# Precise Performance Management Database<sup>™</sup> Application Programming Interface

**Reference Guide** 

Version 9.8.0.x



## Precise Performance Management Database<sup>™</sup> Application Programming Interface Reference Guide

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#### Glossary

# Introduction

This section contains the following topics:

- About this guide
- About the Precise PMDB
- Precise Data Life Cycle
- PMDB notation
- Prerequisites
- Defining instances in the PMDB
- Updating the database version

# About this guide

Performance Management Database (PMDB), a Precise repository, stores application performance data for long-term analysis and trending reports. The data is collected by the Precise product suite, which has been designed to provide a comprehensive and methodical performance management solution.

Precise includes the following four major component products: Alerts, Report Manager, Insight, and the Precise family of products. All Precise products use the PMDB to collect and store long-term historical information throughout the application life cycle. For more information, refer to the relevant user's guide and to the *Precise Administration Guide*.

This guide explains how you can customize the infrastructure of the PMDB such as to store and retrieve application data that is not loaded into the database by default. You can then perform correlations between your data and data collected by Precise.

This guide explains how to use Precise utilities to perform the following:

Define and create your own data structure in the PMDB by means of DDML (Data Definition Markup Language).

<u>Creating DDML Documents</u> on page 26 details the DDML format and explains how to create the database entities using the provided shell script.

• Load your own data into the PMDB using the Data Loader.

Loading Data on page 35 details the XML format and explains how to load data into the PMDB.

Retrieve your own data from the PMDB using the Data Retriever.

Retrieving Data on page 39 details the XML retrieve format and explains how to retrieve data from the PMDB.

The protocols used to define the data structure, load application data, and retrieve that data when needed are derived from the XML (Extensible Markup Language) technology. XML provides a simple and intuitive way to complete these tasks.

We recommend that you use the Precise utilities to take full advantage of the PMDB capabilities:

- Use the PMDB's aggregation mechanism.
- Use the PMDB's purging mechanism.
- Store and handle data efficiently—through partitions in an Oracle<sup>™</sup> database and through partitioned views in a Microsoft® SQL Server<sup>™</sup> database.

# About the Precise PMDB

Analyzing resource consumption over a long period of time is the only way to predict the future resource consumption and response time of your environment. To identify resource consumption trends and patterns, you need to see summarized data on resource consumers in your environment over various periods of time.

The PMDB helps you identify resource consumption patterns and predict future resource consumption and response times by:

- Tracking historical resource consumption trends so you can understand and predict long-term performance behavior.
- Performing period-to-period comparisons so you can analyze performance improvements or performance degradation over time.
- Tracking load patterns, entity changes, entity statistics, and component parameter changes so you can understand their effects on performance.
- Tracking data growth and data distribution changes so you can optimize data storage management.
- Proactively detecting performance bottlenecks before they turn into problems and issue alerts when performance degrades from established baselines.

By using the PMDB to collect this information, you can manage your applications better, make knowledgeable decisions about application changes and hardware upgrades, and improve plans for the future.

The PMDB collects and manages the PMDB data by:

- Scheduling and running batch processes that load historical data from each instance on each application tier (AppTier)
- Managing the summary procedure
- Providing a common interface for requests coming from Precise user interfaces
- Managing and maintaining the PMDB database by filtering unnecessary data, saving baseline data, summarizing data, and purging old data

You can control the settings of the PMDB from AdminPoint. AdminPoint is the central administration console of the Precise product suite. For information about AdminPoint, see the *Precise Administration Guide*.

#### Instances in the PMDB

The PMDB identifies statistics data by the instance from which it is collected, such as an Oracle database or a SQL Server installation. Before you can load data using the Data Loader, you need to define the instance to which the data belongs. For information on how to define and view instances, see <u>Defining instances in the PMDB</u> on page 18.

Once you have defined an instance, you can view the instance ID. You must provide this ID when loading information into statistics tables (see <u>Columns Required for Statistics Tables</u> on page32).

# Precise Data Life Cycle

Before customizing the PMDB, it is essential that you familiarize yourself with the PMDB processes and their roles. The life cycle of data stored in the PMDB involves the following:

Defining and creating tables

To load data into and retrieve data from the PMDB, you must first logically define database tables in DDML. DDML describes the database structure using XML document syntax. After you have defined all database entities in DDML, you must run the DDML creation script to physically create the entities in the database.

Creating DDML Documents on page 26 details the DDML format and explains how to create the database entities.

Loading

The PMDB infrastructure allows you to load data into the PMDB using XML. Both the request protocol and the response protocol are written in XML.

You can load data from any server on which the Precise Listener is installed.

Loading Data on page 35 details the XML load format and explains how to load data from a server on which a Listener is installed.

Retrieving

The PMDB infrastructure allows you to retrieve data using XML. Both the request protocol and the response protocol are written in XML.

You can retrieve data from any server on which a Listener is installed.

<u>Retrieving Data</u> on page 39 details the XML retrieve format and explains how to retrieve data from a on which a Listener is installed.

Summarizing

The PMDB summary process aggregates data from one level to another. This process runs automatically in the PMDB FocalPoint in the 55th minute of every hour and summarizes all new data received since the last run.

Managing Data on page 44 provides a detailed description of the summary process.

Purging

The purge process removes unneeded data from the PMDB database based on the purge parameters defined in AdminPoint. The process runs every week, checking the purge definition and removing the data as required.

Managing Data on page 44 provides a detailed description of the purge process.

For examples of DDML documents, load documents, and retrieve documents, see Examples on page 306.

For more information about the product, refer to the User Defined Reports (UDR) technote.

#### **PMDB** notation

Most database management systems (DBMS) are case-insensitive and do not require either upper- or lowercase notation. Some DBMSs, however, are case sensitive concerning entity names, and some case-insensitive DBMSs automatically change lowercase entity names to uppercase.

The PMDB uses the following notation:

- Tag names and attributes are written in lowercase.
- Attribute values are written in uppercase.
- Database entities are written in uppercase.

#### Prerequisites

Before customizing the infrastructure of the PMDB, make sure you have:

- Installed the Precise FocalPoint.
- Defined the servers from which to load and retrieve data.
- Installed the PMDB FocalPoint.
- Checked in AdminPoint that Precise FocalPoint and PMDB FocalPoint are up and running.
- Configured the PMDB, as described in the following chapters (with MS-SQL and Oracle)
- Defined instances in the PMDB to load your data, as described in the following section. See the *Precise Installation Guide* and the *Precise Administration Guide* for more information.

# Defining instances in the PMDB

To define instances in the PMDB

• On the server on which Precise FocalPoint is installed, run the following command from the <i3\_root> directory: On a Windows server:

products\pw\bin\install\_instance.bat

On a UNIX server:

./products/pw/bin/install\_instance.sh

To view all defined instances

• On the server on which Precise FocalPoint is installed, run the following command from the <i3\_root> directory: On a Windows server:

products\pw\bin\view\_instance.bat

On a UNIX server:

./products/pw/bin/view\_instance.sh

# Updating the database version

When updating the database version, the following steps need to be performed in the PMDB:

1. Open the following files:

```
products\i3fp\registry\connection-pools\jdbc\pools.xml
products\i3fp\registry\products\pw\focalpoint.xml
```

- 2. Update the database version entry in both of these files.
- 3. Save the files.
- 4. Restart the PMDB FocalPoint.

# Configuration with MS-SQL

This section includes the following topics:

- Scope
- **Prerequisites**
- Maintenance operations
- Backing up the database and creating archiving
- Additional DBA settings

# Scope

The scope of this section is to help you configure the SQL Server-based PMDB after you have installed Precise. This is not a replacement of the Precise Installation Guide. The configuration recommendations will help you to fine-tune the PMDB which will result in a faster and more efficient performance.

# Prerequisites

Before applying the information in this section, refer to the Precise Installation Guide.

We recommend that the PMDB database is an MS-SQL dedicated instance. Change the following parameters to avoid using the MS-SQL full automatic configuration function:

max server memory (MB)

Should be 80% of the server's RAM.

Should be 512 instead of 1024. min memory per query (KB)

Example to configure a parameter is the following command from the Query Analyzer:

EXEC sp\_configure 'max server memory (MB)', [new value] **RECONFIGURE WITH OVERRIDE** GO

#### Maintenance operations

Check the table and index status by running the following command:

dbcc showcontig({table name}) with all\_indexes

The results should be that the "Extent Scan Fragmentation" is less than 50 and the "Logical Scan Fragmentation" is low, otherwise it will damage the index scans.

If one of the above conditions is confirmed, perform a reorganization on the indexes with the following command:

Dbcc dbreindex ('{databasename.tableName}')

Note: Be aware that the index and the table will not be available during the rebuild.

## Backing up the database and creating archiving

Use the Database Maintenance Plan function to create a backup plan for the database. Make sure that the SqlServer agent is automatically started at database startup.

If you choose the simple recovery mode for the database (the transaction log can be deleted after a commit or checkpoint), the recovery will not be able to work to a point in time, but only to the backup time.

If you choose a full recovery mode for the database, make sure you also backup the transaction log and shrink the database periodically, to stop the transaction log from growing infinitely.

If you do not create a backup, information will be lost when you have a database crash and you will not be able to recover data.

# Additional DBA settings

To improve performance, the DBA on site must check that the settings in the following table contain the correct values.

| Setting                                  | Description                                   | Value  |
|--|---|--|
| Size of the datafile                     | The default size when the PMDB is created.    | 2GB.   |
| Size of the log file                     | The default size when the PMDB is created.    | 500MB.   |
| Auto Extent size for datafiles<br>& logs | The size of the new segment to be allocated.  | 30% of initial datafile (for example, if the datafile is<br>initially 1GB, the auto extent size should be<br>300MB). If you have a very large installation, the<br>auto extent size should be 1GB. |
| Tempdb location                          | Put the tempdb database on a fast I/O system. |  |

#### Table 2-1 Additional DBA settings

# **Configuration with Oracle**

This chapter includes the following topics:

- <u>Scope</u>
- Prerequisites
- Required INIT.ORA changes
- INIT.ORA example
- Additional DBA settings
- How to disable the recycle bin in Oracle version 10g
- Enabling Automatic Undo Management (AUM)
- Backing up the database and creating archiving
- Maintenance operations
- Changing the size of tables and index extents

# Scope

The scope of this section is to help you configure the Oracle-based PMDB after you have installed Precise. This is not a replacement of the *Precise Installation Guide*. The configuration recommendations will help you to fine-tune the PMDB which will result in a faster and more efficient performance.

# Prerequisites

Before applying the information in this section, refer to the *Precise Installation Guide*. We recommend that the PMDB is an Oracle dedicated instance.

Make sure that you are creating the database with the proper NLS\_CHARACTERSET. When the monitored Oracle instances use a multiple byte character set, use UTF8. AL32UTF8 is not supported by the PMDB. The following table specifies the database block size prerequisite.

| Parameter     | Value                               | Improvement  |
|---------------|-------------------------------------|--|
| db_block_size | Minimum 8 KB<br>(16 KB recommended) | This value defines the Oracle block size. The block size is set when creating the database and cannot be changed afterwards.                                       |
|               |                                     | A value of at least 8 KB ensures that the PMDB can perform smoothly. A lower value may cause serious performance problems.   |
|               |                                     | If you are installing on a legacy database, verify that the database block size is 8 KB or higher. If not, try to install the PMDB on a different Oracle instance. |
|               |                                     | Note: The default block size on Windows NT is 2 KB, which is too small. To review this value, check the db_block_size parameter in the init.ora file.              |

Table 3-1Database block size prerequisite

# **Required INIT.ORA changes**

To improve performance, change some parameter values and make sure the values match those listed in the appropriate table.

The parameter values can be changed on a new and on an existing Oracle instance. Tables 3-2 through 3-5 describe the general and Oracle version specific parameters.

Table 3-2 General parameters

| Parameter              | Value  | Improvement/Remarks   |
|------------------------|--|---|
| log_buffer             | If the version < 9.2.0.7, then the<br>log_buffer = 3MB, else the log_buffer =<br>16MB. |   |
| shared_pool_size       | 1/4th of the physical memory.  | The shared pool should not be too small (< 250MB) or too large (>2 GB).   |
| log_checkpoint_timeout | 900  |   |
| open_cursors           | 2000   | Make sure you have enough open cursors for the application to execute.  |
| Processes              | 300  | Make sure you have enough processes for the application to execute.   |
| db_writer_processes    | Should be set according to the number of I/O devices you have for the database.        | Improves I/O performance in cases of large I/O. Each writer is writing to a different disks (improves loads for example). |

#### Table 3-38i parameters

| Parameter        | Value   | Improvement/Remarks  |
|------------------|---|--|
| sort_area_size   | (1/8th of the physical memory)/<br>(concurrent users + 10), up to 6 MB. | For example:<br>If you have 2 GB of Physical Memory and 90 users,<br>then the calculation will be:<br>(2 GB / 8) / 100 ~= 2.5 MB |
| db_block_buffers | 1/3rd of the physical memory divided by the size of the db_block_size.  | The given values help to keep the I/O wait of the PMDB queries low.  |

#### Table 3-49i parameters

| Parameter              | Value   | Improvement/Remarks   |
|------------------------|---|---|
| db_cache_size          | Replaces parameter<br>db_block_buffers. Sets the final<br>size of the buffer pool to 1/3rd of the<br>physical memory. |   |
| pga_aggregate_target   | 1/3rd of the physical memory.   |   |
| workarea_size_policy   | auto  | This parameter should be set to auto when we use the pga_aggregate_target parameter.  |
| session_cached_cursors | 300   |   |
| Db_cache_advice        | Make sure that this parameter is set to off because the default value is on.  | This parameter checks the work on the database and<br>helps determine the recommended size of the Buffer<br>pool. But this damages performance, so make sure it<br>is on only for a short period. |

#### Table 3-5 10g parameter

| Parameter  | Value  | Improvement/Remarks   |
|------------|--|---|
| sga_target | Automatic memory management. 1/4th of the physical memory. | Replaces the following parameters:<br>db_cache_size, shared_pool_size, large_pool_size,<br>and java_pool_size.<br>Make sure to initialize them with 0 or the minimum<br>value you need. |

# INIT.ORA example

The following is an example of the init.ora file for a 9.2 Oracle server with 2 GB RAM and 2 disks:

db\_block\_size=16384 # 16K db\_cache\_size = 268435456 # 256MB log\_buffer=5242880 # 5 MB shared\_pool\_size=471859200 # 450MB log\_checkpoint\_timeout=900 # 15 minutes pga\_aggregate\_target=262144000 # 256MB

session\_cached\_cursors=300 open\_cursors=2000 processes=300

undo\_management=AUTOundo\_tablespace=UNDOTBS1 undo\_retention=900 # 15 minutes

# Additional DBA settings

To improve performance, the DBA on site must modify the Rollback segment settings and the Redo log file settings. The following table describes those settings.

| Table 3-6 | Rollback segment and R | edo log file settings |
|-----------|------------------------|-----------------------|
|-----------|------------------------|-----------------------|

| Setting                          | Description   | Value  |
|----------------------------------|---|--|
| Rollback segments (For 8i)       | Minimum tablespace size.  | 2 GB (4 GB in large installations).  |
| Rollback segments (For 8i)       | Minimum number of segments.   | 20   |
| Rollback segments (For 8i)       | Minimum initial segment size.   | 5 MB<br>Note: Each rollback segment should be able to grow to<br>the size of the tablespace.                     |
| Enable AUM<br>(For 9i and above) | Automatic Undo Management.<br>See <u>Enabling Automatic Undo</u><br><u>Management (AUM)</u> on page 24. | For 9i and higher.   |
| Temporary tablespace             | Minimum temporary tablespace size.  | 2 GB<br>Note: The temporary tablespace is most likely to grow<br>(according to the PMDB load).                   |
| Redo log file                    | Minimum redo log file size.   | 1 GB (4GB in large installations)<br>Note: If the redo file is switching every 20 minutes,<br>enlarge the file.) |

#### Additional Rollback segment and Redo log file information

Each Rollback segment should contain a minimum of 5 extents. The size of each extent within a Rollback segment should be at least 1MB each. Their optimal size should be set to the summed size of those extents. For example, if creating rollback segment with 5 extents of 1MB each, they should set the optimal size to 5MB. This is to prevent the changing size of the rollback segment to exhaust the tablespace's free space.

If possible, keep data tablespace indexes and temporary tablespace on different disk drives. Make sure that you disable the recycle bin in Oracle version 10. See <u>How to disable the recycle bin in Oracle version 10g</u> on page 24. For more information refer to the Using Flashback Drop and Managing the Recycle Bin section in the *Oracle* Administration Guide.

Four Redo logs should be created, each with 1 mirror (2 members for each group). Remember that hardware mirroring is better than software mirroring.

In Oracle version 9i and higher, it is recommended to configure the Undo space management, otherwise you must configure the rollback segments according to the rules in <u>Table 3-6</u>.

If you are using an archive (log\_archive\_start set to true) and you enable parallel archiving writers, then the log\_archive\_max\_processes should be set to more than 1 (same consideration as in the db\_writer\_process).

## How to disable the recycle bin in Oracle version 10g

Our recommendation is to disable the recycle bin and this section describes the background and the action on how to disable the recycle bin.

The recycle bin is actually a data dictionary table containing information about dropped objects. Dropped tables and any associated objects such as indexes, constraints, nested tables, and the likes are not removed and still occupy space. They continue to count against user space quotas, until specifically purged from the recycle bin or the unlikely situation where they must be purged by the database because of tablespace space constraints.

The following information is taken from the Oracle Database Administration Guide.

In version 10.0 and 10.1 use the following command: alter system set "\_recyclebin"=FALSE scope=BOTH; In version 10.2 use the following command: alter system set recyclebin=off scope=BOTH.

#### Enabling Automatic Undo Management (AUM)

To enable Automatic Undo Management

1. Create the undo tablespace by running the following command:

CREATE UNDO TABLESPACE tablespace\_name DATAFILE 'data file name' SIZE 32M REUSE AUTOEXTEND ON EXTENT MANAGEMENT LOCAL

- 2. Set the following init.ora parameters:
  - a. undo\_management = AUTO
  - b. undo\_tablespace = tablespace\_name
  - c. undo\_retention = 1800

If the undo tablespace size is too large you can decrease the number of seconds.

For more information on how to enable AUM, see the Managing Undo Space section in the Oracle Database Administrator's Guide.

#### Backing up the database and creating archiving

The PMDB holds information for up to 3 years by default. If you want to backup this information, you should enable the Redo log archiving, and create a backup using RMAN or a backup utility. For more information, refer to the official Oracle Backup and Recovery documentation.

If you do not create a backup, information will be lost when you have a database crash and you will not be able to recover data. If you create a backup without using the archive mode, you will be able to recover data to the time of the backup. All new operations (after the logs were archived) will be lost.

#### Maintenance operations

Every week the maintenance process analysis the PMDB, but to improve the database performance, the DBA must check and perform a rebuild to the indexes using the alter index {name} rebuild command.

# Changing the size of tables and index extents

The PMDB uses the products\dbms\files\tables\_definition\ps\_00\_db\_entities.xml file to create the tablespaces for the tables and the indexes. To change the default sizes you can change the file before the PMDB installation or alter the tablespaces after the installation. The following table shows the default extents sizes.

| Table 3-7         Default extents sizes |       |
|---|-------|
| Tablespace                              | Size  |
| Large table                             | 2Mb   |
| Medium table                            | 512Kb |
| Small table                             | 80Kb  |
| Large index                             | 1Mb   |
| Medium index                            | 256Kb |
| Small index                             | 80Kb  |

# **Creating DDML Documents**

This chapter includes the following topics:

- Introduction
- General DDML Document Format
- How to Create DDML Documents

# Introduction

DDML, a language based on XML (Extensible Markup Language), allows you to logically define the entities you want to add to the Precise schema, such as tables, views, indexes, foreign keys, and all other required components. It covers the common entities available in most popular DBMSs.

After you have defined all database entities in DDML, you must run the DDML creation script to physically create the entities in the database.

# **General DDML Document Format**

The general format of a DDML document looks as follows:

| Тад  | Description   |
|--|---|
| <tables-definition></tables-definition>  | Root element of a DDML document. Its children are the main database entities:<br><table-definition>, <ddl-definition>, and <view-definition>.<br/>The <tables-definition> tag includes the product attribute, which indicates the<br/>product of this specific DDML definition.</tables-definition></view-definition></ddl-definition></table-definition>   |
| <table-definition></table-definition>  | Includes the table-level attributes. Its children are the <column-definition>, <index-definition>, and <foreign-key-definition> tags.<br/>If a table is a statistics table, meaning means that the type attribute has the value <u>STATISTICS</u> (see page 29), the <summary-hour>, <summary-day>, <summary-week>, and <summary-month> tags can be specified as children of the <table-definition> tag.</table-definition></summary-month></summary-week></summary-day></summary-hour></foreign-key-definition></index-definition></column-definition> |
| <ddl-definition< td=""><td>Includes ddl-level attributes.</td></ddl-definition<> | Includes ddl-level attributes.  |
| <view-definition></view-definition>  | Includes view-level attributes.   |

#### <tables-definition> Tag

| Root element of the DDML document. |
|------------------------------------|
|------------------------------------|

| Attribute | Definition  |
|-----------|---|
| product   | Required. Holds the product short name (product shortcut) consisting of two characters that define the product.     |
|           | In this case, three customer-defined products are available:  |
|           | <ul> <li>C1—for customer defined 1</li> <li>C2—for customer defined 2</li> <li>C3—for customer defined 3</li> </ul> |

#### <table-definition> Tag

Holds all the information included in a single table.

| Attribute                    | Definition   |
|------------------------------|--|
| name                         | Required. Holds the table name.  |
| type                         | <ul> <li>Required. Specifies the table type and can hold one of the following values:</li> <li>STATISTICS—a PMDB table that holds information about certain database activity, summarized into hours or time slices.<br/>A statistics table has additional attributes, as specified below.</li> <li>EVENTS—a PMDB table that keeps a log of database incidents.</li> </ul> |
| pctfree                      | Optional. Affects only Oracle and is developed as PCTFREE <i>pctfree</i> . Can have a value between 0 and 99.<br>If the PMDB is a Microsoft® SQL Server database, this attribute is transformed to "fill factor."  |
| pctused                      | Optional. Affects only Oracle and is developed as PCTUSED <i>ptcused</i> . Can have a value between 0 and 99.  |
| initrans                     | Optional. Affects only Oracle and is developed as INITRANS <i>initrans</i> . Can have a value between 1 and 255.   |
| maxtrans                     | Optional. Affects only Oracle and is developed as MAXTRNAS <i>maxtrnas</i> . Can have a value between 1 and 255.   |
| oracle-storage-clause        | Optional. Affects only Oracle and is developed as<br>STORAGE(oracle-storage-clause), for example<br>oracle-storage-clause="initial 1M next 1M minextents<br>1maxextents unlimited pctincrease 100".  |
| oracle-additional-<br>clause | Optional. Added to support any other Oracle features that cannot be defined in an oracle storage clause, for example NOLOGGING.  |
| filterable                   | Required for statistics tables (type=STATISTICS). If one or more columns are not relevant or needed in the PMDB, set this attribute to TRUE. If a statistics table is filterable and some columns are specified as not needed in the load or summary control files, these columns are not loaded or summarized.  |

The <table-definition> tag can have the following children: <column-definition> (see page 30), <index-definition> (see page 32), and <foreign-key-definition> (see page 34).

| Additional Child  | Definition  |
|---|---|
| <summary-hour></summary-hour>   | Optional. Instructs to define an hour-level summary table for this table. Used for time slice statistics tables. The name of the summary table is specified by the name attribute (required). The summary table name should follow the naming conventions specified in <u>Naming</u> <u>conventions</u> on page 46. |
| <summary-day></summary-day>   | Optional. Instructs to define a day-level summary table for this table. The name of the summary table is specified by the name attribute (required). The summary table name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.   |
| <summary-week></summary-week>   | Optional. Instructs to define a week-level summary table for this table. The name of the summary table is specified by the name attribute (required). The summary table name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.  |
| <summary-month)< td=""><td>Optional. Instructs to define a month-level summary table for this table. The name of the summary table is specified by the name attribute (required). The summary table name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.</td></summary-month)<> | Optional. Instructs to define a month-level summary table for this table. The name of the summary table is specified by the name attribute (required). The summary table name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.   |

#### <ddl-definition> Tag

Holds DDL (Data Definition Language) and DML (Data Manipulation Language) statements that can be performed during installation or uninstallation, for example stored procedures.

| Attribute | Definition  |
|-----------|---|
| statement | Required. Defines the DDL statement.  |
| dbms      | <pre>Optional. The RDBMS type on which the DDL generates. Must be one of the following:     oracle     mssql     "" If left empty (""), the DDL is created on all relational database management systems (RDBMS).</pre>   |
| version   | Optional. The RDBMS version on which the DDL generates. Should have the format 8.1 If left empty, the DDL is created on all RDBMS versions.   |
| event     | <ul> <li>Optional. The event in which the DDL statement generates. Must be one of the following:</li> <li>INSTALL—during the installation process only (default)</li> <li>UNINSTALL—during the uninstallation process only</li> <li>PREINSTALL—before the installation process</li> <li>PREUNINSTALL—before the uninstallation process</li> </ul> |

#### <view-definition> Tag

Holds all the parameters required for a view definition.

| Attribute    | Definition   |
|--------------|--|
| name         | Required. Holds the view name. The name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.  |
| type         | <ul> <li>Required. Specifies the view type and can hold one of the following values:</li> <li>STATISTICS—a PMDB view that holds information about certain database activity, summarized into hours or time slices</li> <li>INTERNAL—a PMDB view that keeps any other, non-statistical information</li> </ul> |
| view-columns | Required. Its value is the view columns separated by blanks. The number of columns should be equal to the number selected in the as-query attribute  |

#### (Continued)

| Attribute    | Definition   |
|--------------|--|
| as-query     | Required. Specifies the select table that defines the view.  |
| check-option | Optional. Default value is FALSE. If the value is TRUE, only modifications that are visible through the view are allowed, meaning that INSERT and UPDATE statements are valid only if the affected rows can be retrieved by the view afterwards. |

#### <column-definition> Tag

| Attribute | Definition   |
|-----------|--|
| name      | Required. Holds the column name. The name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.  |
| data-type | <ul> <li>Required. Holds the data type of a column:</li> <li>BOOLEAN—does not require data-length and data-scale attributes. These attributes should not be specified. Implementation on all DBMSs: CHAR (1), where T is the boolean TRUE value and F is FALSE.</li> <li>CHAR—requires data-length attribute. Implementation on all DBMSs: CHAR (1), where T is CHAR (data-length)</li> <li>CLOB—requires data-length attribute. Implementation: Microsoft SQL Server—TEXT Oracle—CLOB</li> <li>DECIMAL—requires data-length (used for precision) and data-scale attributes. Implementation: Microsoft SQL Server—same as IBM UDB Oracle—NUMBER (data-length, data-scale)</li> <li>FLOAT—requires data-length attribute. Implementation: Microsoft SQL Server—FLOAT (data-length)</li> <li>Oracle—NUMBER without any parameters</li> <li>INTEGER—requires data-length attribute. Implementation: Microsoft SQL Server—data-length attribute. Implementation: Microsoft SQL Server—FLOAT (data-length)</li> </ul> |
|           | <ul> <li>SMALLINT; data-length more than 4: BIGINT.</li> <li>Oracle—NUMBER (<i>data-length</i>)</li> <li>TIMESTAMP—does not require data-length and data-scale attributes. These attributes should not be specified. Implementation:<br/>Microsoft SQL Server—DATETIME</li> <li>Oracle—DATE</li> <li>UNIQUE INTEGER—does not require data-length and datascale attributes. These attributes should not be specified. This is a data type for a unique integer whose values are generated automatically. Implementation:<br/>Microsoft SQL Server—IDENTITY</li> <li>Oracle—NUMBER (20,0). In addition, a SEQUENCE and a TRIGGER BEFORE INSERT are created, which select the NEXTVAL of the SEQUENCE from DUAL.</li> </ul>   |
|           | <ul> <li>VARCHAR—requires the data-length attribute. Implementation:<br/>Microsoft SQL Server—VARCHAR(data-length) Oracle—<br/>VARCHAR2(data-length)</li> <li>VARBINARY—requires the data-length attribute. Implementation:<br/>Microsoft SQL Server—VARBINARY(data-length)</li> <li>Oracle—RAW(data-length)</li> </ul>  |

(Continued)

#### (Continued)

| Attribute   | Definition   |
|-------------|--|
| data-length | Required only for the data types listed below. Specifies the column data length. CHAR CLOB DECIMAL DECIMAL FLOAT INTEGER VARCHAR VARBINAR  |
| data-scale  | Required only for the data type DECIMAL. Specifies the column data scale.  |
| null        | Required. Has the value TRUE if the column is nullable and FALSE if it is not.   |
| default     | Optional. Specifies the column default. Can have the following values:         Null if the column is nullable (null=TRUE).         N/A if no default exists. If the attribute is omitted, this is the default.         A constant value that is equal to the column type:<br>BOOLEAN—TRUE or FALSE<br>CHAR—a textual constant, such as ABC CLOB—a<br>textual constant, such as ABC DECIMAL—a<br>decimal point constant, such as 10.3<br>FLOAT—a floating point constant, such as 12E7<br>INTEGER—an integer constant, such as 27<br>TIMESTAMP—one of the following:<br>A timestamp constant of the format yyyy-mm-dd hh:mm:ss.ffffffffff,<br>which is jafa.sql.Timestamp's format, such as 2001-11-24<br>23:07:35:17500000. Each DBMS displays a slightly different default.<br>Implementation:<br>Microsoft SQL Server—2001-11-24 23:07:35.175<br>Oracle—TO_DATE(`2001-11-24 23:07:35.175<br>Oracle—TO_DATE(`2001-11-24 23:07:35')         The literal string CURRENT TIMESTAMP. Implementation:<br>Microsoft SQL Server—GETDATE()<br>Oracle—SYSDATE<br>UNIQUE INTEGER—default value not required and not allowed.<br>VARCHAR—a textual constant, such as ABC<br>VARBINARY—a hex string where every two hexadecimal digits represent one byte,<br>such as A07C889F. Each DBMS displays a slightly different default.<br>Implementation:<br>Microsoft SQL Server—0:xA07C889F<br>Oracle—HEXTORAW(`A07C889F'). |
| type        | <ul> <li>Required for the column role in columns of statistics tables. Can have the following values:</li> <li>IDENTIFIER—a column identifying the sampled entity. The concatenation of all identifiers should uniquely identify the entity.</li> <li>DATE—a column identifying the sampled period. Its type should be TIMESTAMP and be equal to the beginning of the sampled period.</li> <li>SUM—a statistics column whose transfer to a higher summary level (such as hourly to daily) should be applied by the SUM function.</li> <li>MIN—a statistics column whose transfer to a higher summary level (such as hourly to daily) should be applied by the MIN function.</li> <li>MAX—a statistics column whose transfer to a higher summary level (such as hourly to daily) should be applied by the MAX function.</li> <li>MAX—a statistics column whose transfer to a higher summary level (such as hourly to daily) should be applied by the MAX function.</li> <li>AVG—a statistics column whose transfer to a higher summary level (such as hourly to daily) should be applied by the MAX function.</li> </ul>  |

#### **Columns Required for Statistics Tables**

If the table is a statistics table, you must include the following columns:

- <column-definition name="<table shortcut>\_TIMESTAMP" data-type="TIMESTAMP" null="FALSE" type="DATE"/>
- <column-definition name="<table shortcut>\_MINUTES\_COUNT\_SUM" data-type="INTEGER" datalength="9" null="FALSE" type="SUM" default="1"/>
- <column-definition name="<table shortcut>\_PWHG\_ID" data-type="INTEGER" data-length="4" null="FALSE" type="IDENTIFIER"/>
- <column-definition name="<table shortcut>\_PWII\_INSTANCE\_ID" data-type="INTEGER" datalength="9" null="FALSE" type="IDENTIFIER"/>
- <column-definition name="<table shortcut>\_RECIEVED\_TIMESTAMP" data-type="TIMESTAMP" null="FALSE" default="CURRENT TIMESTAMP" type="DATE"/>

#### <index-definition> Tag

Holds all the parameters for an index definition.

| Attribute                   | Definition  |
|-----------------------------|---|
| name                        | Required. Holds the index name. The name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.  |
| unique                      | Required. Has the value TRUE if the index is unique and FALSE if it is not.   |
| primary                     | <ul> <li>Required. Has the value TRUE if this is a primary index and FALSE if it is not.<br/>Implementation:</li> <li>Microsoft SQL Server—Adding a primary constraint in Microsoft SQL Server always results in creating a unique index to enforce the constraint. Therefore, only ALTER TABLE ADD CONSTRAINT is issued.</li> <li>Oracle—An index is created using the CREATE INDEX statement. Then an ALTER TABLE ADD CONSTRAINT is performed to add the primary constraint. The ALTER TABLE ADD CONSTRAINT is suffixed with the USING INDEX clause to instruct Oracle to use the already created index to enforce the constraint and not to create a new one.</li> </ul> |
| clustered                   | <ul> <li>Optional. Has the value TRUE if this is a clustered index and FALSE if it is not. The default is FALSE. A clustered index is an index that physically orders and organizes the table. Implementation:</li> <li>Microsoft SQL Server—CLUSTERED clause for a clustered index, NON CLUSTERED clause for a non-clustered index</li> <li>Oracle—Not relevant. In Oracle, this feature is not used frequently; it requires a complete entity to handle clustering.</li> </ul>  |
| mssql-additional-<br>clause | Optional. Only relevant for Microsoft SQL Server. Allows specifying every parameter defined in the "with" section.  |

Note: You must replace with the 4 characters that represent the relevant table (see <u>Table</u> <u>Shortcut</u> on page 47).

#### <foreign-key-definition>Tag

| Attribute   | Definition   |
|-------------|--|
| name        | Required. Holds the foreign key constraint name. The name should follow the naming conventions specified in <u>Naming conventions</u> on page 46.  |
| ref-table   | Required for the table name referenced by the foreign key.   |
| ref-columns | Required. Includes pairs of referencing and referenced columns separated by blanks.  |
| on-delete   | <ul> <li>Required. Determines what action is taken if one or more rows in the referencing table point to a row in the referenced table that has been deleted. Can have the following values:</li> <li>CASCADE—All rows pointing to the deleted row are also deleted. Implementation on all DBMSs: ON DELETE CASCADE</li> <li>NO ACTION—The deletion fails. Implementation: Microsoft SQL Server—ON DELETE NO ACTION Oracle—This is the default. No ON DELETE clause is specified.</li> </ul> |
| on-update   | <ul> <li>Required. Determines what action is taken if one or more rows in the referencing table point to a row in the referenced table that has been updated. Can have the following values:</li> <li>CASCADE—All rows pointing to the deleted row are also deleted. Implementation on all DBMSs: ON UPDATE CASCADE</li> <li>NO ACTION—The update fails. Implementation: Microsoft SQL Server—ON UPDATE NO ACTION Oracle—This is the default. No ON UPDATE clause is specified.</li> </ul>   |

Holds all the parameters for a foreign-key definition.

## How to Create DDML Documents

- 1. Log on to the server where the PMDB FocalPoint is installed using the PMDB user.
- 2. Go to the Precise root directory.
- 3. Open the following file:

products/dbms/files/tables\_definition/pw\_cd\_db\_entities.xml

- 4. Create all database entities you want to add to the PMDB using DDML.
- 5. Save and close the file.
- 6. Run the following command:

On Windows servers:

products\pw\bin\install\_customer\_schema.bat

On UNIX servers:

./products/pw/bin/install\_customer\_schema.sh

7. Stop and restart the PMDB FocalPoint.

# Loading Data

This chapter includes the following topics:

- Introduction
- Load Request Document Format
- Load Response Document Format
- How to Load Data into the PMDB

## Introduction

The Data Loader is a PMDB utility that enables you to efficiently load data into the database structure defined by the DDML document. To improve the load performance, the Data Loader uses JDBC (Java Database Connectivity) batches (similar to array batching in PRO\*C). The Data Loader processes data structured in XML. To load this data, you must run the psin\_http\_requestor utility.

Note: The Data Loader can only process tables defined in the DDML document.

#### Load Request Document Format

The general format of a load request document looks as follows:

- <rowsets> tag: This is the root element of a load request document. Its children are the actual loaded table and the statement to perform during the load process: <rowset> and <statement>.
- <rowset> tag: This tag includes the connection-pool attribute indicating the pool into which to load the data. The value of the connection-pool attribute should always be "pw".
   The <rowset> tag also includes the mandatory object attribute, which indicates the name of the loaded object (such as a table name or a view name if the view is loadable), and other optional attributes described later.
- statement> tag: This tag is used to issue SQL commands during the load process, such as performing an update on a control table or an additional insert that is not part of the load process.

Note: Do NOT enter blanks, nor new lines between the tags.

#### <rowsets> Tag

Root element of the load document.

| Attribute       | Definition  |
|-----------------|---|
| connection-pool | Required. Holds the name of the connection-pool to load. Must have the value $pw$ . |

#### (Continued)

| Attribute            | Definition   |
|----------------------|--|
| 0011011100 011 01101 | Optional. Indicates whether to continue to the next rowset if an error occurs. Default value is FALSE. If the value is TRUE, the load process continues. |

The <rowsets> tag can have the following children: <rowset> and <statement>. These tags are described in the following sections.

#### <rowset> Tag

Holds the request for a specific rowset.

| Attribute | Definition   |
|-----------|--|
| object    | Required. Holds the table name. The name should follow the naming conventions specified in Appendix A, "Naming conventions" on page 46.                                  |
| delete    | Optional. Indicates whether to perform a delete on the table. Default value is FALSE. If the value is TRUE, all data is deleted from the object (do not perform commit). |
| truncate  | Optional. Indicates whether to truncate all the data in the table. Default value is FALSE. If the value is TRUE, all data in the object is truncated (perform commit).   |

The <rowset> tag can have the following children: <columns> and <row>. These tags are described in the following sections.

#### <statement> Tag

Holds the actual SQL command to perform.

#### <columns> Tag

Holds a tag list of all the columns to load in this rowset.

| Child             | Definition   |
|-------------------|--|
| <column></column> | Required. Holds the name of one column to load. For naming conventions, see Appendix A, "Naming conventions" on page 46. |

Note: The following mandatory columns should not be sent in the load request:

\_PWHG\_ID \_RECIEVED\_TIMESTAMP \_MINUTES\_COUNT\_SUM

These columns are populated by the PMDB FocalPoint during the load process.

#### <row> Tag

Holds one row of loaded data. Where X is one digit number indicating the length of the value's length, Y...Y is the actual length of the value and value is the actual value. Example:

212ABCDEFGHIJKL^141234^15RT123

The first column value's length is 2, the column value's length is 12 and the column value is ABCDEFGHIJKL; The second column value's length is 1, the column value's length is 4 and the column value is 1234; and so on.

| Attribute | Definition                                     |
|-----------|--|
| rownum    | Required. Holds the ordinal number of the row. |

## Load Response Document Format

The general format of a load request document looks as follows:

- <rowsets> tag: This is the root element of a load response document. Its children are the <error> tag and the <rowset> tag.
- <rowset> tag: This tag contains the response to a specific rowset sent in the load request.
- <error> tag: This tag contains a complete description of the error. It is a required tag indicating whether a problem has occurred on rowset level. Errors on rowset level mostly point out problems in the RDBMS.

#### <rowsets> Tag

Root element of the load document.

The <rowsets> tag can have the following children: <error> and <rowset>. These tags are described in the following sections.

#### <rowset> Tag

Holds the response to a specific rowset sent in the load request.

| Attribute | Definition  |
|-----------|---|
| )         | Required. Holds the table name. The name should follow the naming conventions specified in Appendix A, "Naming conventions" on page 46. |

The <rowset> tag can have the following child: <error>. This tag is described in the following section.

#### <error> Tag

Holds information on errors that have occurred. Upon successful connection, this tag has a value of 0. Any other value indicates an error.

| Child   | Definition   |
|---|--|
| <code></code>   | Required. Contains an integer value of the load results. A value of 0 indicates a successful, error-free completion. Any other value indicates an error. |
| <description></description>                           | Optional. If an error occurs, this tag contains the error description.   |
| <external-code></external-code>                       | Optional. If an RDBMS error occurs, this tag contains the RDBMS code.  |
| <external-descripti<br>on&gt;</external-descripti<br> | Optional. If an RDBMS error occurs, this tag contains the RDBSM error description.   |

#### How to Load Data into the PMDB

- 1 Make sure a Precise Listener is installed on the server from which you want to load data.
- 2 Prepare an XML file in the load request format containing all the required columns.
- 3 Run the following command from the *<i3\_root>* directory:

```
On a Windows server:
infra\bin\psin_http_requestor.exe -p -x <pw-fp-server> <listener-port> pw-data-load
PW < <file with loading data>
On a UNIX server:
./infra/bin/psin_http_requestor -p -x <pw-fp-server> <listener-port> pw-data-load PW
< <file with loading data>
```

Note: The results are sent to the standard output. If you want to redirect the results to a file, use the > command.

# **Retrieving Data**

This chapter includes the following topics:

- Introduction
- Retrieval Request Document Format
- Retrieval Response Document Format
- How to Retrieve Data from the PMDB
- Combining Data with Precise Data

# Introduction

The Data Retriever is a PMDB utility that enables you to communicate with the database. You can create queries, send them to the PMDB, and receive the answers. The Data Retriever processes data structured in XML. To retrieve data, you must run the psin\_http\_requestor utility.

## **Retrieval Request Document Format**

The general format of a data retrieval request document looks as follows:

- <queries> tag: This is the root element of a retrieval request document. It includes the connection-pool attribute indicating the pool from which to retrieve the data. The value of the connection-pool attribute should always be pw. The children of the <queries> tag are the actual queries to perform. They are identified by the <free-query> tag, which allows a free text query.
- <free-query> tag: This tag holds information on the actual query to perform. You can list several <free
  query> tags under one <queries> tag to perform in serial or parallel mode.

#### <queries> Tag

Root element of a retrieval request document.

| Attribute         | Definition   |
|-------------------|--|
| connection-pool   | Required. Holds the name of the connection-pool from which to retrieve data. Must have the value pw.   |
| single-connection | Optional. Indicates whether to continue to the next rowset if an error occurs.<br>Default value is TRUE, which means that each query is performed in parallel using different<br>connections. This grants a better performance when running multiple queries.<br>If the value is FALSE, all queries are performed in serial mode using the same connection. This<br>way, multiple related updates can be performed on a given order. |

The <queries> tag can have the following child: <free-query>. This tag is described in the following section.

#### <free-query> Tag

Holds information on the actual query to perform.

| Attribute | Definition   |
|-----------|--|
| id        | Required. Holds a string representing a unique ID for the query in this specific request. The string will be attached to the query response to help identify the specific request. This attribute is especially helpful when you send queries with single-connection=false attribute, which performs the queries in parallel. In this case, the query that ends first writes its response first, causing the responses to have a different order than the retrieve requests. |
| types     | Optional. Indicates whether to add an attribute in the response specifying the Java type of each column, as translated from the RDBMS. For example, for VARCHAR/VARCHAR2, the type returned is String. Default value is FALSE.   |

The <free-query> tag can have the following children: <meta-data>, <query-text>, and <bind-variable>. These tags are described in the following sections.

#### <meta-data> Tag

Holds guidelines for the query, such as how many rows to return, whether to skip the first n rows when building the response, or the maximum time in seconds to wait for the query to perform in the RDBMS.

| Child                     | Definition  |  |
|---------------------------|---|--|
| <fetch-rows></fetch-rows> | Optional. Holds the maximum number of rows to return in the response.   |  |
| <skip-rows></skip-rows>   | Optional. Holds the number of rows to skip before building the query. For example, if the query returns 100 rows and you are in rows 6 and above, you can issue the value 5 for this tag. |  |
| <timeout></timeout>       | Optional. Holds the maximum time in seconds to wait for the RDBMS to perform the query.   |  |

#### <query-text> Tag

Holds the actual text of the query to perform.

| Attribute | Definition  |
|-----------|---|
|           | Required. Holds the text of the query to perform. For example:<br><query-text value="select * from&lt;br&gt;pse_pwgi_general_information"></query-text> |

#### <bind-variable> Tag

Holds bind variables, which are represented by ? in Java DataBase Connectivity (JDBC). They are located according to the ordinal number of ? in the query text.

| Attribute | Definition   |
|-----------|--|
| id        | Required. Holds the ordinal location of the ?. The first ? is 1, the second ? is 2, and so on. |

#### (Continued)

| Attribute | Definition  |  |
|-----------|---|--|
| type      | Required. Holds the Java type of the bind variable (in lowercase). Possible types:    |  |
|           | ■ INTEGER   |  |
|           | ■ IDENTITY  |  |
|           | ■ DECIMAL   |  |
|           | ∎ FLOAT   |  |
|           | ■ BOOLEAN   |  |
|           | ■ CHAR  |  |
|           | ■ VARCHAR   |  |
|           | ■ UNIQUE INTEGER  |  |
|           | ■ TIMESTAMP   |  |
|           | VARBINARY   |  |
| value     | Optional. Holds the value of the bind variable to replace during statement execution. |  |

#### **Retrieval Response Document Format**

The data retrieval response document has a format similar to the data load response document—as explained in "Load Response Document Format" on page 37—but it is easier to parse.

The general format of a retrieval response document looks as follows:

- <rowsets> tag: This is the root element of a retrieval response document. Its children are the <rowset> tag—one <rowset> tag for each <free-query> tag sent in the request—and the <error> tag.
- <rowset> tag: Each <rowset> tag gets the same ID as the <free-query> tag in the retrieval request document to indicate to which query this rowset replies.
- <error> tag: This tag contains a complete description of the error. It is a required tag indicating whether a problem has occurred on rowset level. Errors on rowset level mostly point out problems in the RDBMS.

#### <rowsets> Tag

Root element of a retrieval response document.

The <rowsets-tag> tag can have the following children: <rowset> and <error>. These tags are described in the following sections.

#### <rowset> Tag

Holds the information for a specific rowset.

Each <rowset> tag gets the same ID as the <free-query> tag in the retrieval request document to indicate to which query this rowset replies.

| Attribute | Definition  |
|-----------|---|
| id        | Required. Holds the same ID value as the <free-query> tag in the retrieval request document to help identify to which query this rowset replies.</free-query> |

The <rowset> tag can have the following children: <row>, <rowset-info>, and <error>. These tags are described in the following sections.

#### <row> Tag

Holds the value for a specific row.

| Attribute | Definition                                     |
|-----------|--|
| rownum    | Required. Holds the ordinal number of the row. |

The <row> tag can have the following children: <column name> and <error>. These tags are described in the following sections.

#### <column name> Tag

Holds the actual name of the column or its alias (as it is retrieved from the RDBMS), depending on the query.

| Attribute | Definition   |
|-----------|--|
|           | Optional. Holds the Java representation of the column type, such as STRING, INTEGER, FLOAT, DOUBLE. If the retrieval request contains the type attribute, each column of the response request consequently contains a type attribute, too. |

#### <rowset-info> Tag

Holds meta-data on the query, such as the number of rows affected.

| Child                           | Definition  |  |
|---------------------------------|---|--|
| <affected-rows></affected-rows> | <ul> <li>Optional. Indicates how many rows have been affected:</li> <li>In case of a query, it indicates the number of rows returned in response.</li> <li>In case of a DML, it indicates, for example, how many rows have been deleted.</li> </ul>   |  |
| <more-rows></more-rows>         | Optional. Indicates if more rows are to be retrieved. Can have the values TRUE or FALSE.<br>For example, if the <meta-data> tag of the <free-query> tag requests only 5 rows and<br/>the query returns 10 rows, the value of the <affected-rows> tag is 5 and the<br/><more-rows> tag is TRUE.</more-rows></affected-rows></free-query></meta-data> |  |

#### <error> Tag

Holds information if an error has occurred. Upon successful connection, this tag has a value of zero. Any other value indicates an error.

| Child   | Definition   |
|---|--|
| <code></code>   | Required. Contains an integer value of the retrieve results. A value of 0 indicates a successful, error-free completion. Any other value indicates an error. |
| <description></description>                           | Optional. If an error occurs, this tag contains the error description.   |
| <external-code></external-code>                       | Optional. If an RDBMS error occurs, this tag contains the RDBMS code.  |
| <external-descripti<br>on&gt;</external-descripti<br> | Optional. If an RDBMS error occurs, this tag contains the RDBSM error description.   |

#### How to Retrieve Data from the PMDB

- 1 Make sure a Precise Listener is installed on the server to which you want to retrieve data.
- 2 Prepare an XML file in the retrieve request format containing all the required columns.

```
3 Run the following command from the <i3_root> directory:
On a Windows server:
infra\bin\psin_http_requestor.exe -dp -x pw-data-retrieve PW < <file with retriever
request>
On a UNIX server:
./infra/bin/psin_http_requestor -dp -x pw-data-retrieve PW < <file with retriever>
```

Note: The results are sent to the standard output. If you want to redirect the results to a file, use the > command.

#### Combining Data with Precise Data

To combine gathered data with Precise data, use the Report Manager's customized reports, which provide Microsoft Excel<sup>®</sup> output for your queries.

For information on how to integrate the newly created PMDB tables in customized reports and on how to retrieve the combined data, see the technical note *Importing, exporting, and copying Customized Reports in Precise™ Report Manager* and the *Report Manager User's Guide*.

# Managing Data

This chapter includes the following topics:

- Introduction
- Defining Hour Groups
- Summarizing Data
- Purging Data

#### Introduction

As soon as the PMDB contains long-term application data, you can start analyzing this information.

You can identify resource consumption trends and track performance deviation. You can analyze the effect of load patterns, entity changes, entity statistics, or component parameter changes. You may also examine data growth or data distribution changes and detect performance bottlenecks proactively, before they turn into performance problems.

Analyzing the collected data is closely related to managing the PMDB settings. These settings are described in the following:

- Defining Hour Groups
- Summarizing Data
- Purging Data

For more information, see the Precise Administration Guide.

#### **Defining Hour Groups**

The PMDB data is summarized into hourly-based time units. In large environments with a high volume of transactions, the PMDB may use a lot of disk space. To reduce disk space consumption, Precise automatically aggregates hourly data into daily, weekly, and monthly data. Aggregation saves space, but it eliminates the raw details of hourly performance data. To specify the hours for which you want data maintained, you can use the **Hour Group** option in AdminPoint.

The **Hour Group** option divides the week into hour groups. The default groups are day, morning, night, and weekend. During the installation, you, as administrator, can create your own hour groups or change the defaults to whatever is appropriate for your environment. For example, you could define a peak hour every day between 10 a.m. and 11 a.m.

Once you have declared the hour groups you want, you can further define which performance data will be collected within each hour group. For information on how to customized hour groups, see the *Precise Administration Guide*.

Note: When you change hour group definitions, the changes apply only to data loaded subsequent to the change; hour group definitions are not applied retroactively.

#### Summarizing Data

The PMDB can summarize hour group data per day, week, and month. The summaries are based on performance data that is collected by the Precise agents and loaded into the PMDB. The summaries are stored in summary tables, which are partitioned according to the time interval. Summary tables store the same data in different levels of granularity: time slice, hourly, daily, weekly, and monthly.

By storing data in multiple summary tables, Precise can present a detailed view and progressively higher-level views of the same data. Summary tables are particularly useful for data aging. You can implement a data purging policy for each summary table and make sure detailed data is retained for short-term historical analyses while more summarized data is used for long-term analyses and trending.

#### Purging Data

Purging removes performance information that is no longer useful for analyzing trends in your system. You can purge old data from the PMDB to save disk space and to enhance the overall performance of the PMDB.

The purging methodology is based on a cascading approach to keep time-slice-, hour-, day-, week-, and month-based summary tables that contain historical data. The purging option enables you to distinguish between the summary time period levels and to set a purging limit for each level.

For example, suppose you save information about a Web server AppTier and an Oracle AppTier in the PMDB. For the Web server you may want to save daily performance information for one month and monthly summaries for two months. For the Oracle performance information you may want to save daily summaries for two months and monthly summaries for one year.

The purging intervals you choose depend on your organization's need for historical data in each AppTier. The purging settings are set from AdminPoint. For each AppTier and for each summary level, you can set how many weeks or months back you want to keep data. Once you have specified this settings, a batch procedure periodically removes all the data that is older than the values in the purging settings.

To set purging criteria

- 1 Open the Warehouse Processes view in AdminPoint.
- 2 Select the Purge Data process and click Parameters. The Purge Data Process Properties dialog box opens.
- 3 Enter the required values for each technology.
- 4 Click OK.

