, the target is available.</p> |

## Client Number Metrics

|                            |                    |                           |  |
|----------------------------|--------------------|---------------------------|--|
| <b>Metric Name</b>         |                    | CLIENT_CONNECTION_NUMBER  |  |
| <b>Metric Type</b>         |                    | TABLE,<br>Repository side |  |
| <b>Metric Display</b>      |                    | Client Connection Number  |  |
| <b>Collection Interval</b> |                    | 15 minutes                |  |
| <b>Key Column(s)</b>       |                    | None                      |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>      | <b>Note</b>  |
| 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> <p>&gt;</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>&gt;</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>&gt;</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+<br/>WORKSTATION_CLIENT_NUMBER+<br/>JOLT_CLIENT_NUMBER</p> <p>Threshold:</p> <p>&gt;</p> |

## Domain Metrics

|                    |                             |
|--------------------|-----------------------------|
| <b>Metric Name</b> | DOMAIN_OPERATION_STATISTICS |
| <b>Metric Type</b> | TABLE,<br>Repository side   |

| <b>Metric Display</b>      |                    | Domian Operation Statistics |  |
|----------------------------|--------------------|-----------------------------|--|
| <b>Collection Interval</b> |                    | 15 minutes                  |  |
| <b>Key Column(s)</b>       |                    | None                        |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>        | <b>Note</b>  |
| 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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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.

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

## 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>&gt;</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>&gt;</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>&gt;</p>          |

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

|                     |        |                          |  |
|---------------------|--------|--------------------------|--|
| 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>&gt;</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>&gt;</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<br>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(*),<br>UBB Parameter            |   |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |   |
| PMID                 | PMID                        | Visible<br>UBB Parameter                 | Physical machine ID   |
| LMID                 | LMID                        | Visible<br>Editable(*),<br>UBB Parameter | Logic machine name  |
| APPDIR               | APPDIR                      | Visible<br>UBB Parameter                 |   |
| ENVFILE              | ENVFILE                     | Visible<br>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

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



## Client Number Metrics

|                            |                    |                          |   |
|----------------------------|--------------------|--------------------------|---|
| <b>Metric Name</b>         |                    | CLIENT_CONNECTION_NUMBER |   |
| <b>Metric Type</b>         |                    | TABLE                    |   |
| <b>Metric Display</b>      |                    | Client Connections       |   |
| <b>Collection Interval</b> |                    | 15 minutes               |   |
| <b>Key Column(s)</b>       |                    | None                     |   |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>     | <b>Note</b>   |
| 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>&gt;</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>&gt;</p> |

## Reference

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

## Machine Metrics

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

|                      |        |                      |  |
|----------------------|--------|----------------------|--|
| TPCONNECT_NUMB<br>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>&gt;</p>                  |
| TPDEQUEUE_NUMB<br>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>&gt;</p> |

Reference

|                      |        |                      |  |
|----------------------|--------|----------------------|--|
| TPENQUEUE_NUMB<br>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>&gt;</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>&gt;</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>&gt;</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>&gt;</p> |

## Reference

|                                      |        |   |   |
|--------------------------------------|--------|---|---|
| INITIATED_TRANS<br>ACTION_NUMBER     | NUMBER | Initiated Transactions<br>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>&gt;</p> |
| COMMITTED_<br>TRANSACTION_NU<br>MBER | NUMBER | Committed<br>Transactions Per<br>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>&gt;</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>&gt;</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>&gt;</p> |

## Reference

| REQUEST_NUMBER         | NUMBER | Requests Per Minute              | <p>The invoking times (per minute) of tpcall, 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<br/>_NUMBER+<br/>TPCALL_NUMBER</p> <p>Threshold:</p> <p>&gt;</p> |
|------------------------|--------|----------------------------------|--|
| COMPLETED_WOR<br>KLOAD | NUMBER | Completed Workload<br>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>&gt;</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.

|                            |                    |                                      |  |
|----------------------------|--------------------|--------------------------------------|--|
| <b>Metric Name</b>         |                    | SERVICE_STATISTICS                   |  |
| <b>Metric Type</b>         |                    | TABLE, Repository Side               |  |
| <b>Metric Display</b>      |                    | Service Statistics c                 |  |
| <b>Collection interval</b> |                    | 15 minutes                           |  |
| <b>Key Column(s)</b>       |                    | SERVICE_NAME                         |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>                 | <b>NOTE</b>  |
| 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>&gt;</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>&gt;</p>              |

## Reference

|                       |        |                                   |   |
|-----------------------|--------|-----------------------------------|---|
| CPU_TIME              | NUMBER | Average CPU Time<br>(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>&gt;</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>&gt;</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>&gt;</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>&gt;</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+<br/>SYSTEM_FAILURE_NUMBER+<br/>USER_FAILURE_NUMBER</p> <p>Threshold:</p> <p>&gt;</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<br>Editable                      | [Domain Name]/[MasterLMID]/[SRVGRP]<br><br><b>Note:</b> 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(*),<br>UBB Parameter            |  |
| IPCKEY   | IPCKEY        | Editable(*),<br>UBB Parameter            |  |
| LMID     | LMID          | Visible<br>UBB Parameter                 | The current LMID, this property is especially necessary for a group related to two Tuxedo Machines.  |
| SRVGRP   | SRVGRP        | Visible<br>Editable(*),<br>UBB Parameter | Group name.  |
| GRPNO    | GRPNO         | Visible<br>Editable<br>UBB Parameter     | GRPNO parameter for the group.   |

|                      |                             |         |  |
|----------------------|-----------------------------|---------|--|
| CICS_Included        | CICS_Included               |         | Indicates whether this group includes ART JES servers.<br>Values:<br>Yes<br>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&gt;=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.

