Oracle® Tuxedo System and Applications Monitor Plus

Reference Guide

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Contents

TSAM Plus Database Metadata

TSAM Plus Commands Reference

The Oracle TSAM Plus Reference Guide describes system processes and commands delivered with the Oracle TSAM Plus software.

Table 1 lists the Oracle TSAM Plus system processes and commands.

Table 1 Oracle TSAM Plus System Processes and Commands

Name	Description
LMS (Local Monitor Server)	The Oracle TSAM Plus Agent Local Monitor Server
tpgetcallinfo	Routine for retrieving call path message monitoring attributes

LMS (Local Monitor Server)

Name

LMS—The Oracle TSAM Plus Agent Local Monitor Server

Synopsis

```
LMS SRVGRP="identifier" SRVID="number" [other_parms]

CLOPT= "-A -- -l
tsam-manager-dataserver-url[,tsam-manager-backupdataserver-url] [-t
heartbeat-interval] [-n fetch_coll_capacity] [-m metrics-shm-size]"
```

Description

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

- Acts as the local Tuxedo domain data collection proxy

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

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

- Other management information exchanges between the LMS and Oracle TSAM Plus manager.

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

Options

-l

Mandatory parameter. It is followed by one or two addresses of the Oracle TSAM Plus manager data servers. The host address and port number are set based on your Oracle TSAM Plus manager installation. The format is:

`host:port/tsam`

- `host` is the host DNS name or IP address of the box where TSAM Plus manager is installed.

- `port` is the TCP port number.

- `tsam` is the Oracle TSAM Plus manager reserved path name.

If specifying two TSAM Plus manager addresses, use a comma (,) separator.
In the event that two addresses are specified, TSAM Plus agent always connects the first address first, and then tries to connect the backup address if the first address is not reachable.
Whenever the connection is broken, TSAM Plus agent always tries to connect first address first.

Note: Configuring two TSAM Plus manager addresses has been supported since TSAM Plus 12.1.1.1.

```
-m
```

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

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

```
-r
```

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

```
-t
```

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

```
-n
```

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

Example(s)

Listing 1-1 shows the LMS in UBBCONFIG.

Listing 1-1   LMS in UBBCONFIG

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

...
```

tpgetcallinfo

Name

tpgetcallinfo()— Routine for retrieving call path message monitoring attributes.

Synopsis

```
int tpgetcallinfo(const char *msg, FBFR32 **obuf, long flags)
```

Description

tpgetcallinfo() is used for call path monitoring only. It supports the following parameters:

msg

> The typed buffer use for measurement.

obuf

> The FML32 buffer used to contain the fields.

flags

> Reserved for future use.

tpgetcallinfo()retrieves the message monitoring attributes when call path monitoring is enabled.

tpgetcallinfo() can be used in different scenarios to accomplish different functions. Typical usage is as follows:

- Application server calls tpgetcallinfo() to check the requested message monitoring attributes. It can provide the following information:

    - Correlation ID of the request. It is generated by the caller

    - Begins time stamping when the monitoring initiator starts the call

    - Last stop time stamp on the call path tree of the monitored request. Usually, it is used to measure the process requested message waiting time for a service

    - Workstation client address if the request is from a Tuxedo workstation client

- The monitoring initiator calls tpgetcallinfo() to get the end to the monitored call end time.

    Note: tpgetcallinfo() can be called at any time for a reply buffer after a reply is received. This is especially useful with tpacall/tpgetrply.

Table 2 lists the FML monitor metrics field names.

Table 2 Monitor Initiator Field Names

Field Name	Type	Description	Service	Monitoring Initiator
TA_MONCORRID	string	The monitored call correlation ID. It is a critical call path monitoring metric.	Y	Y
TA_MONLASTTIMESEC	long	Timestamp for the last stop on the call path tree in seconds.	Y	Y
TA_MONLASTTIMEUSEC	long	Timestamp of last stop on the call path tree in microseconds.	Y	Y
TA_MONSTARTTTIMESEC	long	Timestamp when the monitoring initiator starts the call in seconds.	Y	Y
TA_MONSTARTTIMEUSEC	long	Timestamp of the monitoring initiator starts the call in microseconds.	Y	Y
TA_MONCLTADDR	string	The workstation client address	Y	N
TA_MONTOTALTIME	long	The end-to-end time used for a monitored call in milliseconds.	N	Y
TA_ECID	string	Execution context ID	Y	Y

Return Values

Upon successfully getting a FML32 buffer containing the monitoring attributes, returns 0.

Upon failure, tpgetcallinfo() returns -1 and sets tperrno to indicate the error condition.

Errors

Upon failure, tpgetcallinfo() sets tperrno to one of the following values,

[TPEINVAL]
Invalid arguments were given (for example, msg is NULL or obuf is not a valid FML32 buffer)

[TPESYSTEM]
The message input does not contain monitoring attributes. Usually this is because the call path monitoring is not turned on for the message.

```
[TPEOS]
        An operating system error has occurred.
```

Example(s)

Listing 1-1 provides a service-side `tpgetcallinfo` example.

Listing 1-1 Service-Side tpgetcallinfo Example

```c
#include <stdio.h>
#include <atmi.h>
#include <userlog.h>
#include <fml32.h>
#include <tpadm.h>
#if defined(__STDC__) || defined(__cplusplus)
tpsvrinit(int argc, char *argv[])
#else
tpsvrinit(argc, argv)
int argc;
char **argv;
#endif
{

        /* tpsvrinit logic */
#ifdef __cplusplus
extern "C"
#endif
void
#if defined(__STDC__) || defined(__cplusplus)
APPSVC(TPSVCINFO *rqst)
#else
TOUPPER(rqst)
TPSVCINFO *rqst;
#endif
{
        FBFR32 *metainfo;
        int len = 0;
        /* Allocate the metainfo space */
```