## Naming conventions

#### **Product Shortcut**

The product shortcut consists of two uppercase letters representing the product, as detailed in the following table.

| Product                    | Product shortcut |
|----------------------------|------------------|
| Precise for J2EE           | JE               |
| Precise for DB2            | UD               |
| Precise for Oracle         | OR               |
| Precise for SQL Server     | SQ               |
| Precise for Web            | ww               |
| Precise for SAP            | SP               |
| Insight                    | IS               |
| Report Manager             | FS               |
| Alerts                     | PU               |
| Instance Watch             | PD               |
| PMDB                       | PW               |
| Precise for Sybase         | SY               |
| Precise for Microsoft .NET | DN               |
| Customer Defined 1         | C1               |
| Customer Defined 2         | C2               |
| Customer Defined 3         | С3               |

#### **Environment Shortcut**

The environment shortcut consists of two uppercase letters representing the environment, as detailed in the following table.

| Environment | Environment shortcut |
|-------------|----------------------|
| Oracle      | OR                   |
| DB2         | UD                   |

#### (Continued)

| Environment            | Environment shortcut |
|------------------------|----------------------|
| Microsoft SQL Server   | SQ                   |
| Tuxedo                 | TU                   |
| www                    | WW                   |
| Java Virtual Machine   | JE                   |
| SAP Application Server | SP                   |
| Oracle Applications    | OA                   |
| Web Servers            | WS                   |
| Storage                | ST                   |
| Other                  | от                   |
| Customer Defined       | CD                   |

#### **Table Shortcut**

The table shortcut consists of two uppercase letters or digits representing the table. For example, the table that holds hour group details has the shortcut "HG."

#### **Table Short Name**

The table short name consists of four uppercase letters or digits representing the concatenation of:

- Environment shortcut and table shortcut (in case of a PMDB Statistics and Events table)
- Product shortcut and table shortcut (in case of a Product Internal table)

#### **Table Description**

The table description is a string describing the table's role and content. It can consist of uppercase letters, digits, and the underscore character.

#### Index Description

The index description is a string describing the index's role and content. It can consist of uppercase letters, digits, and the underscore character.

#### **Column Description**

The column description is a string describing the columns's role and content. It can consist of uppercase letters, digits, and the underscore character.

#### Foreign Key Description

The foreign key description is a string describing the foreign key's role and content. It can consist of uppercase letters, digits, and the underscore character.

#### Table Name

#### The PMDB Events Table

The format for an Events table follows this convention:

PW\_[environment shortcut][table shortcut]\_[table description]
Due to Oracle limitations, the length of a table name cannot exceed 30 characters.
For example, the table PW\_ORIE\_INSTNACE\_EXCEPTIONS is interpreted as follows:

- PW—for all PMDB tables
- ORIE—for the environment shortcut (OR) and the table shortcut (IE)
- INSTANCE\_EXCEPTIONS—for the description of the table

#### The PMDB Statistics Table

The format for a Statistics table follows this convention:

PW\_[environment shortcut][table shortcut]\_[table description]\_
[summary level]

where the *summary* level comprises one character of one of the following values:

- H for an hourly summary level
- D for a daily summary level
- W for a weekly summary level
- M for a monthly summary level

Due to Oracle limitations, the length of a table name cannot exceed 30 characters.

For example, the table <code>PW\_ORIS\_INSTANCE\_STATISTICS\_H</code> is interpreted as follows:

- PW—for all PMDB table
- ORIS—for the environment shortcut (OR) and the table shortcut (IS)
- INSTANCE\_STATISTICS—for the description of the table
- H—for the summary level (hourly)

#### View Name

The view name does not follow any specific convention.

#### Index Name

#### The PMDB Events Table Index

The format for an index of an Events table follows this convention: IW\_[table short name]\_[index description] Due to internal limitations, the index name cannot exceed 18 characters. For example, the index IW\_ORIW\_ID is interpreted as follows:

- IW—for all PMDB table indexes
- ORIW—for the short name of the table PW\_ORIE\_INSTANCE\_EXCEPTIONS
- ID—for the description of the index

#### Naming conventions

#### The PMDB Statistics Table Index

The format for an index of a Statistics table follows this convention:

IW\_[table short name]\_[index description]\_[summary level]
where the summary level comprises one character of one of the following values:

- H for an hourly summary level
- D for a daily summary level
- W for a weekly summary level
- M for a monthly summary level

Due to internal limitations, the index name cannot exceed 18 characters.

For example, the index  ${\tt IW\_ORIS\_ID\_H}$  is interpreted as follows:

- IW—for all PMDB table indexes
- ORIs—for the short name of the table PW\_ORIS\_INSTANCE\_STATISTICS\_H
- ID—for the description of the index
- H—for the summary level (hourly)

#### Column Name

#### Events Table Column Name

The format for a column name in an Events follows this convention:

[table short name]\_[conlumn description]

where the *column* description describes the column role and content; it can consist of uppercase letters, digits, and the underscore character.

Due to Oracle limitations, the column name cannot exceed 30 characters.

For example, the column name PWLH\_TYPE is interpreted as follows:

- PWLH—for the product PMDB (PW) and the short description of the table (LH)
- TYPE—for the description of the column

For naming conventions of columns that are foreign keys, see "Foreign Key Name" later on.

#### Statistics Table Column Name

Column names in Statistics tables follow the same naming convention as those in Events tables but add an additional element if the column type is one of the following: SUM, AVG, MIN, or MAX. In this case, SUM, AVG, MIN, or MAX are attached.

#### Foreign Key Name

The foreign key constraint name follows this convention:

```
FK_[referencing table short name]_[referenced table short name]_[foreign key description]
```

Due to internal limitations, the foreign key cannot exceed 18 characters, which means that the foreign key description is limited to five characters.

For example, the foreign key name FK\_PWHM\_PWHG\_ID is interpreted as follows:

- FK—for all foreign keys
- PWHM—for the short name of the referencing table

- PWHG—for the short name of the referenced table
- ID—for the foreign key description

#### Foreign Key Column Name

The foreign key column names consist of the table short name and the column name of the reference primary key.

For example, a foreign key in the table PS\_PWHM\_HOUR\_MAPPING referencing the column PWHG\_ID of the table PS\_PWHG\_HOUR\_GROUPS should be called PWHM\_PWHG\_ID.

# B

## **Insight General Tables**

## PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | The instance ID. Columns of XXXX_PWII_INSTANCE_ID have values from the column.                  |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PS\_INGD\_GROUPS\_DEFS

A translation of all Insight grouped entities, excluding Locations.

| Column name | Column description  |
|-------------|---|
| INGD_ID     | The group ID.   |
| INGD_NAME   | The group name according to the joined entity (for example (Users (Grouped)). |

#### PS\_INLD\_LOCATION\_DEFS

A translation of all Insight client IPS groups to Locations.

| Column name | Column description |
|-------------|--------------------|
| INLD_ID     | The group ID.      |
| INLD_NAME   | The locations.     |

#### PS\_ISPD\_PROC\_AVAIL\_DEFS

This table contains Alerts Process Availability (PA) Definitions.

| Column name    | Column description                    |
|----------------|---------------------------------------|
| ISPD_ID        | PA definition ID.                     |
| ISPD_NAME      | PA definition name.                   |
| ISPD_INTE_CODE | Technology code of the PA definition. |

### PS\_ISPR\_PROC\_AVAIL\_RULES

This table contains process names that comprise the Process Availability Definition.

| Column name    | Column description            |
|----------------|-------------------------------|
| ISPR_ISPD_ID   | PA definition ID.             |
| ISPR_USER_NAME | OS user name.                 |
| ISPR_RULE      | Process name or text pattern. |

### PS\_ISPC\_PROC\_AVAIL\_CONN

This table contains the association of Process Availability Definitions to Precise instances.

| Column name       | Column description  |
|-------------------|---|
| ISPC_ISPD_ID      | PA definition ID.   |
| ISPC_INTE_CODE    | Technology code of the PA definition.   |
| ISPC_TECH_DEFAULT | Boolean - Does this definition apply to all instances of the technology? (yes or no)              |
| ISPC_INCE_ID      | Instance ID associated with the PA definition (if this definition is not the technology default). |

# C

# Insight OS Tables

## PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_OSST\_SERVER\_STAT\_VIEW\_T

The server load information summarized by each aggregated invocation.

| Column name           | Column description   |
|-----------------------|--|
| OSST_TIMESTAMP        | The time summary.  |
| OSST_PWII_INSTANCE_ID | The ID of the instance.  |
| OSST_LOAD_Q_AVG       | The average length of the Operating System CPU queue on the server . |

#### PW\_OSSG\_SERVER\_GRP

The process statistics server group table.

| Column name  | Column description   |
|--------------|--|
| OSSG_INCE_ID | The ID of the server.  |
| OSSG_INGD_ID | The ID of the server group running the Operating System process. |

### PW\_OSUG\_USER\_GRP

The process statistics user group table.

| Column name  | Column description   |
|--------------|--|
| OSUG_OSUN_ID | The ID of the user.  |
| OSUG_INGD_ID | The ID of the user group running the Operating System process. |

#### PW\_OSAN\_PUB\_APP\_N

The Citrix application normalization table.

| Column name       | Column description   |
|-------------------|--|
| OSAN_ID           | The ID of the Citrix application.  |
| OSAN_STRING_VALUE | The name of the Citrix application running the Operating System process. |

### PW\_OSSN\_APP\_USER\_N

The Citrix user normalization table.

| Column name       | Column description  |  |
|-------------------|---|--|
| OSSN_ID           | The ID of the Citrix user.  |  |
| OSSN_STRING_VALUE | The name of the Citrix user running the Operating System process. |  |

## PW\_OSIN\_CLIENT\_IP\_N

The Citrix client IP normalization table.

| Column name       | Column description   |  |
|-------------------|--|--|
| OSIN_ID           | The ID of the Citrix client IP.  |  |
| OSIN_STRING_VALUE | The name of the Citrix client IP running the Operating System process. |  |

#### PW\_OSCN\_CLIENT\_N

The Citrix client normalization table.

| Column name       | Column description  |  |
|-------------------|---|--|
| OSCN_ID           | The ID of the Citrix client.  |  |
| OSCN_STRING_VALUE | The name of the Citrix client running the Operating System process. |  |

#### PW\_OSPG\_PROGRAM\_GRP

The process statistics program group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OSPG_OSPN_ID | The ID of the program.  |  |
| OSPG_INGD_ID | The ID of the program group running the Operating System process. |  |

#### PW\_OSTG\_PATH\_GRP

The process statistics command group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OSTG_OSTN_ID | The ID of the command.  |  |
| OSTG_INGD_ID | The ID of the command group running the Operating System process. |  |

### PW\_OSUN\_USER\_N

The process statistics user normalization table.

| Column name       | Column description   |  |
|-------------------|--|--|
| OSUN_ID           | The ID of the user.  |  |
| OSUN_STRING_VALUE | The name of the user running the Operating System process. |  |

## PW\_OSPN\_PROGRAM\_N

The process statistics program normalization table.

| Column name       | Column description  |  |
|-------------------|---|--|
| OSPN_ID           | The ID of the program.  |  |
| OSPN_STRING_VALUE | The name of the program running the Operating System process. |  |

#### PW\_OSTN\_PATH\_N

The process statistics command normalization table.

| Column name       | Column description  |  |
|-------------------|---|--|
| OSTN_ID           | The ID of the command.  |  |
| OSTN_STRING_VALUE | The name of the command running the Operating System process. |  |

## PW\_OSSS\_SRV\_STATISTICS\_T

The server-level OS statistics summarized by each aggregated invocation.

| Column name           | Column description   |  |
|-----------------------|--|--|
| OSSS_TIMESTAMP        | The time summary.  |  |
| OSSS_PWHG_ID          | The hour group ID.   |  |
| OSSS_SLICES_SUM       | The number of 15-minute slices in the time summary that data was reported by the OS agent for this instance.   |  |
| OSSS_PWII_INSTANCE_ID | The ID of the OS server instance.  |  |
| OSSS_NUM_CPUS         | The number of processors on the server.  |  |
| OSSS_TOT_PHY_MEM      | Installed physical memory on the server, specified in Mbytes.  |  |
| OSSS_TOT_VIR_MEM      | The virtual memory configured for the server (physical memory and paging file), specified in Mbytes.   |  |
| OSSS_USER_CPU_SUM     | The non-idle processor time spent in user mode, specified in seconds. The user mode is a restricted processing mode designed for applications, environment subsystems, and integral subsystems.  |  |
| OSSS_SYS_CPU_SUM      | The non-idle processor time spent in privileged mode, specified in seconds. The privileged mode is designed for operating system components and allows direct access to hardware and all memory. |  |
| OSSS_WAIT_CPU_SUM     | The amount of time that the processor was idle during which the system had an outstanding disk I/O request, specified in seconds.  |  |
| OSSS_OTHER_CPU_SUM    | The miscellaneous non-idle processor time, specified in seconds.   |  |
| OSSS_SWITCH_SUM       | The combined rate at which all processors on the server are switched from one thread to another.   |  |
| OSSS_IO_SUM           | The total OS I/O consumption on the server, specified in Mbytes.   |  |
| OSSS_PHY_MEM_SUM      | The physical memory consumption, specified in Mbytes.  |  |
| OSSS_VIR_MEM_SUM      | The virtual memory consumption, specified in Mbytes.   |  |
| OSSS_PAGING_SUM       | The total OS paging on the server.   |  |
| OSSS_LOAD_SUM         | The total server load.   |  |
| OSSS_PROC_START_SUM   | The total number of processes started in this time summary.  |  |
| OSSS_PROC_SUM         | The total number of processes running in this time summary.  |  |

#### Expressions

| Oracle   | SQL Server   | Expression description                      |
|--|--|---|
| <pre>sum(OSSS_LOAD_SUM) / sum(OSSS_SLICES_SUM)</pre> | <pre>sum(OSSS_LOAD_SUM) / sum(OSSS_SLICES_SUM)</pre> | Average server load for a given time range. |

#### (Continued)

| Oracle  | SQL Server  | Expression description  |
|---|---|---|
| <pre>sum(OSSS_PHY_MEM_SUM) * 1024.0 * 1024.0 / sum(OSSS_SLICES_SUM)</pre>                                 | <pre>sum(OSSS_PHY_MEM_SUM) * 1024.0 * 1024.0 / sum(OSSS_SLICES_SUM)</pre>                                 | Server physical memory consumption.   |
| <pre>sum(OSSS_VIR_MEM_SUM) * 1024.0 * 1024.0 / sum(OSSS_SLICES_SUM)</pre>                                 | <pre>sum(OSSS_VIR_MEM_SUM) * 1024.0 * 1024.0 / sum(OSSS_SLICES_SUM)</pre>                                 | Server virtual memory consumption.  |
| <pre>(sum(OSSS_PHY_MEM_SUM / OSSS_TOT_PHY_MEM) / sum(OSSS_SLICES_SUM)) * 100.0</pre>                      | <pre>(sum(OSSS_PHY_MEM_SUM / OSSS_TOT_PHY_MEM) / sum(OSSS_SLICES_SUM)) * 100.0</pre>                      | Server physical memory utilization (in percentage from total server physical memory). |
| <pre>(sum(OSSS_VIR_MEM_SUM / OSSS_TOT_VIR_MEM) / sum(OSSS_SLICES_SUM)) * 100.0</pre>                      | (sum(OSSS_VIR_MEM_SUM<br>/ OSSS_TOT_VIR_MEM) /<br>sum(OSSS_SLICES_SUM))<br>* 100.0                        | Server virtual memory utilization (in percentage from total server virtual memory).   |
| (sum(OSSS_USER_CPU_SU<br>M / OSSS_NUM_CPUS) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)) * 100.0                | (sum(OSSS_USER_CPU_SU<br>M / OSSS_NUM_CPUS) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)) * 100.0                | Server User CPU utilization (in percentage from total available processor power).     |
| <pre>(sum(OSSS_SYS_CPU_SUM / OSSS_NUM_CPUS) / (sum(OSSS_SLICES_SUM) *900.0)) * 100.0</pre>                | (sum(OSSS_SYS_CPU_SUM<br>/ OSSS_NUM_CPUS) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)) * 100.0                  | Server System CPU utilization (in percentage from total available processor power).   |
| <pre>(sum(OSSS_WAIT_CPU_SU M / OSSS_NUM_CPUS) / (sum(OSSS_SLICES_SUM) *900.0)) * 100.0</pre>              | <pre>(sum(OSSS_WAIT_CPU_SU M / OSSS_NUM_CPUS) / (sum(OSSS_SLICES_SUM) *900.0)) * 100.0</pre>              | Server Wait IO CPU utilization (in percentage from total available processor power).  |
| <pre>(sum(OSSS_OTHER_CPU_S<br/>UM / OSSS_NUM_CPUS) /<br/>(sum(OSSS_SLICES_SUM)<br/>*900.0)) * 100.0</pre> | <pre>(sum(OSSS_OTHER_CPU_S<br/>UM / OSSS_NUM_CPUS) /<br/>(sum(OSSS_SLICES_SUM)<br/>*900.0)) * 100.0</pre> | Server Other CPU utilization (in percentage from total available processor power).    |
| Sum of above four<br>expressions  | Sum of above four<br>expressions  | Total Server CPU utilization (in percentage from total available processor power).    |
| (sum(OSSS_IO_SUM) *<br>1024.0 * 1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)                             | (sum(OSSS_IO_SUM) *<br>1024.0 * 1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)                             | Server I/O throughput, specified as I/O bytes per second.                             |
| (sum(OSSS_PAGING_SUM)<br>* 1024.0 * 1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)                         | (sum(OSSS_PAGING_SUM)<br>* 1024.0 * 1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0)                         | Server Page faults rate, specified as paging per second.                              |

#### (Continued)

| Oracle  | SQL Server   | Expression description   |
|---|--|--|
| (sum(OSSS_SWITCH_SUM)<br>* 1024.0 * 1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0) | (sum(OSSS_ SWITCH<br>_SUM) * 1024.0 *<br>1024.0) /<br>(sum(OSSS_SLICES_SUM)<br>*900.0) | Server Context Switches rate, specified as Context<br>Switches per second. |

## PW\_OSPS\_PROC\_STATISTICS\_T

The OS process-level statistics summarized by each aggregated invocation.

| Column name           | Column description   |
|-----------------------|--|
| OSPS_TIMESTAMP        | The time summary.  |
| OSPS_PWHG_ID          | The hour group ID.   |
| OSPS_PWII_INSTANCE_ID | The ID of the instance running the OS process.   |
| OSPS_NUM_CPUS         | The number of processors on the server.  |
| OSPS_USER             | The ID of the user running the OS process.   |
| OSPS_PROGRAM          | The ID of the program running the OS process.  |
| OSPS_PATH             | The ID of the command (program with arguments) running the OS process.   |
| OSPS_PID              | The ID of the OS process.  |
| OSPS_PID_TIMESTAMP    | The creation time of the OS process.   |
| OSPS_WORK_TYPE        | 0, null = general; 90 = Citrix.  |
| OSPS_PUB_APP          | The ID of the Citrix application running the OS process.   |
| OSPS_APP_USER         | The ID of the Citrix user running the OS process.  |
| OSPS_CONSUMER_IP      | The ID of the Citrix client IP running the OS process.   |
| OSPS_CONSUMER_IP_GID  | The ID of the Citrix location running the OS process.  |
| OSPS_CONSUMER         | The ID of the Citrix client running the OS process.  |
| OSPS_USER_CPU_SUM     | The non-idle processor time spent in user mode, specified in seconds. The user mode is a restricted processing mode designed for applications, environment subsystems, and integral subsystems.  |
| OSPS_SYS_CPU_SUM      | The non-idle processor time spent in privileged mode, specified in seconds. The privileged mode is designed for operating system components and allows direct access to hardware and all memory. |
| OSPS_WAIT_CPU_SUM     | The amount of time that the processor was idle during which the system had an outstanding disk I/O request, specified in seconds.  |
| OSPS_OTHER_CPU_SUM    | The miscellaneous non-idle processor time, specified in seconds.   |
| OSPS_SWITCH_SUM       | The combined rate at which all processors on the server are switched from one thread to another.   |

#### (Continued)

| Column name         | Column description   |
|---------------------|--|
| OSPS_THREADS_SUM    | The average number of threads active for one process.            |
| OSPS_IO_SUM         | The total OS I/O consumption on the server, specified in Mbytes. |
| OSPS_PHY_MEM_SUM    | The physical memory consumption, specified in Mbytes.            |
| OSPS_VIR_MEM_SUM    | The virtual memory consumption, specified in Mbytes.             |
| OSPS_PAGING_SUM     | The total OS paging on the server.                               |
| OSSS_LOAD_SUM       | The total server load.   |
| OSPS_PROC_START_SUM | The total number of processes started in this time summary.      |
| OSPS_PROC_SUM       | The total number of processes running in this time summary.      |

## PW\_OSLS\_LCPU\_STATISTICS\_T

The OS statistics for the logical processor summarized by each aggregated invocation.

| Column name           | Column description   |
|-----------------------|--|
| OSLS_TIMESTAMP        | The time summary.  |
| OSLS_PWHG_ID          | The hour group ID.   |
| OSLS_PWII_INSTANCE_ID | The ID of the instance running the OS process.   |
| OSLS_SLICES_SUM       | The number of 15-minute slices in the time summary that data was reported by the OS agent for this instance.   |
| OSLS_LOGICAL_CPU      | The processor ID (if it is on a virtual server, then we talk about the logical processor).   |
| OSLS_USER_CPU_SUM     | The non-idle processor time spent in user mode, specified in seconds. The user mode is a restricted processing mode designed for applications, environment subsystems, and integral subsystems.  |
| OSLS_SYS_CPU_SUM      | The non-idle processor time spent in privileged mode, specified in seconds. The privileged mode is designed for operating system components and allows direct access to hardware and all memory. |
| OSLS_WAIT_CPU_SUM     | The amount of time that the processor was idle during which the system had an outstanding disk I/O request, specified in seconds.  |
| OSLS_OTHER_CPU_SUM    | The miscellaneous non-idle processor time, specified in seconds.   |

#### Expressions

| Oracle   | SQL Server   | Expression description   |
|--|--|--|
| (sum(OSLS_USER_CPU_SU<br>M / OSLS_NUM_CPUS) /<br>(sum(OSLS_SLICES_SUM)<br>*900.0)) * 100.0 | (sum(OSLS_USER_CPU_SU<br>M / OSLS_NUM_CPUS) /<br>(sum(OSLS_SLICES_SUM)<br>*900.0)) * 100.0 | User CPU utilization for logical processor (in percentage from total available processor power). |

#### (Continued)

| Oracle  | SQL Server  | Expression description  |
|---|---|---|
| <pre>(sum(OSLS_SYS_CPU_SUM / OSLS_NUM_CPUS) / (sum(OSLS_SLICES_SUM) *900.0)) * 100.0</pre>                | <pre>(sum(OSLS_SYS_CPU_SUM / OSLS_NUM_CPUS) / (sum(OSLS_SLICES_SUM) *900.0)) * 100.0</pre>                | System CPU utilization for logical processor (in percentage from total available processor power).  |
| <pre>(sum(OSLS_WAIT_CPU_SU<br/>M / OSLS_NUM_CPUS) /<br/>(sum(OSLS_SLICES_SUM)<br/>*900.0)) * 100.0</pre>  | (sum(OSLS_WAIT_CPU_SU<br>M / OSLS_NUM_CPUS) /<br>(sum(OSLS_SLICES_SUM)<br>*900.0)) * 100.0                | Wait IO CPU utilization for logical processor (in percentage from total available processor power). |
| <pre>(sum(OSLS_OTHER_CPU_S<br/>UM / OSLS_NUM_CPUS) /<br/>(sum(OSLS_SLICES_SUM)<br/>*900.0)) * 100.0</pre> | <pre>(sum(OSLS_OTHER_CPU_S<br/>UM / OSLS_NUM_CPUS) /<br/>(sum(OSLS_SLICES_SUM)<br/>*900.0)) * 100.0</pre> | Other CPU utilization for logical processor (in percentage from total available processor power).   |
| Sum of above four<br>expressions  | Sum of above four<br>expressions  | Total CPU utilization for logical processor (in percentage from total available processor power).   |

## PW\_OSLN\_LCPU\_N

The process statistics logical processor normalization table.

| Column name       | Column description                 |
|-------------------|------------------------------------|
| OSLN_ID           | The ID of the logical processor.   |
| OSLN_STRING_VALUE | The name of the logical processor. |

## PW\_OSCS\_CITRIX\_STATISTICS\_T

The Citrix performance counters summarized by each aggregated invocation.

| Column name           | Column description                                       |
|-----------------------|--|
| OSCS_TIMESTAMP        | The time summary.  |
| OSCS_PWHG_ID          | The hour group ID.                                       |
| OSCS_PWII_INSTANCE_ID | The ID of the instance running the OS process.           |
| OSCS_PUB_APP          | The ID of the Citrix application running the OS process. |
| OSCS_APP_USER         | The ID of the Citrix user running the OS process.        |
| OSCS_CONSUMER_IP      | The ID of the Citrix client IP running the OS process.   |
| OSCS_CONSUMER_IP_GID  | The ID of the Citrix location running the OS process.    |
| OSCS_CONSUMER         | The ID of the Citrix client running the OS process.      |
| OSCS_SESSIONS_SUM     | The number of Citrix sessions.                           |
| OSCS_CLIENT_LAT_SUM   | The Citrix client average latency.                       |

#### Expressions

| Oracle                                | SQL Server                            | Expression description                    |
|---------------------------------------|---------------------------------------|---|
| <pre>sum(OSCS_CLIENT_LAT_S UM /</pre> | <pre>sum(OSCS_CLIENT_LAT_S UM /</pre> | Average client latency per Citrix session |
|                                       | OSCS_SESSIONS_SUM)                    |   |

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## Insight Network and Other Tables

## PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_OTSG\_SERVER\_GRP

The other server group table.

| Column name  | Column description  |
|--------------|---|
| OTSG_INSM_ID | The ID of the servers.  |
| OTSG_INGD_ID | The ID of the server group running the Other Application Tier network requests. |

#### PW\_NTVN\_SERVER\_IP\_N

The Insight network and other server IP normalization table.

| Column name       | Column description         |
|-------------------|----------------------------|
| NTVN_ID           | The ID of the server IP.   |
| NTVN_STRING_VALUE | The name of the server IP. |

## PW\_NTCN\_CONSUMER\_IP\_N

The Insight network and other client IP normalization table.

| Column name       | Column description         |
|-------------------|----------------------------|
| NTCN_ID           | The ID of the client IP.   |
| NTCN_STRING_VALUE | The name of the client IP. |

### PW\_OTAC\_VIEW\_T

The other AppTier network activity summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| OTAC_TIMESTAMP        | The time summary.   |
| OTAC_PWII_INSTANCE_ID | The ID of the instance running the Other Application Tier network requests.   |
| OTAC_CONSUMER_IP      | The ID of the client IP running the Other Application Tier network requests.  |
| OTAC_CONSUMER_IP_GID  | The ID of the client IP group running the Other Application Tier network requests.  |
| OTAC_ID1              | The ID of the server IP running the Other Application Tier network requests.  |
| OTAC_NETWORK_TIME_SUM | Round-trip Other Application Tier activity network time between the Other Application Tier client and the Application server.                           |
| OTAC_STAT1_SUM        | Total number of network packets, transferred while running the Other Application Tier network requests.   |
| OTAC_STAT2_SUM        | Total number of network bytes, transferred while running the Other Application Tier network requests.   |
| OTAC_TIME1_SUM        | Total Other application tier activity processing time. This time includes the time the Other Application Tier waited for other Other Application Tiers. |
| OTAC_REQUESTS_SUM     | Total number of Other Application Tier network requests.  |
| OTAC_RED_SUM          | Total number of Other Application Tier activity executions, which Breached their SLA.   |
| OTAC_YELLOW_SUM       | Total number of Other Application Tier activity executions, which Near Breached their SLA.  |
| OTAC_GREEN_SUM        | Total number of Other Application Tier activity executions, which did Not Breach their SLA.   |

#### Expressions

| Oracle  | SQL Server  | Expression description   |
|---|---|--|
| <pre>sum(OTAC_NETWORK_TIME _SUM+OTAC_TIME1_SUM)</pre> | <pre>sum(OTAC_NETWORK_TIME _SUM+OTAC_TIME1_SUM)</pre> | Total Other Application Tier activity processing time. This time includes network and all other times, which sum the Other Application Tier response time. |

#### (Continued)

| Oracle  | SQL Server  | Expression description  |
|---|---|---|
| <pre>sum(OTAC_NETWORK_TIME _SUM)/sum(decode(OTAC _REQUESTS_SUM,0,1,OTA C_REQUESTS_SUM))</pre>   | <pre>sum(OTAC_NETWORK_TIME _SUM)/sum(decode(OTAC _REQUESTS_SUM,0,1,OTA C_REQUESTS_SUM))</pre>   | Average round-trip Other Application Tier activity network<br>time between the Other Application Tier client and the<br>Application server.   |
| <pre>sum(OTAC_TIME1_TIME_S UM)/sum(decode(OTAC_R EQUESTS_SUM,0,1,OTAC_ REQUESTS_SUM))</pre>   | <pre>sum(OTAC_TIME1_TIME_S UM)/sum(decode(OTAC_R EQUESTS_SUM,0,1,OTAC_ REQUESTS_SUM))</pre>   | Average Other Application Tier activity processing time.<br>This time includes the time the Other Application Tier<br>waited for other Other Application Tiers.   |
| <pre>sum(OTAC_NETWORK_TIME _SUM+OTAC_TIME1_SUM)/ sum(decode(OTAC_REQUE STS_SUM,0,1,OTAC_REQU ESTS_SUM))</pre>   | <pre>sum(OTAC_NETWORK_TIME _SUM+OTAC_TIME1_SUM)/ sum(decode(OTAC_REQUE STS_SUM,0,1,OTAC_REQU ESTS_SUM))</pre>   | Average Other Application Tier activity processing time.<br>This time includes network and all other times, which<br>sum the Other Application Tier response time.  |
| <pre>sum(OTAC_REQUESTS_SUM -OTAC_RED_SUM-OTAC_YE LLOW_SUM-OTAC_GREEN_S UM)</pre>  | <pre>sum(OTAC_REQUESTS_SUM -OTAC_RED_SUM-OTAC_YE LLOW_SUM-OTAC_GREEN_S UM)</pre>  | Total number of Other Application Tier activity executions, for which the SLA was not defined.  |
| <pre>sum(OTAC_RED_SUM)/sum<br/>(decode(OTAC_RED_SUM+<br/>OTAC_YELLOW_SUM+OTAC_<br/>GREEN_SUM,0,1,OTAC_RE<br/>D_SUM+OTAC_YELLOW_SUM<br/>+OTAC_GREEN))*100</pre>    | <pre>sum(OTAC_RED_SUM)/sum<br/>(decode(OTAC_RED_SUM+<br/>OTAC_YELLOW_SUM+OTAC_<br/>GREEN_SUM,0,1,OTAC_RE<br/>D_SUM+OTAC_YELLOW_SUM<br/>+OTAC_GREEN))*100</pre>    | Percentage of Other Application Tier activity executions,<br>which Breached their SLA. The percentage is calculated<br>out of the Other Application Tier activities, for which the<br>SLA was established.      |
| <pre>sum(OTAC_YELLOW_SUM)/<br/>sum(decode(OTAC_RED_S<br/>UM+OTAC_YELLOW_SUM+OT<br/>AC_GREEN_SUM,0,1,OTAC<br/>_RED_SUM+OTAC_YELLOW_<br/>SUM+OTAC_GREEN))*100</pre> | <pre>sum(OTAC_YELLOW_SUM)/<br/>sum(decode(OTAC_RED_S<br/>UM+OTAC_YELLOW_SUM+OT<br/>AC_GREEN_SUM,0,1,OTAC<br/>_RED_SUM+OTAC_YELLOW_<br/>SUM+OTAC_GREEN))*100</pre> | Percentage of Other Application Tier activity executions,<br>which Near Breached their SLA. The percentage is<br>calculated out of the Other Application Tier activities, for<br>which the SLA was established. |
| <pre>sum(OTAC_GREEN_SUM)/s um(decode(OTAC_RED_SU M+OTAC_YELLOW_SUM+OTA C_GREEN_SUM,0,1,OTAC_ RED_SUM+OTAC_YELLOW_S UM+OTAC_GREEN))*100</pre>                      | <pre>sum(OTAC_GREEN_SUM)/s um(decode(OTAC_RED_SU M+OTAC_YELLOW_SUM+OTA C_GREEN_SUM,0,1,OTAC_ RED_SUM+OTAC_YELLOW_S UM+OTAC_GREEN))*100</pre>                      | Percentage of Other Application Tier activity executions,<br>which Not Breached their SLA. The percentage is<br>calculated out of the Other Application Tier activities, for<br>which the SLA was established.  |

## PW\_NTAC\_VIEW\_T

The network activity summarized by each aggregated invocation.

| Column name           | Column description   |
|-----------------------|--|
| NTAC_TIMESTAMP        | The time summary.  |
| NTAC_PWII_INSTANCE_ID | The ID of the AppTier instance running the network requests. |

#### (Continued)

| Column name           | Column description   |
|-----------------------|--|
| OTAC_CONSUMER_IP      | The ID of the client IP running the network requests.                              |
| NTAC_CONSUMER_IP_GID  | The ID of the client IP group running the network requests.                        |
| NTAC_ID1              | The ID of the server IP running the network requests.                              |
| NTAC_NETWORK_TIME_SUM | Round-trip network time between the Application client and the Application server. |
| NTAC_STAT1_SUM        | Total number of network packets, transferred while running the network requests.   |
| NTAC_STAT2_SUM        | Total number of network bytes, transferred while running the network requests.     |
| NTAC_REQUESTS_SUM     | Total number of network requests.  |

#### Expressions

| Oracle   | SQL Server   | Expression description   |
|--|--|--|
| <pre>sum(NTAC_NETWORK_TIME_<br/>SUM)/sum(decode(NTAC_R<br/>EQUESTS_SUM,0,1,NTAC_R<br/>EQUESTS_SUM))sum(NTAC_<br/>NETWORK_TIME_SUM+NTAC_<br/>TIME1_SUM)</pre> | <pre>sum(NTAC_NETWORK_TIME_S UM)/sum(decode(NTAC_REQ UESTS_SUM,0,1,NTAC_REQU ESTS_SUM))sum(NTAC_NETW ORK_TIME_SUM+NTAC_TIME1 _SUM)</pre> | Average round-trip network time between the Application client and the Application server. |

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# **Precise for SQL Server Tables**

## PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_SQDL\_INST\_DB\_DEFINITION\_LOG

Tracks changes on instance/database definitions. It contains a list of all changes that occur in the instance/database definition.

| Column name           | Column description  |
|-----------------------|---|
| SQDL_PWII_INSTANCE_ID | ID of the SQL Server instance.  |
| SQDL_DATABASE_NAME    | Name of the database in which the change occurred.  |
| SQDL_OLD_VALUE        | Old value (before the change).  |
| SQDL_NEW_VALUE        | New value (after the change).   |
| SQDL_CHANGE_TYPE      | Type of the performed change (Created, Dropped, Updated).   |
| SQDL_DATA_CHANGED     | Property that was changed.  |
| SQDL_SAMPLE_DATE      | Date and time when the schema changes process ran. The actual change date is prior to the sample date and after the previous sample date. |

#### PW\_SQCL\_SCHEMA\_CHANGES\_LOG

Contains a list of all changes that occur in the object's index, key, and column definitions.

| Column name              | Column description   |
|--------------------------|--|
| SQCL_PWII_INSTANCE_ID    | ID of the SQL Server instance.   |
| SQCL_DATABASE_ID         | Internal ID of the database.   |
| SQCL_OBJECT_ID           | ID of the object, column, or index that was changed, depending on the type of the object that was changed.                           |
| SQCL_OBJECT_TYPE         | Type of the object that was changed.   |
| SQCL_OBJECT_NAME         | Name of the object that was changed.   |
| SQCL_OBJECT_OWNER        | Owner of the object that was changed.  |
| SQCL_PARENT_OBJECT_ID    | ID of the parent object that was changed. For example, if an index was changed, the parent object ID is the table ID.                |
| SQCL_PARENT_OBJECT_NAME  | Name of the parent object name that was changed. For example: If an index was changed, the parent object name is the table name.     |
| SQCL_PARENT_OBJECT_OWNER | Owner of the parent object owner that was changed. For example: If an index was changed, the parent object owner is the table owner. |
| SQCL_INDEX_ID            | ID of the index that was changed. Relevant only for index key changes.   |
| SQCL_INDEX_NAME          | Name of the index that was changed. Relevant only for index key changes.   |
| SQCL_OLD_VALUE           | Old value (before the change).   |
| SQCL_NEW_VALUE           | New value (after the change).  |
| SQCL_CHANGE_TYPE         | Type of the performed change (Created, Dropped, Updated).  |
| SQCL_DATA_CHANGED        | Name of the property that was changed.   |
| SQCL_SAMPLE_DATE         | Date and time when the schema changes process run.   |

#### PW\_SQID\_SCHEMA\_CHANGES\_INST

Stores snapshots of the instances' properties. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name              | Column description  |
|--------------------------|---|
| SQID_PWII_INSTANCE_ID    | ID of the SQL Server instance.                                |
| SQID_CONFIG_OPTION_ID    | ID of the instance property (as appearing in sp_configure).   |
| SQID_CONFIG_OPTION_NAME  | Name of the instance property (as appearing in sp_configure). |
| SQID_CONFIG_OPTION_VALUE | Value of the instance property.                               |

## PW\_SQCO\_SCHEMA\_CHANGES\_OBJECTS

Stores snapshots of the instance objects' properties. The object can be a table or a stored object such as a view, trigger, user-defined function, or stored procedure. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name                        | Column description   |
|------------------------------------|--|
| SQCO_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQCO_DATABASE_ID                   | Internal ID of the database.   |
| SQCO_OBJECT_ID                     | ID of the object that was changed.   |
| SQCO_NAME                          | Name of the object that was changed.   |
| SQCO_OWNER                         | Owner of the object that was changed.  |
| SQCO_TYPE                          | Type of the object that was changed. See sysobjects documentation for a list of all available types. |
| SQCO_CREATE_DATE                   | Creation date of the object.   |
| SQCO_FILE_GROUP                    | File group in which the object resides. Relevant only for tables.                                    |
| SQCO_NUM_OF_COLUMN                 | Number of columns in the object.   |
| SQCO_EXEC_IS_ANSI_NULL_O<br>N      | Value of the object's Ansi Null property. Relevant only for stored objects.                          |
| SQCO_TABLE_HAS_INDEX               | TRUE if the table has an index, FALSE if the table does not have an indexes.                         |
| SQCO_TABLE_HAS_CLUSTERED<br>_INDEX | TRUE if the table has a clustered index, FALSE if the table does not have a clustered index.         |
| SQCO_DELETE_TRIGGER_COUN<br>T      | Number of delete triggers on the table.  |
| SQCO_INSERT_TRIGGER_COUN<br>T      | Number of insert triggers on the table.  |
| SQCO_UPDATE_TRIGGER_COUN<br>T      | Number of update triggers on the table.  |
| SQCO_NUM_OF_PARTITIONS             | Number of partitions per object.   |

## PW\_SQCK\_SCHEMA\_CHANGES\_INDXKEY

Stores snapshots of the index keys. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name           | Column description                        |
|-----------------------|---|
| SQCK_PWII_INSTANCE_ID | ID of the SQL Server instance.            |
| SQCK_DATABASE_ID      | Internal ID of the database.              |
| SQCK_OBJECT_ID        | ID of the object the index is defined on. |

(Continued)

| Column name       | Column description                |
|-------------------|-----------------------------------|
| SQCK_INDEX_ID     | ID of the index.                  |
| SQCK_COLUMN_ID    | ID of the column.                 |
| SQCK_COLUMN_NAME  | Name of the column key.           |
| SQCK_INDEX_NAME   | Name of the index.                |
| SQCK_OBJECT_NAME  | Name of the table.                |
| SQCK_OBJECT_OWNER | Owner of the table.               |
| SQCK_POSITION     | Position of the key in the index. |
| SQCK_ORDER_BY     | Sorting of the key in the index.  |

## PW\_SQCI\_SCHEMA\_CHANGES\_INDEXES

Stores snapshots of the indexes. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name                      | Column description                                       |
|----------------------------------|--|
| SQCI_PWII_INSTANCE_ID            | ID of the SQL Server instance.                           |
| SQCI_DATABASE_ID                 | Internal ID of the database.                             |
| SQCI_OBJECT_ID                   | ID of the object the index is defined on.                |
| SQCI_INDEX_ID                    | ID of the index.   |
| SQCI_INDEX_NAME                  | Name of the index.                                       |
| SQCI_OBJECT_NAME                 | Name of the table.                                       |
| SQCI_OBJECT_OWNER                | Owner of the table.                                      |
| SQCI_FILE_GROUP                  | File group in which the index resides.                   |
| SQCI_NUM_OF_KEYS                 | Number of keys in the index.                             |
| SQCI_FILL_FACTOR                 | Fill factor of the index.                                |
| SQCI_IS_CLUSTERED_INDEX          | Indicates if the index is clustered or not.              |
| SQCI_IS_PAD_INDEX                | Indicates if the index is padded or not.                 |
| SQCI_IS_UNIQUE                   | Indicates if the index is unique or not.                 |
| SQCI_INDEX_DEPTH                 | Index tree level.  |
| SQCI_IS_AUTH_STAT                | Indicates if the index has turned on the autostatistics. |
| SQCI_IS_PAGE_LOCK_DISALL<br>OWED | Indicates if an index page can be locked or not.         |
| SQCI_IS_ROW_LOCK_DISALLO<br>WED  | Indicates if an index row can be locked or not.          |

#### PW\_SQCD\_SCHEMA\_CHANGES\_DB

Stores snapshots of the database properties. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name                      | Column description  |
|----------------------------------|---|
| SQCD_PWII_INSTANCE_ID            | ID of the SQL Server instance.  |
| SQCD_DATABASE_ID                 | Internal ID of the database.  |
| SQCD_DATABASE_NAME               | Name of the database in which the change occurred.                                  |
| SQCD_RECOVERY                    | Recovery model of the database.   |
| SQCD_AUTO_UPDATE_STATIST<br>ICS  | Auto-update statistics status of the database.                                      |
| SQCD_ANSI_NULL                   | Ansi null status of the database.   |
| SQCD_AUTO_SHRINK_FILES           | Autoshrink files status of the database.  |
| SQCD_CLOSE_CURSORS_ON_CO<br>MMIT | Close cursor on commit status of the database.                                      |
| SQCD_STATUS                      | Availability status of the database.  |
| SQCD_AUTO_CREATES_STATIS<br>TICS | Autocreate statistics status of the database.                                       |
| SQCD_TRUNCATE_LOG                | Truncate log status of the database.  |
| SQCD_COMPATIBILITY_LEVEL         | Compatibility level of the database.  |
| SQCD_OBJECT_SAMPLE_STATU<br>S    | Status of tracking changes on objects in the database.                              |
| SQCD_COLUMN_SAMPLE_STATU<br>S    | Status of tracking changes on columns in the database.                              |
| SQCD_INDEX_SAMPLE_STATUS         | Status of tracking changes on indexes in the database.                              |
| SQCD_INDEX_K_SAMPLE_STAT<br>US   | Status of tracking changes on keys in the database.                                 |
| SQCD_DATABASES_SAMPLE_ST<br>ATUS | Status of tracking changes on database definitions in the database.                 |
| SQCD_PS_SAMPLE_STATUS            | To support partition schema collecting.   |
| SQCD_PS_FG_SAMPLE_STATUS         | To support file group collecting pointed by partition schema.                       |
| SQCD_PF_SAMPLE_STATUS            | To support partition function collecting.   |
| SQCD_PF_VALUES_SAMPLE_ST<br>ATUS | To support partition function values collecting of a particular partition function. |
| SQCD_AUTO_UPDATE_STATS           | Database option.  |
| SQCD_PARAMS_FORCED               | Database option.  |

 Column name
 Column description

 SQCD\_DATE\_CORRELATION
 Database option.

## PW\_SQCC\_SCHEMA\_CHANGES\_COLUMNS

Stores snapshots of the columns. Every time the schema change process runs, the current values are compared to the values in this table. All changes are stored in the log table, and this table is refreshed with the latest snapshots.

| Column name           | Column description   |
|-----------------------|--|
| SQCC_PWII_INSTANCE_ID | ID of the SQL Server instance.   |
| SQCC_DATABASE_ID      | Internal ID of the database.   |
| SQCC_OBJECT_ID        | ID of the object the column belongs to.  |
| SQCC_COLUMN_ID        | ID of the column.  |
| SQCC_COLUMN_NUMBER    | Number of the subprocedure when the procedure is grouped (0 for nonprocedure objects). |
| SQCC_COLUMN_NAME      | Name of the column.  |
| SQCC_OBJECT_NAME      | Name of the object.  |
| SQCC_OBJECT_OWNER     | Owner of the object.   |
| SQCC_TYPE             | Type of the column.  |
| SQCC_LENGTH           | Length of the column.  |
| SQCC_SCALE            | Scale of the column.   |
| SQCC_PRECISION        | Precision of the column.   |
| SQCC_IS_NULL_ABLE     | Nullable property of the column.   |
| SQCC_IS_TABLE         | Indicates if the object is a table or not.   |

## PW\_SQRS\_REPLIC\_SNAP\_STATS

Holds information on the object SQL Server: Replication Snapshot Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name           | Column description   |
|-----------------------|--|
| SQRS_PWII_INSTANCE_ID | ID of the SQL Server instance.   |
| SQRS_INSTANCE_NAME    | Name of the snapshot agent.  |
| SQRS_TIMESTAMP        | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQRS_PWHG_ID should be used. |
| SQRS_PWHG_ID          | Hour group ID.   |

#### (Continued)

| Column name                       | Column description  |
|-----------------------------------|---|
| SQRS_SNAP_DELIVERED_CMDS<br>_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQRS_SNAP_DELIVERED_TRAN<br>S_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQRS_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.                                 |
| SQRS_ROWID                        | Unique row number.  |

#### PW\_SQRM\_REPLIC\_MERGE\_STATS

Holds information on the object SQL Server: Replication Merge Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name                     | Column description   |
|---------------------------------|--|
| SQRM_PWII_INSTANCE_ID           | ID of the SQL Server instance.   |
| SQRM_INSTANCE_NAME              | Name of the merge agent.   |
| SQRM_TIMESTAMP                  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQRM_PWHG_ID should be used. |
| SQRM_PWHG_ID                    | Hour group ID.   |
| SQRM_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).   |
| SQRM_CONFLICTS_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRM_DOWNLOADED_CHANGES_<br>AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRM_UPLOADED_CHANGES_AV<br>G   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRM_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.  |
| SQRM_ROWID                      | Unique row number.   |

#### PW\_SQRL\_REPLIC\_LOGREAD\_STATS

Holds information on the object SQL Server: Replication Logreader Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name           | Column description              |
|-----------------------|---------------------------------|
| SQRL_PWII_INSTANCE_ID | ID of the SQL Server instance.  |
| SQRL_INSTANCE_NAME    | Name of the publisher instance. |

#### (Continued)

| Column name                       | Column description  |
|-----------------------------------|---|
| SQRL_TIMESTAMP                    | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQRL_PWHG_ID should be used |
| SQRL_PWHG_ID                      | Hour group ID.  |
| SQRL_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes).  |
| SQRL_LOG_DELIVERED_CMDS_<br>AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SQRL_LOG_DELIVERED_TRANS<br>_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SQRL_LOG_DELIVERY_LATENC<br>Y_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SQRL_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.   |
| SQRL_ROWID                        | Unique row number.  |

## PW\_SQRD\_REPLIC\_DISTRIB\_STATS

Holds information on the object SQL Server: Replication Distribution Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name                        | Column description   |
|------------------------------------|--|
| SQRD_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQRD_INSTANCE_NAME                 | Name of the publisher instance.  |
| SQRD_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQRD_PWHG_ID should be used. |
| SQRD_PWHG_ID                       | Hour group ID.   |
| SQRD_DIST_DELIVERED_CMDS<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRD_DIST_DELIVERED_TRAN<br>S_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRD_DIST_DELIVERY_LATEN<br>CY_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRD_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.  |
| SQRD_ROWID                         | Unique row number.   |

### PW\_SQRA\_REPLIC\_AGENT\_STATS

Holds information on the object SQL Server: Replication Agents Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name             | Column description   |
|-------------------------|--|
| SQRA_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQRA_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQRA_PWHG_ID should be used. |
| SQRA_PWHG_ID            | Hour group ID.   |
| SQRA_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQRA_DISTRIBUTION_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRA_LOGREADER_AVG      | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRL_MERGE_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRA_QUEUEREADER_AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRA_SNAPSHOT_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQRA_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQRA_ROWID              | Unique row number.   |

## PW\_SQBP\_BUFFER\_PART\_STATS

Holds information on the object SQL Server: Buffer Partition Object in Windows performance counters. For more details, search for "performance counters" on http://msdn.microsoft.com.

| Column name                     | Column description   |
|---------------------------------|--|
| SQBP_PWII_INSTANCE_ID           | ID of the SQL Server instance.   |
| SQBP_INSTANCE_NAME              | Name of the buffer.  |
| SQBP_TIMESTAMP                  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQBP_PWHG_ID should be used. |
| SQBP_PWHG_ID                    | Hour group ID.   |
| SQBP_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).   |
| SQBP_FREE_LIST_EMPTY_AVG        | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBP_FREE_LIST_REQUESTS_<br>AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBP_FREE_PAGES_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBP_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.  |
| SQBP_ROWID                      | Unique row number.   |

## PW\_SQBM\_BF\_CH\_MANAGER\_STATS\_T

Holds information on the objects SQL Server: Buffer Manager Object and SQL Server: Cache Manager Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                        | Column description   |
|------------------------------------|--|
| SQBM_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQBM_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQBM_PWHG_ID should be used. |
| SQBM_PWHG_ID                       | Hour group ID.   |
| SQBM_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SQBM_AWE_LOOKUP_MAPS_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_AWE_STOLEN_MAPS_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_AWE_UNMAP_CALL_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_AWE_UNMAP_PAGES_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_AWE_WRITE_MAPS_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_BUFFER_HIT_RATIO_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_CHECKPOINT_PAGES_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_DATABASE_PAGES_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_FREE_LIST_STALL_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_FREE_PAGES_AVG                | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_FREE_PAGES_MIN                | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_LAZY_WRITES_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_PAGE_LIFE_EXPECTANC<br>Y_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_PAGE_LOOKUPS_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_PAGE_READS_AVG                | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_PAGE_WRITES_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_PROCEDURE_CACHE_PAG<br>ES_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_READAHEAD_PAGES_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_RESERVED_PAGES_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_STOLEN_PAGES_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBM_TARGET_PAGES_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

| Column name                        | Column description  |
|------------------------------------|---|
| SQBM_TOTAL_PAGES_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_AD_HOC_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_CURSORS_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_CONTEXT_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_N_TREE_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_PREPARE_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_PROC_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_RP_PROC_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_TRIGGER_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_TOTAL_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_AD_HO<br>C_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_CURSO<br>RS_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_CONTE<br>XT_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_N_TRE<br>E_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_PREPA<br>RE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_PROC_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_RP_PR<br>OC_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_TRIGG<br>ER_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_TOTAL<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_AD_HOC_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                      | Column description  |
|----------------------------------|---|
| SQBM_CACHE_PAGES_CURSORS<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_CONTEXT<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_N_TREE_<br>AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_PREPARE<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_PROC_AV<br>G    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_RP_PROC<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_TRIGGER<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_TOTAL_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_AD_HOC_AV<br>G    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_CURSORS_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_CONTEXT_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_N_TREE_AV<br>G    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_PREPARE_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_PROC_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_RP_PROC_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_TRIGGER_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_TOTAL_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_RECIEVED_TIMESTAMP          | Local date and time the row was loaded into the PMDB.                                 |
| SQBM_ROWID                       | Unique row number.  |
| SQBM_CACHE_HIT_SQL_PLN_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_OBJ_PLN_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |

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| Column name                        | Column description  |
|------------------------------------|---|
| SQBM_CACHE_HIT_BND_TRE_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_EXT_SP_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_HIT_TMP_TAB_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_SQL_P<br>LN_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_OBJ_P<br>LN_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_BND_T<br>RE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_EXT_S<br>P_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_OBJ_CNT_TMP_T<br>AB_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_SQL_PLN<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_OBJ_PLN<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_BND_TRE<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_EXT_SP_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_PAGES_TMP_TAB<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_SQL_PLN_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_OBJ_PLN_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_BND_TRE_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_EXT_SP_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQBM_CACHE_USE_TMP_TAB_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |

# PW\_SQBD\_BACKUP\_DEVICE\_STATS\_T

Holds information on the object SQL Server: Backup Device Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                    | Column description   |
|--------------------------------|--|
| SQBD_PWII_INSTANCE_ID          | ID of the SQL Server instance.   |
| SQBD_INSTANCE_NAME             | Name of the backup device.   |
| SQBD_TIMESTAMP                 | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQBD_PWHG_ID should be used. |
| SQBD_PWHG_ID                   | Hour group ID.   |
| SQBD_MINUTES_COUNT_SUM         | The timeframe needed to calculated the row (in minutes).   |
| SQBD_DEVICE_THROUGHPUT_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQBD_RECIEVED_TIMESTAMP        | Local date and time the row was loaded into the PMDB.  |
| SQBD_ROWID                     | Unique row number.   |
| SQDB_READ_IO_WAIT              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDB_WRITE_IO_WAIT             | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDB_FILE_NAME                 | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

# PW\_SQAM\_ACCESS\_METHODS\_STATS\_T

Holds information on the object SQL Server: Access Methods Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                      | Column description   |
|----------------------------------|--|
| SQAM_PWII_INSTANCE_ID            | ID of the SQL Server instance.   |
| SQAM_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQAM_PWHG_ID should be used. |
| SQAM_PWHG_ID                     | Hour group ID.   |
| SQAM_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SQAM_EXTENT_DEALLOC_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQAM_EXTENT_ALLOC_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQAM_FORWARDED_RECORDS_A<br>VG   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQAM_FREESPACE_PAG_FETCH<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQAM_FREESPACE_SCANS_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

| Column name                        | Column description  |
|------------------------------------|---|
| SQAM_FULL_SCANS_AVG                | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_INDEX_SEARCHES_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MIXED_PAGE_ALLOC_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_PAGE_DEALLOC_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_PAGE_SPLITS_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_PAGES_ALLOC_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_PROBE_SCANS_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_RANGE_SCANS_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_SCAN_POINT_REVALID_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_SKIPP_GHOSTED_RECOR<br>D_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_TABLE_LOCK_ESCALATI<br>ON_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_WORKFILES_CREATED_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_WORKTABLES_CREATED_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_WORKTABLES_CREATED_<br>MAX    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_WORKTABLE_CACHE_HIT<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_CONNECTION_MEMOR<br>Y_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_GRANTED_WS_MEMOR<br>Y_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_BLOCK_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_BLOCK_ALLO_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_MEMORY_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_MEMORY_MAX            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_OWN_BLOCK_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_LOCK_OWN_BLOCK_A<br>LC_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQAM_MM_MAX_WS_MEMORY_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_MEMORY_GRANT_OUT<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_MEMORY_GRANT_PEN<br>D_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_OPTIMIZER_MEMORY<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_SQL_CACHE_MEMORY<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_TARGET_SRV_MEMOR<br>Y_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_TOTAL_SRV_MEMORY<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_MM_TOTAL_SRV_MEMORY<br>_MAX   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.                                 |
| SQAM_ROWID                         | Unique row number.  |
| SQAM_AU_CLEANUP_BATCHES_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_AU_CLEANUP_AVG                | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_COUNT_PULL_IN_ROW_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_COUNT_PUSH_OFF_ROW_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_DEFERRED_DROP_AUS_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_DEFERRED_DROP_ROWSE<br>TS_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_DROP_ROWSET_CLEANUP<br>S_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_DROP_ROWSET_SKIPPED<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_FAIL_AU_CLEANUP_BAT<br>CH_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_FAIL_LEAF_PAGE_COOK<br>IE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQAM_FAIL_TREE_PAGE_COOK<br>IE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_USED_LEAF_PAGE_COOK<br>IE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQAM_USED_TREE_PAGE_COOK<br>IE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |

## PW\_SQDD\_DATABASES\_STATS\_T

Holds information on the object SQL Server: Databases Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                        | Column description   |
|------------------------------------|--|
| SQDD_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQDD_INSTANCE_NAME                 | Name of the database   |
| SQDD_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQDD_PWHG_ID should be used. |
| SQDD_PWHG_ID                       | Hour group ID.   |
| SQDD_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SQDD_ACTIVE_TRANSACTIONS<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_BACKUP_RES_THROUGHP<br>UT_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_BULK_COPY_ROWS_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_BULK_COPY_THROUGHPU<br>T_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_DATA_FILE_SIZE_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_DBCC_LOGICAL_SCAN_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_LOG_BYTES_FLUSHED_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_LOG_CACHE_HIT_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_LOG_CACHE_READS_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_LOG_FILE_SIZE_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQDD_LOG_FILE_SIZE_USED_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQDD_LOG_FLUSH_WAIT_TIME<br>_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_FLUSH_WAIT_TIME<br>_MAX  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_FLUSH_WAITS_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_FLUSHES_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_GROWTHS_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_SHRINKS_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_LOG_TRUNCATIONS_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_PERCENT_LOG_USED_AV<br>G     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_REPL_PENDING_XACTS_<br>AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_REPL_TRANS_RATE_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_SHRINK_DATA_MOVEMEN<br>T_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_TRANSACTIONS_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_TRANSACTIONS_MAX             | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQDD_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.                                 |
| SQDD_ROWID                        | Unique row number.  |

# PW\_SQPS\_SQL\_STATISTIC\_STATS\_T

Holds information on the object SQL Server: SQL Statistics Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                      | Column description   |
|----------------------------------|--|
| SQPS_PWII_INSTANCE_ID            | ID of the SQL Server instance.   |
| SQPS_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQPS_PWHG_ID should be used. |
| SQPS_PWHG_ID                     | Hour group ID.   |
| SQPS_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SQPS_AUTO_PARAM_ATTEMPTS<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPS_BATCH_REQUESTS_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPS_BATCH_REQUESTS_MAX          | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

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| Column name                        | Column description  |
|------------------------------------|---|
| SQPS_FAILED_AUTO_PARAMS_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_SAFE_AUTO_PARAMS_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_SQL_COMPILE_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_SQL_RE_COMPILE_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_SAFE_UNSAFE_AUTO_PA<br>RM_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GENERAL_STAT_LOGINS<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GENERAL_STAT_LOGINS<br>_MAX   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GENERAL_STAT_LOGOUT<br>S_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GENERAL_STAT_USR_CO<br>NN_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GENERAL_STAT_USR_CO<br>NN_MAX | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT1_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT2_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT3_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT4_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT5_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT6_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT7_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT8_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT9_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_USER_SETTABLE_CNT10<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQPS_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.                                 |
| SQPS_ROWID                         | Unique row number.  |
| SQPS_GNRL_ACTIVE_TEMP_TA<br>B_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_LOGICAL_CON_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_MARS_DEADLOCKS<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_NATOM_YIELD_RA<br>TE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_PROC_BLOCK_AVG           | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_TMP_TAB_CRT_RA<br>TE_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_TMP_TAB_DSTRUC<br>T_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_GNRL_TRANSACTIONS_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_ETIME_DSTR_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_ETIME_DTC_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_ETIME_EXT_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_ETIME_OLE_A<br>VG     | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_INPROG_DS<br>TR_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_INPROG_DT<br>C_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_INPROG_EX<br>T_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_INPROG_OL<br>E_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_PERSEC_DS<br>TR_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_PERSEC_DT<br>C_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQPS_EX_STAT_E_PERSEC_EX<br>T_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_EX_STAT_E_PERSEC_OL<br>E_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_FORCED_PARM_SEC_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_TRANS_VER_CLNUP_RAT<br>E_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_TRANS_VER_GNRT_RATE<br>_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQPS_TRANS_VER_STORE_SIZ<br>E_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |

# PW\_SQLS\_LOCKS\_STATS\_T

Holds information on the objects SQL Server: Locks Object and SQL Server: Latch Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                     | Column description   |
|---------------------------------|--|
| SQLS_PWII_INSTANCE_ID           | ID of the SQL Server instance.   |
| SQLS_TIMESTAMP                  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQLS_PWHG_ID should be used. |
| SQLS_PWHG_ID                    | Hour group ID.   |
| SQLS_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).   |
| SQLS_AVG_WAIT_TM_HIT_D_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_E_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_K_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_P_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_R_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_T_A<br>VG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_AVG_WAIT_TM_HIT_TL_<br>AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQLS_LOCK_REQUESTS_D_AVG        | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

| Column name                    | Column description  |
|--------------------------------|---|
| SQLS_LOCK_REQUESTS_E_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_K_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_P_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_R_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_T_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_TL_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_D_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_E_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_K_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_P_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_R_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_T_AVG       | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_TL_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_D_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_E_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_K_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_P_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_R_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_T_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_TL_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_D_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_E_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_K_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_P_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_R_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_T_AVG          | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQLS_LOCK_WAITS_TL_AVG             | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>D_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>E_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>K_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>P_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>R_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>T_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>TL_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_LATCH_WAIT_HIT_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_LATCH_WAIT_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_TOTAL_LATCH_WAIT_TI<br>ME_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.                                 |
| SQLS_ROWID                         | Unique row number.  |
| SQLS_AVG_WAIT_TM_HIT_AU_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_WAIT_TM_HIT_AP_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_WAIT_TM_HIT_FI_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_WAIT_TM_HIT_HB_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_WAIT_TM_HIT_MD_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_AVG_WAIT_TM_HIT_OB_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_AU_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_AP_AV<br>G      | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                    | Column description  |
|--------------------------------|---|
| SQLS_LOCK_REQUESTS_FI_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_HB_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_MD_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_REQUESTS_OB_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_AU_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_AP_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_FI_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_HB_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_MD_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_TIMEOUTS_OB_AV<br>G  | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_AU_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_AP_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_FI_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_HB_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_MD_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAIT_TIME_OB_A<br>VG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_AU_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_AP_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_FI_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_HB_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_MD_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_LOCK_WAITS_OB_AVG         | For more information, search for "performance counters" on http://msdn.microsoft.com. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQLS_NUMBER_OF_DEADLOCK_<br>AU_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>AP_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>FI_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>HB_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>MD_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |
| SQLS_NUMBER_OF_DEADLOCK_<br>OB_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com. |

## PW\_SQPR\_PROCESS\_T

Holds information on the object Process Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                       | Column description   |
|-----------------------------------|--|
| SQPR_PWII_INSTANCE_ID             | ID of the SQL Server instance.   |
| SQPR_TIMESTAMP                    | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQPR_PWHG_ID should be used.   |
| SQPR_PWHG_ID                      | Hour group ID.   |
| SQPR_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes).   |
| SQPR_PRCT_PROCESSOR_TIME<br>_AVG  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPR_PRCT_PROCESSOR_TIME<br>_MAX  | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPR_SQL_SRVR_PAGE_FAULT<br>S_AVG | The overall average rate of faulted pages encountered by the SQL-Server process, that are handled by the processor. It is measured in numbers of pages faulted per second. A page fault occurs when a process requires code or data that is not in its working set (its space in physical memory). This counter includes both hard faults (those that require disk access) and soft faults (where the faulted page is found elsewhere in physical memory). Most processors can handle large numbers of soft faults without consequence. However, hard faults can cause significant delays. This counter displays the difference between the values observed in the last two samples, divided by the duration of the sample interval. |
| SQPR_PAGE_FAULTS_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPR_PAGE_READS_AVG               | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPR_PAGE_WRITES_AVG              | For more information, search for "performance counters" on http://msdn.microsoft.com.  |

| Column name                     | Column description  |
|---------------------------------|---|
| SQPR_PAGES_AVG                  | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SQPR_AVAILABLE_MB_AVG           | The amount of physical memory available to processes running on the computer, in Megabytes (Bytes / 1,048,576). It is calculated by summing space on the Zeroed, Free, and Stand by memory lists. Free memory is ready for use; Zeroed memory are pages of memory filled with zeros to prevent later processes from seeing data used by a previous process. Standby memory is memory removed from a process' working set (its physical memory) on route to disk, but is still available to be recalled. This counter displays the last observed value only; it is not an average. |
| SQPR_AVAILABLE_MB_MIN           | Like the previous counter, but it is the minimum value after doing the summary process.   |
| SQPR_SERVER_PHYS_MEMORY_<br>MAX | Total physical memory available in the instance machine.  |
| SQPR_QUEUE_LENGTH_AVG           | The number of threads in the processor queue. There is a single queue for processor time, even on computers with multiple processors. Unlike the disk counters, this counter counts ready threads only, not threads that are running. A sustained processor queue of greater than two threads generally indicates processor congestion. This counter displays the last observed value only; it is not an average.   |
| SQPR_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.   |
| SQPR_ROWID                      | Unique row number.  |

## PW\_SQPO\_PROCESSOR\_T

Holds information on the object Processor Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                      | Column description   |
|----------------------------------|--|
| SQPO_PWII_INSTANCE_ID            | ID of the SQL Server instance.   |
| SQPO_INSTANCE_NAME               | Number of the processor.   |
| SQPO_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQPO_PWHG_ID should be used. |
| SQPO_PWHG_ID                     | Hour group ID.   |
| SQPO_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SQPO_PRCT_PROCESSOR_TIME<br>_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPO_PRCT_PROCESSOR_TIME<br>_MAX | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPO_RECIEVED_TIMESTAMP          | Local date and time the row was loaded into the PMDB.  |
| SQPO_ROWID                       | Unique row number.   |

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# PW\_SQPD\_PHYSICAL\_DISK\_T

Holds information on the object PhysicalDisk Object in Windows performance counters. For more information, search for "performance counters" on http://msdn.microsoft.com.

| Column name                        | Column description   |
|------------------------------------|--|
| SQPD_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQPD_INSTANCE_NAME                 | Identifier of the disk.  |
| SQPD_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQPD_PWHG_ID should be used.                       |
| SQPD_PWHG_ID                       | Hour group ID.   |
| SQPD_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SQPD_AVG_DISK_QUEUE_LENG<br>TH_AVG | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPD_DISK_READS_PER_SEC_<br>AVG    | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPD_DISK_WRITES_PER_SEC<br>_AVG   | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPD_DISK_SEC_READS_AVG            | For more information, search for "performance counters" on http://msdn.microsoft.com.  |
| SQPD_DISK_SEC_WRITES_AVG           | The average time in seconds it took to write data to the disk.   |
| SQPD_DISK_SEC_TRANSFER_A<br>VG     | The average time in seconds of the average disk transfer.  |
| SQPD_DISK_TRANSFER_PER_S<br>EC_AVG | The average number of disk transfers per second.   |
| SQPD_DISK_SPLIT_IO_PER_S<br>EC_AVG | The average rate that I/Os to the disk were split into multiple I/Os. A split I/O may result from requesting data in a size that is too large to fit into a single I/O or that the disk is fragmented. |
| SQPD_PRCT_DISK_READ_TIME<br>_AVG   | The average percentage of elapsed time that the selected disk drive is busy servicing read requests.   |
| SQPD_PRCT_DISK_WRITE_TIM<br>E_AVG  | The average percentage of elapsed time that the selected disk drive is busy servicing write requests.  |
| SQPD_PRCT_IDLE_TIME_AVG            | The average percentage of time during the sample interval that the disk was idle.  |
| SQPD_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.  |
| SQPD_ROWID                         | Unique row number.   |

## PW\_SQXM\_XP\_MAPPING

Holds mapping disks of HP or HDS systems.

| Column name           | Column description   |
|-----------------------|--|
| SQXM_PWII_INSTANCE_ID | ID of the SQL Server instance.   |
| SQXM_PHYSICAL_DISK    | Physical disk number.  |
| SQXM_DEVICE_NAME      | Name of the device.  |
| SQXM_ARRAY_ID         | ID of the array.   |
| SQXM_CONTROL_UNIT     | Control unit identifier.   |
| SQXM_LDEV_ID          | ID of the logical device.  |
| SQXM_RAID_GROUP       | Name of the raid group.  |
| SQXM_CHP_ID           | Identification number of the Client Host Interface Processor Port of the logical device. |
| SQXM_ACP_PAIR_ID      | Identification number of the Array Control Processor Pair of the logical device.         |
| SQXM_URL              | Vendor-specific performance URL.   |

## PW\_SQOU\_OBJECTS\_SPACE\_USAGE\_D

Holds statistics on objects space. By default, this process runs every 24 hours.

| Column name            | Column description   |
|------------------------|--|
| SQOU_PWII_INSTANCE_ID  | ID of the SQL Server instance.   |
| SQOU_DATABASE_ID       | Name of the database, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQOU_OBJECT_ID         | ID of the table.   |
| SQOU_FULL_OBJECT_ID    | The full object ID, normalized in table PW_SQKN_LOCKED_OBJECT_NAMES_N.   |
| SQOU_INDEX_ID          | ID of the index.   |
| SQOU_TIMESTAMP         | Date and time the statistic was sampled. On a slice summary level, the date and time are in GMT. On all other summary levels, the time part is zeroed. |
| SQOU_PWHG_ID           | Hour group ID.   |
| SQOU_MINUTES_COUNT_SUM | The timeframe needed to calculated the row (in minutes).   |
| SQOU_O_ALL_ALLOC_MAX   | Number of pages allocated to the object.   |
| SQOU_O_ALL_USED_MAX    | Number of pages used by the object.  |
| SQOU_O_TEXT_ALLOC_MAX  | Number of text pages allocated to the object.  |
| SQOU_O_TEXT_USED_MAX   | Number of text pages used by the object.   |
| SQOU_O_DATA_USED_MAX   | Number of data pages used by the objects.  |
| SQOU_O_INDEX_ALLOC_MAX | Number of pages allocated to the indexes of the object.  |

| Column name             | Column description                                    |
|-------------------------|---|
| SQOU_O_INDEX_USED_MAX   | Number of pages used by the indexes of the object.    |
| SQOU_ROW_COUNT_MAX      | Number of rows the object has.                        |
| SQOU_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB. |
| SQOU_ROWID              | Unique row number.                                    |
| SQOU_SYSTEM_SEEKS_SUM   | Number of system seeks per one object.                |
| SQOU_SYSTEM_SCANS_SUM   | Number of system scans per one object.                |
| SQOU_SYSTEM_LOOKUPS_SUM | Number of system lookups per one object,              |
| SQOU_SYSTEM_UPDATES_SUM | Number of system updates per one object.              |
| SQOU_USER_SEEKS_SUM     | Number of user seeks per one object.                  |
| SQOU_USER_SCANS_SUM     | Number of user scans per one object.                  |
| SQOU_USER_LOOKUPS_SUM   | Number of user lookups per one object.                |
| SQOU_USER_UPDATES_SUM   | Number of user updates per one object.                |

## PW\_SQDU\_DBFILES\_SPACE\_USAGE\_D

Holds the space over time of datafiles. By default, this process runs every 24 hours.

| Column name             | Column description   |
|-------------------------|--|
| SQDU_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQDU_DATABASE_ID        | ID of the database, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQDU_FILE_ID            | ID of the file in the database.  |
| SQDU_FILE_NAME_ID       | The internal file ID, normalize in table PW_SQFN_FILE_NAMES_N.   |
| SQDU_FILE_GROUP_ID      | ID of the file group in the database.  |
| SQDU_FILE_GROUP_NAME_ID | The internal file group ID, normalized in table PW_SQGN_FILE_GROUP_NAMES_N.  |
| SQDU_TIMESTAMP          | Date and time the statistic was sampled. On a slice summary level, the date and time are in GMT. On all other summary levels, the time part is zeroed. |
| SQDU_PWHG_ID            | Hour group ID.   |
| SQDU_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQDU_FILE_SIZE_MAX      | Maximum file size in MB.   |
| SQDU_SPACE_USED_MAX     | Number of MB bytes used in the files.  |
| SQDU_MAX_SIZE_MAX       | Maximum growth of the file.  |
| SQDU_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQDU_ROWID              | Unique row number.   |

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## PW\_SQDF\_DBFILES\_STATISTICS\_D

Holds information on I/O performance and load of the SQL Server datafiles.

| Column name             | Column description   |
|-------------------------|--|
| SQDF_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQDF_DATABASE_NAME      | Name of the database.  |
| SQDF_FILE_ID            | ID of the file in the database.  |
| SQDF_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQDF_PWHG_ID should be used. |
| SQDF_PWHG_ID            | Hour group ID.   |
| SQDF_READS_NUMBER_SUM   | Number of read requests for the file.  |
| SQDF_WRITES_NUMBER_SUM  | Number of writes requests for the file.  |
| SQDF_READS_BYTES_SUM    | Number of bytes read from the file.  |
| SQDF_WRITTEN_BYTES_SUM  | Number of bytes written to the file.   |
| SQDF_IO_WAIT_SUM        | I/O wait duration of the file.   |
| SQDF_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQDF_ROWID              | Unique row number.   |
| SQDF_READ_IO_WAIT_SUM   | Time of read I/O wait on files.  |
| SQDF_WRITE_IO_WAIT_SUM  | Time of write I/O wait on files.   |
| SQDF_LOGICAL_FILE_ID    | ID of the logical file, normalized in table PW_SQFN_FILE_NAMES_N.  |

## PW\_SQDB\_DBFILES\_SAMPLES

Holds last sample information on I/O performance and load of the SQL Server datafiles.

| Column name           | Column description   |
|-----------------------|--|
| SQDB_PWII_INSTANCE_ID | ID of the SQL Server instance.   |
| SQDB_DATABASE_NAME    | Name of the database.  |
| SQDB_FILE_ID          | ID of the file in the database.  |
| SQDB_SAMPLE_NUMBER    | Sample number. 1 is the previous sample. 2 is the current sample.  |
| SQDB_TIMESTAMP        | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQDB_PWHG_ID should be used. |
| SQDB_READS_NUMBER     | Number of read requests for the file.  |
| SQDB_WRITES_NUMBER    | Number of write requests for the file.   |
| SQDB_READS_BYTES      | Number of bytes read from the file.  |

| Column name        | Column description                  |
|--------------------|-------------------------------------|
| SQDB_WRITTEN_BYTES | Number of bytes writes to the file. |
| SQDB_IO_WAIT       | I/O wait duration of the file.      |

# PW\_SQAV\_AVAILABILITY

Holds information on the status of the databases and the SQL Server instance.

| Column name           | Column description   |
|-----------------------|--|
| SQAV_PWII_INSTANCE_ID | ID of the SQL Server instance.                             |
| SQAV_DATABASE_NAME    | Name of the database. Null in case of an instance record.  |
| SQAV_STATUS           | Status of the database or the instance.                    |
| SQAV_FROM_TIME        | Date and time the status was changed to the status field.  |
| SQAV_TO_TIME          | Date and time the status was changed from the status field |

## PW\_SQSC\_STMT\_CATALOG

Holds information on statements in the Statement Workshop.

| Column name           | Column description  |
|-----------------------|---|
| SQSC_PWII_INSTANCE_ID | ID of the SQL Server instance.  |
| SQSC_CABINET          | Name of the cabinet in which the statement is stored.   |
| SQSC_FOLDER           | Name of the folder within the cabinet.  |
| SQSC_STATEMENT_ID     | Unique identifier (string) assigned to the statement.   |
| SQSC_WORKSHOP_HV      | Unique identifier (number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB have the value 0. |

## PW\_SQEO\_EXPLN\_OPER

Holds information on batch access plans.

| Column name           | Column description  |
|-----------------------|---|
| SQEO_PWII_INSTANCE_ID | ID of the SQL Server instance.  |
| SQEO_DATABASE_NAME    | Name of the database to which the statement belongs.  |
| SQEO_PARSING_USER     | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEO_BATCH_HV         | Unique identifier (number) assigned to the batch.   |

| Column name                    | Column description  |
|--------------------------------|---|
| SQEO_WORKSHOP_HV               | Unique identifier (number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB have the value 0. |
| SQEO_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.  |
| SQEO_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.  |
| SQEO_OPERATOR_ID               | Sequence order of this operation in the access plan for a statement.  |
| SQEO_OPERATOR_TYPE             | Physical operation in the access plan.  |
| SQEO_OPTIONS                   | Logical operation in the access plan.   |
| SQEO_EXECUTION_ORDER           | Sequence order of this operation in the whole access plan.  |
| SQEO_TREE_LEVEL                | Tree level of this operation in the access plan.  |
| SQEO_ARGUMENTS_LIST            | Not in use.   |
| SQEO_REMOTE_STATEMENT_HV       | Unique identifier (number) for the remote query used in this operation.   |
| SQEO_OBJ_DATABASE_NAME         | Database name of the object accessed in this operation.   |
| SQEO_OBJ_OWNER_NAME            | Owner of the object accessed in this operation.   |
| SQEO_OBJ_NAME                  | Name of the object accessed in this operation.  |
| SQEO_INDEX_NAME                | Name of the index accessed in this operation. Otherwise NULL.   |
| SQEO_TOTAL_SUBTREE_COST        | Estimated cost of this operation and its descendants.   |
| SQEO_CONTRIBUTION_RATIO        | Contribution value of the object in this operation to the statement.  |
| SQEO_ESTIMATE_COST             | Estimated cost of this operation.   |
| SQEO_ESTIMATE_IO_COST          | Estimated I/O cost of this operation.   |
| SQEO_ESTIMATE_CPU_COST         | Estimated CPU cost of this operation.   |
| SQEO_ESTIMATE_ROWS             | Estimated number of rows returned by this operation.  |
| SQEO_WARNINGS                  | Warnings in this operation.   |
| SQEO_PARALLEL_IND              | Indicates if the operation is performed in parallel.  |
| SQEO_ESTIMATE_EXECUTION        | Estimated number of times this operation is performed.  |
| SQEO_LAST_EXPLAIN_IND          | Indicates that this operation belongs to the last explain of the batch.   |
| SQEO_AVG_ROW_SIZE              | Average row size this operation handles.  |

# PW\_SQEH\_EXPLN\_HIST

Holds information on batch execution plans. Each batch can have up to three different execution plans.

| Column name           | Column description             |
|-----------------------|--------------------------------|
| SQEH_PWII_INSTANCE_ID | ID of the SQL Server instance. |

| Column name                      | Column description  |
|----------------------------------|---|
| SQEH_DATABASE_NAME               | Database to which the statement belongs.  |
| SQEH_PARSING_USER                | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEH_BATCH_HV                    | Unique identifier (number) assigned to the batch.   |
| SQEH_WORKSHOP_HV                 | Unique identifier (Number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PW have the value 0.                                     |
| SQEH_EXPLAIN_TIME                | Date and time the batch was explained and its access plan was changed.  |
| SQEH_TOTAL_ESTIMATE_COST         | Estimated cost of the batch.  |
| SQEH_TOTAL_ESTIMATE_IO_C<br>OST  | Estimated I/O cost of the batch.  |
| SQEH_TOTAL_ESTIMATE_CPU_<br>COST | Estimated CPU cost of the batch.  |
| SQEH_TOTAL_ESTIMATE_ROWS         | Estimated number of rows returned by the batch. Only rows from SELECT statements are calculated.  |
| SQEH_LAST_EXPLAIN_IND            | Indicates that this access plan is the last access plan of the batch.   |
| SQEH_ACTUAL_PLAN_IND             | An indicator if the execution plan is actual or estimated.  |

# PW\_SQST\_STATEMENTS\_STATS\_T

Stores statistics on statement and batch performance per timeslice.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name            | Column description  |
|------------------------|---|
| SQST_PWII_INSTANCE_ID  | ID of the SQL Server instance.  |
| SQST_TIMESTAMP         | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQST_PWHG_ID should be used.  |
| SQST_PWHG_ID           | Hour group ID.  |
| SQST_MINUTES_COUNT_SUM | The timeframe needed to calculated the row (in minutes).  |
| SQST_DATABASE_ID       | Database to which the statement belongs, normalized in table<br>PW_SQDN_DATABASE_NAMES_N.   |
| SQST_USER_ID           | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |
| SQST_BATCH_HV          | Unique identifier (number) assigned to the batch.   |

| Column name                       | Column description   |
|-----------------------------------|--|
| SQST_STATEMENT_HV                 | Unique identifier (number) assigned to the statement.  |
| SQST_COLLAPSED_BATCH_HV           | Unique identifier (number) assigned to the batch after replacing the literals with a parameters marker (collapsed form).   |
| SQST_COLLAPSED_STATEMENT<br>_HV   | Unique identifier (number) assigned to the statement in its collapsed form.  |
| SQST_TOTAL_INMSSQL_TIME_<br>SUM   | Indicates the total amount of time SQL Server was actively executing queries. It is also the sum of the columns.   |
| SQST_NUM_ENDED_EXECUTION<br>S_SUM | Number of statement executions which ended during the row's timeframe.   |
| SQST_NUM_EXECUTIONS_NOT_<br>ENDED | Number of statement executions which were still running at the end of the row's timeframe  |
| SQST_TOTAL_DURATION_SUM           | Total amount of time SQL Server spent executing this statement.  |
| SQST_REQUEST_WAIT_SUM             | Not in use in this table.  |
| SQST_CPU_SUM                      | Amount of time the process was actively executing a statement.   |
| SQST_LOCK_WAIT_SUM                | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SQST_IO_WAIT_SUM                  | Amount of time the process was waiting for I/O operations to terminate.  |
| SQST_REMOTE_WAIT_SUM              | Amount of time the process was waiting for a remote query to terminate.  |
| SQST_LOG_WAIT_SUM                 | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.   |
| SQST_INTERNAL_WAIT_SUM            | Amount of time the process was waiting for an internal resource to be freed.   |
| SQST_NET_IO_SUM                   | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SQST_PARALLEL_EXCHANGE_<br>SUM    | Amount of time the thread in a parallel session is waiting for data exchange from another thread.  |
| SQST_STAT_CPU_SUM                 | Statistics summing the amount of the process's read memory usage.  |
| SQST_STAT_PHYSICAL_IO_SU<br>M     | Number of physical disk reads and writes for the process.  |
| SQST_STAT_MEM_USAGE_MAX           | Number of pages in the procedure cache allocated to the process.   |
| SQST_STAT_OPEN_TRANS_MAX          | Number of transactions the process opened.   |
| SQST_PARALLEL_DEGREE_MIN          | Minimum number of threads used to execute the statement or batch in parallel. This counter is calculated from the <b>ecid</b> column in <b>sysprocesses</b> . This enables you to verify that SQL Server is using the best execution plan for the current statement. |
| SQST_PARALLEL_DEGREE_MAX          | Maximum number of threads used to execute the statement or batch in parallel. This counter is calculated from the <b>ecid</b> column in <b>sysprocesses</b> . This enables you to verify that SQL Server is using the best execution plan for the current statement. |
| SQST_LOCK_ROW_SUM                 | Amount of time the process was waiting to acquire a lock on a row.   |
| SQST_LOCK_KEY_SUM                 | Amount of time the process was waiting to acquire a lock on an index key or an index key range.  |

| Column name                       | Column description   |
|-----------------------------------|--|
| SQST_LOCK_PAGE_SUM                | Amount of time the process was waiting to acquire a lock on a table or index page.   |
| SQST_LOCK_TABLE_SUM               | Amount of time the process was waiting to acquire a lock on a table.   |
| SQST_COMPILE_LOCK_SUM             | Amount of time the process was waiting to acquire a lock on a compiled plan for a stored procedure.  |
| SQST_OTHER_LOCK_SUM               | Amount of time the process was waiting to acquire a lock on a process that is unrecognized by Precise for SQL Server.                                    |
| SQST_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.  |
| SQST_SLA_RED_SUM                  | Number of times the average amount of time SQL Server was actively executing the statement, exceeded the breach threshold for the type of program.       |
| SQST_SLA_YELLOW_SUM               | Number of times the average amount of time SQL Server was actively executing the statement, exceeded the near-breach threshold for the type of program.  |
| SQST_SLA_GREEN_SUM                | Number of times the average amount of time SQL Server was actively executing the statement, was below the near-breach threshold for the type of program. |
| SQST_ROWID                        | Unique row number.   |
| SQST_NET_IO_WAIT_SUM              | Groups all I/O related wait types.   |
| SQST_TEMP_DB_WAIT_SUM             | Groups I/O / Latch on TempDB pages.  |
| SQST_IDLE_WAIT_SUM                | This group includes the events indicating that a session is waiting for something other than a user request.   |
| SQST_INTRNL_BP_WAIT_SUM           | This state groups the events, which all mean contention on pages in the buffer pool.   |
| SQST_INTRNL_LATCH_WAIT_S<br>UM    | This group includes all Latch related wait types.  |
| SQST_INTRNL_PARALLEL_WAI<br>T_SUM | Amount of time the process was waiting for one of its sub-threads to complete its operation.   |
| SQST_INTRNL_DTC_WAIT_SUM          | Aggregates waits that occur when Distributed Transaction Coordinator sessions are waiting for one another.   |
| SQST_INTRNL_DBMIRROR_WAI<br>T_SUM | Aggregates a couple of new waits that occur when DB Mirroring is used.   |
| SQST_INTRNL_PROFILER_WAI<br>T_SUM | Aggregates a number of states associated with the Profiler.  |
| SQST_INTRNL_MEMORY_WAIT_<br>SUM   | Includes wait types, all of which mean that a session is waiting for memory to be allocated to it.   |
| SQST_INTRNL_BACKUP_WAIT_<br>SUM   | Includes write-ups commonly occurring when a session is doing a BACKUP command.  |
| SQST_INTRNL_OTHER_WAIT_S<br>UM    | This aggregates all the waits that do not match into any of the Precise for MS-SQL Server states.  |
| SQST_LOCK_MD_STAT_SUM             | Aggregates lock waits of the MetaData Statistics type.   |
| SQST_LOCK_MD_PART_SUM             | Aggregates lock waits of the MetaData Partition Function type.   |
| SQST_LOCK_MD_OTHER_SUM            | Aggregates lock waits of other MetaData types.   |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQST_PC_RECOMPILATIONS_S<br>UM    | Number of times this plan has been recompiled while it has remained in the cache. |
| SQST_PC_CACHE_EVICTIONS_<br>SUM   | Number of times the plan has been evicted from the cache.                         |
| SQST_PC_EXECUTION_COUNT_<br>SUM   | Number of times that the plan has been executed.                                  |
| SQST_PC_TOTAL_WORKER_TIM<br>E_SUM | Amount of CPU time that was consumed by executions of this plan.                  |
| SQST_PC_PHYSICAL_READS_S<br>UM    | Number of physical reads performed by executions of this plan.                    |
| SQST_PC_LOGICAL_READS_SU<br>M     | Number of logical reads performed by executions of this plan.                     |
| SQST_PC_LOGICAL_WRITES_S<br>UM    | Number of logical writes performed by executions of this plan.                    |
| SQST_PC_CLR_TIME_SUM              | Time consumed inside CLR objects by executions of this plan.                      |
| SQST_PC_ELAPSED_TIME_SUM          | Total elapsed time for completed executions of this plan.                         |

# PW\_SQSS\_SESSIONS\_STATS\_T

Stores application performance statistics per timeslice for every combination of instance, database, program, user, logon, machine, and work type.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name            | Column description  |
|------------------------|---|
| SQSS_PWII_INSTANCE_ID  | ID of the SQL Server instance.  |
| SQSS_TIMESTAMP         | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQSS_PWHG_ID should be used.  |
| SQSS_PWHG_ID           | Hour group ID.  |
| SQSS_MINUTES_COUNT_SUM | The timeframe needed to calculated the row (in minutes).  |
| SQSS_PROGRAM_ID        | ID of the application program, normalized in table PW_SQPN_PROGRAM_NAMES_N.   |
| SQSS_DATABASE_ID       | ID of the database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQSS_USER_ID           | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |

| Column name                        | Column description   |
|------------------------------------|--|
| SQSS_LOGIN_ID                      | The name used to log in to the database. In case of Windows Authentication mode, it contains the domain and the Windows NT user name, normalized in table PW_SQLN_LOGIN_NAMES_N. |
| SQSS_MACHINE_ID                    | The ID of the client workstation, normalized in table PW_SQMN_MACHINE_NAMES_N.   |
| SQSS_WORK_TYPE                     | Type of session, such as batch, dialog, queue. Used only in ERP components.  |
| SQSS_ERP_IDENTIFIER1_ID            | ID of the ERP entity, normalized in table PW_SQE1_ERP_IDENTIFIERS1_N.  |
| SQSS_ERP_IDENTIFIER2_ID            | ID of the ERP entity, normalized in table PW_SQE2_ERP_IDENTIFIERS2_N.  |
| SQSS_ERP_IDENTIFIER3_ID            | ID of the ERP entity, normalized in table PW_SQE3_ERP_IDENTIFIERS3_N.  |
| SQSS_ERP_IDENTIFIER4_ID            | ID of the ERP entity, normalized in table PW_SQE4_ERP_IDENTIFIERS4_N.  |
| SQSS_TOTAL_INMSSQL_TIME_<br>SUM    | Total amount of time SQL Server was actively executing queries. It is also the sum of the columns.   |
| SQSS_TOTAL_DURATION_SUM            | Total amount of time SQL Server spent executing this session.  |
| SQSS_REQUEST_WAIT_SUM              | Amount of time the process was waiting for the client to issue a statement.  |
| SQSS_CPU_SUM                       | Amount of time the process was actively executing a statement.   |
| SQSS_LOCK_WAIT_SUM                 | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SQSS_IO_WAIT_SUM                   | Amount of time the process was waiting for I/O operations to terminate.  |
| SQSS_REMOTE_WAIT_SUM               | Amount of time the process was waiting for remote query to terminate.  |
| SQSS_LOG_WAIT_SUM                  | Amount of time the process was waiting on an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.                  |
| SQSS_SYNC_SUM                      | Amount of time the process was waiting to synchronize with another process.  |
| SQSS_INTERNAL_WAIT_SUM             | Amount of time the process was waiting for an internal resource to be freed.   |
| SQSS_NET_IO_SUM                    | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SQSS_PARALLEL_WAIT_SUM             | Amount of time the process was waiting for one of its sub-threads to complete its operation.   |
| SQSS_INTERNAL_LOCK_SUM             | Amount of time the process was waiting for an internal lock to be released.  |
| SQSS_WAITFOR_COMMAND_SUM           | Amount of time the process was executing the WAITFOR DELAY command.  |
| SQSS_PARALLEL_EXCHANGE_S<br>UM     | Amount of time the thread in a parallel session is waiting for data exchange from another thread.  |
| SQSS_NUM_OF_ENDED_SESSIO<br>NS_SUM | Number of sessions, which ended during the row's timeframe.  |
| SQSS_NUM_OF_SESSIONS_NOT<br>_ENDED | Number of sessions, which were still open at the end of the row's timeframe.   |
| SQSS_NUM_ENDED_EXECUTION<br>S_SUM  | Number of statement executions, which ended during the row's timeframe.  |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQSS_NUM_EXECUTIONS_NOT_<br>ENDED | Number of statement executions, which were still running at the end of the row's timeframe.   |
| SQSS_STAT_CPU_SUM                 | Statistics summing the amount of the process's read memory usage.   |
| SQSS_STAT_PHYSICAL_IO_SU<br>M     | Number of physical disk reads and writes for the process.   |
| SQSS_STAT_MEM_USAGE_MAX           | Number of pages in the procedure cache allocated to the process.  |
| SQSS_STAT_OPEN_TRANS_MAX          | Number of transactions the process opened.  |
| SQSS_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.   |
| SQSS_LOCKED_ROW_SUM               | Amount of time the process was waiting to acquire a lock on a row.  |
| SQSS_LOCKED_KEY_SUM               | Amount of time the process was waiting to acquire a lock on an index key or an index key range.   |
| SQSS_LOCKED_PAGE_SUM              | Amount of time the process was waiting to acquire a lock on a table or index page.  |
| SQSS_LOCKED_TABLE_SUM             | Amount of time the process was waiting to acquire a lock on a table.  |
| SQSS_OTHER_LOCK_SUM               | Amount of time the process was waiting to acquire a lock that is unrecognized by Precise for SQL Server.  |
| SQSS_SLA_RED_SUM                  | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Breach threshold for the type of program.      |
| SQSS_SLA_YELLOW_SUM               | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Near-Breach threshold for the type of program. |
| SQSS_SLA_GREEN_SUM                | Number of times the average amount of time SQL Server was actively executing the session's statement, was below Near-Breach threshold for the type of program.    |
| SQSS_ROWID                        | Unique row number.  |
| SQSS_TOTAL_INMSSQL_SUM            | Indicates the total amount of time SQL Server was actively executing queries. It is also the sum of the columns.  |
| SQSS_TOTAL_DURATION_SUM           | Total amount of time SQL Server spent executing this statement.   |
| SQSS_REQUEST_WAIT_SUM             | Not in use in this table.   |
| SQSS_USING_CPU_SUM                | Total time of CPU use.  |
| SQSS_LOCK_WAIT_SUM                | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.                                       |
| SQSS_IO_WAIT_SUM                  | Amount of time the process was waiting for I/O operations to terminate.   |
| SQSS_REMOTE_WAIT_SUM              | Amount of time the process was waiting for a remote query to terminate.   |
| SQSS_LOCK_MD_OTHER_SUM            | Total time that session waited on Meta Data Lock type.  |
| SQSS_SLA_RED_SUM                  | Number of times the average amount of time SQL Server was actively executing the statement, exceeded the breach threshold for the type of program.                |
| SQSS_SLA_YELLOW_SUM               | Number of times the average amount of time SQL Server was actively executing the statement, exceeded the near-breach threshold for the type of program.           |
| SQSS_SLA_GREEN_SUM                | Number of times the average amount of time SQL Server was actively executing the statement, was below the near-breach threshold for the type of program.          |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQSS_PC_RECOMPILATIONS_S<br>UM    | Number of times this plan has been recompiled while it has remained in the cache. |
| SQSS_PC_CACHE_EVICTIONS_<br>SUM   | Number of times the plan has been evicted from the cache.                         |
| SQSS_PC_EXECUTION_COUNT_<br>SUM   | Number of times that the plan has been executed                                   |
| SQSS_PC_TOTAL_WORKER_TIM<br>E_SUM | Amount of CPU time that was consumed by executions of this plan.                  |
| SQSS_PC_PHYSICAL_READS_S<br>UM    | Number of physical reads performed by executions of this plan.                    |
| SQSS_PC_LOGICAL_READS_SU<br>M     | Number of logical reads performed by executions of this plan.                     |
| SQSS_PC_LOGICAL_WRITES_S<br>UM    | Number of logical writes performed by executions of this plan.                    |
| SQSS_PC_CLR_TIME_SUM              | Time consumed inside CLR objects by executions of this plan.                      |
| SQSS_PC_ELAPSED_TIME_SUM          | Total elapsed time for completed executions of this plan.                         |

# PW\_SQSE\_SESSIONS\_STMT\_STATS\_T

Stores statistics about performance on every combination of statements and session identifiers, such as instance, database, program, user, logon, machine, and work type per timeslice.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name            | Column description  |
|------------------------|---|
| SQSE_PWII_INSTANCE_ID  | ID of the SQL Server instance.  |
| SQSE_TIMESTAMP         | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQSE_PWHG_ID should be used.  |
| SQSE_PWHG_ID           | Hour group ID.  |
| SQSE_MINUTES_COUNT_SUM | The timeframe needed to calculated the row (in minutes).  |
| SQSE_PROGRAM_ID        | ID of the application program, normalized in table PW_SQPN_PROGRAM_NAMES_N.   |
| SQSE_DATABASE_ID       | The database to which the statement belongs, normalized in table<br>PW_SQDN_DATABASE_NAMES_N.   |
| SQSE_USER_ID           | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |

| Column name                       | Column description   |
|-----------------------------------|--|
| SQSE_LOGIN_ID                     | The name used to log in to the database. In case of Windows Authentication mode, it contains the domain and the Windows NT user name, normalized in table PW_SQLN_LOGIN_NAMES_N. |
| SQSE_MACHINE_ID                   | The ID of the client workstation, normalized in table PW_SQMN_MACHINE_NAMES_N.   |
| SQSE_WORK_TYPE                    | Type of session, such as batch, dialog, queue. Used only in ERP components.  |
| SQSE_ERP_IDENTIFIER1_ID           | ID of the ERP entity, normalized in table PW_SQE1_ERP_IDENTIFIERS1_N.  |
| SQSE_ERP_IDENTIFIER2_ID           | ID of the ERP entity, normalized in table PW_SQE2_ERP_IDENTIFIERS2_N.  |
| SQSE_ERP_IDENTIFIER3_ID           | ID of the ERP entity, normalized in table PW_SQE3_ERP_IDENTIFIERS3_N.  |
| SQSE_ERP_IDENTIFIER4_ID           | ID of the ERP entity, normalized in table PW_SQE4_ERP_IDENTIFIERS4_N.  |
| SQSE_BATCH_HV                     | Unique identifier (number) assigned to the batch.  |
| SQSE_STATEMENT_HV                 | Unique identifier (number) assigned to the statement.  |
| SQSE_COLLAPSED_BATCH_HV           | Unique identifier (number) assigned to the batch.  |
| SQSE_COLLAPSED_STATEMENT<br>_HV   | Unique identifier (number) assigned to the batch in its collapsed form.  |
| SQSE_TOTAL_INMSSQL_SUM            | Total amount of time SQL Server was actively executing queries. It is also the sum of the columns.   |
| SQSE_TOTAL_DURATION_SUM           | Total amount of time SQL Server spent executing this statement.  |
| SQSE_REQUEST_WAIT_SUM             | Amount of time the process was waiting for the client to issue a statement.  |
| SQSE_CPU_SUM                      | Amount of time the process was actively executing a statement.   |
| SQSE_LOCK_WAIT_SUM                | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SQSE_IO_WAIT_SUM                  | Amount of time the process was waiting for I/O operations to terminate.  |
| SQSE_REMOTE_WAIT_SUM              | Amount of time the process was waiting for a remote query to terminate.  |
| SQSE_LOG_WAIT_SUM                 | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.                 |
| SQSE_INTERNAL_WAIT_SUM            | Amount of time the process was waiting for an internal resource to be freed.   |
| SQSE_NET_IO_SUM                   | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SQSE_PARALLEL_EXCHANGE_SU<br>M    | Amount of time the thread in a parallel session is waiting for data exchange from another thread.  |
| SQSE_NUM_ENDED_EXECUTIONS<br>_SUM | Number of statement executions, which ended during the row's timeframe.  |
| SQSE_NUM_EXECUTIONS_NOT_E<br>NDED | Number of statement executions, which were still running at the end of the row's timeframe.  |
| SQSE_STAT_CPU_SUM                 | Statistics summing the amount of the process's read memory usage.  |
| SQSE_STAT_PHYSICAL_IO_SU<br>M     | Number of physical disk reads and writes for the process.  |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQSE_STAT_MEM_USAGE_MAX           | Number of pages in the procedure cache allocated to the process.  |
| SQSE_STAT_OPEN_TRANS_MAX          | Number of transaction the process opened.   |
| SQSE_PARALLEL_DEGREE_MIN          | Minimum number of sessions executing this statement in parallel.  |
| SQSE_PARALLEL_DEGREE_MAX          | Maximum number of sessions executing this statement in parallel.  |
| SQSE_LOCK_ROW_SUM                 | Amount of time the process was waiting to acquire a lock on a row.  |
| SQSE_LOCK_KEY_SUM                 | Amount of time the process was waiting to acquire a lock on an index key or an index key range.   |
| SQSE_LOCK_PAGE_SUM                | Amount of time the process was waiting to acquire a lock on a table or index page.  |
| SQSE_LOCK_TABLE_SUM               | Amount of time the process was waiting to acquire a lock on a table.  |
| SQSE_COMPILE_LOCK_SUM             | Amount of time the process was waiting to acquire a lock on a compiled plan for a stored procedure.   |
| SQSE_SLA_RED_SUM                  | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Breach threshold for the type of program.      |
| SQSE_SLA_YELLOW_SUM               | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Near-Breach threshold for the type of program. |
| SQSE_SLA_GREEN_SUM                | Number of times the average amount of time SQL Server was actively executing the session's statement, was below Near-Breach threshold for the type of program.    |
| SQSE_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.   |
| SQSE_ROWID                        | Unique row number.  |
| SQSE_START_BIT_ID                 | For future use.   |
| SQSE_CLR_WAIT_SUM                 | Groups all the CLR-related waits.   |
| SQSE_INTERNAL_WAIT_SUM            | Groups all the waits from Internal groups.  |
| SQSE_NET_IO_WAIT_SUM              | Groups all I/O related wait types.  |
| SQSE_TEMP_DB_WAIT_SUM             | Groups I/O / Latch on TempDB pages.   |
| SQSE_IDLE_WAIT_SUM                | This group includes the events indicating that a session is waiting for something other than a user request.  |
| SQSE_INTRNL_BP_WAIT_SUM           | This state groups the events, which all mean contention on pages in the buffer pool.  |
| SQSE_INTRNL_LATCH_WAIT_S<br>UM    | This group includes all Latch related wait types.   |
| SQSE_INTRNL_PARALLEL_WAI<br>T_SUM | Amount of time the process was waiting for one of its sub-threads to complete its operation.  |
| SQSE_INTRNL_DTC_WAIT_SUM          | Aggregates waits that occur when Distributed Transaction Coordinator sessions are waiting for one another.  |
| SQSE_INTRNL_DBMIRROR_WAI<br>T_SUM | Aggregates a couple of new waits that occur when DB Mirroring is used.  |
| SQSE_INTRNL_PROFILER_WAI<br>T_SUM | Aggregates a number of states associated with the Profiler.   |

| Column name                        | Column description   |
|------------------------------------|--|
| SQSE_INTRNL_MEMORY_WAIT_<br>SUM    | Includes wait types, all of which mean that a session is waiting for memory to be allocated to it. |
| SQSE_INTRNL_BACKUP_WAIT_<br>SUM    | Includes wait types commonly occurring when a session is doing a BACKUP command.                   |
| SQSE_INTRNL_OTHER_WAIT_S<br>UM     | This aggregates all the waits that do not match into any of the Precise for MS-SQL Server states.  |
| SQSE_NUM_OF_ENDED_SESSIO<br>NS_SUM | Number of sessions, which ended during the row's timeframe.  |
| SQSE_NUM_OF_SESSIONS_NOT<br>_ENDED | Number of sessions, which were still open at the end of the row's timeframe.                       |
| SQSE_LOCK_MD_STAT_SUM              | Aggregates lock waits of the MetaData Statistics type.   |
| SQSE_LOCK_MD_PART_SUM              | Aggregates lock waits of the MetaData Partition Function type.                                     |
| SQSE_LOCK_MD_OTHER_SUM             | Aggregates lock waits of other MetaData types.   |
| SQSE_PC_RECOMPILATIONS_S<br>UM     | Number of times this plan has been recompiled while it has remained in the cache.                  |
| SQSE_PC_CACHE_EVICTIONS_<br>SUM    | Number of times the plan has been evicted from the cache.  |
| SQSE_PC_EXECUTION_COUNT_<br>SUM    | Number of times that the plan has been executed.   |
| SQSE_PC_TOTAL_WORKER_TIM<br>E_SUM  | Amount of CPU time that was consumed by executions of this plan.                                   |
| SQSE_PC_PHYSICAL_READS_S<br>UM     | Number of physical reads performed by executions of this plan.                                     |
| SQSE_PC_LOGICAL_READS_SU<br>M      | Number of logical reads performed by executions of this plan.                                      |
| SQSE_PC_LOGICAL_WRITES_S<br>UM     | Number of logical writes performed by executions of this plan.                                     |
| SQSE_PC_CLR_TIME_SUM               | Time consumed inside CLR objects by executions of this plan.                                       |
| SQSE_PC_ELAPSED_TIME_SUM           | Total elapsed time for completed executions of this plan.  |

# PW\_SQNS\_INSTANCE\_STATS\_T

Stores application performance statistics per timeslice for every combination of instance and database.