|                            |                    |                          |   |
|----------------------------|--------------------|--------------------------|---|
| <b>Metric Name</b>         |                    | SERVICE_STATISTICS       |   |
| <b>Metric Type</b>         |                    | TABLE, Repository Side   |   |
| <b>Metric Display</b>      |                    | Service Statistics       |   |
| <b>Collection interval</b> |                    | 15 minutes               |   |
| <b>Key Column(s)</b>       |                    | SERVICE_NAME             |   |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>     | <b>Note</b>   |
| 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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</p>                         |

## Reference

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

## 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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Editable(*),<br>Visible<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG ( 5 )</code>             |
| AOUT                 | AOUT                        | Visible<br>Editable,<br>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

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

## Service Metrics

|                            |                    |                      |               |
|----------------------------|--------------------|----------------------|---------------|
| <b>Metric Name</b>         |                    | SERVICE_STATISTICS   |               |
| <b>Metric Type</b>         |                    | TABLE                |               |
| <b>Metric Display</b>      |                    | Service Statistics   |               |
| <b>Collection interval</b> |                    | 15 minutes           |               |
| <b>Key Column(s)</b>       |                    | SERVICE_NAME         |               |
| <b>Column Name</b>         | <b>Column type</b> | <b>Display Label</b> | <b>Note</b>   |
| 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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</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+<br/>SYSTEM_FAILURE_NUMBER+<br/>USER_FAILURE_NUMBER</p> <p>Threshold:</p> <p>&gt;</p> |

## IPC Queue Metrics

|                            |                    |                           |  |
|----------------------------|--------------------|---------------------------|--|
| <b>Metric Name</b>         |                    | IPC_QUEUE_STATISTICS      |  |
| <b>Metric Type</b>         |                    | TABLE                     |  |
| <b>Metric Display</b>      |                    | IPC Queue Statistics      |  |
| <b>Collection Interval</b> |                    | 15 minutes                |  |
| <b>Key Column(s)</b>       |                    | IPC_QUEUE_NAME, SERVER_ID |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>      | <b>Note</b>  |
| IPC_QUEUE_NAME             | STRING             | Name                      | Tuxedo request IPC queue name.   |
| SERVER_ID                  | STRING             | Server ID                 | Tuxedo server ID.<br><br>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.<br>Not NULL<br>Threshold:<br>>   |

## Server Metrics

|                            |  |                   |  |
|----------------------------|--|-------------------|--|
| <b>Metric Name</b>         |  | SERVER_STATISTICS |  |
| <b>Metric Type</b>         |  | TABLE             |  |
| <b>Metric Display</b>      |  | Server Statistics |  |
| <b>Collection Interval</b> |  | 15 minutes        |  |
| <b>Key Column(s)</b>       |  | 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>&gt;</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>&gt;</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>&gt;</p> |

## Reference

|                      |        |                      |  |
|----------------------|--------|----------------------|--|
| TPDEQUEUE_NUMB<br>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>&gt;</p> |
| TPENQUEUE_NUMB<br>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>&gt;</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>&gt;</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>&gt;</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>&gt;</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>&gt;</p>  |

|                                      |        |   |   |
|--------------------------------------|--------|---|---|
| ABORTED_<br>TRANSACTION_NUM<br>BER   | NUMBER | Aborted Transactions<br>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>&gt;</p>   |
| COMMITTED_<br>TRANSACTION_NUM<br>BER | NUMBER | Committed<br>Transactions Per<br>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>&gt;</p> |

## Reference

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

## Service Aggregated Metrics

|                            |                    |   |  |
|----------------------------|--------------------|---|--|
| <b>Metric Name</b>         |                    | SERVER_AGGREGATED_STATISTICS                      |  |
| <b>Metric Type</b>         |                    | TABLE   |  |
| <b>Metric Display</b>      |                    | Server Aggregated Statistics                      |  |
| <b>Collection Interval</b> |                    | 15 minutes  |  |
| <b>Key Column(s)</b>       |                    | None  |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>                              | <b>Note</b>  |
| SERVICE<br>_EXECUTION_TIME | NUMBER             | Average Service<br>Execution<br>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>&gt;</p> |
| SERVICE<br>_CPU_TIME       | NUMBER             | Average Service CPU<br>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>&gt;</p>     |

Reference

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

| SERVICE<br>_USER_FAILURE_<br>NUMBER | NUMBER | User Failures Per<br>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>&gt;</p> |
|-------------------------------------|--------|-----------------------------|--|
|-------------------------------------|--------|-----------------------------|--|

|                       |        |                     |   |
|-----------------------|--------|---------------------|---|
| REQUEST_NUMBER        | NUMBER | Requests Per Minute | <p>The number of service requests (per minute) on the Tuxedo Server target.</p> <p>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.</p> <p>Not NULL</p> <p>SUCCESS_NUMBER+<br/>SYSTEM_FAILURE_N<br/>UMBER+<br/>USER_FAILURE_NUM<br/>BER</p> <p>Threshold:</p> <p>&gt;</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>&lt;</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<br>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(*),<br>UBB Parameter            |   |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |   |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name  |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group.  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG ( 5 ). |
| AOUT                 | AOUT                        | Visible<br>Editable<br>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

|                    |          |
|--------------------|----------|
| <b>Metric Name</b> | Response |
| <b>Metric Type</b> | TABLE    |

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

## Instance Number Metrics

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

## Tuxedo Bridge

### Description

This target corresponds to a Tuxedo BRIDGE process.