```
        metainfo = tpalloc("FML32", NULL, 1024);
        if (metainfo == NULL ) {
                userlog("Memory allocation failed");
                tpreturn(TPFAIE, 0, 0, 0);
        }
        /* Get the monitoring attributes*/
        if ( tpgetcallinfo(rqst->data, &metainfo, 0) == 0 )
        {
                char *corrid;
                long laststopsec, starttimesec;
                if ((corrid = Ffind32(metainfo, TA_MONCORRID, 0, &len) ) {
                        userlog("Correlation ID = %s", corrid);
                }
                len = sizeof(starttimesec);
                if (( Fget32(metainfo, TA_MONSTARTTIMESEC, &starttimesec,
&len) == 0) {
                        userlog("Message beginning time = %ld", starttimesec);

                }
}
                len = sizeof(lasttimesec);
        if (( Fget32(metainfo, TA_MONLASTTIMESEC, &lasttimesec, &len)  == 0)
{
                userlog("Message entering my queue time = %ld", lasttimesec);

        }
        }
        tpfree(metainfo);
        /* rest of service processment */
        ......
}
```

TSAM Plus Accounting and Chargeback

This chapter contains the following sections:

- Accounting Information Output

- Accounting Information Analyzing

- Known Issues

Accounting Information Output

Prerequisite

Before you can use this feature, make sure TSAM Plus agent is installed and TSAM Plus plug-in is enabled.

Configuration

A new option, `-a`, is added to `servopts(5)` for providing more various accounting information output fields:

`-a FILENAME[[$FIELD]...]`

If `-a` option is set, the Tuxedo server prints accounting information into the file specified by `FILENAME`.

The accounting file is generated daily with a file name in the format of `[FILENAME].mmddyy`.

The fields that can be specified for `-a` option are as follows:

- `DID`: Indicates the Tuxedo Domain ID of the server process.

- `LMID`: Indicates the `LMID` of the server process.

- `GRPID`: Indicates the Tuxedo Group ID of the server process.

- `GRPNAME`: Indicates the Tuxedo Group name of the server process.

- `SID`: Indicates the Tuxedo Server ID of the server process.

- `PID`: Indicates the process ID of the Tuxedo server process.

- `PNAME`: Indicates the process name of the Tuxedo server process.

- `SVC`: Indicates the name of the service being invoked. It always appears in the output fields when "`-a`" is specified.

- `GID`: Indicates the Tuxedo user group invoking the service.

- `UID`: Indicates the Tuxedo user ID invoking the service.

- `CLIENT`: Indicates the Tuxedo client invoking the service.

- `STIME`: Indicates the time entering the service routing. The output of this field is in the format of "`tv_sec/tv_usec`", where two values are expressed as seconds and microseconds since 00:00 Coordinated Universal Time (UTC), January 1, 1970 respectively. It always appears in the output fields when "`-a`" is specified.

- `ETIME`: Indicates the time leaving the service routing. The output of this field is in the format of "`tv_sec/tv_usec`", where two values are expressed as seconds and microseconds since 00:00 Coordinated Universal Time (UTC), January 1, 1970 respectively. It always appears in the output fields when "`-a`" is specified.

- `TIME`: Indicates the total CPU time (in microsecond) consumed by the service call.

- `SYSTIME`: Indicates the System CPU time (in microsecond) consumed by the service call.

- `USRTIME`: Indicates the User CPU time (in microsecond) consumed by the service call.

- `ERRNO`: Indicates the `ERRNO` returned to the service invoker.

- `URCODE`: Indicates the `URCODE` returned to the service invoker.

- `SIZE`: Indicates the size of the request message (in byte).

- `WTIME`: Indicates the waiting time of the request message in a queue (in microsecond).

- `ALL`: Indicates all fields above.

If no filed is specified for "`-a`" option, these fields are included in sequence by default: `UID`, `SVC`, `STIME`, `ETIME`, `SYSTIME`, `USRTIME`.

If a duplicate field name is specified, it is ignored and a warning message is printed in `ULOG`: "`ERROR: duplicate field xxx for -a option`".

If an invalid field is specified, it is ignored and an error message is printed in `ULOG` "`ERROR: xxx is not a valid field for -a option`".

The fields separated by TAB character are listed in the first line of a new accounting file. Following is a sample:

```
#UID    SVC     STIME   ETIME   SYSTIME USRTIME
```

Subsequently a line is printed for every service call in the same sequence of the field names and values are separated by a TAB character as well. If a field value is not available, it will be left empty.

Note:

- A Log file cannot be re-created if it has been deleted when Tuxedo is running.

- It is recommended you install the Tuxedo 11gR1PS1 RP043(or newer), otherwise, an error message appears: "`illegal option – a`".

- If multiple server instances output accounting information to the same file, the same fields in the same sequence must be specified for all relevant servers, otherwise `accrpt` cannot work.

- The services in system server, such as `BBL`, `GWTDOMAIN`, `TMS`, etc. or the system services with the name starting with '`.`' cannot generate accounting records. The following Oracle Tuxedo Application Runtime for CICS servers are supported:

  – `ARTATR1`

  – `ARTATRN`

  – `ARTCNX`

  – `ARTDPL`

  – `ARTSTR1`

  – `ARTSTRN`

  – `ARTTDQ`

  – `ARTTSQ`

- A multithread server (built with "`-t`" option) reports `no TIME`, `SYSTIME` or `USRTIME`.

- A server with the "`NONE`" or "`APP_PW`" value of the `SECURITY` parameter in `TUXCONFIG` file reports `no GID`, `UID` or `CLIENT`.

Samples

```
CLOPT="-A -a account_file$SVC$GID$UID$TIME$SIZE --"

CLOPT="-A -a account_file$ALL --"

CLOPT="-A -a account_file --"
```

Accounting Information Analyzing

You can use a new tool `accrpt` to analyze and aggregate the content of accounting file.

If an accounting file is specified, `accrpt` analyzes and aggregates the file content and print the aggregated information into `STDOUT`.