Note: The  $\_T$  table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The  $\_M$  table summarizes the data per month.

| Column name                        | Column description   |
|------------------------------------|--|
| SQNS_PWII_INSTANCE_ID              | ID of the SQL Server instance.   |
| SQNS_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQNS_PWHG_ID should be used. |
| SQNS_PWHG_ID                       | Hour group ID.   |
| SQNS_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SQNS_DATABASE_ID                   | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.   |
| SQNS_TOTAL_INMSSQL_SUM             | Total amount of time SQL Server was actively executing queries. It is also the sum of the columns.   |
| SQNS_TOTAL_DURATION_SUM            | Total amount of time SQL Server spent executing this statement.  |
| SQNS_REQUEST_WAIT_SUM              | Amount of time the process was waiting for the client to issue a statement.  |
| SQNS_CPU_SUM                       | Amount of time the process was actively executing a statement.   |
| SQNS_LOCK_WAIT_SUM                 | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SQNS_IO_WAIT_SUM                   | Amount of time the process was waiting for I/O operations to terminate.  |
| SQNS_REMOTE_WAIT_SUM               | Amount of time the process was waiting for a remote query to terminate.  |
| SQNS_LOG_WAIT_SUM                  | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.                 |
| SQNS_INTERNAL_WAIT_SUM             | Amount of time the process was waiting for an internal resource to be freed.   |
| SQNS_NET_IO_SUM                    | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SQNS_PARALLEL_EXCHANGE_SU<br>M     | Amount of time the thread in a parallel session is waiting for data exchange from another thread.  |
| SQNS_NUM_OF_ENDED_SESSION<br>S_SUM | Number of sessions, which ended during the row's timeframe.  |
| SQNS_NUM_OF_SESSIONS_NOT_E<br>NDED | Number of sessions, which were still open at the end of the row's timeframe.   |
| SQNS_NUM_ENDED_EXECUTIONS<br>_SUM  | Number of statement executions, which ended during the row's timeframe.  |
| SQNS_NUM_EXECUTIONS_NOT_E<br>NDED  | Number of statement executions, which were still running at the end of the row's timeframe.  |
| SQNS_STAT_CPU_SUM                  | Statistics summing the amount of the process's read memory usage.  |
| SQNS_STAT_PHYSICAL_IO_SU<br>M      | Number of physical disk reads and writes for the process.  |
| SQNS_STAT_MEM_USAGE_MAX            | Number of pages in the procedure cache allocated to the process.   |
| SQNS_STAT_OPEN_TRANS_MAX           | Number of transaction the process opened.  |

| Column name                       | Column description  |
|-----------------------------------|---|
| SQNS_LOCK_ROW_SUM                 | Amount of time the process was waiting to acquire a lock on a row.  |
| SQNS_LOCK_KEY_SUM                 | Amount of time the process was waiting to acquire a lock on an index key or an index key range.   |
| SQNS_LOCK_PAGE_SUM                | Amount of time the process was waiting to acquire a lock on a table or index page.  |
| SQNS_LOCK_TABLE_SUM               | Amount of time the process was waiting to acquire a lock on a table.  |
| SQNS_OTHER_LOCK_SUM               | Amount of time the process was waiting to acquire a lock that is unrecognized by Precise for SQL Server.  |
| SQNS_SLA_RED_SUM                  | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Breach threshold for the type of program.      |
| SQNS_SLA_YELLOW_SUM               | Number of times the average amount of time SQL Server was actively executing the session's statement, exceeded the Near-Breach threshold for the type of program. |
| SQNS_SLA_GREEN_SUM                | Number of times the average amount of time SQL Server was actively executing the session's statement, was below Near-Breach threshold for the type of program.    |
| SQNS_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.   |
| SQNS_ROWID                        | Unique row number.  |
| SQNS_INTRNL_BP_WAIT_SUM           | This state groups the events, which all mean contention on pages in the buffer pool.  |
| SQNS_INTRNL_LATCH_WAIT_S<br>UM    | This group includes all Latch related wait types.   |
| SQNS_INTRNL_PARALLEL_WAI<br>T_SUM | Aggregates the waits that indicates that session is waiting for one of its sub-threads to complete its operation.   |
| SQNS_INTRNL_DTC_WAIT_SUM          | Aggregates waits that occur when Distributed Transaction Coordinator sessions are waiting for one another.  |
| SQNS_INTRNL_DBMIRROR_WAI<br>T_SUM | Aggregates a couple of new waits that occur when DB Mirroring is used.  |
| SQNS_INTRNL_PROFILER_WAI<br>T_SUM | Aggregates a number of states associated with the Profiler.   |
| SQNS_INTRNL_MEMORY_WAIT_<br>SUM   | Includes wait types, all of which mean that a session is waiting for memory to be allocated to it.  |
| SQNS_INTRNL_BACKUP_WAIT_<br>SUM   | Includes wait type commonly occurring when a session is doing a BACKUP command.   |
| SQNS_INTRNL_OTHER_WAIT_S<br>UM    | This aggregates all the waits that do not match any of the Precise for MS-SQL Server states.  |
| SQNS_PC_RECOMPILATIONS_S<br>UM    | Number of times this plan has been recompiled while it has remained in the cache.   |
| SQNS_PC_CACHE_EVICTIONS_<br>SUM   | Number of times the plan has been evicted from the cache.   |
| SQNS_PC_EXECUTION_COUNT_<br>SUM   | Number of times that the plan has been executed   |

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| Column nomo                       | Column description   |
|-----------------------------------|--|
| Column name                       | Column description   |
| SQNS_PC_TOTAL_WORKER_TIM<br>E_SUM | Amount of CPU time that was consumed by executions of this plan.   |
| SQNS_PC_PHYSICAL_READS_S<br>UM    | Number of physical reads performed by executions of this plan.   |
| SQNS_PC_LOGICAL_READS_SU<br>M     | Number of logical reads performed by executions of this plan.  |
| SQNS_PC_LOGICAL_WRITES_S<br>UM    | Number of logical writes performed by executions of this plan.   |
| SQNS_PC_CLR_TIME_SUM              | Time consumed inside CLR objects by executions of this plan.   |
| SQNS_PC_ELAPSED_TIME_SUM          | Total elapsed time for completed executions of this plan.  |
| SQNS_LOCK_MD_STAT_SUM             | Aggregates lock waits of MetaData Statistics type.   |
| SQNS_LOCK_MD_PART_SUM             | Aggregates lock waits of MetaData Partition Function type.   |
| SQNS_LOCK_MD_OTHER_SUM            | Aggregates lock waits of other MetaData types.   |
| SQNS_CLR_WAIT_SUM                 | Groups all the CLR-related waits.  |
| SQNS_INTERNAL_WAIT_SUM            | Groups all the waits from Internal groups.   |
| SQNS_NET_IO_WAIT_SUM              | Groups all I/O related wait types.   |
| SQNS_TEMP_DB_WAIT_SUM             | Groups I/O / Latch on TempDB pages.  |
| SQNS_IDLE_WAIT_SUM                | This group will include the events indicating that a session is waiting for something other than a user request.   |
| SQNS_INTRNL_BP_WAIT_SUM           | This state groups the events, which all mean contention on pages in the buffer pool.                               |
| SQNS_INTRNL_LATCH_WAIT_S<br>UM    | This group includes all Latch related wait types.  |
| SQNS_INTRNL_PARALLEL_WAI<br>T_SUM | Aggregates the waits that indicate that a session is waiting for one of its sub-threads to complete its operation. |
| SQNS_INTRNL_DTC_WAIT_SUM          | Aggregates waits that occur when Distributed Transaction Coordinator sessions are waiting for one another.         |
| SQNS_INTRNL_DBMIRROR_WAI<br>T_SUM | Aggregates a couple of new waits that occur when DB Mirroring is used.   |
| SQNS_INTRNL_PROFILER_WAI<br>T_SUM | Aggregates a number of states associated with the Profiler.  |
| SQNS_INTRNL_MEMORY_WAIT_<br>SUM   | Includes wait types, all of which mean that a session is waiting for memory to be allocated to it.                 |
| SQNS_INTRNL_BACKUP_WAIT_<br>SUM   | Includes wait types commonly occurring when a session is doing a BACKUP command.                                   |
| SQNS_INTRNL_OTHER_WAIT_S<br>UM    | This aggregates all the waits that do not match into any of the Precise for MS-SQL Server states.                  |

# PW\_SQFA\_FILE\_ACTIVITY\_STATS\_T

Holds performance statistics on datafiles over time.

Stores performance statistics on datafiles per timeslice for every combination of instance, database, program, user, batch, statement and locked object.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name                     | Column description  |
|---------------------------------|---|
| SQFA_PWII_INSTANCE_ID           | ID of the SQL Server instance.  |
| SQFA_TIMESTAMP                  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQFA_PWHG_ID should be used.  |
| SQFA_PWHG_ID                    | Hour group ID.  |
| SQFA_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).  |
| SQFA_PROGRAM_ID                 | ID of the application program, normalized in table PW_SQPN_PROGRAM_NAMES_N.   |
| SQFA_DATABASE_ID                | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQFA_USER_ID                    | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |
| SQFA_WORK_TYPE                  | Type of session, such as batch, dialog, queue. Used only in ERP components.   |
| SQFA_BATCH_HV                   | Unique identifier (number) assigned to the batch.   |
| SQFA_STATEMENT_HV               | Unique identifier (number) assigned to the statement.   |
| SQFA_COLLAPSED_BATCH_HV         | Unique identifier (number) assigned to the batch.   |
| SQFA_COLLAPSED_STATEMENT<br>_HV | Unique identifier (number) assigned to the batch in its collapsed form.   |
| SQFA_PHYSICAL_FILE_ID           | ID of the physical file, normalized in table PW_SQFN_FILE_NAMES_N.  |
| SQFA_LOGICAL_FILE_ID            | ID of the logical file, normalized in table PW_SQFN_FILE_NAMES_N.   |
| SQFA_UNIT_ID                    | ID of the storage device.   |
| SQFA_DEVICE_NAME                | Name of the storage device.   |
| SQFA_SFW_DISK_NUMBER            | The storage for the Windows disk number as it appears in the Disk Management window in the Computer Management application.   |
| SQFA_IO_WAIT_SUM                | Amount of time the process was waiting for I/O operations to terminate.   |
| SQFA_FILE_DATABASE_ID           | ID of the file database, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQFA_FILE_GROUP_ID              | Group to which the file belongs.  |
| SQFA_DEVICE_TYPE                | Type of the storage device.   |

| Column name             | Column description                                    |
|-------------------------|---|
| SQFA_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB. |
| SQFA_ROWID              | Unique row number.                                    |

## PW\_SQDS\_DBFILES\_STATS\_T

Holds statistics on datafiles over time.

| Column name             | Column description   |
|-------------------------|--|
| SQDS_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQDS_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQDS_PWHG_ID should be used. |
| SQDS_PWHG_ID            | Hour group ID.   |
| SQDS_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQDS_DATABASE_ID        | ID of the database, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQDS_PHYSICAL_FILE_ID   | ID of the physical file, normalized in table PW_SQFN_FILE_NAMES_N.   |
| SQDS_LOGICAL_FILE_ID    | ID of the logical file, normalized in table PW_SQFN_FILE_NAMES_N.  |
| SQDS_UNIT_ID            | ID of the storage device.  |
| SQDS_DEVICE_NAME        | Name of the storage device.  |
| SQDS_SFW_DISK_NUMBER    | The storage for Windows disk number as appears in the Disk Management window in the Computer Management application.   |
| SQDS_IO_WAIT_SUM        | Sum of the I/O wait spent on the device.   |
| SQDS_FILE_DATABASE_ID   | ID of the file database, normalized in table PW_SQDN_DATABASE_NAMES_N.   |
| SQDS_FILE_GROUP_ID      | Group to which the file belongs.   |
| SQDS_DEVICE_TYPE        | Type of the storage device.  |
| SQDS_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQDS_ROWID              | Unique row number.   |

## PW\_SQLA\_LOCK\_ACTIVITY\_STATS\_T

Stores statement lock statistics per timeslice for every combination of instance, database, program, user, batch, statement and locked object.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name   | Column description  |
|---|---|
| SQLA_PWII_INSTANCE_ID   | ID of the SQL Server instance.  |
| SQLA_TIMESTAMP  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQLA_PWHG_ID should be used.  |
| SQLA_PWHG_ID  | Hour group ID.  |
| SQLA_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).  |
| SQLA_PROGRAM_ID   | ID of the application program, normalized in table PW_SQPN_PROGRAM_NAMES_N.   |
| SQLA_DATABASE_ID  | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQLA_USER_ID  | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |
| SQLA_BATCH_HV   | Unique identifier (number) assigned to the batch.   |
| SQLA_STATEMENT_HV   | Unique identifier (number) assigned to the statement.   |
| SQLA_COLLAPSED_BATCH_HV   | Unique identifier (number) assigned to the batch.   |
| SQLA_COLLAPSED_STATEMENT<br>_HV                                     | Unique identifier (number) assigned to the batch in its collapsed form.   |
| SQLA_WORK_TYPE  | Type of session, such as batch, dialog, queue. Used only in ERP components.   |
| SQLA_LOCKED_OBJECT_TYPE   | Type of object being locked (such as table and file).   |
| SQLA_LOCKED_OBJECT_ID   | The ID of the locked object, normalized in table<br>PW_SQKN_LOCKED_OBJECT_NAMES_N.  |
| SQLA_SQL_OBJECT_ID1,<br>SQLA_SQL_OBJECT_ID2,<br>SQLA_SQL_OBJECT_ID3 | These three columns combine together the locked object's identifier in SQL Server. For example: a locked index will be represented by Database id . Table's object id . Index id  |
| SQLA_RECIEVED_TIMESTAMP   | Local date and time the row was loaded into the PMDB.   |
| SQLA_ROWID  | Unique row number.  |
| SQLA_LOCK_WAIT_SUM  | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.   |

## PW\_SQLO\_LOCK\_OBJECT\_STATS\_T

Stores application lock statistics per timeslice for every combination of Instance, database and locked objects.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name   | Column description   |
|---|--|
| SQLO_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQLO_TIMESTAMP  | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQLO_PWHG_ID should be used. |
| SQLO_PWHG_ID  | Hour group ID.   |
| SQLO_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQLO_DATABASE_ID  | ID of the database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.   |
| SQLO_LOCK_WAIT_SUM  | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SQLO_LOCKED_OBJECT_TYPE   | Type of object being locked (such as table and file).  |
| SQLO_LOCKED_OBJECT_ID   | The ID of the locked object, normalized in table<br>PW_SQKN_LOCKED_OBJECT_NAMES_N.   |
| SQLO_SQL_OBJECT_ID1,<br>SQLO_SQL_OBJECT_ID2,<br>SQLO_SQL_OBJECT_ID3 | These three columns combine together the locked object's identifier in SQL Server. For example: a locked index will be represented by Database id . Table's object id . Index id |
| SQLO_RECIEVED_TIMESTAMP   | Local date and time the row was loaded into the PMDB.  |
| SQLO_ROWID  | Unique row number.   |

### PW\_SQSM\_STATEMENTS

Holds statements collected by the Precise for SQL Server collector and statements inserted through the statement workshop (SQL workspace). The table holds one row per statement and connects it to the first batch in which the statement was sampled. You can join the statement with other batches run, but only for statistics tables. (PW\_SQST\_STATEMENTS\_STATS or PW\_STSE\_SESS\_STATEMENTS\_STATS).

| Column name                     | Column description  |
|---------------------------------|---|
| SQSM_PWII_INSTANCE_ID           | ID of the SQL Server instance.  |
| SQSM_STATEMENT_HV               | Unique identifier (number) assigned to the statement.   |
| SQSM_STATEMENT_ID               | Unique identifier (string) assigned to the statement.   |
| SQSM_COLLAPSED_STATEMENT<br>_HV | Unique identifier (number) assigned to the statement in its collapsed form.   |
| SQSM_COLLAPSED_STATEMENT<br>_ID | Unique identifier (string) assigned to the statement in its collapsed form.   |
| SQSM_INSERT_TIME                | Date and time the statement was saved in the database.  |
| SQSM_PARSING_USER               | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |

| Column name                        | Column description  |
|------------------------------------|---|
| SQSM_PARSING_USER_ID               | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USE_NAMES_N.  |
| SQSM_WORKSHOP_HV                   | Unique identifier (Number) assigned to statements inserted in the SQL workspace.  |
| SQSM_SOURCE                        | Indicates how the statement was loaded. Possible values:<br>PMDB—Sampled and loaded by the Collector<br>Manually—Entered through the statement workshop (SQL workspace).<br>Saved automatically—Explained from the Current workspace or Activity workspace.   |
| SQSM_LAST_EXPLAINED                | Last time the statement was explained.  |
| SQSM_TOTAL_MSSQL_TIME              | Not in use.   |
| SQSM_DO_NOT_EXPLAIN                | Indicates an error during the explain of the statement (if 'Y', do not try to re-explain).  |
| SQSM_EXPLAIN_ERROR_MSG             | Error that occurred during the last explain process.  |
| SQSM_LAST_ACC_PATH_CHANG<br>ED     | Last time the access plan of the statement changed.   |
| SQSM_ACCESS_PATH_HV                | Unique identifier (number) assigned to the access plan of the statement.  |
| SQSM_TOTAL_ESTIMATED_COS<br>T      | Estimated cost of the statement's execution. A high cost value may indicate a problem in the current implementation of the statement. To determine which operation may have caused the problem, you can use the "Estimated cost breakdown" graph to drill down easily and see the most resource consuming operation. To determine whether the operation is an I/O consuming operation or a CPU consuming operation (or both), check the "Estimated I/O cost" and "Estimated CPU cost" values. |
| SQSM_DATABASE_NAME                 | Name of the database to which the statement belongs.  |
| SQSM_DATABASE_ID                   | ID of the database, in which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.   |
| SQSM_BATCH_HV                      | Unique identifier (number) assigned to the batch. Only the first batch appears.   |
| SQSM_COLLAPSED_BATCH_HV            | Unique identifier (number) assigned to the batch. Only the first batch appears.   |
| SQSM_STATEMENT_OFFSET              | The offset of the statement in the first batch sampled, running the statement by the Collector agent.   |
| SQSM_STATEMENT_LENGTH              | Length of the statement in the first batch sampled running the statement.   |
| SQSM_STATEMENT_ID_IN_BAT<br>CH     | Statement number in the first batch sampled running the statement.  |
| SQSM_START_EXEC_ORDER_IN<br>_BATCH | Execution order the statement started with in the access plan of the batch.   |
| SQSM_START_TREE_LEVEL              | Start level of the statement in the access plan of the batch.   |
| SQSM_EXPLAIN_USAGE_MAP             | Internal bit representative of the types of the operators in the execution plan.  |
| SQSM_ACTUAL_PLAN_IND               | Indication if the last execution plan of the statement is Actual or estimate - available only for MS-SQL 2005.  |
| SQSM_MISS_INDEXES_IMPACT           | Indication if the last execution plan of the statement has missing indexes indication - available only for MS-SQL 2005.   |

| Column name         | Column description  |
|---------------------|---|
| SQSM_STATEMENT_TYPE | Representing the type of the statement. Such as: INSERT and SELECT. |

## PW\_SQBA\_BATCHES

Holds information on batches.

| Column name                    | Column description  |
|--------------------------------|---|
| SQBA_PWII_INSTANCE_ID          | ID of the SQL Server instance   |
| SQBA_BATCH_HV                  | Unique identifier (number) assigned to the batch.   |
| SQBA_COLLAPSED_BATCH_HV        | Unique identifier (number) assigned to the batch in its collapsed form.   |
| SQBA_PARSING_USER              | One of the SQL Server users who executed this batch. If this batch is a stored procedure, this is the user used as the parsing user when explaining this batch.   |
| SQBA_PARSING_USER_ID           | One of the SQL Server users who executed this batch. If this batch is a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N.   |
| SQBA_DATABASE_NAME             | Name of the database to which the batch belongs.  |
| SQBA_DATABASE_ID               | The ID of the database, to which the batch belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.   |
| SQBA_BATCH_ID                  | Unique identifier (string) assigned to the batch.   |
| SQBA_COLLAPSED_BATCH_ID        | Unique identifier (string) assigned to the batch in its collapsed form.   |
| SQBA_LAST_EXPLAINED            | Last time the statement was explained.  |
| SQBA_DO_NOT_EXPLAIN            | Indicates an error during the explain of the statement (if 'Y', do not try to re-explain).  |
| SQBA_EXPLAIN_ERROR_MSG         | Error that occurred during the last explain process.  |
| SQBA_LAST_ACC_PATH_CHANG<br>ED | Last time the access plan of the batch changed.   |
| SQBA_ACCESS_PATH_HV            | Unique identifier (number) assigned to the access plan.   |
| SQBA_TOTAL_ESTIMATED_COS<br>T  | Estimated cost of the statement's execution. A high cost value may indicate a problem in the current implementation of the statement. To determine which operation may have caused the problem, you can use the "Estimated cost breakdown" graph to drill down easily and see the most resource consuming operation. To determine whether the operation is an I/O consuming operation or a CPU consuming operation (or both), check the "Estimated I/O cost" and "Estimated CPU cost" values. |
| SQBA_PROC_DB_ID                | ID of the database that holds the stored procedure.   |
| SQBA_PROC_OBJECT_ID            | ID of the stored procedure.   |
| SQBA_EXPLAIN_USAGE_MAP         | Internal bit representative of the types of the operators in the execution plan.  |
| SQBA_ACTUAL_PLAN_IND           | Indication if the last execution plan of the batch is Actual or estimate - available only for MS-SQL 2005.  |
| SQBA_MISS_INDEXES_IMPACT       | Indication if the last execution plan of the batch has missing indexes indication - available only for MS-SQL 2005.   |

| Column name        | Column description   |
|--------------------|--|
| SQBA_DOTNET_HV     | Used for correlation between Precise for Microsoft .NET and Precise for MS SQL Server.                                       |
|                    | Only in the data migration process. Used to update several columns and distinguish between new batches and previous batches. |
| SQBA_CONSISTENT_HV | Used for correlation between all the other products and Precise for MS SQL Server  |

#### PW\_SQIN\_INSTANCES

Holds information on the SQL Server instances monitored by Precise.

| Column name                     | Column description   |
|---------------------------------|--|
| SQIN_PWII_INSTANCE_ID           | ID of the SQL Server instance.   |
| SQIN_CLUSTER_ID                 | Used to share text of statements and batches between instances.  |
| SQIN_SYSTEM_NAME                | Server on which the Collector agent is installed.  |
| SQIN_INSTANCE_NAME              | Name of the monitored SQL Server instance.   |
| SQIN_LAST_PW_EXPLAIN_DAT<br>E   | Last date the explain process run.   |
| SQIN_LAST_PERF_LOAD_DATE        | Last date the instance performance was loaded.   |
| SQIN_LAST_STMT_LOAD_DATE        | Last date the statement text was loaded.   |
| SQIN_DB_FILES_LAST_SAMPL<br>E   | Last date the process "Collect DB Files Statistics" run.   |
| SQIN_LAST_AVAIL_LOADED          | Last date the instance availability was loaded.  |
| SQIN_LAST_AVAIL_LOADED_D<br>B   | Last date the database availability was loaded.  |
| SQIN_UNAVAIL_DB_STATUS          | Combination of database statuses to classify a database as unavailable.  |
| SQIN_POINTS_INSTALLED           | Array of bits indicating which Interpoints and Precise for Storage are installed.                                  |
| SQIN_INSTANCE_TYPE              | User defined instance group name. And be updated by using stored procedure sq_update_instance_type.                |
| SQIN_JOB_SAMPLE_STATUS          | The status of job changes load (part of Collect Schema changes).   |
| SQIN_SCHEDULE_SAMPLE_STATU<br>S | The status of job schedule changes load (part of Collect Schema changes).  |
| SQIN_STEP_SAMPLE_STATUS         | The status of job step changes load (part of Collect Schema changes).  |
| SQIN_INSTANCE_VERSION           | The version of the MS-SQL Server instance.   |
| SQIN_COSTS_PURGED_TO_DAT<br>E   | A date until which historical data in the execution plan costs table was cleaned by Purge<br>Internal Data process |

### PW\_SQCG\_SCHEMA\_CHANGES\_GROUPS

Holds information on grouping the changes, on which we track to groups. For example groups that contained schema changes and groups that contained instance/database definitions.

| Column name       | Column description  |
|-------------------|---|
| SQCG_GROUP_ID     | ID of group1 for schema changes and of group 2 for instance/database definitions. |
| SQCG_DATA_CHANGED | Name of the property that was changed.  |

#### PW\_SQPC\_PERFORMANCE\_COUNTERS

Maps SQL Server performance counter names to the Precise PMDB tables and columns.

| Column name        | Column description  |
|--------------------|---|
| SQPC_OBJECT_NAME   | Name of the performance Group as it appears in Microsoft SQL Server.    |
| SQPC_COUNTER_NAME  | Name of the performance Counter as it appears in Microsoft SQL Server.  |
| SQPC_INSTANCE_NAME | Name of the performance Instance as it appears in Microsoft SQL Server. |
| SQPC_TABLE_NAME    | Name of the table in the Precise PMDB, which holds the value.           |
| SQPC_COLUMN_NAME   | Name of the column in the Precise PMDB, which holds the value.          |
| SQPC_SCALE         | The scale of the value, in case it shows with other statistics.         |
| SQPC_FROM_VERSION  | Counter from - based on MS-SQL version.                                 |
| SQPC_TILL_VERSION  | Counter till - based on MS-SQL version.                                 |

## PW\_SQNK\_NETWORK\_T

Holds information on network activities of the SQL Server instance.

| Column name                      | Column description   |
|----------------------------------|--|
| SQNK_PWII_INSTANCE_ID            | ID of the SQL Server instance.   |
| SQNK_PWII_INSTANCE_NAME          | Name of the network interface card.  |
| SQNK_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQNK_PWHG_ID should be used.   |
| SQNK_PWHG_ID                     | Hour group ID.   |
| SQNK_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SQNK_OUTPUT_QUEUE_LENGTH<br>_AVG | The average length of the output packet queue (in packets). If this is longer than 2, delays are being experienced and the bottleneck should be found and eliminated if possible. Because the requests are queued by NDIS in this implementation, this will always be 0. |

| Column name                      | Column description   |
|----------------------------------|--|
| SQNK_OUTPUT_QUEUE_LENGTH<br>_MAX | The maximum length of the output packet queue (in packets). If this is longer than 2, delays are being experienced and the bottleneck should be found and eliminated if possible. Because the requests are queued by NDIS in this implementation, this will always be 0. |
| SQNK_PACKETS_SENT_AVG            | The average rate at which packets are sent on the network interface.   |
| SQNK_PACKETS_SENT_MAX            | The highest rate at which packets are sent on the network interface.   |
| SQNK_PACKETS_RECEIVED_AVG        | The average rate at which packets are received on the network interface.   |
| SQNK_PACKETS_RECEIVED_MAX        | The highest rate at which packets are received on the network interface.   |
| SQNK_BYTES_SENT_AVG              | The average rate at which bytes are sent on the interface, including framing characters.   |
| SQNK_BYTES_SENT_MAX              | The highest rate at which bytes are sent on the interface, including framing characters.   |
| SQNK_BYTES_RECEIVED_AVG          | The average rate at which bytes are received on the interface, including framing characters.   |
| SQNK_BYTES_RECEIVED_MAX          | The highest rate at which bytes are received on the interface, including framing characters.   |
| SQNK_RECIEVED_TIMESTAMP          | Local date and time the row was loaded into the PMDB.  |
| SQNK_ROWID                       | Unique row number.   |

## PW\_SQJS\_JOBS\_STATS\_D

Holds information on the SQL Server instance jobs.

Note: The \_D table summarizes the data per day. The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description   |
|-------------------------|--|
| SQJS_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQJS_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQJS_PWHG_ID should be used. |
| SQJS_PWHG_ID            | Hour group ID.   |
| SQJS_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQJS_JOB_NAME           | Name of the job.   |
| SQJS_JOB_ID             | ID of the job, normalized in table PW_SQE3_ERP_IDENTIFIERS3_N.   |
| SQJS_DURATION_SUM       | Total elapsed time. This counter is reported by the SQL Server and not by the I4SQL collector.   |
| SQJS_EXECUTION_SUM      | Total number of job executions.  |
| SQJS_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQJS_ROWID              | Unique row number.   |

#### PW\_SQJT\_JOBS\_STEPS\_STATS\_D

Holds information on the SQL Server instance job steps.

Note: The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description   |
|-------------------------|--|
| SQJT_PWII_INSTANCE_ID   | ID of the SQL Server instance.   |
| SQJT_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQJT_PWHG_ID should be used. |
| SQJT_PWHG_ID            | Hour group ID.   |
| SQJT_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SQJT_JOB_NAME           | Name of the job.   |
| SQJT_JOB_ID             | ID of the job, normalized in table PW_SQE3_ERP_IDENTIFIERS3_N.   |
| SQJT_STEP_ID            | ID of the step, normalized in table PW_SQE4_ERP_IDENTIFIERS4_N.  |
| SQJT_DURATION_SUM       | Total elapsed time. This counter is reported by the SQL Server and not by the Precise for SQL Server Collector agent.  |
| SQJT_EXECUTION_SUM      | Total number of job executions.  |
| SQJT_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |
| SQJT_ROWID              | Unique row number.   |

## PW\_SQCJ\_MTNC\_CHANGE\_JOB

Holds information on the SQL Server instance MTNC job changes.

| Column name                     | Column description                      |
|---------------------------------|---|
| SQCJ_PWII_INSTANCE_ID           | ID of the SQL Server instance.          |
| SQCJ_JOB_NAME                   | Number of the job that was changed.     |
| SQCJ_ENABLED                    | Job status.                             |
| SQCJ_START_STEP_NAME            | Name of the first step that should run. |
| SQCJ_CATEGORY_NAME              | The job's category name.                |
| SQCJ_OWNER_NAME                 | The job's owner.                        |
| SQCJ_EVENT_LOG_NOTIFY_LE<br>VEL | When to write to log.                   |
| SQCJ_EMAIL_NOTIFY_LEVEL         | When to E-mail.                         |

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#### (Continued)

| Column name                     | Column description           |
|---------------------------------|------------------------------|
| SQCJ_NET_SEND_NOTIFY_LEV<br>EL  | When to send net.            |
| SQCJ_PAGE_NOTIFY_LEVEL          | When to page.                |
| SQCJ_EMAIL_OPERATOR_NAME        | To whom to send E-mail.      |
| SQCJ_NET_SEND_OPERATOR_N<br>AME | To whom to send net.         |
| SQCJ_PAGE_OPERATOR_NAME         | To whom to page.             |
| SQCJ_DELETE_LEVEL               | When to do automatic delete. |

## PW\_SQCT\_MTNC\_CHANGE\_STEP

Holds information on the SQL Server instance MTNC job step changes.

| Column name                        | Column description  |
|------------------------------------|---|
| SQCT_PWII_INSTANCE_ID              | ID of the SQL Server instance.  |
| SQCT_JOB_NAME                      | Number of the job that was changed.   |
| SQCT_STEP_NAME                     | Job step name.  |
| SQCT_SUB_SYSTEM_NAME               | Name of the subsystem used by the SQL Server Agent to execute the job step.       |
| SQCT_COMMAND_TEXT                  | Command to be executed.   |
| SQCT_ON_SUCCESS_ACTION             | Action to be performed when a step is executed successfully.                      |
| SQCT_ON_SUCCESS_NEXT_STE<br>P_NAME | The name of the next step to execute when a step name executed successfully.      |
| SQCT_ON_FAIL_ACTION                | Action to be performed when a step is not executed successfully.                  |
| SQCT_ON_FAIL_NEXT_STEP_N<br>AME    | The name of the next step to to execute when a step is not executed successfully. |
| SQCT_DATABASE_NAME                 | Name of the database in which the command is executed.                            |
| SQCT_DATABASE_USER_NAME            | Name of the database user whose account will be used when executing the step.     |
| SQCT_RETRY_ATTEMPTS                | Number of retry attempts made if the step fails.                                  |
| SQCT_RETRY_INTERVAL                | Amount of time to wait between retry attempts.                                    |

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## PW\_SQCH\_MTNC\_CHANGE\_LOG

Holds information on the SQL Server instance MTNC change log.

| Column name             | Column description  |
|-------------------------|---|
| SQCH_PWII_INSTANCE_ID   | ID of the SQL Server instance.                            |
| SQCH_ENTITY_TYPE        | Type of the entity that was changed.                      |
| SQCH_ENTITY_NAME        | Name of the entity that was changed.                      |
| SQCH_PARENT_ENTITY_NAME | The name of the parent entity that was changed.           |
| SQCH_CHANGE_TYPE        | Type of the performed change (Created, Dropped, Updated). |
| SQCH_DATA_CHANGED       | Name of the property that was changed.                    |
| SQCH_OLD_VALUE          | Old value (before the change).                            |
| SQCH_NEW_VALUE          | New value (after the change).                             |
| SQCH_SAMPLE_DATE        | Sample time.  |

#### PW\_SQEC\_EXPLN\_COLUMN

Holds information on the statement execution plan.

| Column name                    | Column description  |
|--------------------------------|---|
| SQEC_PWII_INSTANCE_ID          | ID of the SQL Server instance.  |
| SQEC_DATABASE_NAME             | Name of the database in which the change occurred.  |
| SQEC_PARSING_USER              | One of the SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEC_BATCH_HV                  | Unique identifier (number) assigned to the batch.   |
| SQEC_WORKSHOP_HV               | Unique identifier (Number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PW have the value.                                       |
| SQEC_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.  |
| SQEC_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.  |
| SQEC_OPERATOR_ID               | Sequence order of this operation in the access plan for a statement.  |
| SQEC_PREDICATE_ID              | Sequent of the predicate.   |
| SQEC_OBJ_DATABASE_NAME         | Database name of the object accessed in this operation.   |
| SQEC_OBJ_OWNER_NAME            | Owner of the object accessed in this operation.   |
| SQEC_OBJ_NAME                  | Name of the object accessed in this operation.  |
| SQEC_OBJ_NAME_ALIAS            | Alias of the object accessed in this operation.   |
| SQEC_COLUMN_NAME               | Name of the column of the object that was changed.  |

| Column name           | Column description   |
|-----------------------|--|
| SQEC_USED_IN_SEEK     | Indicates whether the column in the specified operator is used in a seek action. The value can be Y/N. |
| SQEC_LAST_EXPLAIN_IND | Indicates that this operation belongs to the last explain of the batch.                                |
| SQEC_UNION_ID         | The Union ID to which the column belongs (starting from 0) when the statement contains union.          |

#### PW\_SQBX\_BATCH\_TEXT

Holds the text of batches.

| Column name     | Column description                                |
|-----------------|---|
| SQBX_BATCH_HV   | Unique identifier (number) assigned to the batch. |
| SQBX_BATCH_TEXT | The text of the batch.                            |

#### PW\_SQIF\_IGNORE\_FINDINGS

Holds the list of SmarTune findings that will not be displayed in the SmarTune workspace if the user marked them to be ignored.

| Column name              | Column description   |
|--------------------------|--|
| SQIF_STATEMENT_HV        | For the heavy collapsed statement – It contains the collapsed hash value.  |
| SQIF_DATABASE_ID         | For the heavy statement and heavy collapsed statement types – the database ID that the statement was running at, normalized at: PW_SQDN_DATABASE_NAMES_N.  |
| SQIF_DATABASE_NAME       | For the heavy statement and heavy collapsed statement types – the database name on which the statement was running. For the heavy object finding type it is the table's database name.   |
| SQIF_USER_ID             | One of the MS-SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SQUN_USER_NAMES_N. |
| SQIF_USER_NAME           | For the heavy statement and heavy collapsed statements – it is the user that runs the statement. For the heavy object finding – it is the owner of the table.  |
| SQIF_FULL_OBJECT_ID      | For the heavy object finding – The Ignored table ID, normalized in table PW_SQKN_LOCKED_OBJECT_NAMES_N.  |
| SQIF_FINDING_TYPE        | The type of the finding: 1=Heavy Statement, 2=Heavy Object, 3=Heavy Collapsed Statement, 4=Instance event  |
| SQIF_UI_USER_NAME        | This is the user (login) that asked the finding to be ignored.   |
| SQIF_INSTANCE_PROBLEM_ID | For the Instance event finding – It contains the instance event ID.  |

## PW\_SQEJ\_EXPLN\_OPER\_OBJECTS

Holds all the object operators per object.

| Column name                    | Column description   |
|--------------------------------|--|
| SQEJ_DATABASE_NAME             | Name of the database.  |
| SQEJ_PARSING_USER              | One of the MS-SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEJ_BATCH_HV                  | Unique identifier (number) assigned to the batch. Only the first batch appears.  |
| SQEJ_WORKSHOP_HV               | Unique identifier (Number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB get this the value.                                    |
| SQEJ_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.   |
| SQEJ_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.   |
| SQEJ_OPERATOR_ID               | Sequence order of this operation in the access plan for a statement.   |
| SQEJ_OPERATOR_TYPE             | Physical operation in the access plan.   |
| SQEJ_OBJ_DATABASE_NAME         | Database name of the object accessed in this operation.  |
| SQEJ_OBJ_OWNER_NAME            | Owner of the object accessed in this operation.  |
| SQEJ_OBJ_NAME                  | Name of the object accessed in this operation.   |
| SQEJ_OBJ_NAME_ALIAS            | Alias name of the object accessed in this operation.   |
| SQEJ_INDEX_NAME                | Name of the index accessed in this operation. Otherwise NULL.  |
| SQEJ_CONTRIBUTION_RATIO        | Contribution value of the object in this operation to the statement.   |
| SQEJ_MISS_INDEXES_IND          | Indicator if indexes are missing in this operation.  |

## PW\_SQPU\_PARTITION\_USAGE\_D

Collects space information per partition.

| Column name         | Column description   |
|---------------------|--|
| SQPU_DATABASE_ID    | The database to which the statement belongs, normalized in table<br>PW_SQDN_DATABASE_NAMES_N.  |
| SQPU_OBJECT_ID      | ID of the object.  |
| SQPU_FULL_OBJECT_ID | The full object ID, normalized in table PW_SQKN_LOCKED_OBJECT_NAMES_N.   |
| SQPU_INDEX_ID       | ID of the index.   |
| SQPU_PARTITION_ID   | ID of the partition.   |
| SQPU_TIMESTAMP      | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQPU_PWHG_ID should be used. |
| SQPU_PWHG_ID        | Hour group ID.   |

| Column name             | Column description  |
|-------------------------|---|
| SQPU_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).    |
| SQPU_P_ALL_ALLOC_MAX    | Number of allocated pages for a specific partition (in MB). |
| SQPU_P_ALL_USED_MAX     | Number of used pages for a specific partition (in MB).      |
| SQPU_ROW_COUNT_MAX      | Number of rows on a specific partition                      |
| SQPU_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.       |

## PW\_SQCP\_SCHEMA\_CHANGES\_PS

Collects information about schema changes made to a partition schema.

| Column name      | Column description   |
|------------------|--|
| SQCP_DATABASE_ID | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N. |
| SQCP_NAME        | Name of the partition schema.  |
| SQCP_ID          | Partition schema ID.   |
| SQCP_NUMBER_FG   | Number of file groups of the partition schema.   |

## PW\_SQCF\_SCHEMA\_CHANGES\_PS\_FG

Collects information about schema changes made to a partition schema filegroup.

| Column name      | Column description   |
|------------------|--|
| SQCF_DATABASE_ID | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N. |
| SQCF_PS_NAME     | Name of the partition schema.  |
| SQCF_FP_NAME     | Name of the partition function.  |
| SQCF_PS_TYPE     | Type of the partition schema.  |

#### PW\_SQCN\_SCHEMA\_CHANGES\_PF

Collects information about schema changes made to a partition function.

| Column name      | Column description  |
|------------------|---|
| SQCN_DATABASE_ID | The database to which the statement belongs, normalized in table<br>PW_SQDN_DATABASE_NAMES_N. |
| SQCN_PF_NAME     | Name of the partition function.   |
| SQCN_NUM_VALUES  | Number of values of the partition function.   |

 Column name
 Column description

 SQCN\_PF\_TYPE
 Partition function type.

## PW\_SQCV\_SCHEMA\_CHANGES\_PF\_VAL

Collects information about schema changes made to a partition function values.

| Column name      | Column description   |
|------------------|--|
| SQCV_DATABASE_ID | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N. |
| SQCV_PF_NAME     | Name of the partition function.  |
| SQCV_VALUE       | Value of the partition function (one row for each value).                                  |
| SQCV_POSITION    | Position of the value within the partition function.                                       |
| SQCV_TYPE        | Type of the value (such as: int and date).   |

#### PW\_SQWI\_WAIT\_INFO

Contains wait event counters info (MS-SQL).

| Column name                   | Column description                      |
|-------------------------------|---|
| SQWI_WAIT_GROUP               | Normalized, wait group names.           |
| SQWI_WAIT_TYPE                | Normalized, wait type names.            |
| SQWI_GROUP_FROM_VERSION       | Group from - based on MS-SQL version.   |
| SQWI_GROUP_TILL_VERSION       | Group till - based on MS-SQL version.   |
| SQWI_COUNTER_FROM_VERSIO<br>N | Counter from - based on MS-SQL version. |
| SQWI_COUNTER_TILL_VERSIO<br>N | Counter till - based on MS-SQL version. |
| SQWI_EXPLANATION              | Counter explanation.                    |
| SQWI_IS_LATCH                 | Wait event - 0. Latch event - 1.        |

## PW\_SQWC\_WAIT\_COUNTERS\_T

Contains wait counter's data (MS-SQL).

| Column name    | Column description |
|----------------|--------------------|
| SQWC_WAIT_TYPE | Wait type ID.      |

| Column name                      | Column description                          |
|----------------------------------|---|
| SQWC_WAITING_TASKS_COUNT<br>_SUM | Wait event's counter.                       |
| SQWC_TOTAL_WAIT_TIME_SUM         | Summarizes wait event's total wait time.    |
| SQWC_RESOURCE_WAIT_TIME_<br>SUM  | Summarizes wait event's resource wait time. |

#### PW\_SQOP\_OBJECTS\_PERFORMENCE\_D

A daily table which is being loaded every night by the Collects objects PMDB process. The table summarizes statistic data (such as locks, in\_msssql, and using\_cpu.) per object (such as table and index). The idea behind this table is to accelerate the GUI in the Objects workspace.

| Column name             | Column description  |
|-------------------------|---|
| SQOP_PWII_INSTANCE_ID   | ID of the MS-SQL Server instance.   |
| SQOP_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQAM_PWHG_ID should be used.  |
| SQOP_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).  |
| SQOP_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.   |
| SQOP_PWHG_ID            | Hour group ID.  |
| SQOP_OBJECT_FULL_ID     | For heavy object finding, the Ignored table ID, Normalized in table PW_SQKN_LOCKED_OBJECT_NAMES_N.  |
| SQOP_DATABASE_ID        | The database to which the statement belongs, normalized in table PW_SQDN_DATABASE_NAMES_N.  |
| SQOP_FULL_TABLE_ID      | Full table ID means: <db_name>.<table_owner>.<table_name> It is a normalized field which holds only a numeric hash value of the full table name. The normalization table is: PW_SQKN_LOCKED_OBJECT_NAMES_N</table_name></table_owner></db_name> |
| SQOP_TOTAL_INMSSQL_SUM  | Indicates the total amount of time MS-SQL Server was actively executing queries. It is also the sum of the columns.   |
| SQOP_USING_CPU_SUM      | Total time of CPU use.  |
| SQOP_IO_WAIT_SUM        | Amount of time the process was waiting for I/O operations to terminate.   |
| SQOP_LOCK_ROW_SUM       | Aggregates lock waits of row locks.   |
| SQOP_LOCK_KEY_SUM       | Aggregates lock waits of key locks.   |
| SQOP_LOCK_PAGE_SUM      | Aggregates lock waits of page locks.  |
| SQOP_LOCK_TABLE_SUM     | Aggregates lock waits of table locks.   |
| SQOP_LOCK_OTHER_SUM     | Aggregates lock waits of other locks.   |
| SQOP_LOCK_MD_STAT_SUM   | Aggregates lock waits of MetaData Statistics type.  |
| SQOP_LOCK_MD_PART_SUM   | Aggregates lock waits of MetaData Partition Function type.  |

| Column name            | Column description                             |
|------------------------|--|
| SQOP_LOCK_MD_OTHER_SUM | Aggregates lock waits of other MetaData types. |

## PW\_SQEE\_EXPLN\_ESTIMATED\_COST

Contains overtime history of statement's estimated cost changes.

| Column name                    | Column description   |
|--------------------------------|--|
| SQEE_PWII_INSTANCE_ID          | ID of the MS-SQL Server instance.  |
| SQEE_DATABASE_NAME             | Name of the database.  |
| SQEE_PARSING_USER              | One of the MS-SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEE_BATCH_HV                  | Unique identifier (number) assigned to the batch.  |
| SQEE_WORKSHOP_HV               | Unique identifier (number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB have the value 0.                                      |
| SQEE_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.   |
| SQEE_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.   |
| SQEE_ESTIMATE_COST             | Estimated cost of this operation.  |
| SQEE_ACTUAL_PLAN_IND           | An indicator if the execution plan is actual or estimated  |

## PW\_SQEA\_EXPLN\_ACCESS\_PATH

Contains overtime history of statement's access path changes.

| Column name                    | Column description   |
|--------------------------------|--|
| SQEA_PWII_INSTANCE_ID          | ID of the MS-SQL Server instance.  |
| SQEA_DATABASE_NAME             | Name of the database.  |
| SQEA_PARSING_USER              | One of the MS-SQL Server users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SQEA_BATCH_HV                  | Unique identifier (number) assigned to the batch.  |
| SQEA_WORKSHOP_HV               | Unique identifier (number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB have the value 0.                                      |
| SQEA_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.   |
| SQEA_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.   |
| SQEA_ESTIMATE_COST             | Estimated cost of this operation.  |
| SQEA_ACTUAL_PLAN_IND           | An indicator if the execution plan is actual or estimated  |

| Column name              | Column description   |
|--------------------------|--|
| SQEA_ACCESS_PATH_HV      | Unique identifier (number) assigned to the access plan of the statement.               |
| SQEA_MISS_INDEXES_IMPACT | The minimal possible impact of indexes that are missing for effective query execution. |
| SQEA_EXPLAIN_OPER_USAGE  | This column contains a mask of operations that appeared in the execution plan          |

# F

## Insight SQL Server Group Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_SQDG\_DATABASE\_GRP

The SQL Server database group table.

| Column name  | Column description   |
|--------------|--|
| SQDG_SQDN_ID | The ID of the database.  |
| SQDG_INGD_ID | The ID of the database group running the SQL Server statement. |

#### PW\_SQSG\_SERVER\_GRP

The SQL Server server group table.

| Column name  | Column description   |
|--------------|--|
| SQSG_INCE_ID | The ID of the server.  |
| SQSG_INGD_ID | The ID of the server group running the SQL Server statement. |

#### PW\_SQIG\_INSTANCE\_GRP

The SQL Server instance group table.

| Column name  | Column description   |
|--------------|--|
| SQIG_INCE_ID | The ID of the instance.  |
| SQIG_INGD_ID | The ID of the instance group running the SQL Server statement. |

## PW\_SQLG\_LOGIN\_GRP

The SQL Server Login name group table.

| Column name  | Column description  |
|--------------|---|
| SQLG_SQLN_ID | The login ID.   |
| SQLG_INGD_ID | The ID of the login group running the SQL Server statement. |

#### PW\_SQPG\_PROGRAM\_GRP

The SQL Server program group table.

| Column name  | Column description  |
|--------------|---|
| SQPG_SQPN_ID | The ID of the program.  |
| SQPG_INGD_ID | The ID of the program group running the SQL Server statement. |

## PW\_SQMG\_MACHINE\_NAME\_GRP

The SQL Server client group table.

| Column name  | Column description   |
|--------------|--|
| SQMG_SQMN_ID | The ID of the client.  |
| SQMG_INGD_ID | The ID of the client group running the SQL Server statement. |

# G

## Precise for Oracle Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_ORAS\_APPLICATION\_STATS\_T

Stores application performance statistics per hour for every combination of program, user, host user, machine, module, action, and work type.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name       | Column description   |
|-------------------|--|
| ORAS_PROGRAM_ID   | The ID of the program that made the Oracle connection (N PW_ORPR_PROGRAM_NAME_N).                        |
| ORAS_USER_ID      | ID of the Oracle schema to which the program is connected (N<br>PW_ORUS_USER_NAME_N).                    |
| ORAS_HOST_USER_ID | ID of the host user running the program (N PW_ORHU_HOST_USER_NAME_N).                                    |
| ORAS_MACHINE_ID   | ID of the operating system machine running the program (N<br>PW_ORMC_MACHINE_NAME_N).                    |
| ORAS_MODULE_ID    | ID of the session's action as set by calling dbms_application_info.set_module (N PW_ORMD_MODULE_NAME_N). |

| Column name                        | Column description   |
|------------------------------------|--|
| ORAS_ACTION_ID                     | ID of the session's action as set by calling dbms_application_info.set_action (N PW_ORAT_ACTION_NAME_N).   |
| ORAS_WORK_TYPE                     | ERP work type.   |
| ORAS_TIMESTAMP                     | Time the session was sampled.  |
| ORAS_MINUTES_COUNT_SUM             | Number of minutes summed in the row.   |
| ORAS_PWHG_ID                       | ID of the hour group that matches the time sampled.  |
| ORAS_DURATION_SUM                  | Total elapsed time.  |
| ORAS_IN_ORACLE_TIME_SUM            | Total time spent in Oracle.  |
| ORAS_REQUEST_WAIT_TIME_S<br>UM     | Total time spent in waiting for client requests.   |
| ORAS_OR_OR_COMM_WAIT_TIM<br>E_SUM  | The time Oracle spent waiting for another Oracle instance.   |
| ORAS_RSRC_MNGR_WAIT_TIME<br>_SUM   | The time Oracle spent waiting for a resource to become available if the database resource manager had been enabled.  |
| ORAS_RAC_OPS_WAIT_TIME_S<br>UM     | The time Oracle spent waiting for RAC or OPS synchronization.  |
| ORAS_OR_CL_COMM_WAIT_TIM<br>E_SUM  | The time Oracle spent waiting for data sent to the client (usually as a result of a select statement), or data send from a client (usually as a result of bind variables). |
| ORAS_MTS_WAIT_TIME_SUM             | Total time spent waiting for a multithreaded server.   |
| ORAS_MISC_TIME_SUM                 | Total time spent waiting for miscellaneous waits.  |
| ORAS_USING_CPU_TIME_SUM            | Total time of CPU use.   |
| ORAS_CPU_WAIT_TIME_SUM             | Total time spent waiting for CPU.  |
| ORAS_IO_WAIT_TIME_SUM              | Total time spent waiting for I/O.  |
| ORAS_MEMORY_WAIT_TIME_SU<br>M      | Total time spent waiting for memory.   |
| ORAS_OTHER_HOST_WAIT_TIM<br>E_SUM  | Total time spent waiting for another host.   |
| ORAS_TABLE_LOCK_WAIT_TIM<br>E_SUM  | Total time spent waiting for a table lock.   |
| ORAS_ROW_LOCK_WAIT_TIME_<br>SUM    | Total time spent waiting for a row lock.   |
| ORAS_SHARED_POOL_WAIT_TI<br>ME_SUM | Total time spent waiting for a shared pool (library cache or row cache).   |
| ORAS_BUFFER_WAIT_TIME_SU<br>M      | Total time spent waiting for buffers.  |
| ORAS_ROLLBCK_SEG_WAIT_TI<br>ME_SUM | Total time spent waiting for a rollback segment.   |

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| Column name                        | Column description   |
|------------------------------------|--|
| ORAS_REDO_BUFFER_WAIT_TI<br>ME_SUM | Total time spent waiting for redo log buffers.   |
| ORAS_LOG_S_AND_C_WAIT_TI<br>ME_SUM | Total time spent waiting for a log switch and clear waits.                                 |
| ORAS_OTHER_LOCK_WAIT_TIM<br>E_SUM  | Total time spent waiting for other locks (streams, latches, and internal locks in Oracle). |
| ORAS_BG_PROCESS_WAIT_TIM<br>E_SUM  | Total time spent waiting for a background process.   |
| ORAS_PQ_SYNC_WAIT_TIME_S<br>UM     | Total time spent waiting for parallel query synchronization.                               |
| ORAS_PQ_SERVER_WAIT_TIME<br>_SUM   | Total time spent waiting for a parallel query server.                                      |
| ORAS_OTHER_WAIT_TIME_SUM           | Total time spent waiting for other waits.  |
| ORAS_CONSISTENT_GETS_STA<br>T_SUM  | Total number of buffers for a consistent read.   |
| ORAS_DB_BLOCK_GETS_STAT_<br>SUM    | Total number of buffers for a current read.  |
| ORAS_OTR_INT_LCK_WAIT_ST<br>AT_SUM | Total number of enqueue waits.   |
| ORAS_EXEC_COUNT_TOTAL_ST<br>AT_SUM | Total number of times EXECUTE was called.  |
| ORAS_PARSE_COUNT_TOTL_ST<br>AT_SUM | Total number of times PARSE was called.  |
| ORAS_PARSE_COUNT_HARD_ST<br>AT_SUM | Total number of times PARSE HARD was called (had to re-parse).                             |
| ORAS_PARSE_TIME_CPU_STAT<br>_SUM   | Total CPU time spent on parsing.   |
| ORAS_RECURSIVE_CALLS_STA<br>T_SUM  | Total number of recursive calls.   |
| ORAS_SORT_MEMORY_STAT_SU<br>M      | Total number of sorts done in memory.  |
| ORAS_SORT_DISK_STAT_SUM            | Total number of sorts done on disk.  |
| ORAS_TABLE_SCAN_LONG_STA<br>T_SUM  | Total number of long table scans.  |
| ORAS_USER_CALLS_STAT_SUM           | Total number of user calls.  |
| ORAS_PHYSICAL_READS_STAT<br>_SUM   | Total number of disk reads.  |
| ORAS_PWII_INSTANCE_ID              | ID of the instance.  |

| Column name                    | Column description                                   |
|--------------------------------|--|
| ORAS_OPENS_AND_FETCHES_S<br>UM | Total number of open and fetches.                    |
| ORAS_SESSIONS_SUM              | Total number of sessions.                            |
| ORAS_INTERPOINT_MODE           | Interpoint mode - OA/SAP/PS.                         |
| ORAS_RECIEVED_TIMESTAMP        | Timestamp at which the row was loaded into the PMDB. |
| ORAS_SEC_PROG_ID               | Reserved column                                      |
| ORAS_EXEC_NO_SUM               | Total number of executions                           |