### Properties

| Name                 | Display Label               | Characters                    | Description   |
|----------------------|-----------------------------|-------------------------------|---|
| Name                 | Name                        | Visible<br>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(*),<br>UBB Parameter |   |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter |   |
| LMID                 | LMID                        | Editable(*),<br>UBB Parameter | Logical machine of the Tuxedo Machine where the bridge is running.  |
| NADDR                | NADDR                       | Visible<br>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

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

## IPC Queue Metrics

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

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

## Remote Link Metrics

| <b>Metric Name</b>         |             | REMOTE_LINK_STATISTICS              |  |
|----------------------------|-------------|-------------------------------------|--|
| <b>Metric Type</b>         |             | TABLE                               |  |
| <b>Metric Display</b>      |             | Remote Link Statistics              |  |
| <b>Collection Interval</b> |             | 15 minutes                          |  |
| <b>Key Column(s)</b>       |             | 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.<br><br>This value will become to 0 at the earliest collection after the collection interval or target properties are changed.<br><br>Not NULL<br>Threshold:<br>> |

|                               |        |   |  |
|-------------------------------|--------|---|--|
| OUTBOUND_MESS<br>GE_NUMBER    | NUMBER | Outbound Network<br>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>&gt;</p>   |
| INBOUND_NETWORK_MESSAGE_SIZE  | NUMBER | Inbound Network<br>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>&gt;</p>   |
| OUTBOUND_NETWORK_MESSAGE_SIZE | NUMBER | Outbound Network<br>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>&gt;</p> |

|                                |        |                                |   |
|--------------------------------|--------|--------------------------------|---|
| PENDING_NETWORK_MESSAGE_NUMBER | NUMBER | Pending Network Messages       | The number of messages that are pending in the network to the remote Tuxedo machine.<br><br>Not NULL<br>Threshold:<br>>         |
| 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.<br><br>Not NULL<br>Threshold:<br>> |

## 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<br>Editable      | For TMS defined in GROUPS section the name is [Group Name] / [AOUT].<br>For TMS defined in RMS section, the name is [Group Name] / [AOUT] : [RMSNAME] |
| RMSName | RMS Name      | Visible<br>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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| AOUT                 | AOUT                        | Visible<br>Editable(*),<br>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

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

## XA Transaction Metrics

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

|                              |        |                                      |  |
|------------------------------|--------|--------------------------------------|--|
| ACTIVE_INSTANCE_NUMBER       | NUMBER | Active Instances                     | <p>The number of active processes.</p> <p>Not NULL</p> <p>Threshold:</p> <p>&gt;</p>   |
| 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>&gt;</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>&gt;</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>&gt;</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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY           | IPCKEY          | Editable(*),<br>UBB Parameter            |  |
| SRVGRP           | SRVGRP          | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO            | GRPNO           | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID            | SRVID           | Visible<br>Editable,<br>UBB Parameter    | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG ( 5 )</code>             |
| AOUT             | AOUT            | Visible<br>Editable,<br>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

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

## XA Transaction Metrics

|                              |                    |                                       |  |
|------------------------------|--------------------|---------------------------------------|--|
| <b>Metric Name</b>           |                    | DOMAIN_GATEWAY_TRANSACTION_STATISTICS |  |
| <b>Metric Type</b>           |                    | TABLE                                 |  |
| <b>Metric Display</b>        |                    | Domain Gateway Transaction Statistics |  |
| <b>Collection Interval</b>   |                    | 15 minutes                            |  |
| <b>Key Column(s)</b>         |                    | None                                  |  |
| <b>Column Name</b>           | <b>Column Type</b> | <b>Display Label</b>                  | <b>Note</b>  |
| 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>&gt;</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>&gt;</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>&gt;</p> |



## Remote Link Metrics

|                            |                    |                                     |   |
|----------------------------|--------------------|-------------------------------------|---|
| <b>Metric Name</b>         |                    | REMOTE_LINK_STATISTICS              |   |
| <b>Metric Type</b>         |                    | TABLE                               |   |
| <b>Metric Display</b>      |                    | Remote Link Statistics              |   |
| <b>Collection Interval</b> |                    | 15 minutes                          |   |
| <b>Key Column(s)</b>       |                    | REMOTE_DOMAIN_ID                    |   |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>                | <b>Note</b>   |
| 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<br/>  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>&gt;</p> |

## Reference

|                                      |        |   |  |
|--------------------------------------|--------|---|--|
| OUTBOUND_MESSA<br>GE_NUMBER          | NUMBER | Outbound Network<br>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>&gt;</p>     |
| INBOUND<br>_NETWORK_MESSA<br>GE_SIZE | NUMBER | Inbound<br>Network Messages<br>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>&gt;</p> |

|                                       |        |  |   |
|---------------------------------------|--------|--|---|
| OUTBOUND<br>_NETWORK_MESSA<br>GE_SIZE | NUMBER | Outbound<br>Network Messages<br>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>&gt;</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>&gt;</p>  |

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

# 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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group.   |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> .                 |
| AOUT                 | AOUT                        | Visible<br>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

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

## Gateway Metrics

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

|                               |        |   |   |
|-------------------------------|--------|---|---|
| ACTIVE_THREAD_NUMBER          | NUMBER | Active Threads                              | <p>The number of working threads in the pool.</p> <p>Not NULL</p> <p>Threshold:</p> <p>&gt;</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>&gt;</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>&gt;</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>&gt;</p> |

## Reference

|                                   |        |   |  |
|-----------------------------------|--------|---|--|
| INBOUND_ONEWAY<br>_SUCCESS_NUMBER | NUMBER | Inbound One-Way<br>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>&gt;</p> |
| INBOUND_RPC<br>_FAILURE_NUMBER    | NUMBER | Inbound RPC Failures<br>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>&gt;</p>     |
| INBOUND_RPC<br>_SUCCESS_NUMBER    | NUMBER | Inbound RPC<br>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>&gt;</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>&gt;</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>&gt;</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>&gt;</p>     |

|                                    |        |                                      |  |
|------------------------------------|--------|--------------------------------------|--|
| OUTBOUND_RPC<br>_SUCCESS_NUMBER    | NUMBER | Outbound RPC<br>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>&gt;</p> |
| INBOUND_PENDING<br>_REQUEST_NUMBER | NUMBER | Inbound Pending<br>Requests          | <p>The number of requests that are waiting for reply from Tuxedo system.</p> <p>Not NULL</p> <p>Threshold:</p> <p>&gt;</p>   |
| OUTBOUND_PENDING_REQUEST_NUMBER    | NUMBER | Outbound Pending<br>Requests         | <p>The number of requests that are waiting for the reply from outside.</p> <p>Not NULL</p> <p>Threshold:</p> <p>&gt;</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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code> .                 |
| AOUT                 | AOUT                        | Visible<br>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