```
accrpt [-k FIELD[,FIELD]...]  [-t
{MINUTE|5MINUTES|10MINUTES|15MINUTES|HOUR|DAY}] [-o FIELD[,FIELD]...] [-i]
[FILE(s)]
```

Configuration

-k option

It indicates the key fields separated by ',' . The following fields can be specified:

- `DID`: Indicates the Tuxedo Domain ID of the server process.

- `LMID`: Indicates the `LMID` of the server process.

- `GRPID`: Indicates the Tuxedo Group ID of the server process.

- `GRPNAME`: Indicates the Tuxedo Group name of the server process.

- `SID`: Indicates the Tuxedo Server ID of the server process.

- `PID`: Indicates the process ID of the Tuxedo server process.

- `PNAME`: Indicates the process name of the Tuxedo server process.

- `SVC`: Indicates the name of the service being invoked.

- `GID`: Indicates the Tuxedo user group invoking the service.

- `UID`: Indicates the ID of the Tuxedo user invoking the service.

- `CLIENT`: Indicates the Tuxedo client invoking the service.

If this option is not specified, the `SVC` field is specified by default. If a field is specified but its value is not available, the field will be left empty in the output result.

-t option

It indicates the time window to aggregate the accounting information. If it is not specified, the accounting information is aggregated in hour by default.

-o option

It indicates the measurement fields that are outputted for accounting and chargeback purposes. Fields are separated by ' , '. The following fields can be specified in the list:

- `TIMES`: Indicates the total invoke times.

- `SUCC`: Indicates the invoke times for returning success.

- `APPFAIL`: Indicates the invoke times for returning application failure.

- `SYSFAIL`: Indicates the invoke times for returning system failure.

- `ELPTIME`: Indicates the total elapse time (in millisecond).

- `TIME`: Indicates the total CPU time (in millisecond).

- `SYSTIME`: Indicates the total System CPU time (in millisecond).

- `USRTIME`: Indicates the total User CPU time (in millisecond).

- `SIZE`: Indicates the total message size (in kilobytes) of the request message.

- `WTIME`: Indicates the average waiting time of the request message in a queue (in microsecond).

By default, fields `TIMES`, `ELPTIME`, `SYSTIME`, and `USRTIME` are selected as measurement fields.

-i option

If this option is specified, `accrpt` ignores the line of accounting information where any empty key field is included.

File(s)

Specifies accounting files for analyzing. If no file is specified, `accrpt` reads input from STDIN.

Output

`accrpt` analyzes raw accounting information and outputs the aggregated accounting information into STDOUT. Three groups of fields are outputted in sequence:

- Implicit fields: include STIME and ETIME of the time window. They are always printed as the first and second fields.

- Key field: All key fields specified by −k option.

- Measurement fields: all fields specified by −o option.

`accrpt` prints all fields in one line prefixed # character firstly and all accounting information subsequently, sorted by all Key fields, STIME, and ETIME in ascending order. In a line, all fields are separated by TAB character. If a value is not available, it is left empty.

Samples

Sample 1 - Default Usage

For `SimpleServer`, here we set its CLOPT parameter as "`-A -a simpserv_acct -- `"

Every day this server outputs its accounting information into a new file named `simpserv_acct.mmddyy`.

```
>cat simpserv_acct.022102

# SVC  UID STIME      ETIME   SYSTIME        USRTIME

TOUPPER     John   1789249093/34452  1789249093/65389 100    50

......

>accrpt  account3. 022102

#STIME        ETIME   SVC    TIMES   ELPTIME     SYSTIME        USRTIME

00:00:00    01:00:00    TOLOWER    10    100    20    40

01:00:00    02:00:00    TOLOWER    15    200    30    50

00:00:00    01:00:00    TOUPPER    10    100    20    40

01:00:00    02:00:00    TOUPPER    10    100    20    40
```

```
......
```

Sample 2

```
>accrpt -t DAY account.022012

#STIME       ETIME    SVC    TIMES   ELPTIME    SYSTIME    USRTIME

00:00:00     24:00:00     TOLOWER    150    2000    300    500

00:00:00     24:00:00     TOUPPER    100    1000    200    400
```

Sample 3

```
>accrpt -k SVC-o TIMES,ELPTIME,TIME,SIZE  account1.022012 account3.022012

#STIME       ETIME        SVC     TIMES    ELPTIME     TIME    SIZE

00:00:00     01:00:00     TOLOWER     10     100     20     100

01:00:00     02:00:00     TOLOWER     15     200     30     500

00:00:00     01:00:00     TOUPPER     10     100     20     100

01:00:00     02:00:00     TOUPPER     15     200     30     500

......
```

Known Issues

- The user ID of an ART service "connect" call is the domain ID. This works by design.

- The ART service "disconnect" cannot be accounted.

TSAM Plus LDAP Configuration File

The Oracle TSAM Plus LDAP configuration file is similar to the Oracle Tuxedo GAUTHSVR configuration file.

LDAP Configuration File

Although the default values for the LDAP configuration file are usually sufficient, you can choose to configure it with different names. Therefore, you should be aware of the following requirements for the LDAP configuration file:

- The LDAP configuration file is a plain text file.

- Keywords are case-sensitive, but their order does not matter. The keyword format is `keyword=value`.

- Blank lines or lines starting with a # sign are treated as comments, and are ignored.

- The upper limit of a line is 255 characters. If a line exceeds this upper limit, it is truncated.

- The Principal must have privileges to access the LDAP database (usually the LDAP administrator).

Table 3-1 lists the LDAP configuration file keywords.

Table 3-1 LDAP Configuration File Keywords

Configuration Keyword	Value Type	Description
Host	string	The host name or IP address of the LDAP server.The default value is `localhost`.
Port	numeric	The port number on which the LDAP server is listening.The default value is `389`.
Principal		The Distinguished Name (DN) of the LDAP user that is used to connect to the LDAP server.
Credential		The credential (generally a password) used to authenticate the LDAP user that is defined in the Principal attribute.
UserObjectClass	string	The LDAP object class that stores users. The default is `person`.
UserBaseDN	string	The base distinguished name (DN) of the tree in the LDAP directory that contains users. The default is `ou=people, o=example.com`
UserFromNameFilter	string	An LDAP search filter for finding a user given the name of the user. The default is `(&(cn=%u)(objectclass=person))`
UserUIDAttrName	string	The attribute name of an LDAP user object that specifies the UID of the user or the UID and GID of the user in a fixed format. The default value is `userid`.
UserGroupAttrNames	string	The attribute names of an LDAP user object that specify the groups the user belongs to. This attribute can contain three types of values: GID, group CN and group DN. One type of value for each configuration. More names are separated by comma. The default value is `usergroups`.
RetrieveUIDAndGID	boolean	It should always be "true"
UIDAttrValueType	string	It should always be "UIDAndGID"

Table 3-1 LDAP Configuration File Keywords

Configuration Keyword	Value Type	Description
UseZOSRACF	boolean	Specifies whether the LDAP server is z/OS RACF LDAP server. The default is `false`.
SSLEnabled	boolean	Specifies that SSL is used to connect to the LDAP server
ConnectTimeout	numeric	The maximum number of seconds to wait for the LDAP connection to be established. If set to 0, there is no maximum time limit. The default value is 0.

Weblogic Embedded LDAP Server LDAP Configuration File Example

Listing 3-1 shows a Weblogic embedded LDAP server LDAP configuration file example.

Listing 3-1 Weblogic Embedded LDAP Server LDAP Configuration File Example