## PW\_ORSA\_STMT\_APPL\_STATS\_T

Stores statistics about the performance of statements inside applications per hour for every combination of program, user, host user, machine, module, action, and work type.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description   |
|-------------------------|--|
| ORSA_PROGRAM_ID         | ID of the program that made the Oracle connection (N<br>PW_ORPR_PROGRAM_NAME_N).                         |
| ORSA_USER_ID            | ID of the Oracle schema the program connected to (N PW_ORUS_USER_NAME_N).                                |
| ORSA_HOST_USER_ID       | ID of the host user running the program (N PW_ORHU_HOST_USER_NAME_N).                                    |
| ORSA_MACHINE_ID         | ID of the operating system machine running the program (N<br>PW_ORMC_MACHINE_NAME_N).                    |
| ORSA_MODULE_ID          | ID of the session's action as set by calling dbms_application_info.set_module (N PW_ORMD_MODULE_NAME_N). |
| ORSA_ACTION_ID          | ID of the session's action as set by calling dbms_application_info.set_action (N PW_ORAT_ACTION_NAME_N). |
| ORSA_WORK_TYPE          | The ERP work type.   |
| ORSA_SHV                | The statement hash value.  |
| ORSA_TIMESTAMP          | Time the session was sampled.  |
| ORSA_PWHG_ID            | ID of the hour group that matches the time sampled.  |
| ORSA_DURATION_SUM       | Total elapsed time.  |
| ORSA_IN_ORACLE_TIME_SUM | Total time spent inside Oracle.  |

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| Column name                        | Column description   |
|------------------------------------|--|
| ORSA_REQUEST_WAIT_TIME_S<br>UM     | Total time spent waiting for client requests.  |
| ORSA_OR_OR_COMM_WAIT_TIM<br>E_SUM  | Total time Oracle spent waiting for another Oracle instance.   |
| ORSA_RSRC_MNGR_WAIT_TIME<br>_SUM   | The time Oracle spent waiting for a resource to become available, if the database manager is enabled.  |
| ORSA_RAC_OPS_WAIT_TIME_S<br>UM     | The time Oracle spent waiting for RAC or OPS synchronization.  |
| ORSA_OR_CL_COMM_WAIT_TIM<br>E_SUM  | The time Oracle spent waiting for data sent to the client (usually as a result of a SELECT statement), or data sent from a client (usually as a result of bind variables). |
| ORSA_MINUTES_COUNT_SUM             | Total amount of minutes summed in that row.  |
| ORSA_MTS_WAIT_TIME_SUM             | Total time spent waiting for a multithreaded server.   |
| ORSA_MISC_TIME_SUM                 | Total time spent waiting for miscellaneous waits.  |
| ORSA_USING_CPU_TIME_SUM            | Total time of CPU use.   |
| ORSA_CPU_WAIT_TIME_SUM             | Total time spent waiting for CPU.  |
| ORSA_IO_WAIT_TIME_SUM              | Total time spent waiting for I/O.  |
| ORSA_MEMORY_WAIT_TIME_SU<br>M      | Total time spent waiting for memory.   |
| ORSA_OTHER_HOST_WAIT_TIM<br>E_SUM  | Total time spent waiting for another host.   |
| ORSA_TABLE_LOCK_WAIT_TIM<br>E_SUM  | Total time spent waiting for a table lock.   |
| ORSA_ROW_LOCK_WAIT_TIME_<br>SUM    | Total time spent waiting for a row lock.   |
| ORSA_SHARED_POOL_WAIT_TI<br>ME_SUM | Total time spent waiting for a shared pool (library cache or row cache).   |
| ORSA_BUFFER_WAIT_TIME_SU<br>M      | Total time spent waiting for buffer waits.   |
| ORSA_ROLLBCK_SEG_WAIT_TI<br>ME_SUM | Total time spent waiting for a rollback segment.   |
| ORSA_REDO_BUFFER_WAIT_TI<br>ME_SUM | Total time spent waiting for redo log buffers.   |
| ORSA_BG_PROCESS_WAIT_TIM<br>E_SUM  | Total time spent waiting for a background process.   |
| ORSA_PQ_SYNC_WAIT_TIME_S<br>UM     | Total time spent waiting for a parallel query synchronization.   |
| ORSA_PQ_SERVER_WAIT_TIME<br>_SUM   | Total time spent waiting for a parallel query server.  |

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| Column name                        | Column description   |
|------------------------------------|--|
| ORSA_OTHER_WAIT_TIME_SUM           | Total time spent waiting for other waits.                      |
| ORSA_CONSISTENT_GETS_STA<br>T_SUM  | Total number of buffers for a consistent read.                 |
| ORSA_DB_BLOCK_GETS_STAT_<br>SUM    | Total number of buffers for a current read.                    |
| ORSA_EXEC_COUNT_TOTAL_ST<br>AT_SUM | Total number of times EXECUTE was called.                      |
| ORSA_PARSE_COUNT_TOTL_ST<br>AT_SUM | Total number of times PARSE was called.                        |
| ORSA_PARSE_COUNT_HARD_ST<br>AT_SUM | Total number of times PARSE HARD was called (had to re-parse). |
| ORSA_PARSE_TIME_CPU_STAT<br>_SUM   | Total CPU time spent on parsing.                               |
| ORSA_RECURSIVE_CALLS_STA<br>T_SUM  | Total number of recursive calls.                               |
| ORSA_SORT_MEMORY_STAT_SU<br>M      | Total number of sorts done in memory.                          |
| ORSA_SORT_DISK_STAT_SUM            | Total number of sorts done on disk.                            |
| ORSA_TABLE_SCAN_LONG_STA<br>T_SUM  | Total number of long table scans.                              |
| ORSA_USER_CALLS_STAT_SUM           | Total number of user calls.                                    |
| ORSA_PHYSICAL_READS_STAT<br>_SUM   | Total number of disk reads.                                    |
| ORSA_PWII_INSTANCE_ID              | ID of the instance.  |
| ORSA_OPENS_AND_FETCHES_S<br>UM     | Total number of open and fetches.                              |
| ORSA_SESSIONS_SUM                  | Total number of sessions.                                      |
| ORSA_PARENT_SHV                    | Name of the PL/SQL that ran the SQL statement.                 |
| ORSA_MIN_PARALLEL_DEGREE<br>_MIN   | Minimum parallel degree used to run the statement.             |
| ORSA_MAX_PARALLEL_DEGREE<br>_MAX   | Maximum parallel degree used to run the statement.             |
| ORSA_RED_SUM                       | SLA Breach.  |
| ORSA_YELLOW_SUM                    | SLA Near Breach.   |
| ORSA_GREEN_SUM                     | SLA OK.  |
| ORSA_START_BIT_MAP                 | Internal use.  |
| ORSA_INTERPOINT_MODE               | Interpoint mode - OA/SAP/PS.                                   |

| Column name                        | Column description   |
|------------------------------------|--|
| ORSA_RECEIVED_TIMESTAMP            | Timestamp at which the row was loaded into the PMDB.                                       |
| ORSA_LOG_S_AND_C_WAIT_TI<br>ME_SUM | Total time spent waiting for a log switch and clear waits.                                 |
| ORSA_OTHER_LOCK_WAIT_TIM<br>E_SUM  | Total time spent waiting for other locks (streams, latches, and internal locks in Oracle). |
| ORSA_OTR_INT_LCK_WAIT_ST<br>AT_SUM | Total number of enqueue waits.   |
| ORSA_RECIEVED_TIMESTAMP            | Timestamp at which the row was loaded into the PMDB.                                       |
| ORSA_BUFFER_GETS_SUM               | Total time spent getting buffers.  |
| ORSA_ROWS_PROCESSED_SUM            | Total number of rows processed.  |
| ORSA_EXEC_NO_SUM                   | Total number of executions.  |
| ORSA_SQL_ID_MIN                    | Minimum Oracle's SQL ID.   |
| ORSA_HASH_VALUE_MIN                | Minimum Oracle's hash value  |
| ORSA_PLAN_HASH_VALUE               | Oracle's plan hash value.  |
| ORSA_END_OF_FETCH_COUNT_<br>SUM    | Number of END OF FETCHs.   |
| ORSA_VERSION_COUNT_MAX             | Number of statement versions.  |

## PW\_ORSS\_STATEMENTS\_STATS\_T

Stores statistics about statement performance per hour.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name                    | Column description                                  |
|--------------------------------|---|
| ORSS_SHV                       | The statement hash value.                           |
| ORSS_TIMESTAMP                 | Time the session was sampled.                       |
| ORSS_PWHG_ID                   | ID of the hour group that matches the time sampled. |
| ORSS_DURATION_SUM              | Total elapsed time.                                 |
| ORSS_IN_ORACLE_TIME_SUM        | Total time spent inside Oracle.                     |
| ORSS_REQUEST_WAIT_TIME_S<br>UM | Total time spent waiting for client requests.       |

| Column name                         | Column description   |
|-------------------------------------|--|
| ORSS_OR_OR_COMM_WAIT_TIM<br>E_SUM   | Total time Oracle spent waiting for another Oracle instance.   |
| ORSS_RSRC_MNGR_WAIT_TIME<br>_SUM    | The time Oracle spent waiting for a resource to become available, if the database manager is enabled.  |
| ORSS_RAC_OPS_WAIT_TIME_S<br>UM      | The time Oracle spent waiting for RAC or OPS synchronization.  |
| ORSS_OR_CL_COMM_WAIT_TIM            | The time Oracle spent waiting for data sent to the client (usually as a result of a SELECT statement), or data sent from a client (usually as a result of bind variables). |
| ORSS_MINUTES_COUNT_SUM              | Total amount of minutes summed in that row.  |
| ORSS_MTS_WAIT_TIME_SUM              | Total time spent waiting for a multithreaded server.   |
| ORSS_MISC_TIME_SUM                  | Total time spent waiting for miscellaneous waits.  |
| ORSS_USING_CPU_TIME_SUM             | Total time of CPU use.   |
| ORSS_CPU_WAIT_TIME_SUM              | Total time spent waiting for CPU.  |
| ORSS_IO_WAIT_TIME_SUM               | Total time spent waiting for I/O.  |
| ORSS_MEMORY_WAIT_TIME_SU<br>M       | Total time spent waiting for memory.   |
| ORSS_OTHER_HOST_WAIT_TIM<br>E_SUM   | Total time spent waiting for another host.   |
| ORSS_TABLE_LOCK_WAIT_TIM<br>E_SUM   | Total time spent waiting for a table lock.   |
| ORSS_ROW_LOCK_WAIT_TIME_<br>SUM     | Total time spent waiting for a row lock.   |
| ORSS_SHARED_POOL_WAIT_TI<br>ME_SUM  | Total time spent waiting for a shared pool (library cache or row cache).   |
| ORSS_BUFFER_WAIT_TIME_SU<br>M       | Total time spent waiting for buffer waits.   |
| ORSS_ROLLBACK_SEG_WAIT_T<br>IME_SUM | Total time spent waiting for a rollback segment.   |
| ORSS_REDO_BUFFER_WAIT_TI<br>ME_SUM  | Total time spent waiting for redo log buffers.   |
| ORSS_LOG_S_AND_C_WAIT_TI<br>ME_SUM  | Total time spent waiting for a log switch.   |
| ORSS_OTHER_LOCK_WAIT_TIM            | Other lock wait is for all the locking that does not fall in the other locking states. It is for Streams, Latches and other internal locking in Oracle.                    |
| ORSS_BG_PROCESS_WAIT_TIM<br>E_SUM   | Total time spent waiting for a background process.   |
| ORSS_PQ_SYNC_WAIT_TIME_S<br>UM      | Total time spent waiting for a parallel query synchronization.   |

| Column name                        | Column description   |
|------------------------------------|--|
| ORSS_PQ_SERVER_WAIT_TIME<br>_SUM   | Total time spent waiting for a parallel query server.          |
| ORSS_OTHER_WAIT_TIME_SUM           | Total time spent waiting for other waits.                      |
| ORSS_CONSISTENT_GETS_STA<br>T_SUM  | Total number of buffers for a consistent read.                 |
| ORSS_DB_BLOCK_GETS_STAT_<br>SUM    | Total number of buffers for a current read.                    |
| ORSS_OTR_INT_LCK_WAIT_ST<br>AT_SUM | Total number of enqueue waits.                                 |
| ORSS_EXEC_COUNT_TOTAL_ST<br>AT_SUM | Total number of times EXECUTE was called.                      |
| ORSS_PARSE_COUNT_TOTL_ST<br>AT_SUM | Total number of times PARSE was called.                        |
| ORSS_PARSE_COUNT_HARD_ST<br>AT_SUM | Total number of times PARSE HARD was called (had to re-parse). |
| ORSS_PARSE_TIME_CPU_STAT<br>_SUM   | Total CPU time spent on parsing.                               |
| ORSS_RECURSIVE_CALLS_STA<br>T_SUM  | Total number of recursive calls.                               |
| ORSS_SORT_MEMORY_STAT_SU<br>M      | Total number of sorts done in memory.                          |
| ORSS_SORT_DISK_STAT_SUM            | Total number of sorts done on disk.                            |
| ORSS_TABLE_SCAN_LONG_STA<br>T_SUM  | Total number of long table scans.                              |
| ORSS_USER_CALLS_STAT_SUM           | Total number of user calls.                                    |
| ORSS_PHYSICAL_READS_STAT<br>_SUM   | Total number of disk reads.                                    |
| ORSS_PWII_INSTANCE_ID              | ID of the instance.  |
| ORSS_OPENS_AND_FETCHES_S<br>UM     | Total number of open and fetches.                              |
| ORSS_PARENT_SHV                    | Name of the PL/SQL that ran the SQL statement.                 |
| ORSS_MIN_PARALLEL_DEGREE<br>_MIN   | Minimum parallel degree used to run the statement.             |
| ORSS_MAX_PARALLEL_DEGREE<br>_MAX   | Maximum parallel degree used to run the statement.             |
| ORSS_RECEIVED_TIMESTAMP            | Timestamp at which the row was loaded into the PMDB.           |
| ORSS_BUFFER_GETS_SUM               | Total time spent getting buffers.                              |

| Column name                     | Column description                    |
|---------------------------------|---------------------------------------|
| ORSS_ROWS_PROCESSED_SUM         | Total number of rows processed.       |
| ORSS_EXEC_NO_SUM                | Total number of statement executions. |
| ORSS_SQL_ID_MIN                 | Minimum Oracle's SQL ID.              |
| ORSS_HASH_VALUE_MIN             | Minimum Oracle's hash value.          |
| ORSS_PLAN_HASH_VALUE            | Oracle's plan hash value.             |
| ORSS_END_OF_FETCH_COUNT_<br>SUM | Number of END OF FETCHs.              |
| ORSS_VERSION_COUNT_MAX          | Number of versions.                   |

## PW\_ORFS\_FILES\_STATS\_T

Stores performance statistics about datafiles per hour.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name            | Column description  |
|------------------------|---|
| ORFS_UNIT_ID           | The ID of the unit caching the I/O wait (N PW_ORUT_UNIT_NAME_N).        |
| ORFS_DEVICE_ID         | The ID of the device caching the I/O wait (N PW_ORDV_DEVICE_NAME_N).    |
| ORFS_FILE_ID           | The ID of the Oracle file caching the I/O wait (N PW_ORFL_FILE_NAME_N). |
| ORFS_PDEV_ID           | Physical device name (N PW_ORPV_PDEV_NAME_N).                           |
| ORFS_FS_ID             | File system name (N PW_ORFY_FS_NAME_N).                                 |
| ORFS_LV_ID             | Logical volume name (N PW_ORLV_LV_NAME_N).                              |
| ORFS_TIMESTAMP         | The time when the session was sampled.                                  |
| ORFS_OBJECT_NAME_ID    | Object name ID (N PW_OROB_OBJECT_NAME_N).                               |
| ORFS_OBJECT_ID         | Object ID.  |
| ORFS_OBJECT_OWNER_ID   | ID of the object owner (N PW_OROO_OBJECT_OWNER_NAME_N).                 |
| ORFS_NAMESPACE_ID      | ID of the translation table (PW_ORNN_NAMESPACE_NAME).                   |
| ORFS_MINUTES_COUNT_SUM | Total amount of minutes summed in that row.                             |
| ORFS_PWHG_ID           | The hour group ID that matches the time sampled.                        |
| ORFS_DIRECT_IO_SUM     | Total time spend in waiting for a direct I/O.                           |

| Column name                    | Column description  |
|--------------------------------|---|
| ORFS_SCATTERED_IO_SUM          | Total time spend in waiting for a scattered I/O.                                |
| ORFS_SEQ_IO_SUM                | Total time spend in waiting for a sequential I/O.                               |
| ORFS_OTHER_SUM                 | Total time spend in waiting for an I/O that is not scattered/sequential/direct. |
| ORFS_PWII_INSTANCE_ID          | The ID of the instance.   |
| ORFS_RECIEVED_TIMESTAMP        | The timestamp that the row was loaded into the PW.                              |
| ORFS_STORAGE_TYPE              | Type of storage.  |
| ORFS_SUB_OBJECT_NAME_ID        | ID of the sub object name (N PW_OROB_OBJECT_NAME_N)                             |
| ORFS_IN_ORACLE_TIME_SUM        | Total time spent in Oracle.   |
| ORFS_ROW_LOCK_SUM              | Total time spent in waiting for a row lock.                                     |
| ORFS_TABLE_LOCK_SUM            | Total time spent in waiting for a table lock.                                   |
| ORFS_BUFFER_WAIT_SUM           | Total time spent in waiting for a buffer wait.                                  |
| ORFS_RAC_OPS_WAIT_TIME_S<br>UM | The time Oracle spent waiting for RAC or OPS synchronization.                   |

## PW\_ORST\_STATEMENTS

Stores general information about statements.

| Column name             | Column description   |
|-------------------------|--|
| ORST_SHV                | Hash value (calculation based on the statement text).          |
| ORST_TEXT               | Text of the statement.   |
| ORST_TEXT_VARCHAR       | First 1299 characters of unformatted text of the statement.    |
| ORST_IS_FORMATTED       | Y/N flag indicating if the statement text is formatted or not. |
| ORST_BIND_VARIABLES_SUM | Sum of the bind variables.                                     |
| ORST_CONSISTENT_HV      | Precise's consistent hash value.                               |

## PW\_ORSN\_STATEMENT\_INFO

Stores additional information about statements.

| Column name       | Column description                                    |
|-------------------|---|
| ORSN_STATEMENT_ID | Unique statement identifier.                          |
| ORSN_INSTANCE_ID  | Instance ID.  |
| ORSN_SHV          | Hash value (calculation based on the statement text). |

| Column name         | Column description   |
|---------------------|--|
| ORSN_IS_ALTERNATIVE | The statement is saved as a related statement (alternative for other statement). |
| ORSN_SOURCE_TYPE    | 'C'-Collected/'G'-Gathered/'M'-Manually entered/'A'-Alternative statement.       |
| ORSN_CABINET_NAME   | Name of the cabinet.   |
| ORSN_FOLDER_NAME    | Name of the folder.  |
| ORSN_STATEMENT_NAME | Name of the statement.   |
| ORSN_ORIG_STMT_ID   | For related statements; original statement ID.                                   |
| ORSN_USERNAME       | Statement's schema.  |
| ORSN_OPTIMIZER      | Not used.  |
| ORSN_STIME          | Last time the statement was updated.   |
| ORSN_PTIME          | Last time the statement was explained.   |
| ORSN_HASH_VALUE     | Oracle's hash value.   |
| ORSN_SOURCE         | Source file name of gathered statements.   |
| ORSN_STATEMENT_TYPE | Type of the statement (such as select, insert, and so on).                       |
| ORSN_EXPLAIN_ERROR  | Oracle error that occurred during an explain.                                    |
| ORSN_LAST_COST      | Cost of the statement in the last explain.                                       |
| ORSN_LAST_PLANID    | Plan ID of the last explain.   |
| ORSN_LAST_PLAN_HASH | Hash value (calculation based on the last execution plan of the statement).      |
| ORSN_LAST_VIEWED    | Not used.  |
| ORSN_COMMENTS       | Comments.  |

## PS\_ORSM\_SCHEMA\_CHANGE\_LOG

Stores information about changes made to the database schema, such as adding, dropping, or modifying tables, indexes, or columns.

| Column name           | Column description                                     |
|-----------------------|--|
| ORSM_DATABASE_ID      | Database ID of the changed object.                     |
| ORSM_CHANGE_TIME      | Time of the change.                                    |
| ORSM_CHANGE_TYPE      | Type of the change (such as new, deleted, or changed). |
| ORSM_OWNER            | Name of the object's owner.                            |
| ORSM_OBJECT_NAME      | Name of the object that was changed.                   |
| ORSM_BASE_OWNER       | Name of the base object's owner.                       |
| ORSM_BASE_OBJECT_NAME | Name of the base object.                               |
| ORSM_SUBOBJECT_NAME   | Name of the subobject.                                 |

| Column name      | Column description                                   |
|------------------|--|
| ORSM_OBJECT_TYPE | Type of the changed object (such as table or index). |
| ORSM_COLUMN_NAME | Name of the column of the object that was changed.   |
| ORSM_FIELD_NAME  | name of the field.                                   |
| ORSM_OLD_VALUE   | Value of the field as sampled at the previous run.   |
| ORSM_NEW_VALUE   | Value of the field as sampled at the last run.       |
| ORSM_COLUMN_LIST | List of column names.                                |
| ORSM_DDL_COMMAND | DDL command that created the object.                 |

## PS\_ORSN\_STRUCTURE\_CHANGE\_LOG

Stores information about changes to the database structure, such as changes in redo log files, rollback segments, or initialization parameters.

| Column name         | Column description                                     |
|---------------------|--|
| ORSN_DATABASE_ID    | Database ID of the changed object.                     |
| ORSN_CHANGE_TIME    | Time of the change.                                    |
| ORSN_CHANGE_TYPE    | Type of the change (such as new, deleted, or changed). |
| ORSN_OWNER          | Name of the object's owner.                            |
| ORSN_OBJECT_NAME    | Name of the object that was changed.                   |
| ORSN_SUBOBJECT_NAME | Name of the subobject.                                 |
| ORSN_OBJECT_TYPE    | Type of the changed object (such as table or index).   |
| ORSN_COLUMN_NAME    | Name of the column of the object that was changed.     |
| ORSN_FIELD_NAME     | name of the field                                      |
| ORSN_OLD_VALUE      | Value of the field as sampled at the previous run.     |
| ORSN_NEW_VALUE      | Value of the field as sampled at the last run.         |
| ORSN_COLUMN_LIST    | List of column names.                                  |

#### PW\_ORPS\_PW\_SIZE

Stores information about the space usage of Precise Oracle-related objects in the PMDB.

| Column name      | Column description                    |
|------------------|---------------------------------------|
| ORPS_SAMPLE_DATE | Time when the analyzed batch started. |
| ORPS_ROW_TYPE    | Type of row.                          |

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#### (Continued)

| Column name           | Column description  |
|-----------------------|---|
| ORPS_LAST_ANALYZED    | Last time the PMDB schema was analyzed.   |
| ORPS_SCHEMA_USED      | Total space (in bytes) used by schema change objects that are related to Precise for Oracle.      |
| ORPS_SCHEMA_FREE      | Total space (in bytes) unused by schema change objects that are related to Precise for Oracle.    |
| ORPS_SCHEMA_ALLOCATED | Total space (in bytes) allocated to schema change objects that are related to Precise for Oracle. |
| ORPS_STATS_USED       | Total space (in bytes) used by statistics objects that are related to Precise for Oracle.         |
| ORPS_STATS_FREE       | Total space (in bytes) unused by statistics objects that are related to Precise for Oracle.       |
| ORPS_STATS_ALLOCATED  | Total space (in bytes) allocated to statistics objects that are related to Precise for Oracle.    |
| ORPS_STRUCT_USED      | Total space (in bytes) used by structure objects that are related to Precise for Oracle.          |
| ORPS_STRUCT_FREE      | Total space (in bytes) unused by structure objects that are related to Precise for Oracle.        |
| ORPS_STRUCT_ALLOCATED | Total space (in bytes) allocated to structure objects that are related to Precise for Oracle.     |
| ORPS_REP_USED         | Total space (in bytes) used by repository objects that are related to Precise for Oracle.         |
| ORPS_REP_FREE         | Total space (in bytes) unused by repository objects that are related to Precise for Oracle.       |
| ORPS_REP_ALLOCATED    | Total space (in bytes) allocated to repository objects that are related to Precise for Oracle.    |
| ORPS_TOTAL_USED       | Total space (in bytes) used by objects that are related to Precise for Oracle.                    |
| ORPS_TOTAL_FREE       | Total space (in bytes) unused by objects that are related to Precise for Oracle.                  |
| ORPS_TOTAL_ALLOCATED  | Total space allocated to objects that are related to Precise for Oracle.                          |

#### PS\_ORTA\_TABLES\_OVER\_TIME

Stores information about the table's analyze statistics over time.

| Column name         | Column description  |
|---------------------|---|
| ORTA_DATABASE_ID    | ID of the database.   |
| ORTA_CHANGE_TIME    | Date of the change.   |
| ORTA_OWNER          | Owner of the table.   |
| ORTA_OBJECT_NAME    | Name of the table.  |
| ORTA_EXTENTS        | Number of extents in the table.   |
| ORTA_SEGMENT_BLOCKS | Number of blocks allocated to the table.  |
| ORTA_NUM_ROWS       | Number of rows in the table.  |
| ORTA_BLOCKS         | Number of used data blocks in the table.  |
| ORTA_EMPTY_BLOCKS   | Number of empty (never used) data blocks in the table.                          |
| ORTA_AVG_SPACE      | Average amount of free space (in bytes) in a data block allocated to the table. |

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| Column name        | Column description  |
|--------------------|---|
| ORTA_CHAIN_CNT     | Number of rows in the table that are chained from one data block to another or that have migrated to a new block, requiring a link to preserve the old ROWID. |
| ORTA_AVG_ROW_LEN   | Average row length in the table in bytes.   |
| ORTA_LAST_ANALYZED | Date this table was most recently analyzed.   |

## PS\_ORIO\_INDEXES\_OVER\_TIME

Stores information about the index's analyze statistics over time.

| Column name                      | Column description  |
|----------------------------------|---|
| ORIO_DATABASE_ID                 | ID of the database.   |
| ORIO_CHANGE_TIME                 | Date of the change.   |
| ORIO_OWNER                       | Owner of the index.   |
| ORIO_OBJECT_NAME                 | Name of the index.  |
| ORIO_TABLE_OWNER                 | Owner of the table.   |
| ORIO_TABLE_NAME                  | Name of the table.  |
| ORIO_BLEVEL                      | B*-Tree level: depth of the index from its root block to its leaf blocks. A depth of 0 indicates that the root block and leaf block are the same.   |
| ORIO_LEAF_BLOCKS                 | Number of leaf blocks in the index.   |
| ORIO_DISTINCT_KEYS               | Number of distinct indexed values. For indexes that enforce UNIQUE and PRIMARY KEY constraints, this value is the same as the number of rows in the table (USER_TABLES.NUM_ROWS).   |
| ORIO_AVG_LEAF_BLOCKS_PER<br>_KEY | Average number of leaf blocks in which each distinct value in the index appears, rounded to the nearest integer. For indexes that enforce UNIQUE and PRIMARY KEY constraints, this value is always 1.   |
| ORIO_AVG_DATA_BLOCKS_PER<br>_KEY | Average number of data blocks in the table that are pointed to by a distinct value in the index rounded to the nearest integer. This statistic is the average number of data blocks that contain rows with a given value for the indexed columns. |
| ORIO_CLUSTERING_FACTOR           | Indicates the amount of order of the rows in the table based on the values of the index.  |
|                                  | If the value is nearly the number of blocks, the table is very well ordered. In this case, the index entries in a single leaf block tend to point to rows in the same data blocks.  |
|                                  | If the value is nearly the number of rows, the table is very randomly ordered. In this case, it is unlikely that index entries in the same leaf block point to rows in the same data blocks.  |
| ORIO_NUM_ROWS                    | Number of rows in the index.  |
| ORIO_SAMPLE_SIZE                 | Sample size used in analyzing this table.   |
| ORIO_LAST_ANALYZED               | Date this table was most recently analyzed.   |

#### PS\_ORCO\_COLUMNS\_OVER\_TIME

Stores information about the table column's analyze statistics over time.

| Column name        | Column description                            |
|--------------------|---|
| ORCO_DATABASE_ID   | ID of the database.                           |
| ORCO_CHANGE_TIME   | Date of the change.                           |
| ORCO_OWNER         | Owner of the table.                           |
| ORCO_TABLE_NAME    | Name of the table.                            |
| ORCO_COLUMN_NAME   | Name of the column.                           |
| ORCO_NUM_DISTINCT  | Number of distinct values in the column.      |
| ORCO_DENSITY       | Density of the column.                        |
| ORCO_NUM_NULLS     | Number of null values in the column.          |
| ORCO_NUM_BUCKETS   | Number of buckets used to analyze the column. |
| ORCO_LAST_ANALYZED | Date this table was most recently analyzed.   |

#### PW\_ORWA\_V\_WAITSTAT\_H

Stores information about Oracle block contention statistics over time.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description   |
|-------------------------|--|
| ORWA_PWII_INSTANCE_ID   | ID of the database.  |
| ORWA_TIMESTAMP          | Date of the sampling.  |
| ORWA_CLASS_ID           | Class of the block. (N PW_ORCL_CLASS_N)  |
| ORWA_COUNT_SUM          | Number of waits by this OPERATION for this CLASS of the block.                             |
| ORWA_TIME_SUM           | Total value of the wait times for all waits by this OPERATION for this CLASS of the block. |
| ORWA_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.   |
| ORWA_PWHG_ID            | The hour group ID that matches the sampled time.   |
| ORWA_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.   |

#### PW\_ORDI\_V\_DISPATCHER\_H

Stores information about the dispatcher processes.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description   |
|-------------------------|--|
| ORDI_PWII_INSTANCE_ID   | ID of the database.  |
| ORDI_TIMESTAMP          | Timestamp of the sampling.                                       |
| ORDI_NETWORK_ID         | Network address of this dispatcher (N PW_ORNT_NETWORK_N).        |
| ORDI_MESSAGES_SUM       | Total number of messages processed by this dispatcher.           |
| ORDI_BYTES_SUM          | Total size of messages processed by this dispatcher (in bytes).  |
| ORDI_BREAKS_SUM         | Total number of breaks occurring in the connection.              |
| ORDI_IDLE_SUM           | Total idle time for this dispatcher (in hundredths of a second). |
| ORDI_BUSY_SUM           | Total busy time for this dispatcher in hundredths of a second).  |
| ORDI_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.                       |
| ORDI_PWHG_ID            | The hour group ID that matches the sampled time.                 |
| ORDI_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.               |

# PW\_ORFV\_STAT\_FILE\_VIEW\_H

Stores information about the file's read and write statistics.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name           | Column description                                    |
|-----------------------|---|
| ORFV_PWII_INSTANCE_ID | ID of the database.                                   |
| ORFV_TIMESTAMP        | Timestamp of the sampling.                            |
| ORFV_TS_ID            | Tablespace name of the file (N PW_ORTB_TABLESPACE_N). |
| ORFV_FILE_ID          | File name (N PW_ORFI_FILE_N).                         |

| Column name             | Column description  |
|-------------------------|---|
| ORFV_FILE_TYPE          | File type.  |
| ORFV_PYR_SUM            | Total number of physical reads done.  |
| ORFV_PYW_SUM            | Total number of times DBWR is required to write.  |
| ORFV_PRT_SUM            | Time spent on reads (in hundredths of a second).  |
| ORFV_PWT_SUM            | Time spent on writes (in hundredths of a second).   |
| ORFV_PBR_SUM            | Total number of physical blocks read.   |
| ORFV_PBW_SUM            | Total number of blocks written to disk, which may be the same as PHYWRTS if all writes are single blocks. |
| ORFV_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.  |
| ORFV_PWHG_ID            | The hour group ID that matches the sampled time.  |
| ORFV_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.  |

#### PW\_ORLA\_V\_LATCH\_H

Stores statistics for non-parent latches and summary statistics for parent latches.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name                   | Column description  |
|-------------------------------|---|
| ORLA_PWII_INSTANCE_ID         | ID of the database.   |
| ORLA_TIMESTAMP                | Timestamp of the sampling.  |
| ORLA_LATCH_NUM                | Number of the latch   |
| ORLA_LEVEL_NUM                | Level of the latch.   |
| ORLA_LATCH_ID                 | ID of the latch (N PW_ORLT_LATCH_N)                                     |
| ORLA_GETS_SUM                 | Total number of times a wait was obtained.                              |
| ORLA_MISSES_SUM               | Total number of times a wait was obtained, but failed on the first try. |
| ORLA_SLEEPS_SUM               | Total number of times slept when wanting a wait.                        |
| ORLA_IMMEDIATE_GETS_SUM       | Total number of times obtained without a wait.                          |
| ORLA_IMMEDIATE_MISSES_SU<br>M | Total number of times failed to get without a wait.                     |
| ORLA_WAITERS_WOKEN_SUM        | Total number of times a wait was awoken.                                |

| Column name                      | Column description                                      |
|----------------------------------|---|
| ORLA_WAITS_HOLDING_LATCH<br>_SUM | Total number of waits, while holding a different latch. |
| ORLA_SPIN_GETS_SUM               | Gets that missed the first try, but succeeded on spin.  |
| ORLA_MINUTES_COUNT_SUM           | Total amount of minutes summed in the row.              |
| ORLA_PWHG_ID                     | The hour group ID that matches the sampled time.        |
| ORLA_RECEIVED_TIMESTAMP          | The timestamp that the row was loaded into the PW.      |

#### PW\_ORLC\_V\_LICENSE\_H

Stores information about the highest number of concurrent user sessions since the instance started.

Note: The \_H table summarizes the data per hour. The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month.

| Column name                     | Column description   |
|---------------------------------|--|
| ORLC_PWII_INSTANCE_ID           | ID of the database.  |
| ORLC_TIMESTAMP                  | Timestamp of the sampling.   |
| ORLC_SESSIONS_HIGHWATER_<br>SUM | Highest number of concurrent user sessions since the instance started. |
| ORLC_MINUTES_COUNT_SUM          | Total amount of minutes summed in the row.                             |
| ORLC_PWHG_ID                    | The hour group ID that matches the sampled time.                       |
| ORLC_RECEIVED_TIMESTAMP         | The timestamp that the row was loaded into the PW.                     |

# PW\_ORPQ\_V\_PQ\_SYSSTAT\_H

Stores system statistics for parallel queries.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name           | Column description  |
|-----------------------|---------------------|
| OROT_PWII_INSTANCE_ID | ID of the database. |

| Column name             | Column description                                     |
|-------------------------|--|
| OROT_TIMESTAMP          | Date of the sampling.                                  |
| OROT_STATISTIC_ID       | Name of the statistic counter. (N PW_ORTI_STATISTIC_N) |
| OROT_VALUE_SUM          | Total value of the statistic counter.                  |
| OROT_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.             |
| OROT_PWHG_ID            | The hour group ID that matches the sampled time.       |
| OROT_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.     |

#### PW\_ORQU\_V\_QUEUE\_H

Stores information on multi-thread message queues.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description  |
|-------------------------|---|
| ORQU_PWII_INSTANCE_ID   | ID of the database (not null number (9)).   |
| ORQU_TIMESTAMP          | Date of the sampling (not null date).   |
| ORQU_NETWORK_ID         | Network address of the dispatcher (N PW_ORNT_NETWORK_N) (number (9)).   |
| ORQU_WAIT_SUM           | Total time that all items in this queue have waited. Divide this by TOTALQ for an average wait per item (number). |
| ORQU_TOTALQ_SUM         | Total number of items that have ever been in the queue (number).  |
| ORQU_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row (not null number (9)).  |
| ORQU_PWHG_ID            | The hour group ID that matches the sampled time (not null number (4)).  |
| ORQU_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.  |

# PW\_ORRO\_V\_ROLLSTAT\_H

Stores rollback segment statistics.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The  $\_M$  table summarizes the data per month.

| Column name             | Column description   |
|-------------------------|--|
| ORRO_PWII_INSTANCE_ID   | ID of the database (not null number (9)).  |
| ORRO_TIMESTAMP          | Date of the sampling (not null date).  |
| ORRO_SEGMENT_ID         | Name of the rollback segment. (N PW_ORSB_SEGMENT_NAME_N) (number(9)).  |
| ORRO_USN_SUM            | Number of the rollback segment (number).   |
| ORRO_EXTENTS_SUM        | Number of extents in the rollback segment (number).  |
| ORRO_RSSIZE_SUM         | Size of the rollback segment in bytes. This values differs by the number of bytes in one database block from the value of the(number). |
| ORRO_WRITES_SUM         | Number of bytes written to the rollback segment (number).  |
| ORRO_XACTS_SUM          | Number of active transactions (number).  |
| ORRO_GETS_SUM           | Number of header gets (number).  |
| ORRO_WAITS_SUM          | Number of header waits. PMDB Reference Guide 215 (number).   |
| ORRO_OPTSIZE_SUM        | Optimal size of rollback segment (number).   |
| ORRO_HWMSIZE_SUM        | High water mark of rollback segment size (number).   |
| ORRO_SHRINKS_SUM        | Number of times the size of a rollback segment decreases. Column name Column description (number).                                     |
| ORRO_WRAPS_SUM          | Number of times the rollback segment is wrapped (number).  |
| ORRO_EXTENDS_SUM        | Number of times rollback segment size is extended (number).  |
| ORRO_AVESHRINK_SUM      | Average shrink size of the rollback segment (number).  |
| ORRO_AVEACTIVE_SUM      | Current size of active extents, averaged over time (number).   |
| ORRO_STATUS_ID          | Status of the rollback segment (N PW_ORTU_STATUS_N) (number (9)).  |
| ORRO_CUREXT_SUM         | Current extent (number).   |
| ORRO_CURBLK_SUM         | Current block (number).  |
| ORRO_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row (not null number (9)).   |
| ORRO_PWHG_ID            | The hour group ID that matches the sampled time (not null number (4)).   |
| ORRO_RECIEVED_TIMESTAMP | The timestamp that the row was loaded into the PW.   |

## PW\_ORRW\_V\_ROWCACHE\_H

Stores statistics for data dictionary activity. Each row contains statistics for one data dictionary cache.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description   |
|-------------------------|--|
| ORRW_PWII_INSTANCE_ID   | ID of the database.  |
| ORRW_TIMESTAMP          | Timestamp of the sampling.   |
| ORRW_CACHE_NUM          | Number of the row cache.   |
| ORRW_CACHE_TYPE_ID      | Type of the parent or subordinate row cache (N PW_ORCA_CACHE_TYPE_N).  |
| ORRW_SUBORDINATE_NUM    | Subordinate set number.  |
| ORRW_PARAMETER_ID       | Name of the initialization parameter that determines the number of entries in the data dictionary cache (N PW_ORPA_PARAMETER_N). |
| ORRW_GETS_SUM           | Total number of requests for information on the data object.   |
| ORRW_GETMISSES_SUM      | Total number of data requests resulting in cache misses.   |
| ORRW_COUNT_SUM          | Total number of entries in the cache.  |
| ORRW_USAGE_SUM          | Total number of cache entries that contain valid data.   |
| ORRW_FIXED_SUM          | Total number of fixed entries in the cache.  |
| ORRW_SCANS_SUM          | Total number of scan requests.   |
| ORRW_SCANMISSES_SUM     | Total number of times a scan failed to find the data in the cache.   |
| ORRW_SCANCOMPLETES_SUM  | For a list of subordinate entries, the number of times the list was scanned completely.<br>PMDB Reference Guide 217.             |
| ORRW_DLM_REQUESTS_SUM   | Total number of DLM requests. Column name Column description.  |
| ORRW_DLM_CONFLICTS_SUM  | Total number of DLM conflicts.   |
| ORRW_DLM_RELEASES_SUM   | Total number of DLM releases.  |
| ORRW_MODIFICATIONS_SUM  | Total number of inserts, updates, and deletions.   |
| ORRW_FLUSHES_SUM        | Total number of times flushed to disk.   |
| ORRW_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.   |
| ORRW_PWHG_ID            | The hour group ID that matches the sampled time.   |
| ORRW_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.   |

## PW\_ORSE\_V\_SYSTEM\_EVENT\_H

Stores information on total waits for an event.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description  |
|-------------------------|---|
| ORSE_PWII_INSTANCE_ID   | ID of the instance.   |
| ORSE_TIMESTAMP          | The date of the sampling.   |
| ORSE_EVENT_ID           | Event name (N PW_OREI_EVENT_N).   |
| ORSE_TOTAL_WAITS_SUM    | Total number of waits for this event.                                   |
| ORSE_TOTAL_TIMEOUTS_SUM | Total number of timeouts for this event.                                |
| ORSE_TIME_WAITED_SUM    | Total amount of time waited for this event (in hundredths of a second). |
| ORSE_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.                              |
| ORSE_PWHG_ID            | The hour group ID that matches the time sampled.                        |
| ORSE_RECEIVED_TIMESTAMP | The timestamp that the statement was received.                          |

# PW\_ORSG\_V\_SGASTAT\_H

Stores detailed information on the system global area (SGA).

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The  $\_W$  table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description   |
|-------------------------|--|
| ORSG_PWII_INSTANCE_ID   | ID of the database.  |
| ORSG_TIMESTAMP          | Date of the sampling.  |
| ORSG_POOL_ID            | The pool in which the memory in NAME resides (N PW_ORPL_POOL_N). |
| ORSG_SGA_COMPONENT_ID   | Component name. (N PW_ORSM_SGA_COMPONENT_N).                     |
| ORSG_BYTES_SUM          | Memory size in bytes.  |
| ORSG_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.                       |
| ORSG_PWHG_ID            | The hour group ID that matches the sampled time.                 |
| ORSG_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.               |

## PW\_ORSY\_V\_SYSSTAT\_H

Stores system statistics information.

| Column name             | Column description   |
|-------------------------|--|
| ORSY_PWII_INSTANCE_ID   | ID of the database.  |
| ORSY_TIMESTAMP          | Date of the sampling.  |
| ORSY_STATISTIC_NUM      | Number of the statistic counter (note: statistic numbers are not guaranteed to remain constant from one release to another. Therefore you should rely on the statistic name, rather than its number in your applications). |
| ORSY_STATISTIC_ID       | Name of the statistic counter. (N PW_ORTI_STATISTIC_N).  |
| ORSY_CLASS              | Number representing one or more statistics class. The following class numbers are additive:  |
|                         | 1—User   |
|                         | 2—Redo   |
|                         | 4—Enqueue  |
|                         | 8—Cache  |
|                         | 16—OS  |
|                         | 32—Parallel Server   |
|                         | 64—SQL   |
|                         | 128—Debug  |
| ORSY_VALUE_SUM          | Value of the statistic counter.  |
| ORSY_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.   |
| ORSY_PWHG_ID            | The hour group ID that matches the sampled time.   |
| ORSY_RECIEVED_TIMESTAMP | The timestamp that the row was loaded into the PW.   |

## PW\_ORPG\_V\_PGASTAT\_H

Stores detailed information on the program global area (PGA). The data is collected for databases of version 9.2 and higher.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name           | Column description    |
|-----------------------|-----------------------|
| ORPG_PWII_INSTANCE_ID | ID of the database.   |
| ORPG_TIMESTAMP        | Date of the sampling. |

| Column name             | Column description                                   |
|-------------------------|--|
| ORPG_NAME_ID            | Name of the statistic counter. (N PW_ORNE_NAMEPGA_N) |
| ORPG_VALUE_AVG          | Average value of the statistic counter.              |
| ORPG_VALUE_SUM          | Total value of the statistic counter.                |
| ORPG_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.           |
| ORPG_PWHG_ID            | The hour group ID that matches the sampled time.     |
| ORPG_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.   |

## PW\_ORTM\_V\_SYS\_TIME\_MODEL\_H

Stores detailed information on the database time model. This is the partition of the database time spent for connection management, parsing SQL and Java executions, as well as overall database statistics. The data is collected for databases of version 10 and higher.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description                                     |
|-------------------------|--|
| ORTM_PWII_INSTANCE_ID   | ID of the database.                                    |
| ORTM_TIMESTAMP          | Date of the sampling.                                  |
| ORTM_STAT_NAME_ID       | Name of the statistic counter. (N PW_ORTO_STAT_NAME_N) |
| ORTM_STAT_ID            | ID of the statistic counter.                           |
| ORTM_VALUE_SUM          | Total value of the statistic counter.                  |
| ORTM_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.             |
| ORTM_PWHG_ID            | The hour group ID that matches the sampled time.       |
| ORTM_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.     |

#### PW\_OROT\_V\_OSSTAT\_H

Stores detailed information on the database operating system utilization, such as CPU and memory usage. The data is collected for databases of version 10 and higher.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

(N <table\_name>) means normalized, the actual name can be retrieved from the <table\_name>.

| Column name             | Column description                                     |
|-------------------------|--|
| OROT_PWII_INSTANCE_ID   | ID of the database.                                    |
| OROT_TIMESTAMP          | Date of the sampling.                                  |
| OROT_STAT_NAME_ID       | Name of the statistic counter. (N PW_ORTE_STAT_NAME_N) |
| OROT_OSSTAT_ID          | Statistics ID as it appears in v\$osstat.              |
| OROT_VALUE_SUM          | Total value of the statistic counter.                  |
| OROT_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.             |
| OROT_PWHG_ID            | The hour group ID that matches the sampled time.       |
| OROT_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.     |

#### PS\_ORED\_SM\_EFFECT\_DEFINITION

Stores detailed information on the effects, identified problematic opportunities have on the system performance.

| Column name              | Column description   |
|--------------------------|--|
| ORED_SM_PROBLEM_ID       | The unique problem that this effect checks.  |
| ORED_SM_EFFECT_ID        | The ID of this effect.   |
| ORED_SM_EFFECT_CLASS     | The java class handling this effect in the system.   |
| ORED_SM_EFFECT_PARAM     | An optional parameter to the effect class (if the class handles system statistics then the parameter says which specific statistic is used). |
| ORED_SM_EFFECT_THRESHOLD | The threshold the effect needs to cross to be considered as real effect on system performance.   |
| ORED_SM_COLLECTOR_KEY    | The collected data pointer we need to access.  |
| ORED_SM_ANALYSIS_ID      | The ID indicating which data to store for the GUI (from analysis_definition table).  |

#### PS\_ORCC\_SM\_COLLECTION\_CTRL

This is a control table to store history for the collection stage.

| Column name              | Column description   |
|--------------------------|--|
| ORCC_SM_INSTANCE_ID      | Part of the key because each instance is collected separately. |
| ORCC_SM_DATA_SOURCE      | The collector_name from data_collection table.                 |
| ORCC_SM_COLLECTION_TIME  | The start or end collection time for this run.                 |
| ORCC_SM_COLLECTION_STATU | Indication if the collection was successful or not.            |

#### PW\_ORTF\_SMARTUNE\_FG\_T

Stores detailed information on the foreground sessions and their Oracle time.

Note: The \_T table summarizes the data per timeslice. The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month.

| Column name             | Column description                                       |
|-------------------------|--|
| ORTF_PWII_INSTANCE_ID   | ID of the instance, in which the statement was executed. |
| ORTF_TIMESTAMP          | The time of the change.                                  |
| ORTF_EVENT_NAME         | Name of the event.                                       |
| ORTF_P1                 | Parameter 1.   |
| ORTF_P2                 | Parameter 2.   |
| ORTF_P3                 | Parameter 3.   |
| ORTF_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.               |
| ORTF_PWHG_ID            | The ID of the database.                                  |
| ORTF_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.       |
| ORTF_COUNTER_SUM        | In-Oracle time of the process.                           |

#### PW\_ORTB\_SMARTUNE\_BG\_T

Stores detailed information on the background sessions and their Oracle time.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name             | Column description                                       |
|-------------------------|--|
| ORTB_PWII_INSTANCE_ID   | ID of the instance, in which the statement was executed. |
| ORTB_TIMESTAMP          | The time of the change.                                  |
| ORTB_EVENT_NAME         | Name of the event.                                       |
| ORTB_P1                 | Parameter 1.   |
| ORTB_P2                 | Parameter 2.   |
| ORTB_BG_PROCESS         | Name of the background process.                          |
| ORTB_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.               |
| ORTB_PWHG_ID            | The ID of the database.                                  |
| ORTB_RECEIVED_TIMESTAMP | The timestamp that the row was loaded into the PW.       |
| ORTB_COUNTER_SUM        | In-Oracle time of the process.                           |

#### PS\_ORPN\_STATEMENT\_PLAN\_STEPS

This table contains information about execution plan steps and slightly differs from the PLAN\_TABLE. Information comes from Oracle.

Note: The column description can contain the following additional specifications: in plan\_table - the data in the column comes from Oracle's Execution plan. not in plan\_table - The data is a result of our plan processing.

| Column name      | Column description   |
|------------------|--|
| ORPN_PLANID      | Statement plan ID.   |
| ORPN_OPSEQ       | Operation sequence, as ID (in plan_table).   |
| ORPN_INSTANCE_ID | Instance ID.   |
| ORPN_OPLEVEL     | Indentation level of the step in the tree.   |
| ORPN_OPTYPE      | Operation type number (not in plan_table).   |
| ORPN_OPCODE      | Operation code number (not in plan_table).   |
| ORPN_OPTEXT      | Not used.  |
| ORPN_OPERATION   | OPERATION  '.'  OPTIONS from plan_table.   |
| ORPN_VIEW_EXISTS | Indicates if an object is accessed using a view (not in plan_table).               |
| ORPN_OBJ_OWN     | Object's owner. The same as OBJECT_OWNER in plan_table.                            |
| ORPN_OBJ_NAME    | Object's name. The same as OBJECT_NAME in plan_table.                              |
| ORPN_OBJ_NODE    | Database link used to reference the object. The same as OBJECT_NODE in plan_table. |

| Column name      | Column description   |
|------------------|--|
| ORPN_BS_OBJ_OWN  | Base object owner (owner of table of index) (not in plan_table).   |
| ORPN_BS_OBJ_NAME | Base object name (table name of index) (not in plan_table).  |
| ORPN_INDONLY     | Is this an "Index Only" operation (not in plan_table)?   |
| ORPN_OBJ_INS     | For table/views/direct indexes - object_instance from plan_table. For indexes - the object_instance of the parent table. |
| ORPN_ORG_OBJ_INS | Sequential number of the table in the statement text (not in plan_table).  |
| ORPN_PARENT_ID   | The same as PARENT_ID in plan_table.   |
| ORPN_STEPNO      | The step number in Oracle's way of going through the plan (not in plan_table).   |
| ORPN_STEP_SONS   | A list of all steps' sons of this step (not in plan_table).  |
| ORPN_OPTI        | The current mode of the optimizer. The same as OPTIMIZER in plan_table.  |
| ORPN_COSTI       | Cost of the step. The same as COST in plan_table.  |
| ORPN_CARDI       | The number of rows accessed by the operation of the step. The same as CARDINALITY in plan_table.                         |
| ORPN_BYTI        | Number of bytes accessed by the operation. The same as BYTES in plan_table.  |
| ORPN_PART_START  | The start position of a range of accessed partitions. The same as PARTITION_START in plan_table.                         |
| ORPN_PART_STOP   | The stop position of a range of accessed partitions. The same as PARTITION_STOP in plan_table.                           |

## PS\_ORPL\_STATEMENT\_PLAN

This table contains information about explains performed on statements, like explain time, cost, explain error, and so on.

| Column name            | Column description   |
|------------------------|--|
| ORPL_PLANID            | Unique key (sequence).   |
| ORPL_STATEMENT_ID      | FK to STATEMENT_INFO.STATEMENT _ID.  |
| ORPL_INSTANCE_ID       | De-normalization. This field is included for narrowing join results, when it is needed to get statement text by owner and name of object in the PLAN_OBJECTS.      |
| ORPL_FIRST_PTIME       | The time when this plan was inserted.  |
| ORPL_LAST_PTIME        | Last explain time. Equals to FIRST_PTIME when the plan is new. Difference between LAST_PTIME and FIRST_PTIME shows how long the plan remained the same.            |
| ORPL_IS_LAST_EXPLAINED | Is this the result of last explain for the statement? The values: $N - no$ , $Y - yes$ , $T - this is a temporary plan (of expanded statement).$                   |
| ORPL_PLAN_HASH         | Hash for the statement's plan.   |
| ORPL_STEPS_PLANID      | This field will link plan table to plan steps. It will differ from PLAN_ID when only the cost changed. It will equal to PLAN_TABLE.PLAN_ID if the plan is changed. |

| Column name         | Column description   |
|---------------------|--|
| ORPL_EXPLAIN_TYPE   | 0-without parsing, 1-with parsing  |
| ORPL_COST           | Overall cost of the statement, as sampled by explain.  |
| ORPL_EXPLAINS_COUNT | How many consequent explains of the statement resulted in this plan (the plan remained the same) – for future use. |

#### PW\_ORLI\_V\_LIBRARYCACHE\_H

Stores statistics about the library cache performance and activity.