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

## Workstation Listener Metrics

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

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

|                            |        |                      |   |
|----------------------------|--------|----------------------|---|
| 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>&gt;</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>&gt;</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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code>                   |
| AOUT                 | AOUT                        | Visible<br>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

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

## Jolt Listener Metrics

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



|                            |        |                      |   |
|----------------------------|--------|----------------------|---|
| 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>&gt;</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>&gt;</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>&gt;</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>&gt;</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<br>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(*),<br>UBB Parameter            |  |
| IPCKEY   | IPCKEY        | Editable(*),<br>UBB Parameter            |  |
| SRVGRP   | SRVGRP        | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO    | GRPNO         | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID    | SRVID         | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code>                   |

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

## Availability Metrics

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

## Event Statistics Metrics

|                            |  |                  |  |
|----------------------------|--|------------------|--|
| <b>Metric Name</b>         |  | EVENT_STATISTICS |  |
| <b>Metric Type</b>         |  | TABLE            |  |
| <b>Metric Display</b>      |  | Event Statistics |  |
| <b>Collection Interval</b> |  | 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>&gt;</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>&gt;</p> |

|                                |        |   |   |
|--------------------------------|--------|---|---|
| QUEUE_MESSAGE_<br>EVENT_NUMBER | NUMBER | Notified Events by<br>Queue Message Per<br>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>&gt;</p>           |
| COMMAND_LINE_E<br>VENT_NUMBER  | NUMBER | Notified Events by<br>Command Line Per<br>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>&gt;</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>&gt;</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+<br/>UNSOLICITED_MESSAGE_EVENT_NUMBER<br/>+<br/>QUEUE_MESSAGE_EVENT_NUMBER+<br/>COMMAND_LINE_EVENT_NUMBER+<br/>USERLOG_MESSAGE_EVENT_NUMBER</p> <p>Threshold:</p> <p>&gt;</p> |

## Tuxedo LMS

This target corresponds to an LMS entry defined in TUXCONFIG.

### Properties

| Name     | Display Label | Characters                               | Description  |
|----------|---------------|--|--|
| Name     | Name          | Visible,<br>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(*),<br>UBB Parameter            |  |
| IPCKEY   | IPCKEY        | Editable(*),<br>UBB Parameter            |  |
| SRVGRP   | SRVGRP        | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO    | GRPNO         | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID    | SRVID         | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG</code>                   |
| AOUT     | AOUT          | Visible<br>Editable<br>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

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



## 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<br>Editable(*)                | Qspace name   |
| QMCONFIG             | Queue space path            | Visible<br>Editable(*)                | Absolute pathname of the file or device where the application queue space is located. |
| AOUT                 | AOUT                        | Visible<br>Editable,<br>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

|                            |           |
|----------------------------|-----------|
| <b>Metric Name</b>         | Response  |
| <b>Metric Type</b>         | TABLE     |
| <b>Metric Display</b>      | Response  |
| <b>Collection Interval</b> | 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&gt;=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>&gt;</p> |

## Reference

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

|         |        |                      |  |
|---------|--------|----------------------|--|
| TQUEUES | NUMBER | Current Temp Queues  | TA_CURTMPQUEUES<br>Not NULL<br>Threshold:<br>> |
| TRANS   | NUMBER | Current Transactions | TA_CURTRANS<br>Not NULL<br>Threshold:<br>>     |

### Queue Space Peak Metrics

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

## Reference

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

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

### Queue Statistics Metrics

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

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

## 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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG(5)</code>                |
| AOUT                 | AOUT                        | Visible<br>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

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

## XA Transaction Metrics

|                            |  |   |  |
|----------------------------|--|---|--|
| <b>Metric Name</b>         |  | SNA_DOMAIN_GATEWAY_TRANSACTION_STATISTICS |  |
| <b>Metric Type</b>         |  | TABLE                                     |  |
| <b>Metric Display</b>      |  | SNA Domain Gateway Transaction Statistics |  |
| <b>Collection Interval</b> |  | 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>&gt;</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>&gt;</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>&gt;</p> |

## Remote Link Metrics

|                            |                    |                                    |  |
|----------------------------|--------------------|------------------------------------|--|
| <b>Metric Name</b>         |                    | REMOTE_LINK_STATISTICS             |  |
| <b>Metric Type</b>         |                    | TABLE                              |  |
| <b>Metric Display</b>      |                    | Remote Link Statistics             |  |
| <b>Collection Interval</b> |                    | 15 minutes                         |  |
| <b>Key Column(s)</b>       |                    | REMOTE_DOMAIN_ID                   |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>               | <b>Note</b>  |
| 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>&gt;</p> |

## Reference

|                                       |        |   |   |
|---------------------------------------|--------|---|---|
| OUTBOUND_MESSA<br>GE_NUMBER           | NUMBER | Outbound Network<br>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>&gt;</p>        |
| INBOUND<br>_NETWORK_MESSA<br>GE_SIZE  | NUMBER | Inbound Network<br>Message Bytes Per<br>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>&gt;</p> |
| OUTBOUND<br>_NETWORK_MESSA<br>GE_SIZE | NUMBER | Outbound Network<br>Message Bytes Per<br>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>&gt;</p>    |

|                                    |        |                               |  |
|------------------------------------|--------|-------------------------------|--|
| PENDING_NETWORK_MESSAGE_NUMBER     | NUMBER | Pending Network Message       | The number of messages that are pending in the network to the remote Mainframe domain.<br>Not NULL<br>Threshold:<br>>            |
| 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.<br>Not NULL<br>Threshold:<br>> |
| OUTSTANDING_NETWORK_REQUEST_NUMBER | NUMBER | Outstanding Network Request   | The number of requests that are waiting for reply from the remote Mainframe domain.<br>Not NULL<br>Threshold:<br>>               |

## TMA TCP Gateway

This target corresponds to a GWIDOMAIN entry defined in TUXCONFIG.