```
Host = localhost
Port = 7001
Principal = cn=Admin
Credential = aaa
UserObjectClass = person
UserBaseDN = ou=people,ou=myrealm,dc=base_domain
UserFromNameFilter = (&(uid=%u)(objectclass=person))
UserUIDAttrName = description
UserGroupAttrNames=wlsMemberOf
RetrieveUIDAndGID = true
UIDAttrValueType = UIDAndGID
UseZOSRACF=false
SSLEnabled=false
ConnectTimeout=5
```

TSAM Plus Database Metadata

TSAM Plus Database Metadata

This chapter contains the following sections:

- Tuxedo Configuration Information
- Tuxedo Monitoring Information
- TSAM Plus Management Information

Tuxedo Configuration Information

This section contains the following:

- TUXDOMAIN
- MACHINE
- GROUPS
- SERVER
- SERVICE
- LDOM
- RDOM
- ARTREGION
- ARTTUXGROUP
- ARTRESGROUP

- **ARTTRAN**

TUXDOMAIN

Tuxedo domain information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Unique	11.1.1.1.0	The domain name to identify the domain. Its value is composed of: `[Domain id]:[PMID of master machine]:[IPC key]`
MASTER	VARCHAR2(255)	NO		11.1.1.1.0	LMID of master machine
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo domain: • `ACT`: Active • `INA`: Inactive • `INV`: Invalid, the node may not exist anymore.
TUXMODE	VARCHAR2(31)	YES		11.1.1.1.0	`MODE` parameter in UBB
TAG	NUMBER	NO		11.1.1.1.0	Internal used.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

MACHINE

Tuxedo machine information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (ID)	11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	PMID of the Tuxedo Machine
LMID	VARCHAR2(255)	NO		11.1.1.1.0	LMID of the Tuxedo Machine
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo machine: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
TUXVERSION	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo version
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM Plus Agent version
HOSTNAME	VARCHAR2(255)	NO		11.1.1.1.0	Host name of the machine.
SERVERNAME	VARCHAR(1023)	YES		12.1.1.0	The host name of TSAM Plus manages to which the Tuxedo machine is connecting.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
SERVERPORT	NUMBER	YES		12.1.1.0	The port of TSAM Plus manager to which the Tuxedo machine is connecting.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

GROUPS

Tuxedo group information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
MACHINEID	NUMBER	NO	FK to MACHINE (ID)	11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	Group name
TUXGRPID	NUMBER	NO		11.1.1.1.0	GRPNO parameter in the UBB.
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo machine: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

SERVER

Tuxedo server information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
GROUPID	NUMBER	NO	FK to GROUPS (ID)	11.1.1.1.0	`GRPNO` parameter in the UBB
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	`AOUT` parameter in UBB
TUXSVRID	NUMBER	NO		11.1.1.1.0	`SRVID` parameter in UBB
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo machine: • `ACT`: Active • `INA`: Inactive • `INV`: Invalid, the node may not exist anymore.
CLOPT	VARCHAR2(1023)	YES		11.1.1.2.0	`CLOPT` parameter in UBB
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

SERVICE

Tuxedo service information.

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

FUNCNAME	VARCHAR2(255)	YES		11.1.1.1.0	Function name
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the Tuxedo machine: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

LDOM

Tuxedo local domain gateway information.

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

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

RDOM

Tuxedo remote domain gateway information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	The name of the remote domain access point
RDOMID	VARCHAR2(255)	YES		11.1.1.1.0	Reserved
LDOM	NUMBER	NO	FK to LDOM(ID)	11.1.1.1.0	
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of the remote domain access point: • ACTive • SUSpended • INItializing • INActive • UNKnown
TYPE	VARCHAR2(255)	YES		11.1.1.1.0	The type of domain: TDOMAIN
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

ARTREGION

Tuxedo application runtime for CICS region information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	Region ID
TUXDOMAINID	NUMBER	NO	FK to TUXDOMAIN (ID)	11.1.1.1.0	Domain ID
NAME	VARCHAR2(255)	NO	Unique	11.1.1.1.0	Region name
STATUS	VARCHAR2(31)	YES		11.1.1.1.0	The status of the Region: • `ACT`: Active • `INA`: Inactive • `INV`: Invalid, the node may not exist anymore.
STARTTIME	TIMESTAMP	YES		11.1.1.1.0	Start time
SHUTDOWNTIME	TIMESTAMP	YES		11.1.1.1.0	Shutdown time
TRANCLASSESDESC	CLOB	YES		12.1.1.0	The content of file `tranclasses.desc`
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

ARTTUXGROUP

Tuxedo application runtime for CICS region information

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