Note: The \_H table summarizes the data per hour.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name                    | Column description   |
|--------------------------------|--|
| ORLI_PWII_INSTANCE_ID          | ID of the database.  |
| ORLI_TIMESTAMP                 | Timestamp of the sampling.   |
| ORLI_NAMESPACE_ID              | The library cache namespace (N PW_ORNS_NAMESPACE_N).   |
| ORLI_GETS_SUM                  | Total number of times a lock was requested for objects of this namespace.  |
| ORLI_GETHITS_SUM               | Total number of times an object's handle was found in the memory.  |
| ORLI_GETHITRATIO_SUM           | Ratio of GETHITS to GETS.  |
| ORLI_PINS_SUM                  | Total number of times a PIN was requested for objects of this namespace.   |
| ORLI_PINHITS_SUM               | Total number of times all of the metadata pieces of the library object were found in the memory.   |
| ORLI_PINHITRATIO_SUM           | Ratio of PINHITS to PINS.  |
| ORLI_RELOADS_SUM               | Any PIN of an object that is not the first PIN performed since the object handle was created and that requires loading the object from disk. |
| ORLI_INVALIDATIONS_SUM         | Total number of times objects in this namespace were marked invalid, because a dependent object was modified.                                |
| ORLI_DLM_LOCK_REQUESTS_S<br>UM | Total number of GET requests to lock instance locks.   |
| ORLI_DLM_PIN_REQUESTS_SU<br>M  | Total number of PIN requests to lock instance locks.   |
| ORLI_DLM_PIN_RELEASES_SU<br>M  | Total number of release requests for PIN instance locks.   |

| Column name                       | Column description  |
|-----------------------------------|---|
| ORLI_DLM_INVALID_REQUEST<br>S_SUM | Total number of GET requests for invalidation of instance locks.  |
| ORLI_DLM_INVALIDATIONS_S<br>UM    | Total number of invalidation pings received from other instances. |
| ORLI_MINUTES_COUNT_SUM            | Total amount of minutes summed in the row.                        |
| ORLI_PWHG_ID                      | The hour group ID that matches the sampled time.                  |
| ORLI_RECEIVED_TIMESTAMP           | The timestamp that the row was loaded into the PW.                |

## PW\_OROS\_OBJECTS\_STATS\_T

Stores object statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name           | Column description   |
|-----------------------|--|
| OROS_PWII_INSTANCE_ID | ID of the instance database.   |
| OROS_TIMESTAMP        | The time the statement was inserted.   |
| OROS_NAMESPACE_ID     | ID of the namespace.   |
| OROS_OBJECT_NAME_ID   | ID of the object name (N PW_OROB_OBJECT_NAME_N)  |
| OROS_OBJECT_ID        | ID of the object.  |
| OROS_OBJECT_OWNER_ID  | ID of the owner of the object (N PW_OROO_OBJECT_OWNER_NAME_N)  |
| OROS_PROGRAM_ID       | ID of the program, making the Oracle connection (N PW_ORPR_PROGRAM_NAME_N)                               |
| OROS_USER_ID          | ID of the Oracle schema to which the program connected (N<br>PW_ORUS_USER_NAME_N).                       |
| OROS_HOST_USER_ID     | ID of the host user running the program (N PW_ORHU_HOST_USER_NAME_N).                                    |
| OROS_MACHINE_ID       | ID of the OS machine running the program (N PW_ORMC_MACHINE_NAME_N).                                     |
| OROS_MODULE_ID        | ID of the session's action as set by calling dbms_application_info.set_module (N PW_ORMD_MODULE_NAME_N). |
| OROS_ACTION_ID        | ID of the session's action as set by calling dbms_application_info.set_action (N PW_ORAT_ACTION_NAME_N). |
| OROS_WORK_TYPE        | The ERP work type.   |
| OROS_INTERPOINT_MODE  | Interpoint mode - OA/SAP/PS.   |

| Column name                    | Column description  |
|--------------------------------|---|
| OROS_DIRECT_IO_SUM             | Total time spent in waiting for a direct I/O.                                   |
| OROS_SCATTERED_IO_SUM          | Total time spent in waiting for a scattered I/O.                                |
| OROS_SEQ_IO_SUM                | Total time spent in waiting for a sequential I/O.                               |
| OROS_OTHER_SUM                 | Total time spent in waiting for an I/O that is not scattered/sequential/direct. |
| OROS_ROW_LOCK_SUM              | Total time spent in waiting for a row lock.                                     |
| OROS_BUFFER_WAIT_SUM           | Total time spent in waiting for a buffer wait.                                  |
| OROS_MINUTES_COUNT_SUM         | Total amount of minutes summed in the row.                                      |
| OROS_PWHG_ID                   | The hour group ID that matches the sampled time.                                |
| OROS_RECIEVED_TIMESTAMP        | The timestamp that the row was received.  |
| OROS_IN_ORACLE_TIME_SUM        | Total time spent in Oracle.   |
| OROS_TABLE_LOCK_SUM            | Total time spent in waiting for a table lock.                                   |
| OROS_SUB_OBJECT_NAME_ID        | ID of the sub object name (N PW_OROB_OBJECT_NAME_N).                            |
| OROS_RAC_OPS_WAIT_TIME_S<br>UM | The time Oracle spent waiting for RAC or OPS synchronization.                   |

# PW\_ORSO\_STMT\_OBJ\_STATS\_T

Stores object statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name           | Column description   |
|-----------------------|--|
| ORSO_PWII_INSTANCE_ID | ID of the instance database.   |
| ORSO_TIMESTAMP        | The time the statement was inserted.   |
| ORSO_NAMESPACE_ID     | ID of the namespace.   |
| ORSO_OBJECT_NAME_ID   | ID of the object name (N PW_OROB_OBJECT_NAME_N)                                    |
| ORSO_OBJECT_ID        | ID of the object.  |
| ORSO_OBJECT_OWNER_ID  | ID of the owner of the object (N PW_OROO_OBJECT_OWNER_NAME_N)                      |
| ORSO_PROGRAM_ID       | ID of the program, making the Oracle connection (N PW_ORPR_PROGRAM_NAME_N)         |
| ORSO_USER_ID          | ID of the Oracle schema to which the program connected (N<br>PW_ORUS_USER_NAME_N). |

| Column name             | Column description   |
|-------------------------|--|
| ORSO_HOST_USER_ID       | ID of the host user running the program (N PW_ORHU_HOST_USER_NAME_N).                                    |
| ORSO_MACHINE_ID         | ID of the OS machine running the program (N PW_ORMC_MACHINE_NAME_N).                                     |
| ORSO_MODULE_ID          | ID of the session's action as set by calling dbms_application_info.set_module (N PW_ORMD_MODULE_NAME_N). |
| ORSO_ACTION_ID          | ID of the session's action as set by calling dbms_application_info.set_action (N PW_ORAT_ACTION_NAME_N). |
| ORSO_WORK_TYPE          | The ERP work type.   |
| ORSO_INTERPOINT_MODE    | Interpoint mode - OA/SAP/PS.   |
| ORSO_DIRECT_IO_SUM      | Total time spent in waiting for a direct I/O.  |
| ORSO_SCATTERED_IO_SUM   | Total time spent in waiting for a scattered I/O.   |
| ORSO_SEQ_IO_SUM         | Total time spent in waiting for a sequential I/O.  |
| ORSO_OTHER_SUM          | Total time spent in waiting for an I/O that is not scattered/sequential/direct.                          |
| ORSO_ROW_LOCK_SUM       | Total time spent in waiting for a row lock.  |
| ORSO_BUFFER_WAIT_SUM    | Total time spent in waiting for a buffer wait.   |
| ORSO_MINUTES_COUNT_SUM  | Total amount of minutes summed in the row.   |
| ORSO_PWHG_ID            | The hour group ID that matches the sampled time.   |
| ORSO_RECEIVED_TIMESTAMP | The timestamp that the row was received.   |
| ORSO_SHV                | The statement hash value.  |
| ORSO_PARENT_SHV         | The name of the PL/SQL running the SQL statement.  |
| ORSO_FILE_ID            | File name (N PW_ORFI_FILE_N)   |
| ORSO_PDEV_ID            | Physical device name (N PW_ORPV_PDEV_NAME_N).  |
| ORSO_FS_ID              | File system name (N PW_ORFY_FS_NAME_N).  |
| ORSO_LV_ID              | Logical volume name (N PW_ORLV_LV_NAME_N).   |
| ORSO_STORAGE_TYPE       | Type of storage.   |
| ORSO_UNIT_ID            | ID of the storage unit.  |
| ORSO_DEVICE_ID          | ID of the storage device.  |
| ORSO_IN_ORACLE_TIME_SUM | Total time spent in Oracle.  |
| ORSO_TABLE_LOCK_SUM     | Total time spent in table locks.   |
| ORSO_SQL_ID_MIN         | Minimum Oracle's SQL ID  |
| ORSO_HASH_VALUE_MIN     | Minimum Oracle's hash value  |
| ORSO_PLAN_HASH_VALUE    | Oracle's plan hash value   |
| ORSO_SUB_OBJECT_NAME_ID | ID of the sub object name (N PW_OROB_OBJECT_NAME_N).   |

| Column name                    | Column description  |
|--------------------------------|---|
| ORSO_RAC_OPS_WAIT_TIME_S<br>UM | The time Oracle spent waiting for RAC or OPS synchronization. |

## PW\_ORBV\_STMT\_BIND\_VALUES\_T

Holds information on bind values sampled from the monitored instance. Each row represents one bind value, a group of rows represent a set of one or more binds which were used by a statement during a single statement execution.

| Column name                   | Column description   |
|-------------------------------|--|
| ORBV_SHV                      | Name of the SQL statement.   |
| ORBV_HASH_VALUE               | Oracle's hash value.   |
| ORBV_SQL_ID                   | SQL identifier of the parent cursor in the library cache.  |
| ORBV_CHILD_ADDRESS            | Address of the parent cursor.  |
| ORBV_BIND_NAME                | Name of the bind variable.   |
| ORBV_POSITION                 | Position of the bind variable in the SQL statement.  |
| ORBV_DUP_POSITION             | If the binding is performed by name and the bind variable is duplicated, then this column gives the position of the primary bind variable.   |
| ORBV_DATATYPE                 | Internal identifier for the bind datatype.   |
| ORBV_DATATYPE_STRING          | Textual representation of the bind datatype.   |
| ORBV_PRECISION                | Precision (for numeric binds).   |
| ORBV_SCALE                    | Scale (for numeric binds).   |
| ORBV_MAX_LENGTH               | Maximum bind length.   |
| ORBV_WAS_CAPTURED             | Indicates whether the bind value was captured (YES) or not (NO).   |
| ORBV_LAST_CAPTURED            | Date when the bind value was captured. Bind values are captured when SQL statements are executed. To limit the overhead, binds are captured at most every 15 minutes for a given cursor. |
| ORBV_VALUE_STRING             | Value of the bind represented as a string.   |
| ORBV_ECOST                    | Estimated cost for SQL statement with this binds set.  |
| ORBV_EPLAN_HASH_VALUE         | Estimated plan hash value for sql statement with this binds set.   |
| ORBV_COST_ESTIMATION_DAT<br>E | Cost and plan hash value of the estimation date.   |
| ORBV_PWII_INSTANCE_ID         | ID of the instance database.   |
| ORBV_TIMESTAMP                | The time the statement was inserted.   |
| ORBV_MINUTES_COUNT_SUM        | Total amount of minutes summed in the row.   |
| ORBV_PWHG_ID                  | The hour group ID that matches the sampled time.   |
| ORBV_RECEIVED_TIMESTAMP       | The timestamp that the row was received.   |

#### PS\_ORFG\_FINDINGS

Describes the findings displayed in the SQL workspace and in the Dashboard findings section. Each row describes one finding and includes its text, its type and misc. display info (such as icon shape).

| Column name              | Column description                           |
|--------------------------|--|
| ORFG_FINDING_ID          | The finding ID.                              |
| ORFG_FINDING_DESC        | The finding description.                     |
| ORFG_FINDING_TYPE        | The finding type (STMT, STMT-OBJ, INSTANCE). |
| ORFG_FINDING_ICON_NUMBER | The default launch icon number.              |
| ORFG_FINDING_SUB_STATE   | The sub state of this finding.               |

# PW\_ORCT\_CAPACITY\_TRACK\_D

Contains overtime data of the tablespace capacity.

| Column name                       | Column description                                       |
|-----------------------------------|--|
| ORCT_PWII_INSTANCE_ID             | ID of the Oracle Server instance.                        |
| ORCT_TIMESTAMP                    | Date and time the statistic was sampled.                 |
| ORCT_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.    |
| ORCT_PWHG_ID                      | Hour group ID.   |
| ORCT_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes). |
| ORCT_TABLESPACE_ID                | The tablespace to which the data refers.                 |
| ORCT_DATAFILE_BYTES_AVG           | Number of bytes in the datafiles.                        |
| ORCT_FREE_SPACE_BYTES_AV<br>G     | Number of free bytes.                                    |
| ORCT_TABLE_BYTES_AVG              | Number of bytes reserved for tables.                     |
| ORCT_TABLE_OCCUPIED_BYTE<br>S_AVG | Number of bytes actually occupied by tables.             |
| ORCT_INDEX_BYTES_AVG              | Number of bytes reserved for indexes.                    |
| ORCT_INDEX_OCCUPIED_BYTE<br>S_AVG | Number of bytes actually occupied by indexes.            |

# PW\_ORTA\_TABLES\_STATISTICS\_D

Contains overtime data of table statistics.

| Column name           | Column description                |
|-----------------------|-----------------------------------|
| ORTA_PWII_INSTANCE_ID | ID of the Oracle Server instance. |

| Column name             | Column description                                       |  |  |
|-------------------------|--|--|--|
| ORTA_TIMESTAMP          | Date and time the statistic was sampled.                 |  |  |
| ORTA_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.    |  |  |
| ORTA_PWHG_ID            | Hour group ID.   |  |  |
| ORTA_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes). |  |  |
| ORTA_OWNER_ID           | The table owner.   |  |  |
| ORTA_TABLE_ID           | The table name.  |  |  |
| ORTA_EXTENTS_AVG        | Number of extents for the table.                         |  |  |
| ORTA_SEGMENT_BLOCKS_AVG | Number of used blocks for the table.                     |  |  |
| ORTA_NUM_ROWS_AVG       | Number of rows in the table.                             |  |  |
| ORTA_BLOCKS_AVG         | Number of block for the table.                           |  |  |
| ORTA_EMPTY_BLOCKS_AVG   | Number of empty blocks in the table.                     |  |  |
| ORTA_AVG_SPACE_AVG      | The average available free space in the table.           |  |  |
| ORTA_CHAIN_CNT_AVG      | Number of chained rows in the table.                     |  |  |
| ORTA_AVG_ROW_LEN_AVG    | Average row length in the table.                         |  |  |

## PW\_ORIO\_INDEXES\_STATISTICS\_D

Contains overtime data of index statistics.

| Column name             | Column description                                       |  |  |
|-------------------------|--|--|--|
| ORIO_PWII_INSTANCE_ID   | ID of the Oracle Server instance.                        |  |  |
| ORIO_TIMESTAMP          | Date and time the statistic was sampled.                 |  |  |
| ORIO_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.    |  |  |
| ORIO_PWHG_ID            | Hour group ID.   |  |  |
| ORIO_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes). |  |  |
| ORIO_OWNER_ID           | The index owner.   |  |  |
| ORIO_INDEX_ID           | The index name.  |  |  |
| ORIO_TABLE_OWNER_ID     | The indexed table owner.                                 |  |  |
| ORIO_TABLE_ID           | The indexed table name.                                  |  |  |
| ORIO_BLEVEL_AVG         | B-Tree level.  |  |  |
| ORIO_LEAF_BLOCKS_AVG    | The number of leaf blocks in the index.                  |  |  |
| ORIO_DISTINCT_KEYS_AVG  | The number of distinct keys in the index.                |  |  |

| Column name                       | Column description  |  |
|-----------------------------------|---|--|
| ORIO_AVG_LEAF_BLK_PER_KE<br>Y_AVG | The average number of leaf blocks per key.                                |  |
| ORIO_AVG_DATA_BLK_PER_KE<br>Y_AVG | The average number of data blocks per key.                                |  |
| ORIO_CLUSTERING_FACTOR_A<br>VG    | A measurement of the amount of (dis)order of the table this index is for. |  |
| ORIO_NUM_ROWS_AVG                 | Number of rows in the indexed table.                                      |  |
| ORIO_SAMPLE_SIZE_AVG              | The sample size used in analyzing this index.                             |  |

# H

# Insight Oracle Application Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |  |
|--------------------|---|--|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |  |
| PWII_INSTANCE_NAME | Name of the instance.   |  |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |  |
| PWII_SERVER        | Name of the server on which the instance is installed.  |  |

#### PW\_OASG\_SERVER\_GRP

The Oracle Application server group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OASG_INCE_ID | The ID of the server.   |  |
| OASG_INGD_ID | The ID of the server group running the Oracle Application form. |  |

#### PW\_OAIG\_INSTANCE\_GRP

The Oracle Application instance group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OAIG_INCE_ID | The ID of the instance.   |  |
| OAIG_INGD_ID | The ID of the instance group running the Oracle Application form. |  |

#### PW\_OAUG\_USER\_GRP

The Oracle Application server group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OAUG_ORUS_ID | The ID of the user.   |  |
| OAUG_INGD_ID | The ID of the user group running the Oracle Application form. |  |

#### PW\_OAAG\_ACTION\_GRP

The Oracle Application form group table.

| Column name  | Column description  |  |
|--------------|---|--|
| OAAG_ORPR_ID | The ID of the Oracle Application form.                        |  |
| OAAG_INGD_ID | The ID of the form group running the Oracle Application form. |  |

#### PW\_OAAC\_ACTIONS\_T

The Oracle Application information summarized by each aggregated invocation.

| Column name           | Column description  |  |  |
|-----------------------|---|--|--|
| OAAC_TIMESTAMP        | The time summary.   |  |  |
| OAAC_PWII_INSTANCE_ID | The ID of the Oracle instance running the Oracle Application form.  |  |  |
| OAAC_ACTION           | The ID of the Oracle Application form.  |  |  |
| OAAC_USER             | The ID of the Oracle Application user running the Oracle Application form.  |  |  |
| OAAC_CONSUMER_IP      | The ID of the Oracle Application client IP running the Oracle Application form.   |  |  |
| OAAC_CONSUMER_IP_GID  | The ID of the Oracle Application client IP group running the Oracle Application form.   |  |  |
| OAAC_APPLICATION      | The ID of the Oracle Application application running the Oracle Application form.   |  |  |
| OAAC_NETWORK_TIME_SUM | Round-trip Oracle Application form network time between the Oracle Application client and the server.                                 |  |  |
| OAAC_STAT1_SUM        | Total number of network packets, transferred while running the Oracle Application form.   |  |  |
| OAAC_STAT2_SUM        | Total number of network bytes, transferred while running the Oracle Application form.   |  |  |
| OAAC_STAT3_SUM        | Total number of network requests in the round-trip of the Oracle Application form.  |  |  |
| OAAC_TIME1_SUM        | Total Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers. |  |  |
| OAAC_REQUESTS_SUM     | Total number of Oracle Application form executions.   |  |  |
| OAAC_RED_SUM          | Total number of Oracle Application form executions, which Breached their SLA.   |  |  |
| OAAC_YELLOW_SUM       | Total number of Oracle Application form executions, which Near Breached their SLA.  |  |  |

| Column name    | Column description  |  |
|----------------|---|--|
| OAAC_GREEN_SUM | Total number of Oracle Application form executions, which did Not Breach their SLA. |  |

#### Expressions

| Oracle   | SQL Server  | Expression description   |
|--|---|--|
| <pre>sum(OAAC_NETWORK_TIME_<br/>SUM+OAAC_TIME1_SUM)</pre>  | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>   | Total Oracle Application form processing time. This time includes network and all other times, which sum the Oracle Application response time.   |
| <pre>sum(OAAC_NETWORK_TIME_<br/>SUM)/sum(decode(OAAC_R<br/>EQUESTS_SUM,0,1,OAAC_R<br/>EQUESTS_SUM))</pre>  | <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>   | Average round-trip Oracle Application form network time between the Oracle Application client and the server.  |
| <pre>sum(OAAC_TIME1_TIME_SU M)/sum(decode(OAAC_REQ UESTS_SUM,0,1,OAAC_REQ UESTS_SUM))</pre>  | <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>   | Average Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers.  |
| <pre>sum(OAAC_NETWORK_TIME_<br/>SUM+OAAC_TIME1_SUM)/su<br/>m(decode(OAAC_REQUESTS<br/>_SUM,0,1,OAAC_REQUESTS<br/>_SUM))</pre>                                  | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre>   | Average Oracle Application form processing time. This time include network and all other times, which sum the Oracle Application response time.  |
| <pre>sum(OAAC_REQUESTS_SUM-<br/>OAAC_RED_SUM-OAAC_YELL<br/>OW_SUM-OAAC_GREEN_SUM)</pre>  | <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>  | Total number of Oracle Application form executions, for which the SLA was Not Defined.   |
| <pre>sum(OAAC_RED_SUM)/sum(<br/>decode(OAAC_RED_SUM+OA<br/>AC_YELLOW_SUM+OAAC_GRE<br/>EN_SUM,0,1,OAAC_RED_SU<br/>M+OAAC_YELLOW_SUM+OAAC<br/>_GREEN))*100</pre> | <pre>sum(OAAC_RED_SUM)/sum (decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RE D_SUM+OAAC_YELLOW_SUM +OAAC_GREEN))*100</pre>                        | Percentage of Oracle Application form executions, which<br>Breached their SLA. The percentage is calculated out of<br>the Oracle Application forms, for which the SLA was<br>established.      |
| <pre>sum(OAAC_YELLOW_SUM)/s um(decode(OAAC_RED_SUM +OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RED _SUM+OAAC_YELLOW_SUM+O AAC_GREEN))*100</pre>                  | <pre>sum(OAAC_YELLOW_SUM)/<br/>sum(decode(OAAC_RED_S<br/>UM+OAAC_YELLOW_SUM+OA<br/>AC_GREEN_SUM,0,1,OAAC<br/>_RED_SUM+OAAC_YELLOW_<br/>SUM+OAAC_GREEN))*100</pre> | Percentage of Oracle Application form executions, which<br>Near Breached their SLA. The percentage is calculated<br>out of the Oracle Application forms, for which the SLA<br>was established. |
| <pre>sum(OAAC_GREEN_SUM)/su m(decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_G REEN_SUM,0,1,OAAC_RED_ SUM+OAAC_YELLOW_SUM+OA AC_GREEN))*100</pre>                   | <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                      | Percentage of Oracle Application form executions, which<br>Not Breached their SLA. The percentage is calculated<br>out of the Oracle Application forms, for which the SLA<br>was established.  |

## PW\_OAAC\_ACTIONS\_AL\_T

The Oracle Application information summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| OAAC_TIMESTAMP        | The time summary.   |
| OAAC_PWII_INSTANCE_ID | The ID of the Oracle Application instance running the Oracle Application form.  |
| OAAC_ACTION           | The ID of the Oracle Application form.  |
| OAAC_APPLICATION      | The ID of the Oracle Application application running the Oracle Application form.   |
| OAAC_NETWORK_TIME_SUM | Round-trip Oracle Application form network time between the Oracle Application client and the server.                                 |
| OAAC_STAT1_SUM        | Total number of network packets, transferred while running the Oracle Application form.   |
| OAAC_STAT2_SUM        | Total number of network bytes, transferred while running the Oracle Application form.   |
| OAAC_STAT3_SUM        | Total number of network requests in the round-trip of the Oracle Application form.  |
| OAAC_TIME1_SUM        | Total Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers. |
| OAAC_REQUESTS_SUM     | Total number of Oracle Application form executions.   |
| OAAC_RED_SUM          | Total number of Oracle Application from executions, which Breached their SLA.   |
| OAAC_YELLOW_SUM       | Total number of Oracle Application form executions, which Near Breached their SLA.  |
| OAAC_GREEN_SUM        | Total number of Oracle Application form executions, which did Not Breach their SLA.   |

#### Expressions

| Oracle  | SQL Server  | Expression description  |
|---|---|---|
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>   | <pre>sum(OAAC_NETWORK_TIM E_SUM+OAAC_TIME1_SUM )</pre>  | Total Oracle Application form processing time. This time includes network and all other times, which sum the Oracle Application response time.  |
| <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>                 | <pre>sum(OAAC_NETWORK_TIM<br/>E_SUM)/sum(decode(OA<br/>AC_REQUESTS_SUM,0,1,<br/>OAAC_REQUESTS_SUM))</pre>                     | Average round-trip Oracle Application form network time between the Oracle Application client and the server.                                   |
| <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>                   | <pre>sum(OAAC_TIME1_TIME_<br/>SUM)/sum(decode(OAAC<br/>_REQUESTS_SUM,0,1,OA<br/>AC_REQUESTS_SUM))</pre>                       | Average Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers.         |
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre> | <pre>sum(OAAC_NETWORK_TIM<br/>E_SUM+OAAC_TIME1_SUM<br/>)/sum(decode(OAAC_RE<br/>QUESTS_SUM,0,1,OAAC_<br/>REQUESTS_SUM))</pre> | Average Oracle Application form processing time. This time include network and all other times, which sum the Oracle Application response time. |

| Oracle   | SQL Server   | Expression description   |
|--|--|--|
| <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>   | <pre>sum(OAAC_REQUESTS_SU M-OAAC_RED_SUM-OAAC_ YELLOW_SUM-OAAC_GREE N_SUM)</pre>   | Total number of Oracle Application form executions, for which the SLA was Not Defined.   |
| <pre>sum(OAAC_RED_SUM)/sum<br/>(decode(OAAC_RED_SUM+<br/>OAAC_YELLOW_SUM+OAAC_<br/>GREEN_SUM,0,1,OAAC_RE<br/>D_SUM+OAAC_YELLOW_SUM<br/>+OAAC_GREEN))*100</pre> | <pre>sum(OAAC_RED_SUM)/su m(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OA AC_GREEN_SUM,0,1,OAA C_RED_SUM+OAAC_YELLO W_SUM+OAAC_GREEN))*1 00</pre>    | Percentage of Oracle Application form executions, which<br>Breached their SLA. The percentage is calculated out of the<br>Oracle Application forms, for which the SLA was<br>established.      |
| <pre>sum(OAAC_YELLOW_SUM)/ sum(decode(OAAC_RED_S UM+OAAC_YELLOW_SUM+OA AC_GREEN_SUM,0,1,OAAC _RED_SUM+OAAC_YELLOW_ SUM+OAAC_GREEN))*100</pre>                  | <pre>sum(OAAC_YELLOW_SUM) /sum(decode(OAAC_RED _SUM+OAAC_YELLOW_SUM +OAAC_GREEN_SUM,0,1, OAAC_RED_SUM+OAAC_YE LLOW_SUM+OAAC_GREEN) )*100</pre> | Percentage of Oracle Application form executions, which<br>Near Breached their SLA. The percentage is calculated out<br>of the Oracle Application forms, for which the SLA was<br>established. |
| <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                   | <pre>sum(OAAC_GREEN_SUM)/ sum(decode(OAAC_RED_ SUM+OAAC_YELLOW_SUM+ OAAC_GREEN_SUM,0,1,0 AAC_RED_SUM+OAAC_YEL LOW_SUM+OAAC_GREEN)) *100</pre>  | Percentage of Oracle Application form executions, which<br>Not Breached their SLA. The percentage is calculated out of<br>the Oracle Application forms, for which the SLA was<br>established.  |

## PW\_OAAC\_ACTIONS\_CAL\_T

The Oracle Application information summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| OAAC_TIMESTAMP        | The time summary.   |
| OAAC_PWII_INSTANCE_ID | The ID of the Oracle instance running the Oracle Application form.                                    |
| OAAC_ACTION           | The ID of the Oracle Application form.  |
| OAAC_CONSUMER_IP      | The ID of the Oracle Application client IP running the Oracle Application form.                       |
| OAAC_CONSUMER_IP_GID  | The ID of the Oracle Application client IP group running the Oracle Application form.                 |
| OAAC_APPLICATION      | The ID of the Oracle Application application running the Oracle Application form.                     |
| OAAC_NETWORK_TIME_SUM | Round-trip Oracle Application form network time between the Oracle Application client and the server. |
| OAAC_STAT1_SUM        | Total number of network packets, transferred while running the Oracle Application form.               |
| OAAC_STAT2_SUM        | Total number of network bytes, transferred while running the Oracle Application form.                 |

#### (Continued)

| Column name       | Column description  |
|-------------------|---|
| OAAC_STAT3_SUM    | Total number of network requests in the round-trip of the Oracle Application form.  |
| OAAC_TIME1_SUM    | Total Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers. |
| OAAC_REQUESTS_SUM | Total number of Oracle Application form executions.   |
| OAAC_RED_SUM      | Total number of Oracle Application from executions, which Breached their SLA.   |
| OAAC_YELLOW_SUM   | Total number of Oracle Application form executions, which Near Breached their SLA.  |
| OAAC_GREEN_SUM    | Total number of Oracle Application form executions, which did Not Breach their SLA.   |

#### Expressions

| Oracle   | SQL Server   | Expression description  |
|--|--|---|
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>  | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>  | Total Oracle Application form processing time. This time includes network and all other times, which sum the Oracle Application response time.  |
| <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>  | <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>  | Average round-trip Oracle Application form network time between the Oracle Application client and the server.   |
| <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>  | <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>  | Average Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers.   |
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre>                              | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre>                              | Average Oracle Application form processing time. This time include network and all other times, which sum the Oracle Application response time.   |
| <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>   | <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>   | Total number of Oracle Application form executions, for which the SLA was Not Defined.  |
| <pre>sum(OAAC_RED_SUM)/sum (decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RE D_SUM+OAAC_YELLOW_SUM +OAAC_GREEN))*100</pre> | <pre>sum(OAAC_RED_SUM)/sum (decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RE D_SUM+OAAC_YELLOW_SUM +OAAC_GREEN))*100</pre> | Percentage of Oracle Application form executions, which<br>Breached their SLA. The percentage is calculated out of<br>the Oracle Application forms, for which the SLA was<br>established. |

| Oracle  | SQL Server  | Expression description   |
|---|---|--|
| <pre>sum(OAAC_YELLOW_SUM)/<br/>sum(decode(OAAC_RED_S<br/>UM+OAAC_YELLOW_SUM+OA<br/>AC_GREEN_SUM,0,1,OAAC<br/>_RED_SUM+OAAC_YELLOW_<br/>SUM+OAAC_GREEN))*100</pre> | <pre>sum(OAAC_YELLOW_SUM)/<br/>sum(decode(OAAC_RED_S<br/>UM+OAAC_YELLOW_SUM+OA<br/>AC_GREEN_SUM,0,1,OAAC<br/>_RED_SUM+OAAC_YELLOW_<br/>SUM+OAAC_GREEN))*100</pre> | Percentage of Oracle Application form executions, which<br>Near Breached their SLA. The percentage is calculated<br>out of the Oracle Application forms, for which the SLA<br>was established. |
| <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                      | <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                      | Percentage of Oracle Application form executions, which<br>Not Breached their SLA. The percentage is calculated<br>out of the Oracle Application forms, for which the SLA<br>was established.  |

# PW\_OAAC\_ACTIONS\_UAL\_T

The Oracle Application information summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| OAAC_TIMESTAMP        | The time summary.   |
| OAAC_PWII_INSTANCE_ID | The ID of the Oracle instance running the Oracle Application form.  |
| OAAC_ACTION           | The ID of the Oracle Application form.  |
| OAAC_USER             | The ID of the Oracle Application user running the Oracle Application form.  |
| OAAC_APPLICATION      | The ID of the Oracle Application application running the Oracle Application form.   |
| OAAC_NETWORK_TIME_SUM | Round-trip Oracle Application form network time between the Oracle Application client and the server.                                 |
| OAAC_STAT1_SUM        | Total number of network packets, transferred while running the Oracle Application form.   |
| OAAC_STAT2_SUM        | Total number of network bytes, transferred while running the Oracle Application form.   |
| OAAC_STAT3_SUM        | Total number of network requests in the round-trip of the Oracle Application form.  |
| OAAC_TIME1_SUM        | Total Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers. |
| OAAC_REQUESTS_SUM     | Total number of Oracle Application form executions.   |
| OAAC_RED_SUM          | Total number of Oracle Application from executions, which Breached their SLA.   |
| OAAC_YELLOW_SUM       | Total number of Oracle Application form executions, which Near Breached their SLA.  |
| OAAC_GREEN_SUM        | Total number of Oracle Application form executions, which did Not Breach their SLA.   |

#### Expressions

| Oracle  | SQL Server  | Expression description   |
|---|---|--|
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>   | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)</pre>   | Total Oracle Application form processing time. This time includes network and all other times, which sum the Oracle Application response time.   |
| <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>   | <pre>sum(OAAC_NETWORK_TIME _SUM)/sum(decode(OAAC _REQUESTS_SUM,0,1,OAA C_REQUESTS_SUM))</pre>   | Average round-trip Oracle Application form network time between the Oracle Application client and the server.  |
| <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>   | <pre>sum(OAAC_TIME1_TIME_S UM)/sum(decode(OAAC_R EQUESTS_SUM,0,1,OAAC_ REQUESTS_SUM))</pre>   | Average Oracle Application form processing time. This time includes the time the Oracle Application waited for other Application Tiers.  |
| <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre>   | <pre>sum(OAAC_NETWORK_TIME _SUM+OAAC_TIME1_SUM)/ sum(decode(OAAC_REQUE STS_SUM,0,1,OAAC_REQU ESTS_SUM))</pre>   | Average Oracle Application form processing time. This time include network and all other times, which sum the Oracle Application response time.  |
| <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>  | <pre>sum(OAAC_REQUESTS_SUM -OAAC_RED_SUM-OAAC_YE LLOW_SUM-OAAC_GREEN_S UM)</pre>  | Total number of Oracle Application form executions, for which the SLA was Not Defined.   |
| <pre>sum(OAAC_RED_SUM)/sum (decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RE D_SUM+OAAC_YELLOW_SUM +OAAC_GREEN))*100</pre>                        | <pre>sum(OAAC_RED_SUM)/sum (decode(OAAC_RED_SUM+ OAAC_YELLOW_SUM+OAAC_ GREEN_SUM,0,1,OAAC_RE D_SUM+OAAC_YELLOW_SUM +OAAC_GREEN))*100</pre>                        | Percentage of Oracle Application form executions, which<br>Breached their SLA. The percentage is calculated out of<br>the Oracle Application forms, for which the SLA was<br>established.      |
| <pre>sum(OAAC_YELLOW_SUM)/<br/>sum(decode(OAAC_RED_S<br/>UM+OAAC_YELLOW_SUM+OA<br/>AC_GREEN_SUM,0,1,OAAC<br/>_RED_SUM+OAAC_YELLOW_<br/>SUM+OAAC_GREEN))*100</pre> | <pre>sum(OAAC_YELLOW_SUM)/<br/>sum(decode(OAAC_RED_S<br/>UM+OAAC_YELLOW_SUM+OA<br/>AC_GREEN_SUM,0,1,OAAC<br/>_RED_SUM+OAAC_YELLOW_<br/>SUM+OAAC_GREEN))*100</pre> | Percentage of Oracle Application form executions, which<br>Near Breached their SLA. The percentage is calculated<br>out of the Oracle Application forms, for which the SLA<br>was established. |
| <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                      | <pre>sum(OAAC_GREEN_SUM)/s um(decode(OAAC_RED_SU M+OAAC_YELLOW_SUM+OAA C_GREEN_SUM,0,1,OAAC_ RED_SUM+OAAC_YELLOW_S UM+OAAC_GREEN))*100</pre>                      | Percentage of Oracle Application form executions, which<br>Not Breached their SLA. The percentage is calculated out<br>of the Oracle Application forms, for which the SLA was<br>established.  |

# Insight Oracle Groups Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

#### PW\_ORSG\_SERVER\_GRP

The Oracle server group table.

| Column name  | Column description                                       |
|--------------|--|
| ORSG_INCE_ID | The ID of the server.                                    |
| ORSG_INGD_ID | The ID of the server group running the Oracle statement. |

#### PW\_ORIG\_INSTANCE\_GRP

The Oracle instance group table.

| Column name  | Column description   |
|--------------|--|
| ORIG_INCE_ID | The ID of the instance.                                    |
| ORIG_INGD_ID | The ID of the instance group running the Oracle statement. |

#### PW\_ORUG\_USER\_GRP

The Oracle user group table.

| Column name  | Column description                                     |
|--------------|--|
| ORUG_ORUS_ID | The ID of the user.                                    |
| ORUG_INGD_ID | The ID of the user group running the Oracle statement. |

#### PW\_ORPG\_PROGRAM\_GRP

The Oracle program group table.

| Column name  | Column description                  |
|--------------|-------------------------------------|
| ORPG_ORPR_ID | The ID of the program.              |
| ORPG_INGD_ID | The ID of the Oracle program group. |

#### PW\_ORMG\_MACHINE\_NAME\_GRP

The Oracle client machine group table.

| Column name  | Column description                                       |
|--------------|--|
| ORMG_ORMC_ID | The ID of the client.                                    |
| ORMG_INGD_ID | The ID of the client group running the Oracle statement. |

# Precise for SAP Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| pwii_id            | The instance ID. Columns of XXXX_PWII_INSTANCE_ID have values from the column.                  |
| PWII_INSTANCE_NAME | The name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | The name of the server, on which the instance is installed.                                     |

# PW\_SPVS\_AVAIL\_STAT\_LS\_T

Calculated table showing total availably (source tables are PW\_SPSS\_APPSVR\_AVAIL\_STAT\_T and PW\_SPLS\_LOCALE\_STAT\_T).

| Column name                      | Column description   |
|----------------------------------|--|
| SPVS_PWII_INSTANCE_ID            | The instance ID.   |
| SPVS_TIMESTAMP                   | The sampling end time aligned to the time grain (5 minutes).                     |
| SPVS_RECIEVED_TIMESTAMP          | The received timestamp.  |
| SPVS_MINUTES_COUNT_SUM           | The minutes count.   |
| SPVS_PWHG_ID                     | The hour group in the PW.  |
| SPVS_APPSVR_KEY                  | The application server ID, on which the job step occurred.                       |
| SPVS_LOCALE_KEY                  | The locale ID, on which the step took place.                                     |
| SPVS_LOCALE_AVAIL_AVG            | The average availability of the destinations in this locale's locale.            |
| SPVS_APPSVR_AVAIL_AVG            | The average availability of the application server.                              |
| SPVS_REAL_AVAILABILITY_A<br>VG   | The average end to end availability.   |
| SPVS_AVAIL_WITH_DOWNTIME<br>_AVG | The average end to end availability, excluding planned down time in the average. |

## PW\_SPBS\_BATCH\_STAT\_T

Batch Step Statistics table.

| Column name             | Column description  |
|-------------------------|---|
| SPBS_PWII_INSTANCE_ID   | The instance ID.  |
| SPBS_TIMESTAMP          | The start time of the batch step.   |
| SPBS_RECIEVED_TIMESTAMP | The received timestamp.   |
| SPBS_MINUTES_COUNT_SUM  | The minutes count.  |
| SPBS_PWHG_ID            | The hour group in the PW.   |
| SPBS_HOST_KEY           | The host machine ID, on which the transaction took place.   |
| SPBS_APPSVR_KEY         | The application server ID, on which the job step occurred.  |
| SPBS_CLIENT             | The ID of the SAP client executing the step.  |
| SPBS_PGM_KEY            | The ID of the executing ABAP program.   |
| SPBS_USER_KEY           | The ID of the user executing the job.   |
| SPBS_ROW_ID             | The row ID.   |
| SPBS_JOB_KEY            | The ID of the executed job.   |
| SPBS_STEP_ID            | The step order in the executed job.   |
| SPBS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).   |
| SPBS_APP_TIME_SUM       | Total time spent in the application server (in seconds).  |
| SPBS_DB_TIME_SUM        | Total time spent in the database (in seconds).  |
| SPBS_LOAD_TIME_SUM      | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| SPBS_ENQ_TIME_SUM       | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| SPBS_CPU_TIME_SUM       | CPU time consumed by the work processes (in seconds).   |
| SPBS_ROLLWAIT_TIME_SUM  | Time spent in a rolled out status in the application server (in seconds).   |
| SPBS_PRIVMODE_COUNT_SUM | Number of times a work process ran in private mode.   |
| SPBS_MEMORY_USED_SUM    | Amount of SAP's extended (shared) memory attributed to the application.   |
| SPBS_KB_TRANSFERRED_SUM | Amount of database data transferred (in KB).  |
| SPBS_PHY_READ_COUNT_SUM | Number of read access performed to the database (could not be satisfied from SAP buffers).                            |
| SPBS_DB_SEQ_REQS_SUM    | Number of requests for database sequential read.  |
| SPBS_DB_SEQ_CALL_SUM    | Number of actual calls to the database to satisfy a sequential read request.  |
| SPBS_DB_SEQ_TIME_SUM    | Time spent in the database for sequential reads (in seconds).   |
| SPBS_DB_DIR_REQS_SUM    | Number of requests for database direct read.  |
| SPBS_DB_DIR_CALL_SUM    | Number of actual calls to the database to satisfy a direct read request.  |

#### (Continued)

| Column name           | Column description  |
|-----------------------|---|
| SPBS_DB_DIR_TIME_SUM  | Time spent in the database for direct reads (in seconds). |
| SPBS_DB_ROWS_READ_SUM | Number of rows read from the database.                    |
| SPBS_DB_READ_REQS_SUM | Total number of database read requests.                   |
| SPBS_DB_REQS_SUM      | Total number of database requests.                        |

# PW\_SPRS\_APPSVR\_BUFFER\_STAT\_T

Application Server statistics (also has D, H, W, M summary levels).

| Column name                       | Column description   |
|-----------------------------------|--|
| SPRS_PWII_INSTANCE_ID             | The instance ID.   |
| SPRS_TIMESTAMP                    | The time of the host samples (aligned to 5 minutes).   |
| SPRS_RECIEVED_TIMESTAMP           | The received timestamp.  |
| SPRS_MINUTES_COUNT_SUM            | The minutes count.   |
| SPRS_PWHG_ID                      | The hour group in the PW.  |
| SPRS_APPSVR_KEY                   | The sampled application server ID.   |
| SPRS_HOST_KEY                     | The host machine ID, on which the application server is installed.                                   |
| SPRS_RECORD_COUNT_SUM             | Total number of samples made to the application server in the specified time.                        |
| SPRS_USERS_AVG                    | Average number of connected users.   |
| SPRS_SESSION_COUNT_AVG            | Average sessions number.   |
| SPRS_ACTIVE_USER_COUNT_A<br>VG    | Average number of active users in 5 minutes.   |
| SPRS_ROLL_AREA_TOTAL_AVG          | Total size of roll area (in KB).   |
| SPRS_ROLL_AREA_IN_USE_AV<br>G     | Average size of used roll area (in KB).  |
| SPRS_EXTEND_MEMORY_TOTAL<br>_AVG  | Size of available extended memory (in KB).   |
| SPRS_EXTEND_MEMORY_IN_US<br>E_AVG | Average size of used extended memory, meaning extended memory that is in 'allocated' status (in KB). |
| SPRS_SELECT_SINGLE_COUNT<br>_AVG  | Number of requests for database direct reads.  |
| SPRS_SELECT_COUNT_AVG             | Number of requests for database direct and sequential reads.   |
| SPRS_SCREEN_HIT_RATIO_AV<br>G     | Average hit ratio of screen buffer.  |
| SPRS_SELECT_HIT_RATIO_AV<br>G     | Average hit ratio of DB read access.   |

#### (Continued)

| Column name                    | Column description                   |
|--------------------------------|--------------------------------------|
| SPRS_PROGRAM_HIT_RATIO_A<br>VG | Average hit ratio of program buffer. |
| SPRS_SCREEN_HIT_RATIO_AV<br>G  | Average hit ratio of screen buffer.  |

## PW\_SPHS\_HOST\_STAT\_T

Host Statists table (also has D, H, W, M, B, BT, BH, BD, BW, BM summary levels).

| Column name             | Column description   |
|-------------------------|--|
| SPHS_PWII_INSTANCE_ID   | The instance ID.   |
| SPHS_TIMESTAMP          | The time of the host samples (aligned to 5 minutes).   |
| SPHS_RECIEVED_TIMESTAMP | The received timestamp.  |
| SPHS_MINUTES_COUNT_SUM  | The minutes count.   |
| SPHS_PWHG_ID            | The hour group in the PW.  |
| SPHS_HOST_KEY           | The sampled host machine ID.   |
| SPHS_REC_COUNT_SUM      | Total number of samples made to the host in the specified time.  |
| SPHS_LOAD_AVG1_AVG      | The average number of work processes waiting for a free processor.   |
| SPHS_LOAD_AVG5_AVG      | The average number of work processes waiting for a free processor.   |
| SPHS_LOAD_AVG15_AVG     | The average number of work processes waiting for a free processor.   |
| SPHS_INTERRUPTS_AVG     | The average number of times per second the operating system had to interrupt system resources during process activity.                     |
| SPHS_SYS_CALLS_AVG      | The average number of times the operating system performed system (privileged/root) calls per second.                                      |
| SPHS_CONTEXT_SW_AVG     | The average number of times the operating system had to switch CPU resources from one form of work to another per second.                  |
| SPHS_USER_MODE_AVG      | The average CPU workload caused by user processes (SAP system or database); average percentage of the CPU that is used for user processes. |
| SPHS_SYS_MODE_AVG       | The average CPU workload caused by operating system processes; average percentage of the CPU that is used for operating system processes.  |
| SPHS_IDLE_AVG           | The average percentage of the CPU that was not consumed.   |
| SPHS_PAGE_INS_AVG       | The average paging in rate per second.   |
| SPHS_PAGE_OUTS_AVG      | The average paging out rate per second.  |
| SPHS_KB_PAGE_INS_AVG    | The average paging in data amount (in KB) per second.  |
| SPHS_KB_PAGE_OUTS_AVG   | The average paging out data amount (in KB) per second.   |
| SPHS_PHYS_MEMORY_AVG    | The amount of physical operating system memory (in KB).  |

| Column name          | Column description                                 |
|----------------------|--|
| SPHS_FREE_MEMORY_AVG | The average amount of free memory (in KB).         |
| SPHS_SWAP_CONFIG_AVG | the configured size of the swap area (in KB).      |
| SPHS_SWAP_FREE_AVG   | The average free swap space (in KB).               |
| SPHS_SWAP_SIZE_AVG   | The average allocated swap space (in KB).          |
| SPHS_SWAP_MAX        | The maximum swap space (in KB) that was allocated. |

# PW\_SPDS\_DETAILS\_STAT\_T

Step Statistics table.

| Column name             | Column description  |
|-------------------------|---|
| SPDS_PWII_INSTANCE_ID   | The instance ID.  |
| SPDS_TIMESTAMP          | The start time of the step aligned to the time grain (5 minutes).                       |
| SPDS_RECIEVED_TIMESTAMP | The received timestamp.   |
| SPDS_MINUTES_COUNT_SUM  | The minutes count.  |
| SPDS_PWHG_ID            | The hour group in the PW.   |
| SPDS_LOCALE_KEY         | The ID of the locale, on which the step took place.                                     |
| SPDS_HOST_KEY           | The ID of the host machine, on which the step took place.                               |
| SPDS_TCODE_KEY          | The step's TCODE ID.  |
| SPDS_TRAN_KEY           | The step's TCODE or Program ID.   |
| SPDS_PGM_KEY            | The ID of the executing ABAP program.   |
| SPDS_USER_KEY           | The ID of the user executing the step.  |
| SPDS_APP_KEY            | The ID of application the step's TCODE belongs to.                                      |
| SPDS_ORG_KEY            | The ID of the user's organization executing the step.                                   |
| SPDS_APPSVR_KEY         | The ID of the application server, on which the step occurred.                           |
| SPDS_CLIENT             | The ID of the SAP client user that executed the step belongs to.                        |
| SPDS_WORK_TYPE          | The step's work type (for example: Dialog, Update, Program).                            |
| SPDS_TRAN_TYPE          | The step detailed type (for example: Login/Logout , Buffer synchronization, and so on). |
| SPDS_GUIPGM_NAME        | The GUI program the step executed.  |
| SPDS_DYNPRO             | The screen number.  |
| SPDS_STEP_COUNT_SUM     | Number of identical steps per time slice.   |
| SPDS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).                   |
| SPDS_RFC_TIME_SUM       | Total time spent in remote function calls (in seconds).                                 |

#### (Continued)

| Column description   |
|--|
| The start time of the step   |
| The ID of the terminal which activated the step  |
| Total time spent in the application server (in seconds).   |
| Total time spent in the database (in seconds).   |
| Total time spent on loading from the database and generate objects like ABAP source code, CUA, and screen information. |
| Time spent waiting for a resource protected by a SAP lock (in seconds).  |
| CPU time consumed by the work processes (in seconds).  |
| Time spent in a rolled out status in the application server (in seconds).  |
| The GUI time (in seconds) (available from SAP version 4.6).  |
| The FE Net time (in seconds) (available from SAP version 4.6).   |
| Number of round-trips performed (available from SAP version 4.6).  |
| Number of times a work process ran in private mode.  |
| Amount of SAP's extended (shared) memory attributed to the application.  |
| Amount of database data transferred (in KB).   |
| Total number of bytes transferred from the front end to the application server.  |
| Total number of bytes transferred from the application server to the front end.  |
| Volume of read requests transferred to the database server.  |
| Number of requests for a database sequential read.   |
| Number of actual calls to the database to satisfy a sequential read request.   |
| Time spent in the database for sequential reads (in seconds).  |
| Number of requests for database direct read.   |
| Number of actual calls to the database to satisfy a direct read request.   |
| Time spent in the database for direct reads (in seconds).  |
| Number of rows read from the database.   |
| Total number of database read requests.  |
| Total number of database requests.   |
| FFU  |
| FFU  |
| FFU  |
|  |

#### (Continued)

| Column name                       | Column description |
|-----------------------------------|--------------------|
| SPDS_RFC_SRV_EXE_TIME_SU<br>M     | FFU                |
| SPDS_RFC_SRV_DATA_SENT_S<br>UM    | FFU                |
| SPDS_RFC_SRV_DATA_RCV_SU<br>M     | FFU                |
| SPDS_RFC_CLNT_DEST_COUNT<br>_SUM  | FFU                |
| SPDS_RFC_CLNT_CALLS_COUN<br>T_SUM | FFU                |
| SPDS_RFC_CLNT_CALL_TIME_<br>SUM   | FFU                |
| SPDS_RFC_CLNT_EXE_TIME_S<br>UM    | FFU                |
| SPDS_RFC_CLNT_DATA_SENT_<br>SUM   | FFU                |
| SPDS_RFC_CLNT_DATA_RCV_S<br>UM    | FFU                |