### Properties

| Name | Display Label | Characters          | Description                     |
|------|---------------|---------------------|---------------------------------|
| Name | Name          | Visible<br>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(*),<br>UBB Parameter            |  |
| IPCKEY               | IPCKEY                      | Editable(*),<br>UBB Parameter            |  |
| SRVGRP               | SRVGRP                      | Visible<br>Editable(*),<br>UBB Parameter | Group name   |
| GRPNO                | GRPNO                       | UBB Parameter                            | GRPNO parameter for the group  |
| SRVID                | SRVID                       | Visible<br>Editable(*),<br>UBB Parameter | SRVID parameter for the server entry defined in <code>SERVERS</code> section of <code>UBBCONFIG(5)</code>                |
| AOUT                 | AOUT                        | Visible<br>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

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

## XA Transaction Metrics

|                            |  |   |  |
|----------------------------|--|---|--|
| <b>Metric Name</b>         |  | TCP_DOMAIN_GATEWAY_TRANSACTION_STATISTICS |  |
| <b>Metric Type</b>         |  | TABLE                                     |  |
| <b>Metric Display</b>      |  | TCP Domain Gateway Transaction Statistics |  |
| <b>Key Column(s)</b>       |  | None                                      |  |
| <b>Collection Interval</b> |  | 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>&gt;</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>&gt;</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>&gt;</p> |

## Remote Link Metrics

|                            |                    |                                    |  |
|----------------------------|--------------------|------------------------------------|--|
| <b>Metric Name</b>         |                    | REMOTE_LINK_STSTISTICS             |  |
| <b>Metric Type</b>         |                    | TABLE                              |  |
| <b>Metric Display</b>      |                    | Remote Link Statistics             |  |
| <b>Collection Interval</b> |                    | 15 minutes                         |  |
| <b>Key Column(s)</b>       |                    | REMOTE_DOMAIN_ID                   |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>               | <b>Note</b>  |
| 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>&gt;</p> |

|                                       |        |   |   |
|---------------------------------------|--------|---|---|
| OUTBOUND_MESSA<br>GE_NUMBER           | NUMBER | Outbound Network<br>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>&gt;</p>       |
| INBOUND<br>_NETWORK_MESSA<br>GE_SIZE  | NUMBER | Inbound<br>Network Message<br>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>&gt;</p> |
| OUTBOUND<br>_NETWORK_MESSA<br>GE_SIZE | NUMBER | Outbound<br>Network Message<br>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>&gt;</p>    |

|                                    |        |                               |  |
|------------------------------------|--------|-------------------------------|--|
| PENDING_NETWORK_MESSAGE_NUMBER     | NUMBER | Pending Network Message       | The number of messages that are pending in the network to the remote Mainframe domain.<br>Not NULL<br>Threshold:<br>>            |
| 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.<br>Not NULL<br>Threshold:<br>> |
| OUTSTANDING_NETWORK_REQUEST_NUMBER | NUMBER | Outstanding Network Request   | The number of requests that are waiting for the reply from the remote Mainframe domain.<br>Not NULL<br>Threshold:<br>>           |

## 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<br>Editable | CRM/[Host]:[Port] |
| Host | Host          | Editable            | CRM address.      |
| Port | Port          | Editable            | CRM host.         |
| AOUT | AOUT          | Visible<br>Editable | Process name      |

## Availability Metrics

| <b>Metric Name</b>         |             | Response      |  |
|----------------------------|-------------|---------------|--|
| <b>Metric Type</b>         |             | TABLE         |  |
| <b>Metric Display</b>      |             | Response      |  |
| <b>Collection Interval</b> |             | 1 minute      |  |
| <b>Key Column(s)</b>       |             | 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&gt;=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

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

# 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<br>Editable(*) | Name of the region. When first discovery, the CICS Region name will be [Domain Name]/CICS_Region<br><br>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>&gt;</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>&gt;</p> |
| TRANSACTION_NUMBER         | NUMBER | Transactions Per Minute              | <p>Not NULL</p> <p>Value:</p> <p>transaction_success_number+<br/>transaction_failure_number</p> <p>Threshold:</p> <p>&gt;</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>&gt;</p>  |

|                            |        |                                 |  |
|----------------------------|--------|---------------------------------|--|
| TRANSACTION_FAILURE_NUMBER | NUMBER | Transaction Failures Per Minute | Not NULL<br>Value:<br>Sum(service_statistics.<br>system_failure_number<br>+ service_statistics<br>user_failure_number)<br>Threshold:<br>>                                |
| FAILED_TRANSACTION_RATIO   | NUMBER | Failed Transaction ratio(%)     | The value will be<br>NULL if no request is<br>served during the<br>interval.<br>Value:<br>(100*<br>transaction_failure_number/<br>transaction_number)<br>Threshold:<br>> |