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ARTREGIONID	NUMBER	NO	FK to ARTREGION (ID)	11.1.1.1.0	
GROUPID	NUMBER	NO		11.1.1.1.0	Tuxedo Group ID
NAME	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo Group Name
STATUS	VARCHAR2(31)	YES		11.1.1.1.0	Reserved.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

ARTRESGROUP

Tuxedo application runtime for CICS group information

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ARTREGIONID	NUMBER	NO	FK to ARTREGION (ID)	11.1.1.1.0	
NAME	VARCHAR2(255)	NO		11.1.1.1.0	Resource group name
STATUS	VARCHAR2(31)	YES		11.1.1.1.0	The status of the resource group: • ACT: Active • INA: Inactive • INV: Invalid, the node may not exist anymore.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

ARTTRAN

Tuxedo application runtime for CICS transaction information

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ARTRESGRO UPID	NUMBER	NO	FK to ARTRESGRO UP (ID)	11.1.1.1.0	
NAME	VARCHAR2(255)	NO		11.1.1.1.0	Resource group name
STATUS	VARCHAR2(31)	YES		11.1.1.1.0	The status of the Region group: • `ACT`: Active • `INA`: Inactive • `INV`: Invalid, the node may not exist anymore.
TRANCLASS	VARCHAR2(255)	YES		12.1.1.0	The transaction class which this resource group belongs to.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

Tuxedo Monitoring Information

This section contains the following:

- POLICY
- ALERT_DEFINITION
- ALERT
- CALLPATH
- MON_CPSEGMENT
- MON_XA

- MON_SERVICE

- MON_GWTDOMAIN

- MON_GWTLINK

- MON_BRIDGE

- MON_BRGLINK

- MON_GWWS

- MON_ARTTCP

- MON_JESJOB

- MON_CLOB

POLICY

Monitoring policy information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
TUXDOMAI NID	NUMBER	NO	FK to TUXDOMAI N (ID)	11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	Policy name.
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	Policy status: • `enabled` • `disabled`
AGENTTYPE	VARCHAR2(255)	YES		11.1.1.1.0	Policy type: • `tuxedo`: Tuxedo monitoring policy. • `art`: Tuxedo application runtime for CICS monitoring policy.

CREATEDTIME	TIMESTAMP	NO		11.1.1.1.0	Create time
MODIFIEDTIME	TIMESTAMP	YES		11.1.1.1.0	Modify time
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	Reserved.
DEFINITION	VARCHAR2(4000)	YES		11.1.1.1.0	Policy definition in XML.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

ALERT_DEFINITION

Monitoring alert policy definition.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ARTREGIONID	NUMBER	YES		11.1.1.1.0	ART Region ID
NAME	VARCHAR2(255)	NO	UNIQUE	11.1.1.1.0	Alert definition name
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	Status: • `enabled` • `disabled`
SEVERITY	VARCHAR2(31)	NO		11.1.1.1.0	Alert definition severity: • `information` • `warn` • `critical` • `fatal`

TYPE	VARCHAR2(255)	NO		11.1.1.1.0	Alert definition type: • `callpath` • `svc` • `xatran` • `gwtdomain` • `bridge` • `gwws` • `arttran` • `arttcp` • `jesjob` • `jesmetrics`
AGENTTYPE	VARCHAR2(255)	YES		11.1.1.1.0	Alert definition agent type: • `tuxedo` • `art` • `jes`
EXPRESSION	VARCHAR2(4000)	YES		11.1.1.1.0	Alert definition expression
EXPRESSION MODE	NUMBER	NO		11.1.1.1.0	Alert definition expression mode: • 0 (Metric Evaluation) • 1 (fml)
ACTION	VARCHAR2(255)	YES		11.1.1.1.0	Alert definition action. Null or a Tuxedo event broker name
RESFILTER	VARCHAR2(4000)	YES		11.1.1.1.0	Alert definition resource filter
RESFILTERMODE	NUMBER	NO		11.1.1.1.0	Alert definition resource filter mode: • 0 (Selection) • 1 (advance)

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
TUXEVENTN AME	VARCHAR2(255)	YES		11.1.1.1.0	The event name posted to the Oracle Tuxedo event broker. The event name is the alert name by default; you can also specify it manually.
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.
INTERVAL	NUMBER	YES		11.1.1.1.0	Alert check interval

ALERT

Alert information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ALERTDEFI D	NUMBER	YES		11.1.1.1.0	
NAME	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	Alert definition name
DOMAIN	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo domain name
MACHINE	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo machine LMID
TUXGROUP	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo group number
PROCESSNA ME	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo process name
SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
PID	NUMBER	YES		11.1.1.1.0	Tuxedo process ID

LOGTIME	TIMESTAMP	NO		11.1.1.1.0	The time an alert occurs.
CLEARTIME	TIMESTAMP	YES		11.1.1.1.0	The time an alert is cleared.
SEVERITY	VARCHAR2(31)	NO		11.1.1.1.0	Alert definition severity: • `information` • `warn` • `critical` • `fatal`
ALERTTYPE	VARCHAR2(31)	NO		11.1.1.1.0	Alert definition type: • `callpath` • `svc` • `xatran` • `gwtdomain` • `bridge` • `gwws` • `arttran` • `arttcp` • `jesjob` • `jesmetrics` • `system`
REASON	VARCHAR2(1023)	YES		11.1.1.1.0	The reason/cause for the alert.