#### Expressions

| Oracle   | PRES   | Expression description                                       |
|--|--|--|
| SUM(SPDS_QUEUE_TIME_SUM+<br>SPDS_APP_TIME_SUM+SPDS_D<br>B_TIME_SUM+SPDS_FENET_TI<br>ME_SUM+SPDS_GUI_TIME_SUM<br>)  | SUM(SPDS_QUEUE_TIME_SUM<br>+SPDS_APP_TIME_SUM+SPDS<br>_DB_TIME_SUM+SPDS_FENET<br>_TIME_SUM+SPDS_GUI_TIME<br>_SUM)                              | The sum of all the response time components of the step.     |
| <pre>SUM(SPDS_QUEUE_TIME_SUM+<br/>SPDS_APP_TIME_SUM+SPDS_D<br/>B_TIME_SUM+SPDS_FENET_TI<br/>ME_SUM+SPDS_GUI_TIME_SUM<br/>)/SUM(SPDS_STEP_COUNT_SU<br/>M)</pre> | SUM(SPDS_QUEUE_TIME_SUM<br>+SPDS_APP_TIME_SUM+SPDS<br>_DB_TIME_SUM+SPDS_FENET<br>_TIME_SUM+SPDS_GUI_TIME<br>_SUM)/SUM(SPDS_STEP_COU<br>NT_SUM) | The average of all the response time components of the step. |
| SUM(SPDS_GUI_TIME_SUM+SP<br>DS_FENET_TIME_SUM)   | SUM(SPDS_GUI_TIME_SUM+S<br>PDS_FENET_TIME_SUM)/SUM<br>(SPDS_STEP_COUNT_SUM)  | The sum of the client time components of the step.           |
| SUM(SPDS_GUI_TIME_SUM+SP<br>DS_FENET_TIME_SUM)/SUM(S<br>PDS_STEP_COUNT_SUM)  | SUM(SPDS_GUI_TIME_SUM+S<br>PDS_FENET_TIME_SUM)/SUM<br>(SPDS_STEP_COUNT_SUM)  | The average of the client time components of the step.       |

## PW\_SPTS\_TRAN\_STAT\_T

Transaction Statistics table (also has D, H, W, M, B, BT, BH, BD, BW, BM summary levels).

| Column name             | Column description  |
|-------------------------|---|
| SPTS_PWII_INSTANCE_ID   | The instance ID.  |
| SPTS_TIMESTAMP          | The end time of the transaction aligned to the time grain (5 minutes).  |
| SPTS_RECIEVED_TIMESTAMP | The received timestamp.   |
| SPTS_MINUTES_COUNT_SUM  | The minutes count.  |
| SPTS_PWHG_ID            | The hour group in the PW.   |
| SPTS_LOCALE_KEY         | The locale ID, on which the transaction took place.   |
| SPTS_HOST_KEY           | ID of the host machine, on which the transaction took place.  |
| SPTS_TRAN_KEY           | The ID of the transaction (Program or TCODE).   |
| SPTS_USER_KEY           | The ID of the user executing the transaction.   |
| SPTS_APP_KEY            | The ID of application the transaction's TCODE belongs to.   |
| SPTS_ORG_KEY            | The ID of the user's organization executing the transaction.  |
| SPTS_APPSVR_KEY         | The ID of the application server, on which the transaction occurred.  |
| SPTS_CLIENT             | The ID of the SAP client executing the step.  |
| SPTS_WORK_TYPE          | The transaction's work type (for example: Dialog, Update, Program).   |
| SPTS_TERMINAL_KEY       | The ID of the terminal which activated the transaction  |
| SPTS_URL_KEY            | The key of the url that activated the transaction   |
| SPTS_TRAN_TYPE          | The transaction's detailed type (for example: Login/Logout , Buffer synchronization, and so on).                      |
| SPTS_STEP_COUNT_SUM     | Number of steps per transaction.  |
| SPTS_TRAN_COUNT_SUM     | Number of identical transactions per time slice.  |
| SPTS_RFC_TIME_SUM       | Total time spent in the remote function calls (in seconds).   |
| SPTS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).   |
| SPTS_APP_TIME_SUM       | Total time spent in the application server (in seconds).  |
| SPTS_DB_TIME_SUM        | Total time spent in the database (In seconds).  |
| SPTS_LOAD_TIME_SUM      | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| SPTS_ENQ_TIME_SUM       | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| SPTS_CPU_TIME_SUM       | CPU time consumed by the work processes (in seconds).   |
| SPTS_ROLLWAIT_TIME_SUM  | Time spent in a rolled out status in the application server (in seconds).   |
| SPTS_GUI_TIME_SUM       | The GUI time (in seconds) (available from SAP version 4.6).   |
| SPTS_FENET_TIME_SUM     | The FE Net time (in seconds) (available from SAP version 4.6).  |

#### (Continued)

| Column name             | Column description   |
|-------------------------|--|
| SPTS_ROUNDTRIPS_SUM     | Number of round-trips performed (available from SAP version 4.6).  |
| SPTS_PRIVMODE_COUNT_SUM | Number of times a work process ran in private mode.  |
| SPTS_MEMORY_USED_SUM    | Amount of SAP's extended (shared) memory attributed to the application.  |
| SPTS_KB_TRANSFERRED_SUM | Amount of database data transferred (in KB).   |
| SPTS_INPUTBYTES_SUM     | Total number of bytes transferred from the front end to the application server.                                |
| SPTS_OUTPUTBYTES_SUM    | Total number of bytes transferred from the application server to the front end.                                |
| SPTS_PHY_READ_COUNT_SUM | Number of read access performed to the database (could not be satisfied from SAP buffers).                     |
| SPTS_DB_SEQ_REQS_SUM    | Number of requests for database sequential read.   |
| SPTS_DB_SEQ_CALL_SUM    | Number of actual calls to the database to satisfy a sequential read request.                                   |
| SPTS_DB_SEQ_TIME_SUM    | Time spent in the database for sequential reads (in seconds)   |
| SPTS_DB_DIR_REQS_SUM    | Number of requests for database direct read.   |
| SPTS_DB_DIR_CALL_SUM    | Number of actual calls to the database to satisfy a direct read request.                                       |
| SPTS_DB_DIR_TIME_SUM    | Time spent in the database for direct reads (in seconds).  |
| SPTS_DB_ROWS_READ_SUM   | Number of rows read from the database.   |
| SPTS_DB_READ_REQS_SUM   | Total number of database read requests.  |
| SPTS_DB_REQS_SUM        | Total number of database requests.   |
| SPTS_START_BIT_MAP      | Insight SmarTune bitmap.   |
| SPTS_GREEN_SUM          | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.         |
| SPTS_YELLOW_SUM         | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold. |
| SPTS_RED_SUM            | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

#### Expressions

| Oracle  | PRES   | Expression description                                   |
|---|--|--|
| SUM(SPTS_QUEUE_TIME_SUM+<br>SPTS_APP_TIME_SUM+SPTS_D<br>B_TIME_SUM+SPTS_FENET_TI<br>ME_SUM+SPTS_GUI_TIME_SUM<br>) | +SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET | The sum of all the response time components of the step. |

| Oracle   | PRES   | Expression description                                       |
|--|--|--|
| SUM(SPTS_QUEUE_TIME_SUM+<br>SPTS_APP_TIME_SUM+SPTS_D<br>B_TIME_SUM+SPTS_FENET_TI<br>ME_SUM+SPTS_GUI_TIME_SUM<br>)/SUM(SPTS_STEP_COUNT_SU<br>M) | SUM(SPTS_QUEUE_TIME_SUM<br>+SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET<br>_TIME_SUM+SPTS_GUI_TIME<br>_SUM)/SUM(SPTS_STEP_COU<br>NT_SUM) | The average of all the response time components of the step. |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)   | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)   | The sum of the client time components of the step.           |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)/SUM(S<br>PTS_STEP_COUNT_SUM)  | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)/SUM<br>(SPTS_STEP_COUNT_SUM)  | The average of the client time components of the step.       |

#### PW\_SPTS\_TRAN\_STAT\_AOLS\_T

Aggregated Transaction Statistics table. Group by: Instance ID, Timestamp, Hour group, Client, Work type, Locale, Appsvr, Organization, Application (also has D, H, W, M summary levels).

| Column name             | Column description  |
|-------------------------|---|
| SPTS_PWII_INSTANCE_ID   | The instance ID.  |
| SPTS_TIMESTAMP          | The end time of the transaction aligned to the time grain of the table (hour, day, and so on).                        |
| SPTS_RECIEVED_TIMESTAMP | The received timestamp.   |
| SPTS_MINUTES_COUNT_SUM  | The minutes count.  |
| SPTS_PWHG_ID            | The hour group in the PW.   |
| SPTS_LOCALE_KEY         | The locale ID, on which the transaction took place.   |
| SPTS_APP_KEY            | The application ID, to which the transaction's TCODE belongs.   |
| SPTS_ORG_KEY            | The ID of the user's organization executing the transaction.  |
| SPTS_APPSVR_KEY         | The ID of the application server where the transaction occurred.  |
| SPTS_CLIENT             | The ID of the SAP's client executing the step.  |
| SPTS_WORK_TYPE          | The transaction's work type (for example: Dialog, Update, Program).   |
| SPTS_STEP_COUNT_SUM     | Number of steps per transaction.  |
| SPTS_TRAN_COUNT_SUM     | Number of identical transactions per time slice.  |
| SPTS_RFC_TIME_SUM       | Total time spent in the remote function calls (in seconds).   |
| SPTS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).   |
| SPTS_APP_TIME_SUM       | Total time spent in the application server (in seconds).  |
| SPTS_DB_TIME_SUM        | Total time spent in the database (in seconds).  |
| SPTS_LOAD_TIME_SUM      | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |

#### (Continued)

| Column name             | Column description   |
|-------------------------|--|
| SPTS_ENQ_TIME_SUM       | Time spent waiting for a resource protected by a SAP lock (in seconds).  |
| SPTS_CPU_TIME_SUM       | CPU time consumed by the work processes (in seconds).  |
| SPTS_ROLLWAIT_TIME_SUM  | Time spent in a rolled out status in the application server (in seconds).                                      |
| SPTS_GUI_TIME_SUM       | The GUI time (in seconds) (available from SAP version 4.6).  |
| SPTS_FENET_TIME_SUM     | The FE Net time (in seconds) (available from SAP version 4.6).   |
| SPTS_ROUNDTRIPS_SUM     | Number of round-trips performed (available from SAP version 4.6).  |
| SPTS_PRIVMODE_COUNT_SUM | Number of times a work process ran in private mode.  |
| SPTS_MEMORY_USED_SUM    | Amount of SAP's extended (shared) memory attributed to the application.  |
| SPTS_KB_TRANSFERRED_SUM | Amount of database data transferred (in KB)  |
| SPTS_INPUTBYTES_SUM     | Total Number of bytes transferred from the front end to the application server.                                |
| SPTS_OUTPUTBYTES_SUM    | Total Number of bytes transferred from the application server to the front end.                                |
| SPTS_PHY_READ_COUNT_SUM | Number of read access performed to the database (could not be satisfied from SAP buffers).                     |
| SPTS_DB_SEQ_REQS_SUM    | Number of requests for database sequential read.   |
| SPTS_DB_SEQ_CALL_SUM    | Number of actual calls to the database to satisfy a sequential read request.                                   |
| SPTS_DB_SEQ_TIME_SUM    | Time spent in the database for sequential reads (in seconds).  |
| SPTS_DB_DIR_REQS_SUM    | Number of requests for database direct read.   |
| SPTS_DB_DIR_CALL_SUM    | Number of actual calls to the database to satisfy a direct read request.                                       |
| SPTS_DB_DIR_TIME_SUM    | Time spent in the database for direct reads (in seconds).  |
| SPTS_DB_ROWS_READ_SUM   | Number of rows read from the database.   |
| SPTS_DB_READ_REQS_SUM   | Total number of database read requests.  |
| SPTS_DB_REQS_SUM        | Total number of database requests.   |
| SPTS_GREEN_SUM          | Number of transactions that their SLA time does not exceed their Near breach or breach SLA thresholds.         |
| SPTS_YELLOW_SUM         | Number of transactions that their SLA time exceeds the Near breach SLA threshold but not the Breach threshold. |
| SPTS_RED_SUM            | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

#### Expressions

| Oracle   | PRES   | Expression description                                      |
|--|--|---|
| SUM(SPTS_QUEUE_TIME_SUM+<br>SPTS_APP_TIME_SUM+SPTS_D<br>B_TIME_SUM+SPTS_FENET_TI<br>ME_SUM+SPTS_GUI_TIME_SUM<br>)  | SUM(SPTS_QUEUE_TIME_SUM<br>+SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET<br>_TIME_SUM+SPTS_GUI_TIME<br>_SUM)  | The sum of all the response time components of the step     |
| <pre>SUM(SPTS_QUEUE_TIME_SUM+<br/>SPTS_APP_TIME_SUM+SPTS_D<br/>B_TIME_SUM+SPTS_FENET_TI<br/>ME_SUM+SPTS_GUI_TIME_SUM<br/>)/SUM(SPTS_STEP_COUNT_SU<br/>M)</pre> | <pre>SUM(SPTS_QUEUE_TIME_SUM<br/>+SPTS_APP_TIME_SUM+SPTS<br/>_DB_TIME_SUM+SPTS_FENET<br/>_TIME_SUM+SPTS_GUI_TIME<br/>_SUM)/SUM(SPTS_STEP_COU<br/>NT_SUM)</pre> | The average of all the response time components of the step |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)   | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)   | The sum of the client time components of the step           |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)/SUM(S<br>PTS_STEP_COUNT_SUM)  | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)/SUM<br>(SPTS_STEP_COUNT_SUM)  | The average of the client time components of the step       |

#### PW\_SPTS\_TRAN\_STAT\_OA\_T

Aggregated Transaction Statistics table. Group by: Instance ID, Timestamp, Hour group, Client, Work type, Organization, Application (also has D, H, W, M summary levels).

| Column name             | Column description   |
|-------------------------|--|
| SPTS_PWII_INSTANCE_ID   | The instance ID.   |
| SPTS_TIMESTAMP          | The end time of the transaction aligned to the time grain of the table (hour, day, and so on). |
| SPTS_RECIEVED_TIMESTAMP | The received timestamp.  |
| SPTS_MINUTES_COUNT_SUM  | The minutes count.   |
| SPTS_PWHG_ID            | The hour group in the PW.  |
| SPTS_APP_KEY            | The ID of application the transaction's TCODE belongs to.                                      |
| SPTS_CLIENT             | The ID of the SAP client executing the step.   |
| SPTS_WORK_TYPE          | The transaction's work type (for example: Dialog, Update, Program).                            |
| SPTS_STEP_COUNT_SUM     | Number of steps per transactions.  |
| SPTS_TRAN_COUNT_SUM     | Number of identical transactions per time slice.   |
| SPTS_RFC_TIME_SUM       | Total time spent in the remote function calls (in seconds).                                    |
| SPTS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).                          |
| SPTS_APP_TIME_SUM       | Total time spent in the application server (in seconds).                                       |

#### (Continued)

| Column name             | Column description  |
|-------------------------|---|
| SPTS_DB_TIME_SUM        | Total time spent in the database (in seconds).  |
| SPTS_LOAD_TIME_SUM      | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| SPTS_ENQ_TIME_SUM       | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| SPTS_CPU_TIME_SUM       | CPU time consumed by the work processes (in seconds).   |
| SPTS_ROLLWAIT_TIME_SUM  | Time spent in a rolled out status in the application server (in seconds).   |
| SPTS_GUI_TIME_SUM       | The GUI time (in seconds) (available from SAP version 4.6).   |
| SPTS_FENET_TIME_SUM     | The FE Net time (in seconds) (available from SAP version 4.6).  |
| SPTS_ROUNDTRIPS_SUM     | Number of round-trips performed (available from SAP version 4.6).   |
| SPTS_PRIVMODE_COUNT_SUM | Number of times a work process ran in private mode.   |
| SPTS_MEMORY_USED_SUM    | Amount of SAP's extended (shared) memory attributed to the application.   |
| SPTS_KB_TRANSFERRED_SUM | Amount of database data transferred (in KB).  |
| SPTS_INPUTBYTES_SUM     | Total number of bytes transferred from the front end to the application server.                                       |
| SPTS_OUTPUTBYTES_SUM    | Total number of bytes transferred from the application server to the front end.                                       |
| SPTS_PHY_READ_COUNT_SUM | Number of read access performed to the database (could not be satisfied from SAP buffers).                            |
| SPTS_DB_SEQ_REQS_SUM    | Number of requests for database sequential read.  |
| SPTS_DB_SEQ_CALL_SUM    | Number of actual calls to the database to satisfy a sequential read request.  |
| SPTS_DB_SEQ_TIME_SUM    | Time spent in the database for sequential reads (in seconds).   |
| SPTS_DB_DIR_REQS_SUM    | Number of requests for database direct read.  |
| SPTS_DB_DIR_CALL_SUM    | Number of actual calls to the database to satisfy a direct read request.  |
| SPTS_DB_DIR_TIME_SUM    | Time spent in the database for direct reads (in seconds).   |
| SPTS_DB_ROWS_READ_SUM   | Number of rows read from the database.  |
| SPTS_DB_READ_REQS_SUM   | Total number of database read requests.   |
| SPTS_DB_REQS_SUM        | Total number of database requests.  |
| SPTS_GREEN_SUM          | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.                |
| SPTS_YELLOW_SUM         | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold.        |
| SPTS_RED_SUM            | Number of transactions that their SLA time exceeds the Breach SLA threshold.  |

#### Expressions

| Oracle   | PRES   | Expression description                                      |
|--|--|---|
| SUM(SPTS_QUEUE_TIME_SUM+<br>SPTS_APP_TIME_SUM+SPTS_D<br>B_TIME_SUM+SPTS_FENET_TI<br>ME_SUM+SPTS_GUI_TIME_SUM<br>)  | SUM(SPTS_QUEUE_TIME_SUM<br>+SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET<br>_TIME_SUM+SPTS_GUI_TIME<br>_SUM)  | The sum of all the response time components of the step     |
| <pre>SUM(SPTS_QUEUE_TIME_SUM+<br/>SPTS_APP_TIME_SUM+SPTS_D<br/>B_TIME_SUM+SPTS_FENET_TI<br/>ME_SUM+SPTS_GUI_TIME_SUM<br/>)/SUM(SPTS_STEP_COUNT_SU<br/>M)</pre> | <pre>SUM(SPTS_QUEUE_TIME_SUM<br/>+SPTS_APP_TIME_SUM+SPTS<br/>_DB_TIME_SUM+SPTS_FENET<br/>_TIME_SUM+SPTS_GUI_TIME<br/>_SUM)/SUM(SPTS_STEP_COU<br/>NT_SUM)</pre> | The average of all the response time components of the step |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)   | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)   | The sum of the client time components of the step           |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)/SUM(S<br>PTS_STEP_COUNT_SUM)  | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)/SUM<br>(SPTS_STEP_COUNT_SUM)  | The average of the client time components of the step       |

#### PW\_SPTS\_TRAN\_STAT\_ATS\_T

Aggregated Transaction Statistics table. Group by: Instance ID, Timestamp, Hour group, Client, Work type, Transaction, program, Appsvr, Application (also has D, H, W, M summary levels).

| Column name             | Column description   |
|-------------------------|--|
| SPTS_PWII_INSTANCE_ID   | The instance ID.   |
| SPTS_TIMESTAMP          | The end time of the transaction aligned to the time grain of the table (hour, day, and so on). |
| SPTS_RECIEVED_TIMESTAMP | The received timestamp.  |
| SPTS_MINUTES_COUNT_SUM  | The minutes count.   |
| SPTS_PWHG_ID            | The hour group in the PW.  |
| SPTS_TRAN_KEY           | The transaction ID (TCODE or Program).   |
| SPTS_APP_KEY            | The ID of application the transaction TCODE belongs to.  |
| SPTS_APPSVR_KEY         | The ID of the application server where the transaction occurred.                               |
| SPTS_CLIENT             | The ID of the SAP client executing the step.   |
| SPTS_WORK_TYPE          | The transaction's work type (for example: Dialog, Update, Program).                            |
| SPTS_STEP_COUNT_SUM     | Number of steps per transaction.   |
| SPTS_TRAN_COUNT_SUM     | Number of identical transactions per time slice.   |
| SPTS_RFC_TIME_SUM       | Total time spent in the remote function calls (in seconds).                                    |

#### (Continued)

| Column name             | Column description  |
|-------------------------|---|
| SPTS_QUEUE_TIME_SUM     | Time spent waiting in the dispatcher for a work process (in seconds).   |
| SPTS_APP_TIME_SUM       | Total time spent in the application server (in seconds).  |
| SPTS_DB_TIME_SUM        | Total time spent in the database (in seconds).  |
| SPTS_LOAD_TIME_SUM      | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| SPTS_ENQ_TIME_SUM       | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| SPTS_CPU_TIME_SUM       | CPU time consumed by the work processes (in seconds).   |
| SPTS_ROLLWAIT_TIME_SUM  | Time spent in a rolled out status in the application server (in seconds).   |
| SPTS_GUI_TIME_SUM       | The GUI time (in seconds) (available from SAP version 4.6).   |
| SPTS_FENET_TIME_SUM     | The FE Net time (in seconds) (available from SAP version 4.6).  |
| SPTS_ROUNDTRIPS_SUM     | Number of round-trips performed (available from SAP version 4.6).   |
| SPTS_PRIVMODE_COUNT_SUM | Number of times a work process ran in private mode.   |
| SPTS_MEMORY_USED_SUM    | Amount of SAP's extended (shared) memory attributed to the application.   |
| SPTS_KB_TRANSFERRED_SUM | Amount of database data transferred (in KB).  |
| SPTS_INPUTBYTES_SUM     | Total number of bytes transferred from the front end to the application server.                                       |
| SPTS_OUTPUTBYTES_SUM    | Total number of bytes transferred from the application server to the front end.                                       |
| SPTS_PHY_READ_COUNT_SUM | Number of read access performed to the database (could not be satisfied from SAP buffers).                            |
| SPTS_DB_SEQ_REQS_SUM    | Number of requests for database sequential read.  |
| SPTS_DB_SEQ_CALL_SUM    | Number of actual calls to the database to satisfy a sequential read request.  |
| SPTS_DB_SEQ_TIME_SUM    | Time spent in the database for sequential reads (in seconds).   |
| SPTS_DB_DIR_REQS_SUM    | Number of requests for database direct read.  |
| SPTS_DB_DIR_CALL_SUM    | Number of actual calls to the database to satisfy a direct read request.  |
| SPTS_DB_DIR_TIME_SUM    | Time spent in the database for direct reads (in seconds).   |
| SPTS_DB_ROWS_READ_SUM   | Number of rows read from the database.  |
| SPTS_DB_READ_REQS_SUM   | Total number of database read requests.   |
| SPTS_DB_REQS_SUM        | Total number of database requests.  |
| SPTS_GREEN_SUM          | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.                |
| SPTS_YELLOW_SUM         | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold.        |
| SPTS_RED_SUM            | Number of transactions that their SLA time exceeds the Breach SLA threshold.  |

#### Expressions

| Oracle   | PRES  | Expression description                                       |
|--|---|--|
| SUM(SPTS_QUEUE_TIME_SUM+<br>SPTS_APP_TIME_SUM+SPTS_D<br>B_TIME_SUM+SPTS_FENET_TI<br>ME_SUM+SPTS_GUI_TIME_SUM<br>)  | SUM(SPTS_QUEUE_TIME_SUM<br>+SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET<br>_TIME_SUM+SPTS_GUI_TIME<br>_SUM) | The sum of all the response time components of the step.     |
| <pre>SUM(SPTS_QUEUE_TIME_SUM+<br/>SPTS_APP_TIME_SUM+SPTS_D<br/>B_TIME_SUM+SPTS_FENET_TI<br/>ME_SUM+SPTS_GUI_TIME_SUM<br/>)/SUM(SPTS_STEP_COUNT_SU<br/>M)</pre> | +SPTS_APP_TIME_SUM+SPTS<br>_DB_TIME_SUM+SPTS_FENET  | The average of all the response time components of the step. |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)   | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)  | The sum of the client time components of the step.           |
| SUM(SPTS_GUI_TIME_SUM+SP<br>TS_FENET_TIME_SUM)/SUM(S<br>PTS_STEP_COUNT_SUM)  | SUM(SPTS_GUI_TIME_SUM+S<br>PTS_FENET_TIME_SUM)/SUM<br>(SPTS_STEP_COUNT_SUM)                                       | The average of the client time components of the step.       |

## PW\_SPTS\_TRAN\_STAT\_LS\_T

Aggregated Transaction Statistics table, group by - Instance ID, Timestamp, Hour group, Client, Work type, Locale, Appsvr, url (also has D, H, W, M summary levels).

| Column name             | Column description   |
|-------------------------|--|
| spts_pwii_instance_id   | The instance ID.   |
| spts_timestamp          | The end time of the transaction aligned to the time grain (5 minutes). |
| spts_recieved_timestamp | The received timestamp.  |
| spts_minutes_count_sum  | The minutes count.   |
| spts_pwhg_id            | The hour group in the PW.  |
| spts_client             | The ID of the SAP client executing the step.                           |
| spts_work_type          | The transaction's work type (for example: Dialog, Update, Program).    |
| spts_locale_key         | The locale ID, on which the transaction took place.                    |
| spts_appsvr_key         | The ID of the application server, on which the transaction occurred.   |
| spts_url_key            | The key of the url that activated the transaction                      |
| spts_step_count_sum     | Number of steps per transaction.                                       |
| spts_tran_count_sum     | Number of identical transactions per time slice.                       |
| spts_queue_time_sum     | Time spent waiting in the dispatcher for a work process (in seconds).  |
| spts_rfc_time_sum       | Total time spent in the remote function calls (in seconds).            |

| Column name                   | Column description  |
|-------------------------------|---|
| spts_app_time_sum             | Total time spent in the application server (in seconds).  |
| spts_db_time_sum              | Total time spent in the database (In seconds).  |
| spts_load_time_sum            | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| spts_enq_time_sum             | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| spts_cpu_time_sum             | CPU time consumed by the work processes (in seconds).   |
| spts_rollwait_time_sum        | Time spent in a rolled out status in the application server (in seconds).   |
| spts_gui_time_sum             | The GUI time (in seconds) (available from SAP version 4.6).   |
| spts_fenet_time_sum           | The FE Net time (in seconds) (available from SAP version 4.6).  |
| spts_roundtrips_sum           | Number of round-trips performed (available from SAP version 4.6).   |
| spts_privmode_count_sum       | Number of times a work process ran in private mode.   |
| spts_memory_used_sum          | Amount of SAP's extended (shared) memory attributed to the application.   |
| spts_kb_transferred_sum       | Amount of database data transferred (in KB).  |
| spts_inputbytes_sum           | Total number of bytes transferred from the front end to the application server.                                       |
| spts_outputbytes_sum          | Total number of bytes transferred from the application server to the front end.                                       |
| spts_phy_read_count_sum       | Number of read access performed to the database (could not be satisfied from SAP buffers).                            |
| spts_db_seq_reqs_sum          | Number of requests for database sequential read.  |
| spts_db_seq_call_sum          | Number of actual calls to the database to satisfy a sequential read request.  |
| spts_db_seq_time_sum          | Time spent in the database for sequential reads (in seconds)  |
| spts_db_dir_reqs_sum          | Number of requests for database direct read.  |
| spts_db_dir_call_sum          | Number of actual calls to the database to satisfy a direct read request.  |
| spts_db_dir_time_sum          | Time spent in the database for direct reads (in seconds).   |
| spts_db_rows_read_sum         | Number of rows read from the database.  |
| spts_db_read_reqs_sum         | Total number of database read requests.   |
| spts_db_reqs_sum              | Total number of database requests.  |
| spts_rfc_srv_dest_count_sum   | FFU (For Future Use)  |
| spts_rfc_srv_calls_count_sum  | FFU   |
| spts_rfc_srv_call_time_sum    | FFU   |
| spts_rfc_srv_exe_time_sum     | FFU   |
| spts_rfc_srv_data_sent_sum    | FFU   |
| spts_rfc_srv_data_rcv_sum     | FFU   |
| spts_rfc_cInt_dest_count_sum  | FFU   |
| spts_rfc_cInt_calls_count_sum | FFU   |

| Column name                 | Column description   |
|-----------------------------|--|
| spts_rfc_clnt_call_time_sum | FFU  |
| spts_rfc_cInt_exe_time_sum  | FFU  |
| spts_rfc_cInt_data_sent_sum | FFU  |
| spts_rfc_cInt_data_rcv_sum  | FFU  |
| spts_green_sum              | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.         |
| spts_yellow_sum             | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold. |
| spts_red_sum                | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

## PW\_SPTS\_TRAN\_STAT\_OLSU\_T

Aggregated Transaction Statistics table, group by - Instance ID, Timestamp, Hour group, Client, Work type, user, terminal, locale, appserver, organization, url (also has D, H, W, M summary levels).

| Column name             | Column description  |
|-------------------------|---|
| spts_pwii_instance_id   | The instance ID.  |
| spts_timestamp          | The end time of the transaction aligned to the time grain (5 minutes).  |
| spts_recieved_timestamp | The received timestamp.   |
| spts_minutes_count_sum  | The minutes count.  |
| spts_pwhg_id            | The hour group in the PW.   |
| spts_client             | The ID of the SAP client executing the step.  |
| spts_work_type          | The transaction's work type (for example: Dialog, Update, Program).   |
| spts_locale_key         | The locale ID, on which the transaction took place.   |
| spts_user_key           | The ID of the application server, on which the transaction occurred.  |
| spts_terminal_key       | The key of the url that activated the transaction   |
| spts_appsvr_key         | Number of steps per transaction.  |
| spts_org_key            | Number of identical transactions per time slice.  |
| spts_url_key            | Time spent waiting in the dispatcher for a work process (in seconds).   |
| spts_step_count_sum     | Total time spent in the remote function calls (in seconds).   |
| spts_tran_count_sum     | Total time spent in the application server (in seconds).  |
| spts_queue_time_sum     | Total time spent in the database (In seconds).  |
| spts_rfc_time_sum       | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| spts_app_time_sum       | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| spts_db_time_sum        | CPU time consumed by the work processes (in seconds).   |

| Column name                   | Column description   |
|-------------------------------|--|
| spts_load_time_sum            | Time spent in a rolled out status in the application server (in seconds).                  |
| spts_enq_time_sum             | The GUI time (in seconds) (available from SAP version 4.6).                                |
| spts_cpu_time_sum             | The FE Net time (in seconds) (available from SAP version 4.6).                             |
| spts_rollwait_time_sum        | Number of round-trips performed (available from SAP version 4.6).                          |
| spts_gui_time_sum             | Number of times a work process ran in private mode.  |
| spts_fenet_time_sum           | Amount of SAP's extended (shared) memory attributed to the application.                    |
| spts_roundtrips_sum           | Amount of database data transferred (in KB).   |
| spts_privmode_count_sum       | Total number of bytes transferred from the front end to the application server.            |
| spts_memory_used_sum          | Total number of bytes transferred from the application server to the front end.            |
| spts_kb_transferred_sum       | Number of read access performed to the database (could not be satisfied from SAP buffers). |
| spts_inputbytes_sum           | Number of requests for database sequential read.   |
| spts_outputbytes_sum          | Number of actual calls to the database to satisfy a sequential read request.               |
| spts_phy_read_count_sum       | Time spent in the database for sequential reads (in seconds)                               |
| spts_db_seq_reqs_sum          | Number of requests for database direct read.   |
| spts_db_seq_call_sum          | Number of actual calls to the database to satisfy a direct read request.                   |
| spts_db_seq_time_sum          | Time spent in the database for direct reads (in seconds).                                  |
| spts_db_dir_reqs_sum          | Number of rows read from the database.   |
| spts_db_dir_call_sum          | Total number of database read requests.  |
| spts_db_dir_time_sum          | Total number of database requests.   |
| spts_db_rows_read_sum         | The instance ID.   |
| spts_db_read_reqs_sum         | The end time of the transaction aligned to the time grain (5 minutes).                     |
| spts_db_reqs_sum              | The received timestamp.  |
| spts_rfc_srv_dest_count_sum   | FFU (For Future Use)   |
| spts_rfc_srv_calls_count_sum  | FFU  |
| spts_rfc_srv_call_time_sum    | FFU  |
| spts_rfc_srv_exe_time_sum     | FFU  |
| spts_rfc_srv_data_sent_sum    | FFU  |
| spts_rfc_srv_data_rcv_sum     | FFU  |
| spts_rfc_cInt_dest_count_sum  | FFU  |
| spts_rfc_cInt_calls_count_sum | FFU  |
| spts_rfc_cInt_call_time_sum   | FFU  |
| spts_rfc_cInt_exe_time_sum    | FFU  |

| Column name                 | Column description   |
|-----------------------------|--|
| spts_rfc_cInt_data_sent_sum | FFU  |
| spts_rfc_cInt_data_rcv_sum  | FFU  |
| spts_green_sum              | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.         |
| spts_yellow_sum             | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold. |
| spts_red_sum                | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

#### PW\_SPTS\_TRAN\_STAT\_H\_T

Aggregated Transaction Statistics table, group by - Instance ID, Timestamp, Hour group, host (also has D, H, W, M summary levels)

| Column name             | Column description  |
|-------------------------|---|
| spts_pwii_instance_id   | The instance ID.  |
| spts_timestamp          | The end time of the transaction aligned to the time grain (5 minutes).  |
| spts_recieved_timestamp | The received timestamp.   |
| spts_minutes_count_sum  | The minutes count.  |
| spts_pwhg_id            | The hour group in the PW.   |
| spts_host_key           | The ID of the SAP client executing the step.  |
| spts_step_count_sum     | The transaction's work type (for example: Dialog, Update, Program).   |
| spts_tran_count_sum     | The locale ID, on which the transaction took place.   |
| spts_queue_time_sum     | The ID of the application server, on which the transaction occurred.  |
| spts_rfc_time_sum       | The key of the url that activated the transaction   |
| spts_app_time_sum       | Number of steps per transaction.  |
| spts_db_time_sum        | Number of identical transactions per time slice.  |
| spts_load_time_sum      | Time spent waiting in the dispatcher for a work process (in seconds).   |
| spts_enq_time_sum       | Total time spent in the remote function calls (in seconds).   |
| spts_cpu_time_sum       | Total time spent in the application server (in seconds).  |
| spts_rollwait_time_sum  | Total time spent in the database (In seconds).  |
| spts_gui_time_sum       | Total time spent on loading from the database and generate objects like ABAP source code, CUA and screen information. |
| spts_fenet_time_sum     | Time spent waiting for a resource protected by a SAP lock (in seconds).   |
| spts_roundtrips_sum     | CPU time consumed by the work processes (in seconds).   |
| spts_privmode_count_sum | Time spent in a rolled out status in the application server (in seconds).   |
| spts_memory_used_sum    | The GUI time (in seconds) (available from SAP version 4.6).   |

| Column name                   | Column description   |
|-------------------------------|--|
| spts_kb_transferred_sum       | The FE Net time (in seconds) (available from SAP version 4.6).   |
| spts_inputbytes_sum           | Number of round-trips performed (available from SAP version 4.6).  |
| spts_outputbytes_sum          | Number of times a work process ran in private mode.  |
| spts_phy_read_count_sum       | Amount of SAP's extended (shared) memory attributed to the application.  |
| spts_db_seq_reqs_sum          | Amount of database data transferred (in KB).   |
| spts_db_seq_call_sum          | Total number of bytes transferred from the front end to the application server.                                |
| spts_db_seq_time_sum          | Total number of bytes transferred from the application server to the front end.                                |
| spts_db_dir_reqs_sum          | Number of read access performed to the database (could not be satisfied from SAP buffers).                     |
| spts_db_dir_call_sum          | Number of requests for database sequential read.   |
| spts_db_dir_time_sum          | Number of actual calls to the database to satisfy a sequential read request.                                   |
| spts_db_rows_read_sum         | Time spent in the database for sequential reads (in seconds)   |
| spts_db_read_reqs_sum         | Number of requests for database direct read.   |
| spts_db_reqs_sum              | Number of actual calls to the database to satisfy a direct read request.                                       |
| spts_rfc_srv_dest_count_sum   | FFU (For Future Use)   |
| spts_rfc_srv_calls_count_sum  | FFU  |
| spts_rfc_srv_call_time_sum    | FFU  |
| spts_rfc_srv_exe_time_sum     | FFU  |
| spts_rfc_srv_data_sent_sum    | FFU  |
| spts_rfc_srv_data_rcv_sum     | FFU  |
| spts_rfc_cInt_dest_count_sum  | FFU  |
| spts_rfc_cInt_calls_count_sum | FFU  |
| spts_rfc_cInt_call_time_sum   | FFU  |
| spts_rfc_cInt_exe_time_sum    | FFU  |
| spts_rfc_cInt_data_sent_sum   | FFU  |
| spts_rfc_cInt_data_rcv_sum    | FFU  |
| spts_green_sum                | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.         |
| spts_yellow_sum               | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold. |
| spts_red_sum                  | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

#### PW\_SPSS\_APPSVR\_AVAIL\_STAT\_T

Application Server Availability table (also has D, H, W, M summary levels).

| Column name                      | Column description                            |
|----------------------------------|---|
| SPSS_PWII_INSTANCE_ID            | The instance ID.                              |
| SPSS_TIMESTAMP                   | The timestamp.                                |
| SPSS_PWHG_ID                     | The hour group ID.                            |
| SPSS_RECIEVED_TIMESTAMP          | The received timestamp.                       |
| SPSS_MINUTES_COUNT_SUM           | The minutes count.                            |
| SPSS_APPSVR_KEY                  | The application server key.                   |
| SPSS_REAL_AVAILABILITY_A<br>VG   | The availability value.                       |
| SPSS_AVAIL_WITH_DOWNTIME<br>_AVG | The availability value with planned downtime. |
| SPSS_TOTAL_COUNT_SUM             | Total sampling count in the time slice.       |

## PW\_SPFS\_FUNCTION\_STAT\_T

Function (RFC) Statistics table (also has D, H, W, M summary levels).

| Column name             | Column description   |
|-------------------------|--|
| SPFS_PWII_INSTANCE_ID   | The instance ID.   |
| SPFS_TIMESTAMP          | The end time of the RFC aligned to the time grain of the table (hour, day, and so on). |
| SPFS_RECIEVED_TIMESTAMP | The received timestamp.  |
| SPFS_MINUTES_COUNT_SUM  | The minutes count.   |
| SPFS_PWHG_ID            | The hour group in the PW.  |
| SPFS_TRAN_KEY           | The transaction ID (TCODE or Program).   |
| SPFS_APP_KEY            | The ID of application the transaction's TCODE belongs to.                              |
| SPFS_ORG_KEY            | The ID of organization the user belongs to.  |
| SPFS_APPSVR_KEY         | The ID of the application server where the RFC occurred.                               |
| SPFS_LOCALE_KEY         | The locale ID of the user running the RFC.   |
| SPFS_USER_KEY           | The ID of the SAP user executing the RFC.  |
| SPFS_CLIENT             | The ID of the SAP client executing the step.   |
| SPFS_FUNCTION_KEY       | The ID of the Function executed.   |
| SPFS_PROGRAM_KEY        | The ID of the Program to which the Function belongs.                                   |

#### (Continued)

| Column name        | Column description   |
|--------------------|--|
| SPFS_RFC_USER_KEY  | The RFC User ID.   |
| SPFS_IP_KEY        | The ID of the IP running the RFC.  |
| SPFS_REMOTE_IP_KEY | The ID of the Remote IP running the RFC.   |
| SPFS_COUNT_SUM     | Count of RFC.  |
| SPFS_RECIEVE_SUM   | Bytes Received.  |
| SPFS_SEND_SUM      | Bytes Sent.  |
| SPFS_EXE_TIME_SUM  | Execution Time.  |
| SPFS_WAIT_TIME_SUM | Wait Time.   |
| SPFS_TARGET        | Target.  |
| SPFS_DEST          | Destination.   |
| SPFS_HOST          | Host.  |
| SPFS_CALLER        | Caller.  |
| SPFS_TID           | Transaction ID.  |
| SPFS_GREEN_SUM     | Number of transactions that their SLA time does not exceed their Near Breach or Breach SLA thresholds.         |
| SPFS_YELLOW_SUM    | Number of transactions that their SLA time exceeds the Near Breach SLA threshold but not the Breach threshold. |
| SPFS_RED_SUM       | Number of transactions that their SLA time exceeds the Breach SLA threshold.                                   |

## PW\_SPLS\_LOCALE\_STAT\_T

Local availability table (also has D, H, W, M summary levels).

| Column name                      | Column description                            |
|----------------------------------|---|
| SPLS_PWII_INSTANCE_ID            | The instance ID.                              |
| SPLS_TIMESTAMP                   | The timestamp.                                |
| SPLS_PWHG_ID                     | The hour group ID.                            |
| SPLS_RECIEVED_TIMESTAMP          | The received timestamp.                       |
| SPLS_MINUTES_COUNT_SUM           | The minutes count.                            |
| SPLS_LOCALE_KEY                  | The locale key.                               |
| SPLS_REAL_AVAILABILITY_A<br>VG   | The availability value.                       |
| SPLS_AVAIL_WITH_DOWNTIME<br>_AVG | The availability value with planned downtime. |
| SPLS_LOCALE_COUNT_SUM            | Count.  |

| Column name                    | Column description |
|--------------------------------|--------------------|
| SPLS_LOCALE_SMPL_COUNT_S<br>UM | Samples count.     |
| SPLS_LOCALE_TIME_AVG           | Time average.      |
| SPLS_LOCALE_TIME_MAX           | Time maximum.      |

## PW\_SPUD\_CURR\_USER\_DIM\_WITH\_ORG

View for User dimensions with Organizations.

| Column name           | Column description       |
|-----------------------|--------------------------|
| SPUD_PWII_INSTANCE_ID | The instance ID.         |
| SPUD_USER_NAME        | The user name.           |
| SPUD_CLIENT           | The client number.       |
| SPUD_ORG_NAME         | The user's organization. |
| SPUD_USER_AREA        | The user's user area.    |

## PW\_SPOV\_ORGLOCALE\_VIEW

\_USER\_DIM\_WITH\_ORG joined with locale dimension.

| Column name       | Column description    |
|-------------------|-----------------------|
| SPOV_TIMESTAMP    | The timestamp.        |
| SPOV_INSTANCE_KEY | The instance ID.      |
| SPOV_LOCALE_KEY   | The locale key.       |
| SPOV_ORG_KEY      | The organization key. |

#### PW\_SPCD\_CLIENT\_DIM

Client dimension.

| Column name           | Column description |
|-----------------------|--------------------|
| SPCD_PWII_INSTANCE_ID | The instance ID.   |
| SPCD_CLIENT_KEY       | The client key.    |
| SPCD_SID              | The client SID.    |
| SPCD_CLIENT           | The client name.   |

| Column name         | Column description                          |
|---------------------|---|
| SPCD_CHANGED_DT     | The date when this record was last changed. |
| SPCD_CLIENT_COMMENT | Comment.                                    |
| SPCD_IS_DELETED     | Was this record deleted?                    |
| SPCD_CLIENT_LANG    | The client's language.                      |

#### PW\_SPTD\_TRAN\_DIM

Transaction dimension.

| Column name           | Column description                          |
|-----------------------|---|
| SPTD_PWII_INSTANCE_ID | The instance ID.                            |
| SPTD_APP_NAME         | The application name of the transaction     |
| SPTD_CHANGE_DATE      | The date when this record was last changed. |
| SPTD_IS_TCODE         | Is this key a TCODE or a program?           |
| SPTD_TRAN_NAME        | The transaction name.                       |
| SPTD_IS_DELETED       | Was this record deleted?                    |

## PW\_SPLD\_LOCALE\_DIM

Locale dimension.

| Column name      | Column description                          |
|------------------|---|
| SPLD_LOCALE_KEY  | The locale key.                             |
| SPLD_LOCALE_NAME | The locale name.                            |
| SPLD_SAPROUTER   | SAP router string.                          |
| SPLD_DESCRIPTION | The locale description.                     |
| SPLD_USEICMP     | Do we use ICMP to connect to the locale?    |
| SPLD_CHANGED_DT  | The date when this record was last changed. |
| SPLD_START_DT    | The start date of the record.               |
| SPLD_END_DT      | The end date of the record.                 |
| SPLD_IS_DELETED  | Was this record deleted?                    |

#### PW\_SPID\_INSTANCE\_DIM

Instance dimension view.

| Column name           | Column description               |
|-----------------------|----------------------------------|
| SPID_ENVIRONMENT_KEY  | The instance environment key.    |
| SPID_APPTIER_KEY      | The instance AppTier key.        |
| SPID_PWII_INSTANCE_ID | The instance ID.                 |
| SPID_INSTANCE_NAME    | The instance name.               |
| SPID_CREATE_TIME      | The time the record was created. |
| SPID_UPDATE_TIME      | The time the record was updated. |
| SPID_IS_DELETED       | Was this record deleted?         |

## PW\_SPUL\_USERLOCALE\_DIM

User Locale dimension.

| Column name           | Column description                          |
|-----------------------|---|
| SPUL_PWII_INSTANCE_ID | The instance ID.                            |
| SPUL_USERLOCALE_KEY   | The user locale key.                        |
| SPUL_CLIENT           | The client.                                 |
| SPUL_USER_AREA        | The user area.                              |
| SPUL_LOCALE_KEY       | The locale key.                             |
| SPUL_CHANGED_DT       | The date when this record was last changed. |
| SPUL_START_DT         | The start date of the record.               |
| SPUL_END_DT           | The end date of the record.                 |
| SPUL_IS_DELETED       | Was this record deleted?                    |

#### PW\_SPUD\_USER\_DIM

User dimension.

| Column name           | Column description |
|-----------------------|--------------------|
| SPUD_PWII_INSTANCE_ID | The instance ID.   |
| SPUD_USER_NAME        | The user name.     |
| SPUD_CLIENT           | The client number. |
| SPUD_USER_TYPE        | The user type.     |

#### (Continued)

| Column name     | Column description                          |
|-----------------|---|
| SPUD_DEPT       | The user's department.                      |
| SPUD_BLDG       | The user's building.                        |
| SPUD_COST       | The user's cost center.                     |
| SPUD_LOC        | The user's location.                        |
| SPUD_REGION     | The user's region.                          |
| SPUD_ACCT       | The user's account.                         |
| SPUD_CLS        | The user's group.                           |
| SPUD_NAME0      | The user's name 0.                          |
| SPUD_NAME1      | The user's name 1.                          |
| SPUD_NAME2      | The user's name 2.                          |
| SPUD_NAME 3     | The user's name 3.                          |
| SPUD_CHANGED_DT | The date when this record was last changed. |
| SPUD_IS_DELETED | Was this record deleted?                    |

#### PW\_SPSQ\_SEQ

Sequel table.

| Column name        | Column description |
|--------------------|--------------------|
| SPSQ_TABLE_COLUMN  | The table column.  |
| SPSQ_NEXT_FREE_SEQ | Next free sequel.  |

#### PW\_SPID\_AI\_SIDS

SIDs table.

| Column name      | Column description                  |
|------------------|-------------------------------------|
| SPID_SID_KEY     | The SID key.                        |
| SPID_SYSTEM_NAME | The system name.                    |
| SPID_SID_NAME    | The ID name.                        |
| SPID_SID_SYSNO   | The SID system number.              |
| SPID_SAP_IMPHOST | The SAP implement host.             |
| SPID_SAP_RELEASE | The SAP release.                    |
| SPID_SID_USER    | The user used to connect to the SID |

| Column name                     | Column description  |
|---------------------------------|---|
| SPID_SID_PASSTHROUGH_SER<br>VER | Deprecated - not in use                                     |
| SPID_DB_STANDALONE              | Is this SID use stand alone DB server                       |
| SPID_RFC_DEST                   | Routing string for RFC connection                           |
| SPID_CENTRAL_INSTANCE           | Application server key of the central instance              |
| SPID_DB_HOST_NAME               | Host name of the DB server                                  |
| SPID_SID_LAST_IMPORT_DAT<br>E   | Deprecated - not in use                                     |
| SPID_USE_SAPROUTER              | Boolean indication whether to use routing string connection |
| SPID_SID_PASS                   | The password for the user                                   |
| SPID_SID_DEFCLIENT              | The SID default client.                                     |
| SPID_USER_LOC_FIELD             | The user locale field.                                      |
| SPID_USER_ORG_FIELD             | The user organization field.                                |

#### PW\_SPDI\_DISABLED\_INSTANCES

Disabled instances table.

| Column name      | Column description |
|------------------|--------------------|
| SPDI_INSTANCE_ID | The instance ID.   |

#### PW\_SPID\_AI\_SIDS\_VIEW

SIDs view.

| Column name        | Column description      |
|--------------------|-------------------------|
| SPID_SID_KEY       | The SID ID.             |
| SPID_SYSTEM_NAME   | The system name.        |
| SPID_SID_NAME      | The SID name.           |
| SPID_SID_SYSNO     | The SID system number.  |
| SPID_SAP_IMPHOST   | The SAP implement host. |
| SPID_SAP_RELEASE   | The SAP release.        |
| SPID_SID_USER      | The SID user.           |
| SPID_SID_PASS      | The SID password.       |
| SPID_SID_DEFCLIENT | The SID default client. |

| Column name                     | Column description                  |
|---------------------------------|-------------------------------------|
| SPID_SID_DEFAPPSVR              | The SID default application server. |
| SPID_USER_LOC_FIELD             | The user locale field.              |
| SPID_USER_ORG_FIELD             | The user organization field.        |
| SPID_SID_PASSTHROUGH_SER<br>VER | The SID pass through server.        |
| SPID_DB_STANDALONE              | Is the DB standalone?               |
| SPID_RFC_DEST                   | The RFC destination.                |
| SPID_CENTRAL_INSTANCE           | The central instance.               |
| SPID_DB_HOST_NAME               | The DB host name.                   |
| SPID_SID_LAST_IMPORT_DAT<br>E   | The SID last import date.           |
| SPID_USE_SAPROUTER              | Use the SAP router.                 |
| SPID_SERVER                     | The server                          |
| SPID_INTERPOINT_NAME            | The Interpoint name.                |

#### PW\_SPAS\_AI\_APPSVRS

Application servers view.

| Column name           | Column description                 |
|-----------------------|------------------------------------|
| SPAS_APPSVR_KEY       | The application server key.        |
| SPAS_SID_KEY          | The SID key.                       |
| SPAS_APPSVR_SID       | The application server SID.        |
| SPAS_APPSVR_NAME      | The application server name.       |
| SPAS_APPSVR_SYSNO     | The application server sys number. |
| SPAS_APPSVR_SAPROUTER | The application server SAP router. |
| SPAS_INSM_ID          | The instance server.               |

## PW\_SPLC\_AI\_LOCALES

Locales view.

| Column name   | Column description |
|---------------|--------------------|
| SPLC_LOC_KEY  | The locale key.    |
| SPLC_LOC_NAME | The locale name.   |

| Column name          | Column description      |
|----------------------|-------------------------|
| SPLC_LOC_SAPROUTER   | The locale SAP router.  |
| SPLC_LOC_DESCRIPTION | The locale description. |
| SPLC_USEICMP         | Use ICMP.               |

#### PW\_SPCL\_AI\_CLIENTS

Clients view.

| Column name              | Column description        |
|--------------------------|---------------------------|
| SPCL_CLIENT_KEY          | The client key.           |
| SPCL_CLIENT_NAME         | The client name,          |
| SPCL_CLIENT_COMMENT      | The client comment.       |
| SPCL_CLIENT_LANG         | The client's language.    |
| SPCL_CLIENT_DOCOLLECTION | The client do collection. |
| SPCL_SID                 | The SID.                  |
| SPCL_SID_KEY             | The SID key.              |

## PW\_SPSL\_AI\_SYSLOC

System locale view.

| Column name     | Column description |
|-----------------|--------------------|
| SPSL_SYS_KEY    | The system key.    |
| SPSL_LOC_KEY    | The locale key.    |
| SPSL_CHANGED_DT | The changed date.  |
| SPSL_IS_DELETED | Is deleted.        |

## AI\_AVAILAGENT\_APPSERVER\_VIEW

Avail agent application server view.

| Column name | Column description           |
|-------------|------------------------------|
| SID_KEY     | The SID key.                 |
| APPSVR_KEY  | The application server key.  |
| APPSVR_NAME | The application server name. |

| Column name      | Column description                    |
|------------------|---------------------------------------|
| APPSVR_SYSNO     | The application server system number. |
| APPSVR_SAPROUTER | The application server SAP router.    |
| SID_NAME         | The SID name.                         |
| SID_DEFCLIENT    | The SID default client.               |
| SID_USER         | The SID user.                         |
| SID_PASS         | The SID password.                     |
| SAP_RELEASE      | The SAP release.                      |
| CLIENT_LANG      | The client's language.                |