## 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<br>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.

| <b>Metric Name</b>         |             | ART_CICS_TSANSACTION_STATISTICS |   |
|----------------------------|-------------|---------------------------------|---|
| <b>Metric Type</b>         |             | TABLE<br>Repository Side        |   |
| <b>Metric Display</b>      |             | ART CICS Transaction Statistics |   |
| <b>Collection interval</b> |             | 15 minutes                      |   |
| <b>Key Column(s)</b>       |             | 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:<br/>AVG(service_statistics.avg_execution_time)</p> <p>Threshold:<br/>&gt;</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:<br/>AVG(service_statistics.CPU_time)</p> <p>Threshold:<br/>&gt;</p>           |
| SUCCESS_NUMBER        | NUMBER | Successes Per Minute                 | <p>Not NULL</p> <p>Value:<br/>Sum(service_statistics.success_number)</p> <p>Threshold:<br/>&gt;</p>  |
| SYSTEM_FAILURE_NUMBER | NUMBER | System Failures Per Minute           | <p>Not NULL</p> <p>Value:<br/>Sum(service_statistics.system_failure_number)</p> <p>Threshold:<br/>&gt;</p>   |

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

## 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<br>Editable(*), UBB Parameter | group name  |
| GRPNO     | GRPNO         | UBB Parameter                         | GRPNO parameter for the group   |
| SRVID     | SRVID         | Visible<br>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

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

## ART TSQ Metrics

|                       |                    |
|-----------------------|--------------------|
| <b>Metric Name</b>    | ARTTSQ_STATISTICS  |
| <b>Metric Type</b>    | TABLE              |
| <b>Metric Display</b> | ART TSQ Statistics |

|                            |                    |                              |  |
|----------------------------|--------------------|------------------------------|--|
| <b>Collection Interval</b> | 15 minutes         |                              |  |
| <b>Key Column(s)</b>       | TSQUEUE_NAME       |                              |  |
| <b>Column Name</b>         | <b>Column type</b> | <b>Display Label</b>         | <b>Note</b>  |
| 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<br>Editable(*), UBB Parameter | group name  |
| GRPNO    | GRPNO         | UBB Parameter                         | GRPNO parameter for the group   |
| SRVID    | SRVID         | Visible<br>Editable(*), UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG                                  |
| AOUT     | AOUT          | Visible<br>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

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

## ART TDQ Metrics

|                            |                    |                            |  |
|----------------------------|--------------------|----------------------------|--|
| <b>Metric Name</b>         | ARTTDQ_STATISTICS  |                            |  |
| <b>Metric Type</b>         | TABLE              |                            |  |
| <b>Metric Display</b>      | ART TDQ Statistics |                            |  |
| <b>Collection Interval</b> | 15 minutes         |                            |  |
| <b>Key Column(s)</b>       | TDQUEUE_NAME       |                            |  |
| <b>Column Name</b>         | <b>Column Type</b> | <b>Display Label</b>       | <b>Note</b>  |
| 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.<br>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    |

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

## Job Aggregated Statistics

|                            |                           |                                      |             |
|----------------------------|---------------------------|--------------------------------------|-------------|
| <b>Metric Name</b>         | JOB_AGGREGATED_STATISTICS |                                      |             |
| <b>Metric Type</b>         | TABLE                     |                                      |             |
| <b>Metric Display</b>      | Job Aggregated Statistics |                                      |             |
| <b>Collection Interval</b> | 15 minutes                |                                      |             |
| <b>Key Column(s)</b>       |                           |                                      |             |
| <b>Column Name</b>         | <b>Column type</b>        | <b>Display Label</b>                 | <b>Note</b> |
| 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 |   |



| <b>Name</b>          | <b>Display Label</b> | <b>Characters</b>                       | <b>Description</b>  |
|----------------------|----------------------|---|---|
| SRVGRP               | Group Name           | Editable(*), Visible<br>UBB Parameter   | Group name  |
| GRPNO                | Group Number         | UBB Parameter                           | Group Number for the group  |
| SRVID                | SRVID                | Visible<br>Editable(*)<br>UBB Parameter | SRVID parameter for the server entry defined in SERVERS section of UBBCONFIG(5)       |
| Queue server name    | AOUT                 | Visible<br>Editable                     | OTMQ server name  |
| Qspace name          | Queue Space Name     | Visible<br>Editable(*)                  | OTMQ Qspace name  |
| QMCONFIG             | Queue space path     | Visible<br>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

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

## Queue Space Statistics Metrics

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

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

## Reference

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

## Queue Space Peak Metrics

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

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

## Reference

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

## Queue Statistics Metrics

|                            |                         |                      |                  |
|----------------------------|-------------------------|----------------------|------------------|
| <b>Metric Name</b>         | QUEUE_STATISTICS        |                      |                  |
| <b>Metric Type</b>         | TABLE                   |                      |                  |
| <b>Metric Display</b>      | Queue Statistics        |                      |                  |
| <b>Collection Interval</b> | 15 minutes              |                      |                  |
| <b>Key Column(s)</b>       | QUEUE_NAME, QSPACE_NAME |                      |                  |
| <b>Column Name</b>         | <b>Column type</b>      | <b>Display Label</b> | <b>Note</b>      |
| 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<br>Not NULL<br>Threshold:<br>>                          |
| NONPERSIST_MEM | NUMBER | Memory Bytes Consumed by Non-persistent Messages | TA_CURNONPERSIS<br>TBYTES<br>Not NULL<br>Threshold:<br>>             |
| SENT_MSG       | NUMBER | Send Messages Per Minute                         | TA_MSGSENT<br>Not NULL<br>Threshold:<br>>                            |
| RECV_MSG       | NUMBER | Receive Messages Per Minute                      | TA_MSGRCV<br>Not NULL<br>Threshold:<br>>                             |
| PENDING_MSG    | NUMBER | Pending Messages                                 | TA_CURMSG+TA_C<br>URNONPERSISTMS<br>G<br>Not NULL<br>Threshold:<br>> |