STATUS	VARCHAR2(31)	NO		11.1.1.1.0	The status of an alert: • 0 (new) • 1 (cleared)

TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM Plus agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

CALLPATH

Call path master information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
CORRELATIONID	VARCHAR2(255)	NO	PK	11.1.1.1.0	
PROCTYPE	NUMBER	YES		11.1.1.1.0	Tuxedo process type: • `0 (NCLIENT)` • `1 (WCLIENT)` • `2 (APPSERVER)` • `3 (GWTDOMAIN)` • `4 (BRIDGE)` • `5 (GWWS)` • `6 (WSH)` • `7 (JSH)` • `8 (ISH)` • `9 (TMQUEUE)` • `10 (TMQFORWARD)`
DOMAIN	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Tuxedo domain name
MACHINE	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Tuxedo machine LMID

INITIATOR	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Initiator process name
SERVICE	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Tuxedo service
LOGTIME	TIMESTAMP	YES	Indexed	11.1.1.1.0	The time a call path is generated
USERNAME	VARCHAR2(255)	YES		12.1.1.0	Tuxedo user name
CLTADDR	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo client name
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
SEGMENTCOUNT	NUMBER	NO		11.1.1.1.0	Segment count
CALLPATTERN	VARCHAR2(4000)	YES		11.1.1.1.0	Call pattern in XML. If the length exceeds 4000, only an MD5 value will be stored here and the actual value should be found in MON_CLOB table.

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

MON_CPSEGMENT

Call path detail information.

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

DEPTH	NUMBER	YES		11.1.1.1.0	Call path depth
TARGETSVC	VARCHAR2(255)	YES		11.1.1.1.0	Target service
HOSTSVC	VARCHAR2(255)	YES		11.1.1.1.0	Host service
CPUTIME	NUMBER	YES		11.1.1.1.0	CPU time
SYSCPUTIM E	NUMBER	YES		12.1.1.0	SYS CPU time
USRCPUTIM E	NUMBER	YES		12.*1*.1.0	User CPU time
ELAPSETIME	NUMBER	YES		11.1.1.1.0	Elapse time
TOTALTIME	NUMBER	YES	Indexed	11.1.1.1.0	Total time
URCODE	NUMBER	YES		11.1.1.1.0	tpurcode
ERRNO	NUMBER	YES	Indexed	11.1.1.1.0	tperrno
STATUS	NUMBER	YES		11.1.1.1.0	Status: • null • 1
MSGTYPE	VARCHAR2(16)	YES		11.1.1.1.0	Message type: • ARP • ARQ
MSGSIZE	NUMBER	YES		11.1.1.1.0	Message size
MSGSTAGE	VARCHAR2(16)	YES		11.1.1.1.0	Message stage: • STMO • ME2NET • NET2ME • ME2Q • Q2ME • ME2QFAIL
MSGQUEUE D	NUMBER	YES		11.1.1.1.0	Message queue length

LOCALGTRID	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Local GTRID
MSGID	VARCHAR2(255)	YES		11.1.1.1.0	Message ID
CALLMODE	NUMBER	YES		11.1.1.1.0	Call mode: • 1 (tpacall) • 2 (tpcall) • 3 (tpforward)
CALLFLAG	NUMBER	YES		11.1.1.1.0	Call flag
SVCSEQ	VARCHAR2(1023)	YES		11.1.1.1.0	Service sequence
PSVCSEQ	VARCHAR2(1023)	YES		11.1.1.1.0	Parent service sequence
IPCQID	VARCHAR2(64)	YES		11.1.1.1.0	IPC queue ID
LOGTIME	TIMESTAMP	YES		11.1.1.1.0	Log time
STARTTIME	TIMESTAMP	YES		11.1.1.1.0	Call start time
LASTTIME	TIMESTAMP	YES		11.1.1.1.0	Call last time
PROCTYPE	NUMBER	YES		11.1.1.1.0	Tuxedo Process type: • `0` (`NCLIENT`) • `1` (`WCLIENT`) • `2` (`APPSERVER`) • `3` (`GWTDOMAIN`) • `4` (`BRIDGE`) • `5` (`GWWS`) • `6` (`WSH`) • `7` (`JSH`) • `8` (`ISH`) • `9` (`TMQUEUE`) • `10` (`TMQFORWARD`)

TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
CLTADDR	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo client address
LDOM	VARCHAR2(255)	YES		11.1.1.1.0	Ldom name: Ldom ID
RDOM	VARCHAR2(255)	YES		11.1.1.1.0	Rdom name: Rdom ID
MSGCVTTIME	NUMBER	YES		11.1.1.1.0	Message convert time
ATTRIBUTES	VARCHAR2(4000)	YES		11.1.1.1.0	Reserved.
EXTTYPE	VARCHAR2(255)	YES		12.1.1.0	Call path extended type
EXTSUBTYPE	VARCHAR2(255)	YES		12.1.1.0	Call path extended subtype
EXTSEQ	NUMBER	YES		12.1.1.0	Call path extended sequence
EXTCORRSEQ	NUMBER	YES		12.1.1.0	Call path extended parent sequence

MON_XA

XA transaction information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
LOCALGTRID	VARCHAR2(255)	NO	Indexed	11.1.1.1.0	Local GTRID

DOMAIN	VARCHAR2(255)	YES			11.1.1.1.0	Tuxedo domain name
MACHINE	VARCHAR2(255)	YES			11.1.1.1.0	Tuxedo machine LMID
TUXGROUP	VARCHAR2(255)	YES			11.1.1.1.0	Tuxedo group number
PROCESSNA ME	VARCHAR2(255)	YES			11.1.1.1.0	Tuxedo server process name
SERVERID	NUMBER	YES			11.1.1.1.0	Tuxedo server ID
PID	NUMBER	YES			11.1.1.1.0	Tuxedo process ID
PROCTYPE	NUMBER	YES			11.1.1.1.0	Tuxedo process type: • `0 (NCLIENT)` • `1 (WCLIENT)` • `2 (APPSERVER)` • `3 (GWTDOMAIN)` • `4 (BRIDGE)` • `5 (GWWS)` • `6 (WSH)` • `7 (JSH)` • `8 (ISH)` • `9 (TMQUEUE)` • `10 (TMQFORWARD)`
LOGTIME	TIMESTAMP	YES	Indexed		11.1.1.1.0	Log time
XACODE	NUMBER	YES			11.1.1.1.0	The XA Routine return code
REMOTEGTR ID	VARCHAR2(255)	YES			11.1.1.1.0	Remote GTRID
RMID	NUMBER	YES			11.1.1.1.0	RMID

XANAME	VARCHAR2(255)	YES	11.1.1.1.0	The transaction routine name: • `tpbegin` • `tpcommit` • `tprollback` • `tpabort` • `xa_commit` • `xa_start` • `xa_prepare` • `xa_rollback` • `xa_end` • `tms_msg_xxx` (for`GWTDOMAIN` XA transaction activities) • `xa_msg_xxx` (for`GWTDOMAIN` XA transaction activities)
LDOM	VARCHAR2(255)	YES	11.1.1.1.0	Ldom name: Ldom ID
RDOM	VARCHAR2(255)	YES	11.1.1.1.0	Rdom name: Rdom ID
MSGCVTTIM E	NUMBER	YES	11.1.1.1.0	Message convert time
EXECTIME	NUMBER	YES	11.1.1.1.0	Transaction execute time
FLAGS	NUMBER	YES	11.1.1.1.0	The XA Routine call flag
TIMEOUT	NUMBER	YES	11.1.1.1.0	The XA Routine timeout

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

MON_SERVICE

Tuxedo service call information.

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

PROCTYPE	NUMBER	YES		11.1.1.1.0	Tuxedo Process type: • 0 (NCLIENT) • 1 (WCLIENT) • 2 (APPSERVER) • 3 (GWTDOMAIN) • 4 (BRIDGE) • 5 (GWWS) • 6 (WSH) • 7 (JSH) • 8 (ISH) • 9 (TMQUEUE) • 10 (TMQFORWARD)
USERNAME	VARCHAR2(255)	YES	Indexed	12.1.1.0	Tuxedo user name
LOGTIME	TIMESTAMP	NO	Indexed	11.1.1.1.0	Log time
MSGSIZE	NUMBER	YES		11.1.1.1.0	Message size
MSGTYPE	VARCHAR2(6)	YES		11.1.1.1.0	Message type: • ARP • ARQ
MSGQUEUE D	NUMBER	YES		11.1.1.1.0	Message queue length
MSGWAITTI ME	NUMBER	YES		11.1.1.1.0	Message wait time
STATUS	VARCHAR2(31)	YES		11.1.1.1.0	Reserved
ERRNO	NUMBER	YES		11.1.1.1.0	tperrno
URCODE	NUMBER	YES		11.1.1.1.0	tpurcode
EXECTIME	NUMBER	YES		11.1.1.1.0	Service execute time
CPUTIME	NUMBER	YES		11.1.1.1.0	Service CPU time

SYSCPUTIME	NUMBER	YES		12.1.1.0	Service SYS CPU time
USRCPUTIME	NUMBER	YES		12.1.1.0	Service USER CPU time
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

MON_GWTDOMAIN

Tuxedo /T domain gateway performance statistics master information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
DOMAIN	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo domain name
MACHINE	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo machine LMID
TUXGROUP	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo group number
PROCESSNAME	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo server process name
SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
PID	NUMBER	NO		11.1.1.1.0	Tuxedo process ID
LDOM	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	Ldom name: Ldom ID
LOGTIME	TIMESTAMP	NO	Indexed	11.1.1.1.0	Log time

LINKNUMBER	NUMBER	YES		11.1.1.1.0	Link number
MSGQUEUED	NUMBER	YES		11.1.1.1.0	Message queue length
REQUESTQUEUED	NUMBER	YES		11.1.1.1.0	Reserved
WORKLOAD	NUMBER	YES		11.1.1.1.0	Reserved
PROCTYPE	NUMBER	YES		11.1.1.1.0	Tuxedo process type: 3 (GWTDOMAIN)
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

MON_GWTLINK

Tuxedo /T domain gateway performance statistics detail information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
MON_GWTDOMAINID	NUMBER	NO	FK to MON_GWTDOMAIN (ID)	11.1.1.1.0	
LINKADDRESS	VARCHAR2(255)	YES		11.1.1.1.0	Link address
LOGTIME	TIMESTAMP	NO		12.1.1.0	Log time

LINKSTATUS	NUMBER	YES		11.1.1.1.0	Link status: • 0 (UP) • -1 (DOWN) • 1 (INIT)
PENDNUMBER	NUMBER	YES		11.1.1.1.0	Network Pending Number
PENDBYTES	NUMBER	YES		11.1.1.1.0	Network Pending Bytes
ACCNUMBER	NUMBER	YES		11.1.1.1.0	Network Message Number
ACCBYTES	NUMBER	YES		11.1.1.1.0	Network Message Bytes
WAITREPLYNUMBER	NUMBER	YES		11.1.1.1.0	Network Outstanding Requests
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved.

MON_BRIDGE

Tuxedo bridge gateway performance statistics master information.

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

SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
PID	NUMBER	NO		11.1.1.1.0	Tuxedo process ID
LOGTIME	TIMESTAMP	NO	Indexed	11.1.1.1.0	Log time
LINKNUMBER	NUMBER	YES		11.1.1.1.0	Link number
MSGQUEUED	NUMBER	YES		11.1.1.1.0	Message queue length
REQUESTQUEUED	NUMBER	YES		11.1.1.1.0	Reserved
WORKLOAD	NUMBER	YES		11.1.1.1.0	Reserved
PROCTYPE	NUMBER	YES		11.1.1.1.0	
TSAMVERSION	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

MON_BRGLINK

Tuxedo /T domain gateway performance statistics detail information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
MON_BRIDGEID	NUMBER	NO	FK to MON_BRIDGE (ID)	11.1.1.1.0	
LINKADDRESS	VARCHAR2(255)	YES		11.1.1.1.0	Link address
LOGTIME	TIMESTAMP	NO		12.1.1.0	Log time

LINKSTATU S	NUMBER	YES		11.1.1.1.0	Link status: • 0 (UP) • -1 (DOWN) • 1 (INIT)
PENDNUMB ER	NUMBER	YES		11.1.1.1.0	Network Pending Number
PENDBYTES	NUMBER	YES		11.1.1.1.0	Network Pending Bytes
ACCNUMBE R	NUMBER	YES		11.1.1.1.0	Network Message Number
ACCBYTES	NUMBER	YES		11.1.1.1.0	Network Message Bytes
TSAMVERSI ON	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	

MON_GWWS

Tuxedo GWWS performance statistics information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ACTCLIENT NUM	NUMBER	YES		11.1.1.1.0	Active client number
ACTTHREAD NUM	NUMBER	YES		11.1.1.1.0	Active Thread Number
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

AVGINTIME	NUMBER	YES		11.1.1.1.0	Average Inbound Process Time
AVGOUTTIME	NUMBER	YES		11.1.1.1.0	Average Outbound Process Time
DOMAIN	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo domain name
TUXGROUP	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo group number