## 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

|                       |                     |                    |                    |               |
|-----------------------|---------------------|--------------------|--------------------|---------------|
| <b>TARGET_TYPE</b>    |                     | tuxedo_machine     |                    |               |
| <b>HISTORY_IGNORE</b> |                     | N                  |                    |               |
| <b>TABLE NAME</b>     |                     | TUXEDO_ECM_MACHINE |                    |               |
| <b>UI_IGNORE</b>      |                     | N                  |                    |               |
| <b>COMPARE_IGNORE</b> |                     | N                  |                    |               |
| <b>SINGLE_ROW</b>     |                     | N                  |                    |               |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b> | <b>TYPE</b>        | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> |
| 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<br>TS           | MAXWSCLIEN<br>TS           | NUMBER | 10   | N |
| MAXACLCACH<br>E            | MAXACLCACH<br>E            | NUMBER | 10   | N |
| MAXCONV                    | MAXCONV                    | NUMBER | 10   | N |
| MAXPENDING<br>BYTES        | MAXPENDING<br>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<br>L_NAME     | SEC_PRINCIPA<br>L_NAME     | STRING | 512  | N |
| SEC_PRINCIPA<br>L_LOCATION | SEC_PRINCIPA<br>L_LOCATION | STRING | 1024 | N |
| SEC_PRINCIPA<br>L_PASSVAR  | SEC_PRINCIPA<br>L_PASSVAR  | STRING | 64   | N |
| SIGNATURE_R<br>EQUIRED     | SIGNATURE_R<br>EQUIRED     | STRING | 64   | N |

|                         |                         |        |    |   |
|-------------------------|-------------------------|--------|----|---|
| ENCRYPTION_<br>REQUIRED | ENCRYPTION_<br>REQUIRED | STRING | 64 | N |
| SICACHEENTRI<br>ESMAX   | SICACHEENTRI<br>ESMAX   | STRING | 64 | N |

## Tuxedo Group

|                            |                            |                   |                    |               |
|----------------------------|----------------------------|-------------------|--------------------|---------------|
| <b>TARGET_TYPE</b>         |                            | tuxedo_group      |                    |               |
| <b>UI_IGNORE</b>           |                            | N                 |                    |               |
| <b>HISTORY_IGNORE</b>      |                            | N                 |                    |               |
| <b>COMPARE_IGNORE</b>      |                            | N                 |                    |               |
| <b>TABLE NAME</b>          |                            | TUXEDO_ECM_GROUPS |                    |               |
| <b>SINGLE_ROW</b>          |                            | N                 |                    |               |
| <b>COLUMN NAME</b>         | <b>DISPLAY NAME</b>        | <b>TYPE</b>       | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> |
| 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_<br>NAME     | SEC_PRINCIPAL_<br>NAME     | STRING            | 512                | N             |
| SEC_PRINCIPAL_<br>LOCATION | SEC_PRINCIPAL_<br>LOCATION | STRING            | 1024               | N             |
| SEC_PRINCIPAL_<br>PASSVAR  | SEC_PRINCIPAL_<br>PASSVAR  | STRING            | 64                 | N             |

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

## Tuxedo Server

|                       |                     |                    |                    |               |
|-----------------------|---------------------|--------------------|--------------------|---------------|
| <b>TARGET_TYPE</b>    |                     | tuxedo_server      |                    |               |
| <b>UI_IGNORE</b>      |                     | N                  |                    |               |
| <b>HISTORY_IGNORE</b> |                     | N                  |                    |               |
| <b>COMPARE_IGNORE</b> |                     | N                  |                    |               |
| <b>TABLE NAME</b>     |                     | TUXEDO_ECM_SERVERS |                    |               |
| <b>SINGLE_ROW</b>     |                     | N                  |                    |               |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b> | <b>TYPE</b>        | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> |
| 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

|                       |                     |                   |                    |               |
|-----------------------|---------------------|-------------------|--------------------|---------------|
| <b>TARGET_TYPE</b>    |                     | tuxedo_bridge     |                    |               |
| <b>UI_IGNORE</b>      |                     | N                 |                    |               |
| <b>HISTORY_IGNORE</b> |                     | N                 |                    |               |
| <b>COMPARE_IGNORE</b> |                     | N                 |                    |               |
| <b>TABLE NAME</b>     |                     | TUXEDO_ECM_BRIDGE |                    |               |
| <b>SINGLE_ROW</b>     |                     | N                 |                    |               |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b> | <b>TYPE</b>       | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> |
| 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<br>BITS    | MINENCRYPT<br>BITS  | STRING            | 10                 | N             |
| MAXENCRYPT<br>BITS    | MAXENCRYPT<br>BITS  | STRING            | 10                 | N             |

## Tuxedo TMS

|                       |  |            |  |  |
|-----------------------|--|------------|--|--|
| <b>TARGET_TYPE</b>    |  | tuxedo_TMS |  |  |
| <b>UI_IGNORE</b>      |  | N          |  |  |
| <b>HISTORY_IGNORE</b> |  | N          |  |  |



|                       |                     |                |                    |               |
|-----------------------|---------------------|----------------|--------------------|---------------|
| <b>COMPARE_IGNORE</b> |                     | N              |                    |               |
| <b>TABLE NAME</b>     |                     | TUXEDO_ECM_TMS |                    |               |
| <b>SINGLE_ROW</b>     |                     | N              |                    |               |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b> | <b>TYPE</b>    | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> |
| 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

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

| <b>MIB CLASS</b>   |                      | <b>T_APPQSPACE</b> |                    |               |                  |
|--------------------|----------------------|--------------------|--------------------|---------------|------------------|
| <b>COLUMN NAME</b> | <b>DISPLAY NAME</b>  | <b>TYPE</b>        | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> | <b>MIB FIELD</b> |
| 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

|                       |                              |             |                    |               |                  |
|-----------------------|------------------------------|-------------|--------------------|---------------|------------------|
| <b>TARGET_TYPE</b>    | tuxedo_queue_server          |             |                    |               |                  |
| <b>UI_NAME</b>        | Tuxedo /Q QUEUE              |             |                    |               |                  |
| <b>UI_IGNORE</b>      | N                            |             |                    |               |                  |
| <b>HISTORY_IGNORE</b> | N                            |             |                    |               |                  |
| <b>COMPARE_IGNORE</b> | N                            |             |                    |               |                  |
| <b>TABLE NAME</b>     | TUXEDO_ECM_SLASH_QUEUE_QUEUE |             |                    |               |                  |
| <b>SINGLE_ROW</b>     | N                            |             |                    |               |                  |
| <b>MIB CLASS</b>      | T_APPQ                       |             |                    |               |                  |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b>          | <b>TYPE</b> | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> | <b>MIB FIELD</b> |
| 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

| <b>TARGET_TYPE</b>    | tuxedo_OTMQ_server      |        |             |        |                  |
|-----------------------|-------------------------|--------|-------------|--------|------------------|
| <b>UI_NAME</b>        | Tuxedo OTMQ QSPACE      |        |             |        |                  |
| <b>UI_IGNORE</b>      | N                       |        |             |        |                  |
| <b>HISTORY_IGNORE</b> | N                       |        |             |        |                  |
| <b>COMPARE_IGNORE</b> | N                       |        |             |        |                  |
| <b>TABLE NAME</b>     | TUXEDO_ECM_OTMQ_QSPACE  |        |             |        |                  |
| <b>SINGLE_ROW</b>     | Y                       |        |             |        |                  |
| <b>MIB CLASS</b>      | 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

| <b>TARGET_TYPE</b>    | tuxedo_OTMQ_server    |             |                    |               |                  |
|-----------------------|-----------------------|-------------|--------------------|---------------|------------------|
| <b>UI_NAME</b>        | Tuxedo OTMQ QUEUE     |             |                    |               |                  |
| <b>UI_IGNORE</b>      | N                     |             |                    |               |                  |
| <b>HISTORY_IGNORE</b> | N                     |             |                    |               |                  |
| <b>COMPARE_IGNORE</b> | N                     |             |                    |               |                  |
| <b>TABLE NAME</b>     | TUXEDO_ECM_OTMQ_QUEUE |             |                    |               |                  |
| <b>SINGLE_ROW</b>     | N                     |             |                    |               |                  |
| <b>MIB CLASS</b>      | T_OTMQ                |             |                    |               |                  |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b>   | <b>TYPE</b> | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> | <b>MIB FIELD</b> |
| 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

| <b>TARGET_TYPE</b>    | tuxedo_OTMQ_server      |             |                    |               |                   |
|-----------------------|-------------------------|-------------|--------------------|---------------|-------------------|
| <b>UI_NAME</b>        | Tuxedo OTMQ QUEUE ALIAS |             |                    |               |                   |
| <b>UI_IGNORE</b>      | N                       |             |                    |               |                   |
| <b>HISTORY_IGNORE</b> | N                       |             |                    |               |                   |
| <b>COMPARE_IGNORE</b> | N                       |             |                    |               |                   |
| <b>TABLE NAME</b>     | TUXEDO_ECM_OTMQ_ALIAS   |             |                    |               |                   |
| <b>SINGLE_ROW</b>     | N                       |             |                    |               |                   |
| <b>MIB CLASS</b>      | T_OTMQNAMING            |             |                    |               |                   |
| <b>COLUMN NAME</b>    | <b>DISPLAY NAME</b>     | <b>TYPE</b> | <b>TYPE_FORMAT</b> | <b>IS_KEY</b> | <b>MIB FIELD</b>  |
| 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">

```

```

        <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>
<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"/>
```



```

        <xs:element name="SICACHEENTRIESMAX" type="sicachetype" minOccurs="0"
            maxOccurs="1"/>
    </xs:all>

    <xs:attribute name="AOUT" type="stringtype" use="required"/>
    <xs:attribute name="SRVID" type="srvidtype" use="required"/>
</xs:complexType>

<xs:complexType name="rmssection">
    <xs:all>

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

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

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

        <xs:element name="TMSCOUNT" type="tmscounttype" minOccurs="0"
            maxOccurs="1"/>

        <xs:element name="AUTO" type="booleantype" minOccurs="0"
maxOccurs="1"/>
    </xs:all>

    <xs:attribute name="RMSNAME" type="stringtype" use="required"/>
    <xs:attribute name="RMID" type="rmidtype" use="required"/>
</xs:complexType>

<xs:complexType name="servicesections">
    <xs:sequence>

        <xs:element name="ServiceSection" type="servicesection" minOccurs="1"
            maxOccurs="unbounded"/>

    </xs:sequence>
</xs:complexType>

```

```
<xs:complexType name="serversections">
  <xs:sequence>
    <xs:element name="ServerSection" type="serversection" minOccurs="1"
      maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="rmssections">
  <xs:sequence>
    <xs:element name="RmsSection" type="rmssection" minOccurs="1"
      maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="groupsection">
  <xs:all>
    <xs:element name="ENVFILE" type="stringtype" minOccurs="0"
maxOccurs="1"/>
    <xs:element name="TMSNAME" type="stringtype" minOccurs="0"
maxOccurs="1"/>
    <xs:element name="MRM" type="booleanType" minOccurs="0"
maxOccurs="1"/>
    <xs:element name="SIGNATURE_REQUIRED" type="booleanType" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="ENCRYPTION_REQUIRED" type="booleanType"
minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="OPENINFO" type="openinfotype" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="CLOSEINFO" type="openinfotype" minOccurs="0"
```

```

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

---