GWWSID	VARCHAR2(255)	NO		11.1.1.1.0	GWWS ID
INBOUNDPEND	NUMBER	YES		11.1.1.1.0	Inbound Pending Request
OUTBOUNDPEND	NUMBER	YES		11.1.1.1.0	Outbound Pending Request
INOWFAILNUM	NUMBER	YES		11.1.1.1.0	Inbound One-Way Failure Number
INOWSUCCNUM	NUMBER	YES		11.1.1.1.0	Inbound One-Way Success Number
INRPCFAILNUM	NUMBER	YES		11.1.1.1.0	Inbound RPC Failure Number
INRPCSUCCNUM	NUMBER	YES		11.1.1.1.0	Inbound RPC Success Number
MACHINE	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo machine LMID
OUTOWFAILNUM	NUMBER	YES		11.1.1.1.0	Outbound One-Way Failure Number
OUTOWSUCCNUM	NUMBER	YES		11.1.1.1.0	Outbound One-Way Success Number
OUTRPCFAILNUM	NUMBER	YES		11.1.1.1.0	Outbound RPC Failure Number

OUTRPCSUC CNUM	NUMBER	YES		11.1.1.1.0	Outbound RPC Success Number
PID	NUMBER	NO		11.1.1.1.0	Tuxedo process ID
PROCESSNA ME	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo process name
PROCTYPE	NUMBER	YES		11.1.1.1.0	Tuxedo process type: 5 (GWWS)
SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
LOGTIME	TIMESTAMP	YES		11.1.1.1.0	Log time
TSAMVERSI ON	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: • null (11g or above) • 1.1 (TSAM 1.1 and 10gR3)

MON_ARTTCP

Tuxedo application runtime for CICS TCP listener performance statistics information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.1.0	
ATTRIBUTES	VARCHAR2(1023)			11.1.1.1.0	Reserved
DOMAIN	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo domain name
TUXGROUP	VARCHAR2(255)	YES		11.1.1.1.0	Tuxedo group number
TRANFAILN UM	NUMBER	YES		11.1.1.1.0	Failed Transaction Number
TRANSUCCN UM	NUMBER	YES		11.1.1.1.0	Successful Transaction Number

MACHINE	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo machine LMID
SESSIONNU M	NUMBER	YES		11.1.1.1.0	Session Number
PID	NUMBER	NO		11.1.1.1.0	Tuxedo process ID
PROCESSNA ME	VARCHAR2(255)	NO		11.1.1.1.0	Tuxedo process name
PROCTYPE	SMALLINT	YES		11.1.1.1.0	Tuxedo process type: 2 (APPSERVER)
SERVERID	NUMBER	YES		11.1.1.1.0	Tuxedo server ID
LOGTIME	TIMESTAMP	YES		11.1.1.1.0	Log time
TSAMVERSI ON	VARCHAR2(255)	YES		11.1.1.1.0	TSAM agent version: null (11g or above)

MON_JESJOB

Tuxedo application runtime for Batch job information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	11.1.1.2.0	Job ID
DOMAIN	VARCHAR2(255)	NO	PK	11.1.1.2.0	Tuxedo domain name
MACHINE	VARCHAR2(255)	YES		11.1.1.2.0	Tuxedo machine LMID
NAME	VARCHAR2(32)	YES	Indexed	11.1.1.2.0	Job name
TYPRUN	VARCHAR2(7)	YES		11.1.1.2.0	Job typrun
PRIORITY	NUMBER	YES	Indexed	11.1.1.2.0	Job priority

OWNER	VARCHAR2(32)	YES	Indexed	11.1.1.2.0	Job owner
EXECMAC	VARCHAR2(32)	YES		11.1.1.2.0	Job executing machine
STATUS	VARCHAR2(12)	YES		11.1.1.2.0	Job status: • `CONVING` • `WAITING` • `EXECUTING` • `DONE` • `HOLD_CONVING` • `HOLD_WAITING` • `HOLD_DELAY` • `FAIL` • `DISCARD` • `INDOUBT`
JOBCLASS	CHAR(1)	YES	Indexed	11.1.1.2.0	Job class. Value may be [A-Z], [0-9]
RUNNINGST EP	VARCHAR2(32)	YES		11.1.1.2.0	Job running step
EXECSTATU S	VARCHAR2(32)	YES		11.1.1.2.0	Job executing status
SUBMITTIM E	NUMBER	YES		11.1.1.2.0	Submit time
WAITINGTI ME	NUMBER	YES		11.1.1.2.0	Job waiting time
EXECTIME	NUMBER	YES		11.1.1.2.0	Job execution time
ENDTIME	NUMBER	YES		11.1.1.2.0	Job end time
PURGETIME	NUMBER	YES		11.1.1.2.0	Job purge time
LOGTIME	TIMESTAMP	YES	Indexed	11.1.1.2.0	Log time
USRCPU	NUMBER	YES		11.1.1.2.0	Job user CPU time
SYSCPU	NUMBER	YES		11.1.1.2.0	Job system CPU time

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
INITIATORPID	NUMBER	YES		11.1.1.2.0	Job initiator PID
ATTRIBUTES	VARCHAR2(1023)	YES		12.1.1.0	Reserved

MON_CLOB

Global CLOB information table.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
ID	NUMBER	NO	PK	12.1.1.0	
MD5	VARCHAR2(40)	NO	Indexed	12.1.1.0	Call pattern content MD5
CONTENT	CLOB	NO		12.1.1.0	Call pattern content
ATTRIBUTES	VARCHAR2(1023)	YES		12.1.1.0	Reserved

TSAM Plus Management Information

This section contains the following:

- GLOBALCONFIG
- ROLES
- USERS

GLOBALCONFIG

TSAM Plus global parameters information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
PARAM	VARCHAR2(255)	NO	PK	11.1.1.1.0	Parameter name

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
VALUE	VARCHAR2(255)	YES		11.1.1.1.0	Parameter value
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved

ROLES

TSAM Plus role information.

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

USERS

TSAM Plus user information.

COLUMN	TYPE	Nullable	Constraints	Since Version	Note
NAME	VARCHAR2(255)	NO	PK	11.1.1.1.0	User login name
ROLENAMES	VARCHAR2(255)	NO		11.1.1.2.0	Role names the user belongs to
PASSWORD	VARCHAR2(255)	NO		11.1.1.1.0	User password

FULLNAME	VARCHAR2(255)	YES	Indexed	11.1.1.1.0	User full name
DESCRIPTIO N	VARCHAR2(255)	YES		11.1.1.1.0	User description
MODIFIEDTI ME	TIMESTAMP	YES		11.1.1.1.0	User modification time
ATTRIBUTES	VARCHAR2(1023)	YES		11.1.1.1.0	Reserved