#### PW\_SPUN\_USER\_N

PW normalization table for users.

| Column name       | Column description     |
|-------------------|------------------------|
| SPUN_ID           | user id                |
| SPUN_HASH_VALUE   | pw internal hash value |
| SPUN_STRING_VALUE | user name              |
| SPUN_TIMESTAMP    | creation time          |

## PW\_SPTN\_TRAN\_N

PW normalization table for transactions

| Column name       | Column description     |
|-------------------|------------------------|
| SPTN_ID           | transaction id         |
| SPTN_HASH_VALUE   | pw internal hash value |
| SPTN_STRING_VALUE | transaction name       |
| SPTN_TIMESTAMP    | creation time          |

#### PW\_SPPN\_PGM\_N

PW normalization table for programs.

| Column name     | Column description     |
|-----------------|------------------------|
| SPPN_ID         | program id             |
| SPPN_HASH_VALUE | pw internal hash value |

| Column name       | Column description |
|-------------------|--------------------|
| SPPN_STRING_VALUE | program name       |
| SPPN_TIMESTAMP    | creation time      |

## PW\_SPRN\_APPSVR\_N

PW normalization table for application servers.

| Column name       | Column description      |
|-------------------|-------------------------|
| SPRN_ID           | application server id   |
| SPRN_HASH_VALUE   | pw internal hash value  |
| SPRN_STRING_VALUE | application server name |
| SPRN_TIMESTAMP    | creation time           |

#### PW\_SPHN\_HOST\_N

PW normalization table for server hosts.

| Column name       | Column description     |
|-------------------|------------------------|
| SPHN_ID           | host id                |
| SPHN_HASH_VALUE   | pw internal hash value |
| SPHN_STRING_VALUE | host name              |
| SPHN_TIMESTAMP    | creation time          |

#### PW\_SPFN\_FUNC\_N

PW normalization table for functions.

| Column name       | Column description     |
|-------------------|------------------------|
| SPFN_ID           | function id            |
| SPFN_HASH_VALUE   | pw internal hash value |
| SPFN_STRING_VALUE | function name          |
| SPFN_TIMESTAMP    | creation time          |

#### PW\_SPON\_ORG\_N

PW normalization table for organizations

| Column name       | Column description     |
|-------------------|------------------------|
| SPON_ID           | organization id        |
| SPON_HASH_VALUE   | pw internal hash value |
| SPON_STRING_VALUE | organization name      |
| SPON_TIMESTAMP    | creation time          |

#### PW\_SPIN\_IP\_N

PW normalization table for IP addresses.

| Column name       | Column description     |
|-------------------|------------------------|
| SPIN_ID           | ip id                  |
| SPIN_HASH_VALUE   | pw internal hash value |
| SPIN_STRING_VALUE | ip name                |
| SPIN_TIMESTAMP    | creation time          |

## PW\_SPAN\_APP\_N

PW normalization table for applications.

| Column name       | Column description     |
|-------------------|------------------------|
| SPAN_ID           | application id         |
| SPAN_HASH_VALUE   | pw internal hash value |
| SPAN_STRING_VALUE | application name       |
| SPAN_TIMESTAMP    | creation time          |

#### PW\_SPWD\_WORKTYPES\_DIM

Dimension table for work types.

| Column name            | Column description          |
|------------------------|-----------------------------|
| SPWD_WORKTYPE_KEY      | work type key               |
| SPWD_WORKTYPE_NAME     | work type name              |
| SPWD_WORKTYPE_INTERNAL | internal SAP work type name |

#### PW\_SPPP\_PRODUCT\_PARAMS

Internal parameter table

| Column name      | Column description |
|------------------|--------------------|
| SPPP_PARAM_NAME  | parameter name     |
| SPPP_PARAM_VALUE | parameter value    |

#### PW\_SPTN\_TRAN\_N\_VIEW

View on PW\_SPTN\_TRAN\_N.

| Column name            | Column description     |
|------------------------|------------------------|
| SPTN_ID_VIEW           | transaction id         |
| SPTN_HASH_VALUE_VIEW   | pw internal hash value |
| SPTN_STRING_VALUE_VIEW | transaction name       |
| SPTN_TIMESTAMP_VIEW    | creation time          |

#### PW\_SPCF\_AI\_CONFIG

Configuration table for all the collectors.

| Column name             | Column description                   |
|-------------------------|--------------------------------------|
| SPCF_CONFIG_KEY         | config key                           |
| SPCF_LOCCFG_LAST_UPD    | locale agent last update time        |
| SPCF_AVAILCFG_LAST_UPD  | availablity agent last update time   |
| SPCF_WRKLDCFG_LAST_UPD  | workload agent last update time      |
| SPCF_LOCCFG_LAST_PUSH   | locale agent last push time          |
| SPCF_AVAILCFG_LAST_PUSH | availability agent last push time    |
| SPCF_WRKLDCFG_LAST_PUSH | workload agent last push time        |
| SPCF_DEF_USER_AREA      | user area mapping definition         |
| SPCF_DEF_USER_ORG       | user organization mapping definition |
| SPCF_DEF_LOC            | locale mapping definition            |
| SPCF_DEF_APP            | application mapping definition       |

## PW\_SPPG\_AI\_PINGERS

Locale pingers list.

| Column name       | Column description |
|-------------------|--------------------|
| SPPG_PINGER_KEY   | pinger key         |
| SPPG_LOC_KEY      | locale key         |
| SPPG_PINGEER_NAME | pinger name or IP  |

#### AI\_CONFIG\_VIEW

View on PW\_SPCF\_AI\_CONFIG.

| Column name        | Column description                   |
|--------------------|--------------------------------------|
| CONFIG_KEY         | config key                           |
| LOCCFG_LAST_UPD    | locale agent last update time        |
| AVAILCFG_LAST_UPD  | availablity agent last update time   |
| WRKLDCFG_LAST_UPD  | workload agent last update time      |
| LOCCFG_LAST_PUSH   | locale agent last push time          |
| AVAILCFG_LAST_PUSH | availablity agent last push time     |
| WRKLDCFG_LAST_PUSH | workload agent last push time        |
| DEF_USER_AREA      | user area mapping definition         |
| DEF_USER_ORG       | user organization mapping definition |
| DEF_LOC            | locale mapping definition            |
| DEF_APP            | application mapping definition       |

## AI\_LOCAGENTLOC\_VIEW\_1

View on PW\_SPLC\_AI\_LOCALES.

| Column name | Column description |
|-------------|--------------------|
| LOC_KEY     | locale key         |
| LOC_NAME    | locale name        |
| USEICMP     | is using ICMP      |

#### AI\_LOCAGENT\_PINGER\_VIEW

View that join PW\_SPPG\_AI\_PINGERS and AI\_LOCAGENTLOC\_VIEW\_1

| Column name | Column description |
|-------------|--------------------|
| LOC_KEY     | locale key         |
| LOC_NAME    | locale name        |
| USEICMP     | is using ICMP      |
| DEVICENAME  | pinger name        |

#### AI\_WRKLDAGENT\_APPSERVER\_VIEW

View for workload agent configuration.

| Column name         | Column description                     |
|---------------------|--|
| sid_key             | SID key                                |
| appsvr_key          | application server key                 |
| appsvr_name         | application server name                |
| appsvr_sysno        | application server system number       |
| appsvr_saprouter    | application server sap router          |
| insm_id             | INSM_ID in server table                |
| sid_defappsvr       | default application server key of SID  |
| sid_defappsvr_name  | default application server name of SID |
| sid_defclient       | SID default client                     |
| sid_user            | SID user                               |
| sid_pass            | SID password encrypted                 |
| sid_passthru_appsvr | Deprecated - not in use                |
| db_standalone       | is DB on stand alone server            |
| db_host             | DB host name                           |
| rfc_dest            | RFC destination                        |
| client_lang         | Client language                        |
| sys_sid             | SID name                               |

#### PW\_SPII\_INTERPOINT\_INSTALLED

View to get data on SAP interpoint installations.

| Column name               | Column description              |
|---------------------------|---------------------------------|
| spii_oracle_instance_name | Instance name of the DB product |
| spii_interpoint_installed | number representing the DB type |
| spii_inap_id              | apptier id                      |
| spii_ince_id              | Instance key of the DB product  |

#### PW\_SPAR\_SLA\_RULES

View for SLA of Precise for SAP.

| Column name      | Column description |
|------------------|--------------------|
| spar_id          | rule id            |
| spar_inad_id     | rule in alert      |
| spar_rule_type   | rule type          |
| spar_rule        | rule definition    |
| spar_rfc_ind     | RFC indication     |
| spar_create_time | Rule creation time |
| spar_update_time | rule update time   |
| spar_deleted     | is deleted         |

#### PW\_SPOL\_ORGLOCALE\_STAT\_D

Statistics table for Locale-organizations mapping, also have M summary level.

| Column name             | Column description |
|-------------------------|--------------------|
| spol_pwii_instance_id   | Instance ID        |
| spol_timestamp          | Timestamp          |
| spol_pwhg_id            | PW hour group      |
| spol_recieved_timestamp | Received timestamp |
| spol_minutes_count_sum  | Minutes count      |
| spol_locale_key         | Locale key         |
| spol_org_key            | Organization key   |

# K

# Insight SAP Group Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

#### PW\_SPSG\_SERVER\_GRP

The SAP server group table.

| Column name  | Column description                                      |
|--------------|---|
| SPSG_INSM_ID | The ID of the server.                                   |
| SPSG_INGD_ID | The ID of the server group running the SAP transaction. |

#### PW\_SPPG\_APPSVR\_GRP

The SAP application server group table.

| Column name  | Column description   |
|--------------|--|
| SPPG_SPSD_ID | The ID of the application server.                                    |
| SPPG_INGD_ID | The ID of the application server group running the SAP transactions. |

#### PW\_SPAG\_ACTION\_GRP

The SAP transaction group table.

| Column name  | Column description                   |
|--------------|--------------------------------------|
| SPAG_SPTD_ID | The ID of the transaction.           |
| SPAG_INGD_ID | The ID of the SAP transaction group. |

## Precise for Web Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | The instance ID. Columns of XXXX_PWII_INSTANCE_ID have values from the column.                  |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

#### PW\_WWPS\_PERF\_SUMMARY\_T

Summarizes each aggregated invocation per page.

| Column name           | Column description  |
|-----------------------|---|
| WWPS_PWII_INSTANCE_ID | The instance (site) ID. The instance entity represents sites. Each site groups one or more domains. PS_INCE_INSTANCE lists available instances (sites).   |
| WWPS_TIMESTAMP        | Time summary.   |
| WWPS_WWDO_ID          | The domain ID. PW_WWDO_DOMAIN lists available domain names.   |
| WWPS_WWPL_ID          | The page ID. PW_WWPL_PAGE_LOOKUP lists available pages.   |
| WWPS_WWCT_ID          | Communication in the user computer, where:<br>0 = unknown<br>1 = offline<br>2 = LAN<br>3 = modem  |
| WWPS_WWCO_ID          | The country ID. PW_WWCO_COUNTRY lists available country names. There are two special values: '++' for unknown and '' for internal, which means the user connects from within the IP range of the company.             |
| WWPS_WWST_ID          | The state ID. PW_WWST_STATE lists available state names (US states only!). There are two special values: '++' for unknown and '' for internal, which means the user connects from within the IP range of the company. |

#### (Continued)

| Column name                     | Column description   |
|---------------------------------|--|
| WWPS_WWCI_ID                    | City the user connects from. PW_WWCT_CITY lists available city names (US cities only!).<br>There are two special values: '++' for unknown and '' for internal, which means the user<br>connects from within the IP range of the company. |
| WWPS_WWAT_ID                    | Indicates whether the page was abandoned. A page is abandoned when the page load to<br>the user's browser is not completed. Possible values:<br>-1 = unknown<br>0 = completed<br>1 = abandoned   |
| WWPS_INLD_ID                    | The location definition ID. A location is assigned according to user definitions (in the site map) and the Client IP. PS_INLD_LOCATION_DEFS lists available locations.   |
| WWPS_NAT_IP                     | The Client IP in long. The Client IP needed in case the server is within the firewall neighborhood or the Firewall IP needed in case the server is outside the firewall.   |
| WWPS_CLIENT_IP                  | Private IP in long. The real Client IP.  |
| WWPS_WWCL_IP                    | The Client machine ID. PW_WWCL_CLIENT lists available client machine names.  |
| WWPS_WWLO_IP                    | The network user login ID. PW_WWLO_LOGIN lists available application user names.   |
| WWPS_WWAU_IP                    | The application user login ID. PW_WWAU_APPLICATION_USER lists available application user names.  |
| WWPS_PAGE_VIEW_SUM              | Total amount of pages viewed for this aggregation.   |
| WWPS_EXTENDED_PAGE_VIEW_<br>SUM | Total amount of supported pages viewed for this aggregation. Supported pages are executions whose performance can be measured.   |
| WWPS_BASIC_PAGE_VIEW_SUM        | Total amount of unsupported pages viewed for this aggregation. Unsupported pages are executions whose performance cannot be measured.  |
| WWPS_ABANDON_COUNT_SUM          | Total amount of abandoned pages for this aggregation. An abandoned page is an HTML-page left before it was fully loaded to the client browser.   |
| WWPS_TPCOUNT_SUM                | Total amount of pages with a known text period for this aggregation.   |
| WWPS_TEXT_PRD_SUM               | First byte period sum for this aggregation of pages. First byte is the period between the page request and the time the first byte arrives at the client browser.  |
| WWPS_RENDERING_PRD_SUM          | Rendering period sum for this aggregation of pages.  |
| WWPS_SLA_UNKNOWN_SUM            | Amount of pages whose SLA is unknown for this aggregation.   |
| WWPS_SLA_OK_SUM                 | Amount of pages whose SLA is OK for this aggregation.  |
| WWPS_SLA_WARNING_SUM            | Amount of pages whose SLA is nearly breached for this aggregation.   |
| WWPS_SLA_SEVERE_SUM             | Amount of pages whose SLA is breached for this aggregation.  |

### Expressions

| Oracle  | SQL Server   | Expression description                         |
|---|--|--|
| <pre>SUM(WWPS_PAGE_VIEW_SUM)* DECODE(greatest(SUM(WWPS_TP COUNT_SUM),0), 0, 0.0, ((SUM(WWPS_TEXT_PRD_SUM)* 1.0) / (SUM(WWPS_TPCOUNT_SUM)* 1.0)))</pre>  | <pre>SUM(WWPS_PAGE_VIEW_SUM)* CASE case when SUM(WWPS_TPCOUNT_SUM) &gt; 0 then SUM(WWPS_TPCOUNT_SUM) else 0 end when 0 then 0.0 else ((SUM(WWPS_TEXT_PRD_SUM)* 1.0) /(SUM(WWPS_TPCOUNT_SUM)* 1.0)) end</pre>   | Total time of the first byte periods of pages. |
| <pre>SUM(WWPS_PAGE_VIEW_SUM)* (decode(greatest(SUM(WWPS_T PCOUNT_SUM),0), 0, 0.0, ((SUM(WWPS_TEXT_PRD_SUM)* 1.0) / (SUM(WWPS_TPCOUNT_SUM)* 1.0)) ) + decode(greatest(SUM(WWPS_EX TENDED_PAGE_VIEW_SUM),0), 0, -1.0, ((SUM(WWPS_RENDERING_PRD_SU M)* 1.0) / (SUM(WWPS_EXTENDED_PAGE_VIE W_SUM)* 1.0)))</pre> | <pre>SUM(WWPS_PAGE_VIEW_SUM)* (decode(greatest(SUM(WWPS_ TPCOUNT_SUM),0), 0, 0.0, ((SUM(WWPS_TEXT_PRD_SUM)* 1.0) / (SUM(WWPS_TPCOUNT_SUM)* 1.0)) + decode(greatest(SUM(WWPS_E XTENDED_PAGE_VIEW_SUM),0), 0, -1.0, ((SUM(WWPS_RENDERING_PRD_S UM)* 1.0) / (SUM(WWPS_EXTENDED_PAGE_VI EW_SUM)* 1.0)) )</pre> | Total wait time of pages.                      |
| <pre>SUM(WWPS_PAGE_VIEW_SUM)* decode(greatest(SUM(WWPS_EX TENDED_PAGE_VIEW_SUM),0),0, -1.0, ((SUM(WWPS_RENDERING_PRD_SU M)* 1.0) / (SUM(WWPS_EXTENDED_PAGE_VIE W_SUM)* 1.0)))</pre>   | <pre>SUM(WWPS_PAGE_VIEW_SUM)* decode(greatest(SUM(WWPS_E XTENDED_PAGE_VIEW_SUM),0), 0, -1.0, ((SUM(WWPS_RENDERING_PRD_S UM)* 1.0) / (SUM(WWPS_EXTENDED_PAGE_VI EW_SUM)* 1.0)) )</pre>  | Total rendering time of pages.                 |

### PW\_WWSC\_SUMMARY\_T

Summarizes each sub component aggregated invocation.

| Column name                | Column description  |
|----------------------------|---|
| WWSC_PWII_INSTANCE_ID      | The Web instance (site) ID. The instance entity represents Web instances (sites). Each site groups one or more domains. PS_INCE_INSTANCE lists available instances (sites). |
| WWSC_TIMESTAMP             | Time summary.   |
| WWSC_PWII_INSTANCE_ID_PAGE | The page instance ID. The instance entity represents a Web instance.<br>PS_INCE_INSTANCE lists available instances.   |

| Column name           | Column description   |
|-----------------------|--|
| WWSC_WWDO_ID_PAGE     | The page domain ID. PW_WWDO_DPOMAIN lists available domain names.  |
| WWSC_WWDO_ID          | The domain ID. PW_WWDO_DOMAIN lists available domain names.  |
| WWSC_WWPL_ID          | The page ID. PW_WWPL_PAGE_LOOKUP lists available pages (URLS?).  |
| WWSC_WWUL_ID          | The URL ID. PW_WWUL_URL_LOOKUP lists available URLs.   |
| WWSC_WWCT_ID          | Communication in the user computer, where:<br>0 = unknown<br>1 = offline<br>2 = LAN<br>3 = modem   |
| WWSC_WWCO_ID          | The country ID. PW_WWCO_COUNTRY lists available country names. There are two special values: '++' for unknown and '' for internal, which means the user connects from within the IP range of the company.                                |
| WWSC_WWST_ID          | The state ID. PW_WWST_STATE lists available state names (US states only!). There are two special values: '++' for unknown and '' for internal, which means the user connects from within the IP range of the company.                    |
| WWSC_WWCI_ID          | City the user connects from. PW_WWCT_CITY lists available city names (US cities only!).<br>There are two special values: '++' for unknown and '' for internal, which means the user<br>connects from within the IP range of the company. |
| WWSC_INLD_ID          | The location definition ID. A location is assigned according to user definitions (in the site map) and the Client IP. PS_INLD_LOCATION_DEFS lists available locations.   |
| WWSC_NAT_IP           | The Client IP in long. The Client IP needed in case the server is within the firewall neighborhood or the Firewall IP needed in case the server is outside the firewall.   |
| WWSC_CLIENT_IP        | The Private IP in long. The real Client IP.  |
| WWSC_WWCL_IP          | The Client machine IP. PW_WWCL_CLIENT lists available client machine names.  |
| WWSC_WWLO_ID          | The network user login ID. PW_WWLO_LOGIN lists available application user names.   |
| WWSC_WWAU_ID          | The application login ID. PW_WWAU_APPLICATION_USER lists available application user names.   |
| WWSC_HIT_SUM          | Total amount of URL requests for this aggregation.   |
| WWSC_CLIENT_CACHE_SUM | Total amount of URLs retrieved from caching for this aggregation.  |
| WWSC_ERROR_SUM        | Total amount of URLs that ended with an error for this aggregation.  |
| WWSC_BYTE_SUM         | Total amount of bytes transferred during the send and receive actions.   |
| WWSC_SERVER_PRD_SUM   | The summarized server period for this aggregation. The server time is the period spent in the Web server.  |
| WWSC_NETWORK_PRD_SUM  | The summarized network period for this aggregation. The network time is the period spent in the network.   |
| WWSC_SLA_UNKNOWN_SUM  | Amount of pages whose SLA is unknown for this aggregation.   |
| WWSC_SLA_OK_SUM       | Amount of pages whose SLA is OK for this aggregation.  |
| WWSC_SLA_WARNING_SUM  | Amount of pages whose SLA is nearly breached for this aggregation.   |

(Continued)

| Column name         | Column description  |
|---------------------|---|
| WWSC_SLA_SEVERE_SUM | Amount of pages whose SLA is breached for this aggregation. |

### PW\_WWAS\_AVAILABILITY\_SUMMARY\_T

Summarizes each sub component aggregated invocation.

| Column name                        | Column description  |
|------------------------------------|---|
| WWAS_PWII_INSTANCE_ID              | The instance ID. The instance entity represents a Web instance. PS_INCE_INSTANCE lists available instances. |
| WWAS_TIMESTAMP                     | Time summary  |
| WWAS_AVAIL_WITH_DOWNTIME<br>_AVG   | Average availability percentage calculated with downtime  |
| WWAS_UNAVAIL_WITH_DOWNTI<br>ME_SUM | Summed time of unavailability calculated with downtime.   |
| WWAS_AVAIL_AVG                     | Average availability percentage calculated without downtime.  |
| WWAS_UNAVAIL_SUM                   | Summed time of unavailability calculated without downtime.  |

# PW\_WWCS\_COUNTER\_STATISTIC\_T

Summarizes each webserver counter aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| WWCS_PWII_INSTANCE_ID | The instance ID. The instance entity represents a Web instance. Available instances can be found in PS_INCE_INSTANCE. |
| WWCS_TIMESTAMP        | Time summary  |
| WWCS_WWCR_ID          | Web servers counter ID. The counter name (Performance Counter) can be found in PW_WWCR_COUNTER.                       |
| WWCS_COUNTER_SUM      | Represents the value for the counter that summarize data. Null if the counter does not summarize                      |
| WWCS_COUNTER_AVG      | Represents the value for the counter that average data. Null if the counter does not average.                         |
| WWCS_COUNTER_MAX      | Represents the value for the counter that holding maximum values. Null if the counter does not holds maximum values   |

### Expressions

| PRES   | Expression description   |
|--|--|
| <pre>({pss<br/>nvl(SUM(WWCS_COUNTER_SUM<br/>* 1.0), 0.0)} + {pss<br/>nvl(MAX(WWCS_COUNTER_MAX<br/>* 1.0), 0.0)} + {pss<br/>nvl(AVG(WWCS_COUNTER_AVG<br/>* 1.0), 0.0)})</pre> | The counter aggregate values. Since each counter value is either one of the 3 counter columns this formula is calculating the value regardless which column is to be used. |

### PW\_WWCM\_COMMON\_STATISTIC\_T

Summarizes each common counter aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| WWCM_PWII_INSTANCE_ID | The instance ID. The instance entity represents a Web instance. PS_INCE_INSTANCE lists available instances. |
| WWCM_TIMESTAMP        | Time summary  |
| WWCM_COUNTER1_SUM     | Amount of requests per instance.  |
| WWCM_COUNTER2_AVG     | Average concurrent connections per instance.  |
| WWCM_COUNTER3_AVG     | Average amount of memory being used by this web server.   |
| WWCM_COUNTER4_AVG     | Average amount of page faults in this web server.   |
| WWCM_COUNTER5_AVG     | Average amount of cpu being used by this web server.  |
| WWCM_COUNTER6_AVG     | Average amount of cache hit ratio in this web server.   |
| WWCM_COUNTER7_AVG     | Currently not in use  |

# PW\_WWPL\_PAGE\_LOOKUP

List of pages.

| Column name    | Column description   |
|----------------|--|
| WWPL_URL_ID    | The URL ID.  |
| WWPL_WWDO_ID   | The domain ID. PW_WWDO_DOMAIN lists available domain names.          |
| WWPL_PROTOCOL  | Protocol - The data transfer standard (HTTP, HTTPS)                  |
| WWPL_PATH_PART | The part of the path inside the URL                                  |
| WWPL_SPLITTER  | The character/s used to separate between the path and the parameters |
| WWPL_PARM_PART | The parameters (for example a=1&b=2&c=3)                             |

(Continued)

| Column name       | Column description                                 |
|-------------------|--|
| WWPL_URL_FILE_EXT | File extension (for example - html, htm, asp, jsp) |
| WWPL_TITLE        | Page title   |

### Expressions

| Oracle  | SQL Server                                      | Expression description |
|---|---|------------------------|
| WWPL_PATH_PART  WWPL<br>_SPLITTER  WWPL_PARM<br>_PART | WWPL_PATH_PART+WWPL_SPL<br>ITTER+WWPL_PARM_PART | Page URL               |

### PW\_WWUL\_URL\_LOOKUP

List of URLs.

| Column name       | Column description   |
|-------------------|--|
| WWUL_URL_ID       | The URL ID.  |
| WWUL_WWDO_ID      | The domain ID. PW_WWDO_DOMAIN lists available domain names.          |
| WWUL_PROTOCOL     | Protocol - The data transfer standard (HTTP, HTTPS)                  |
| WWUL_PATH_PART    | The part of the path inside the URL                                  |
| WWUL_SPLITTER     | The character/s used to separate between the path and the parameters |
| WWUL_PARM_PART    | The parameters (for example a=1&b=2&c=3)                             |
| WWUL_URL_FILE_EXT | File extension (for example - html, htm, asp, jsp)                   |

### Expressions

| Oracle  | SQL Server | Expression description |
|---|------------|------------------------|
| WWUL_PATH_PART  WWUL_<br>SPLITTER  WWUL_PARM_P<br>ART |            |                        |
| ARI   | T          |                        |

### PW\_WWDO\_DOMAIN

List of domains.

| Column name | Column description  |
|-------------|---------------------|
| WWDO_NAME   | Name of the domain. |

### PW\_WWCO\_COUNTRY

List of countries, where users are surfing from.

| Column name  | Column description  |
|--------------|---|
| WWCO_INITIAL | The country initials from where the user is surfing (for example IL - Israel).  |
| WWCO_NAME    | The country where the user is surfing from. There are two special values: unknown and internal, meaning that the user is surfing from within the IP range of the company. |

### PW\_WWST\_STATE

List of states, where users are surfing from.

| Column name  | Column description  |
|--------------|---|
| WWST_INITIAL | The state initials from where the user is surfing (for example NY - New York).  |
| WWST_NAME    | The state where the user is surfing from. There are two special values: unknown and internal, meaning that the user is surfing from within the IP range of the company. |

### PW\_WWCI\_CITY

List of cities, where users are surfing from.

| Column name | Column description   |
|-------------|--|
| WWCI_NAME   | The city where the user is surfing from. There are two special values: unknown and internal, meaning that the user is surfing from within the IP range of the company. |

### PW\_WWCL\_CLIENT

List of user clients machines.

| Column name | Column description       |
|-------------|--------------------------|
| WWCL_CLIENT | The Client machine name. |

### PW\_WWAU\_APPLICATION\_USER

List of the application users (this is the user name for entering PeopleSoft).

| Column name | Column description               |
|-------------|----------------------------------|
| WWAU_NAME   | The application user login name. |

# PW\_WWLO\_LOGIN

List of user logins.

| Column name | Column description          |
|-------------|-----------------------------|
| WWLO_LOGIN  | The login name of the user. |

### PW\_WWCR\_COUNTER

List of instance statistics counters.

| Column name | Column description                   |
|-------------|--------------------------------------|
| WWCR_NAME   | The Instance Statistic Counter name. |

### PW\_WWBT\_BUSINESS\_TRAN\_GRP\_VIEW

Basic Transaction grouping view.

| Column name | Column description                   |
|-------------|--------------------------------------|
| INGD_NAME   | The Business Transaction group name. |
| WWPL_NAME   | The page URL.                        |

### PW\_WWAG\_URL\_GRP\_VIEW

URL Grouped grouping view.

| Column name | Column description          |
|-------------|-----------------------------|
| INGD_NAME   | The URL Grouped group name. |
| WWUL_NAME   | The URL.                    |

### PW\_WWIG\_INSTANCE\_GRP\_VIEW

Instance Grouped grouping view.

| Column name | Column description                 |
|-------------|------------------------------------|
| INGD_NAME   | The Instance Grouped grouper name. |
| INCE_NAME   | The instance name.                 |

### PW\_WWPG\_PSOFT\_PANEL\_GRP\_VIEW

PeopleSoft Panel grouping view.

| Column name | Column description                |
|-------------|-----------------------------------|
| INGD_NAME   | The PeopleSoft Panels group name. |
| WWPL_TITLE  | The PeopleSoft Panel.             |

### PW\_WWPV\_PAGE\_SBL\_VIEW\_GRP\_VIEW

Page Siebel View grouping view.

| Column name | Column description                |
|-------------|-----------------------------------|
| INGD_NAME   | The Page Siebel Views group name. |
| WWPB_VIEW   | The Page Siebel view.             |

### PW\_WWSG\_SERVER\_GRP\_VIEW

Servers grouping view.

| Column name | Column description     |
|-------------|------------------------|
| INGD_NAME   | The server group name. |
| INSM_NAME   | The server name.       |

## PW\_WWSL\_SBL\_TITLE\_GRP\_VIEW

Siebel Title Grouped grouping view.

| Column name | Column description                   |
|-------------|--------------------------------------|
| INGD_NAME   | The Siebel Title grouped group name. |
| WWPL_TITLE  | The Siebel title.                    |

### PW\_WWST\_SAP\_TITLE\_GRP\_VIEW

SAP Title Grouped grouping view.

| Column name | Column description                |
|-------------|-----------------------------------|
| INGD_NAME   | The SAP Title grouped group name. |
| WWPL_TITLE  | The SAP title.                    |

### PW\_WWTG\_TRANSACTION\_GRP\_VIEW

Transaction Grouped grouping view.

| Column name | Column description                  |
|-------------|-------------------------------------|
| INGD_NAME   | The Transaction grouped group name. |
| WWPL_TITLE  | The Transaction.                    |

### PW\_WWUE\_URL\_EXT\_GRP\_VIEW

URL File Extension Grouped grouping view.

| Column name       | Column description                         |
|-------------------|--|
| INGD_NAME         | The URL File Extension grouped group name. |
| WWUL_URL_FILE_EXT | The URL File Extension.                    |

### PW\_WWUV\_URL\_SBL\_VIEW\_GRP\_VIEW

URL Siebels View grouping view.

| Column name | Column description              |
|-------------|---------------------------------|
| INGD_NAME   | The URL Siebel View group name. |
| WWUB_VIEW   | The URL Siebel view.            |

# Μ

# Insight for Tuxedo Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

# PW\_TUIG\_INSTANCE\_GRP

The Tuxedo domain group table.

| Column name  | Column description                                     |
|--------------|--|
| TUIG_INCE_ID | The ID of the domain.                                  |
| TUIG_INGD_ID | The ID of the domain group running the Tuxedo service. |

### PW\_TUUG\_USER\_GRP

The Tuxedo user group table.

| Column name  | Column description                                   |
|--------------|--|
| TUUG_TUUN_ID | The ID of the user.                                  |
| TUUG_INGD_ID | The ID of the user group running the Tuxedo service. |

### PW\_TUPG\_PROGRAM\_GRP

The Tuxedo server process group table.

| Column name  | Column description   |
|--------------|--|
| TUPG_TUPN_ID | The ID of the server process.                                  |
| TUPG_INGD_ID | The ID of the server process group running the Tuxedo service. |

### PW\_TUAG\_ACTION\_GRP

The Tuxedo service group table.

| Column name  | Column description                                      |  |
|--------------|---|--|
| TUAG_TUAN_ID | The ID of the service.                                  |  |
| TUAG_INGD_ID | The ID of the service group running the Tuxedo service. |  |

### PW\_TUUN\_USER\_N

The Tuxedo user normalization table.

| Column name       | Column description                                |  |
|-------------------|---|--|
| TUUN_ID           | The ID of the user.                               |  |
| TUUN_STRING_VALUE | The name of the users running the Tuxedo service. |  |

### PW\_TUPN\_PROGRAM\_N

The Tuxedo server process normalization table.

| Column name       | Column description   |  |
|-------------------|--|--|
| TUPN_ID           | The ID of the server process.                              |  |
| TUPN_STRING_VALUE | The name of the server process running the Tuxedo service. |  |

### PW\_TUAN\_ACTION\_N

The Tuxedo service normalization table.

| Column name       | Column description              |  |
|-------------------|---------------------------------|--|
| TUAN_ID           | The ID of the service.          |  |
| TUAN_STRING_VALUE | The name of the Tuxedo service. |  |

### PW\_TUCN\_CONSUMER\_IP\_N

The Tuxedo client IP normalization table.

| Column name       | Column description                        |  |
|-------------------|---|--|
| TUCN_ID           | The ID of the client IP.                  |  |
| TUCN_STRING_VALUE | The client IP running the Tuxedo service. |  |

### PW\_TUSG\_SERVER\_GRP

The Tuxedo server group table.

| Column name  | Column description                                     |  |
|--------------|--|--|
| TUSG_INCE_ID | The ID of the server.                                  |  |
| TUSG_INGD_ID | The ID of the server group running the Tuxedo service. |  |

### PW\_TUAC\_ACTIONS\_T

The Tuxedo information summarized by each aggregated invocation.

| Column name           | Column description  |  |
|-----------------------|---|--|
| TUAC_TIMESTAMP        | The time summary.   |  |
| TUAC_PWII_INSTANCE_ID | The ID of the Tuxedo domain running the Tuxedo service.   |  |
| TUAC_ACTION           | The ID of the Tuxedo server.  |  |
| TUAC_USER             | The ID of the user running the Tuxedo service.  |  |
| TUAC_CONSUMER_IP      | The ID of the client IP running the Tuxedo service.   |  |
| TUAC_CONSUMER_IP_GID  | The ID of the client IP group running the Tuxedo service.   |  |
| TUAC_PROGRAM          | The ID of the Tuxedo server process running the Tuxedo service.   |  |
| TUAC_TIME1_SUM        | Total time the Tuxedo service waited in a queue.  |  |
| TUAC_TIME2_SUM        | Total Tuxedo service processing time. The time includes the time the Tuxedo service waited for other Application Tiers.   |  |
| TUAC_TIME3_SUM        | Total time the Tuxedo service waited for execution of another Tuxedo server process. This time is gathered on a Tuxedo service level and should not be used on any summary level other than Tuxedo service and Tuxedo server process (such as Tuxedo service group or Tuxedo server). |  |
| TUAC_REQUESTS_SUM     | Total number of Tuxedo service executions.  |  |
| TUAC_RED_SUM          | Total number of Tuxedo service executions, which Breached their SLA.  |  |
| TUAC_YELLOW_SUM       | Total number of Tuxedo service executions, which Near Breached their SLA.   |  |
| TUAC_GREEN_SUM        | Total number of Tuxedo service executions, which did Not Breach their SLA.  |  |

### Expressions

| Oracle   | SQL Server  | Expression description   |
|--|---|--|
| <pre>sum(OAAC_NETWORK_TI ME_SUM+OAAC_TIME1_S UM)</pre>   | <pre>sum(OAAC_NETWORK_TIME_S UM+OAAC_TIME1_SUM)</pre>   | Total Tuxedo processing time per Tuxedo domain, Tuxedo server or any grouped entity.   |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM)</pre>   | <pre>sum(TUAC_TIME1_SUM+TUAC _TIME2_SUM)</pre>  | Total Tuxedo processing time per Tuxedo service or Tuxedo server process.  |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM+TUAC<br/>_TIME3_SUM)</pre>   | <pre>sum(TUAC_TIME1_SUM+TUAC _TIME2_SUM+TUAC_TIME3_S UM)</pre>  | Average time the Tuxedo service waited in a queue.   |
| <pre>sum(TUAC_TIME1_TIME _SUM)/sum(decode(TU AC_REQUESTS_SUM,0,1 ,TUAC_REQUESTS_SUM) )</pre>   | <pre>sum(TUAC_TIME1_TIME_SUM<br/>)/sum(decode(TUAC_REQUE<br/>STS_SUM,0,1,TUAC_REQUES<br/>TS_SUM))</pre>                               | Average Tuxedo service processing time. This time includes the average time the Tuxedo service waited for other Application Tiers.   |
| <pre>sum(TUAC_TIME2_TIME _SUM)/sum(decode(TU AC_REQUESTS_SUM,0,1 ,TUAC_REQUESTS_SUM) )</pre>   | <pre>sum(TUAC_TIME2_TIME_SUM )/sum(decode(TUAC_REQUE STS_SUM,0,1,TUAC_REQUES TS_SUM))</pre>   | Average time the Tuxedo service waited for the execution<br>of another Tuxedo service, within another Tuxedo server<br>process. This time is gathered on a Tuxedo service level<br>and should not be used on any summary level, other than<br>Tuxedo service and Tuxedo server process (such as<br>Tuxedo service group or Tuxedo server). |
| <pre>sum(TUAC_TIME3_TIME _SUM)/sum(decode(TU AC_REQUESTS_SUM,0,1 ,TUAC_REQUESTS_SUM) )</pre>   | <pre>sum(TUAC_TIME3_TIME_SUM )/sum(decode(TUAC_REQUE STS_SUM,0,1,TUAC_REQUES TS_SUM))</pre>   | Average Tuxedo processing time per Tuxedo domain,<br>Tuxedo server or any grouped entity.  |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM)/sum<br/>(decode(TUAC_REQUES<br/>TS_SUM,0,1,TUAC_REQ<br/>UESTS_SUM))</pre>                     | <pre>sum(TUAC_TIME1_SUM+TUAC<br/>_TIME2_SUM)/sum(decode(<br/>TUAC_REQUESTS_SUM,0,1,T<br/>UAC_REQUESTS_SUM))</pre>                     | Average Tuxedo processing time per Tuxedo service or<br>Tuxedo server process.   |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM+TUAC<br/>_TIME3_SUM)/sum(dec<br/>ode(TUAC_REQUESTS_S<br/>UM,0,1,TUAC_REQUEST<br/>S_SUM))</pre> | <pre>sum(TUAC_TIME1_SUM+TUAC<br/>_TIME2_SUM+TUAC_TIME3_S<br/>UM)/sum(decode(TUAC_REQ<br/>UESTS_SUM,0,1,TUAC_REQU<br/>ESTS_SUM))</pre> | Total number of Tuxedo service executions, for which the SLA was Not Defined.  |
| <pre>sum(TUAC_REQUESTS_S UM-TUAC_RED_SUM-TUA C_YELLOW_SUM-TUAC_G REEN_SUM)</pre>   | <pre>sum(TUAC_REQUESTS_SUM-T<br/>UAC_RED_SUM-TUAC_YELLOW<br/>_SUM-TUAC_GREEN_SUM)</pre>   | Percentage of Tuxedo service executions, which<br>Breached their SLA. The percentage is calculated out of<br>the Tuxedo services, for which the SLA was established.   |

| Oracle   | SQL Server  | Expression description  |
|--|---|---|
| <pre>sum(TUAC_RED_SUM)/s um(decode(TUAC_RED_ SUM+TUAC_YELLOW_SUM +TUAC_GREEN_SUM,0,1 ,TUAC_RED_SUM+TUAC_ YELLOW_SUM+TUAC_GRE EN))*100</pre>    | <pre>sum(TUAC_RED_SUM)/sum(d ecode(TUAC_RED_SUM+TUAC _YELLOW_SUM+TUAC_GREEN_ SUM,0,1,TUAC_RED_SUM+TU AC_YELLOW_SUM+TUAC_GREE N))*100</pre>    | Percentage of Tuxedo service executions, which Near<br>Breached their SLA. The percentage is calculated out of<br>the Tuxedo services, for which the SLA was established. |
| <pre>sum(TUAC_YELLOW_SUM )/sum(decode(TUAC_R ED_SUM+TUAC_YELLOW_ SUM+TUAC_GREEN_SUM, 0,1,TUAC_RED_SUM+TU AC_YELLOW_SUM+TUAC_ GREEN))*100</pre> | <pre>sum(TUAC_YELLOW_SUM)/su m(decode(TUAC_RED_SUM+T UAC_YELLOW_SUM+TUAC_GRE EN_SUM,0,1,TUAC_RED_SUM +TUAC_YELLOW_SUM+TUAC_G REEN))*100</pre> | Percentage of Tuxedo service executions, which Not<br>Breached their SLA. The percentage is calculated out of<br>the Tuxedo services, for which the SLA was established.  |

### PW\_TUAC\_ACTIONS\_U\_T

The Tuxedo information summarized by each aggregated invocation.

| Column name           | Column description  |  |
|-----------------------|---|--|
| TUAC_TIMESTAMP        | The time summary.   |  |
| TUAC_PWII_INSTANCE_ID | The ID of the Tuxedo domain running the Tuxedo service.   |  |
| TUAC_USER             | The ID of the user running the Tuxedo service.  |  |
| TUAC_TIME1_SUM        | Total time the Tuxedo service waited in a queue.  |  |
| TUAC_TIME2_SUM        | Total Tuxedo service processing time. The time includes the time the Tuxedo service waited for other Application Tiers.   |  |
| TUAC_TIME3_SUM        | Total time the Tuxedo service waited for execution of another Tuxedo server process. This time is gathered on a Tuxedo service level and should not be used on any summary level other than Tuxedo service and Tuxedo server process (such as Tuxedo service group or Tuxedo server). |  |
| TUAC_REQUESTS_SUM     | Total number of Tuxedo service executions.  |  |
| TUAC_RED_SUM          | Total number of Tuxedo service executions, which Breached their SLA.  |  |
| TUAC_YELLOW_SUM       | Total number of Tuxedo service executions, which Near Breached their SLA.   |  |
| TUAC_GREEN_SUM        | Total number of Tuxedo service executions, which did Not Breach their SLA.  |  |

### Expressions

| Oracle  | SQL Server  | Expression description   |
|---|---|--|
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM)</pre>  | <pre>sum(TUAC_TIME1_SUM+T UAC_TIME2_SUM)</pre>  | Total Tuxedo processing time per Tuxedo domain, Tuxedo server or any grouped entity.   |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM+TUAC<br/>_TIME3_SUM)</pre>  | <pre>sum(TUAC_TIME1_SUM+T UAC_TIME2_SUM+TUAC_T IME3_SUM)</pre>  | Total Tuxedo processing time per Tuxedo service or Tuxedo server process.  |
| <pre>sum(TUAC_TIME1_TIME _SUM)/sum(decode(TU AC_REQUESTS_SUM,0,1 ,TUAC_REQUESTS_SUM) )</pre>  | <pre>sum(TUAC_TIME1_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | Average time the Tuxedo service waited in a queue.   |
| <pre>sum(TUAC_TIME2_TIME _SUM)/sum(decode(TU AC_REQUESTS_SUM,0,1 ,TUAC_REQUESTS_SUM) )</pre>  | <pre>sum(TUAC_TIME2_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | Average Tuxedo service processing time. This time includes<br>the average time the Tuxedo service waited for other<br>Application Tiers.   |
| <pre>sum(TUAC_TIME3_TIME<br/>_SUM)/sum(decode(TU<br/>AC_REQUESTS_SUM,0,1<br/>,TUAC_REQUESTS_SUM)<br/>)</pre>                                | <pre>sum(TUAC_TIME3_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | Average time the Tuxedo service waited for the execution of<br>another Tuxedo service, within another Tuxedo server process.<br>This time is gathered on a Tuxedo service level and should not<br>be used on any summary level, other than Tuxedo service and<br>Tuxedo server process (such as Tuxedo service group or<br>Tuxedo server). |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM)/sum<br/>(decode(TUAC_REQUES<br/>TS_SUM,0,1,TUAC_REQ<br/>UESTS_SUM))</pre>                      | <pre>sum(TUAC_TIME1_SUM+T<br/>UAC_TIME2_SUM)/sum(d<br/>ecode(TUAC_REQUESTS_<br/>SUM,0,1,TUAC_REQUEST<br/>S_SUM))</pre>                      | Average Tuxedo processing time per Tuxedo domain, Tuxedo server or any grouped entity.   |
| <pre>sum(TUAC_TIME1_SUM+<br/>TUAC_TIME2_SUM+TUAC<br/>_TIME3_SUM)/sum(dec<br/>ode(TUAC_REQUESTS_S<br/>UM,0,1,TUAC_REQUEST<br/>S_SUM))</pre>  | <pre>sum(TUAC_TIME1_SUM+T<br/>UAC_TIME2_SUM+TUAC_T<br/>IME3_SUM)/sum(decode<br/>(TUAC_REQUESTS_SUM,0<br/>,1,TUAC_REQUESTS_SUM<br/>))</pre>  | Average Tuxedo processing time per Tuxedo service or Tuxedo server process.  |
| <pre>sum(TUAC_REQUESTS_S UM-TUAC_RED_SUM-TUA C_YELLOW_SUM-TUAC_G REEN_SUM)</pre>  | <pre>sum(TUAC_REQUESTS_SU M-TUAC_RED_SUM-TUAC_ YELLOW_SUM-TUAC_GREE N_SUM)</pre>  | Total number of Tuxedo service executions, for which the SLA was Not Defined.  |
| <pre>sum(TUAC_RED_SUM)/s um(decode(TUAC_RED_ SUM+TUAC_YELLOW_SUM +TUAC_GREEN_SUM,0,1 ,TUAC_RED_SUM+TUAC_ YELLOW_SUM+TUAC_GRE EN))*100</pre> | <pre>sum(TUAC_RED_SUM)/su m(decode(TUAC_RED_SU M+TUAC_YELLOW_SUM+TU AC_GREEN_SUM,0,1,TUA C_RED_SUM+TUAC_YELLO W_SUM+TUAC_GREEN))*1 00</pre> | Percentage of Tuxedo service executions, which Breached<br>their SLA. The percentage is calculated out of the Tuxedo<br>services, for which the SLA was established.   |

| Oracle   | SQL Server  | Expression description  |
|--|---|---|
| <pre>sum(TUAC_YELLOW_SUM )/sum(decode(TUAC_R ED_SUM+TUAC_YELLOW_ SUM+TUAC_GREEN_SUM, 0,1,TUAC_RED_SUM+TU AC_YELLOW_SUM+TUAC_ GREEN))*100</pre> | <pre>sum(TUAC_YELLOW_SUM) /sum(decode(TUAC_RED _SUM+TUAC_YELLOW_SUM +TUAC_GREEN_SUM,0,1, TUAC_RED_SUM+TUAC_YE LLOW_SUM+TUAC_GREEN) )*100</pre>                        | Percentage of Tuxedo service executions, which Near<br>Breached their SLA. The percentage is calculated out of the<br>Tuxedo services, for which the SLA was established. |
| <pre>sum(TUAC_GREEN_SUM) /sum(decode(TUAC_RE D_SUM+TUAC_YELLOW_S UM+TUAC_GREEN_SUM,0 ,1,TUAC_RED_SUM+TUA C_YELLOW_SUM+TUAC_G REEN))*100</pre>  | <pre>sum(TUAC_GREEN_SUM)/<br/>sum(decode(TUAC_RED_<br/>SUM+TUAC_YELLOW_SUM+<br/>TUAC_GREEN_SUM,0,1,T<br/>UAC_RED_SUM+TUAC_YEL<br/>LOW_SUM+TUAC_GREEN))<br/>*100</pre> | Percentage of Tuxedo service executions, which Not Breached<br>their SLA. The percentage is calculated out of the Tuxedo<br>services, for which the SLA was established.  |

### PW\_TUAC\_ACTIONS\_APC\_T

The Tuxedo information summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| TUAC_TIMESTAMP        | The time summary.   |
| TUAC_PWII_INSTANCE_ID | The ID of the Tuxedo domain running the Tuxedo service.   |
| TUAC_ACTION           | The ID of the Tuxedo server.  |
| TUAC_CONSUMER_IP      | The ID of the client IP running the Tuxedo service.   |
| TUAC_CONSUMER_IP_GID  | The ID of the client IP group running the Tuxedo service.   |
| TUAC_PROGRAM          | The ID of the Tuxedo server process running the Tuxedo service.   |
| TUAC_TIME1_SUM        | Total time the Tuxedo service waited in a queue.  |
| TUAC_TIME2_SUM        | Total Tuxedo service processing time. The time includes the time the Tuxedo service waited for other Application Tiers.   |
| TUAC_TIME3_SUM        | Total time the Tuxedo service waited for execution of another Tuxedo server process. This time is gathered on a Tuxedo service level and should not be used on any summary level other than Tuxedo service and Tuxedo server process (such as Tuxedo service group or Tuxedo server). |
| TUAC_REQUESTS_SUM     | Total number of Tuxedo service executions.  |
| TUAC_RED_SUM          | Total number of Tuxedo service executions, which Breached their SLA.  |
| TUAC_YELLOW_SUM       | Total number of Tuxedo service executions, which Near Breached their SLA.   |
| TUAC_GREEN_SUM        | Total number of Tuxedo service executions, which did Not Breach their SLA.  |

### Expressions

| Oracle  | SQL Server   | Expression description   |
|---|--|--|
| <pre>sum(TUAC_TIME1_SUM+T UAC_TIME2_SUM)</pre>  | <pre>sum(TUAC_TIME1_SUM+TU AC_TIME2_SUM)</pre>   | Total Tuxedo processing time per Tuxedo domain, Tuxedo server or any grouped entity.   |
| <pre>sum(TUAC_TIME1_SUM+T UAC_TIME2_SUM+TUAC_T IME3_SUM)</pre>  | <pre>sum(TUAC_TIME1_SUM+TU AC_TIME2_SUM+TUAC_TIM E3_SUM)</pre>   | Total Tuxedo processing time per Tuxedo service or Tuxedo server process.  |
| <pre>sum(TUAC_TIME1_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | <pre>sum(TUAC_TIME1_TIME_S UM)/sum(decode(TUAC_R EQUESTS_SUM,0,1,TUAC_ REQUESTS_SUM))</pre>  | Average time the Tuxedo service waited in a queue.   |
| <pre>sum(TUAC_TIME2_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | <pre>sum(TUAC_TIME2_TIME_S UM)/sum(decode(TUAC_R EQUESTS_SUM,0,1,TUAC_ REQUESTS_SUM))</pre>  | Average Tuxedo service processing time. This time includes the average time the Tuxedo service waited for other Application Tiers.   |
| <pre>sum(TUAC_TIME3_TIME_<br/>SUM)/sum(decode(TUAC<br/>_REQUESTS_SUM,0,1,TU<br/>AC_REQUESTS_SUM))</pre>                                     | <pre>sum(TUAC_TIME3_TIME_S UM)/sum(decode(TUAC_R EQUESTS_SUM,0,1,TUAC_ REQUESTS_SUM))</pre>  | Average time the Tuxedo service waited for the execution<br>of another Tuxedo service, within another Tuxedo server<br>process. This time is gathered on a Tuxedo service level<br>and should not be used on any summary level, other than<br>Tuxedo service and Tuxedo server process (such as<br>Tuxedo service group or Tuxedo server). |
| <pre>sum(TUAC_TIME1_SUM+T<br/>UAC_TIME2_SUM)/sum(d<br/>ecode(TUAC_REQUESTS_<br/>SUM,0,1,TUAC_REQUEST<br/>S_SUM))</pre>                      | <pre>sum(TUAC_TIME1_SUM+TU<br/>AC_TIME2_SUM)/sum(dec<br/>ode(TUAC_REQUESTS_SUM<br/>,0,1,TUAC_REQUESTS_SU<br/>M))</pre>                     | Average Tuxedo processing time per Tuxedo domain,<br>Tuxedo server or any grouped entity.  |
| <pre>sum(TUAC_TIME1_SUM+T<br/>UAC_TIME2_SUM+TUAC_T<br/>IME3_SUM)/sum(decode<br/>(TUAC_REQUESTS_SUM,0<br/>,1,TUAC_REQUESTS_SUM<br/>))</pre>  | <pre>sum(TUAC_TIME1_SUM+TU<br/>AC_TIME2_SUM+TUAC_TIM<br/>E3_SUM)/sum(decode(TU<br/>AC_REQUESTS_SUM,0,1,T<br/>UAC_REQUESTS_SUM))</pre>      | Average Tuxedo processing time per Tuxedo service or<br>Tuxedo server process.   |
| <pre>sum(TUAC_REQUESTS_SU M-TUAC_RED_SUM-TUAC_ YELLOW_SUM-TUAC_GREE N_SUM)</pre>  | <pre>sum(TUAC_REQUESTS_SUM -TUAC_RED_SUM-TUAC_YE LLOW_SUM-TUAC_GREEN_S UM)</pre>   | Total number of Tuxedo service executions, for which the SLA was Not Defined.  |
| <pre>sum(TUAC_RED_SUM)/su m(decode(TUAC_RED_SU M+TUAC_YELLOW_SUM+TU AC_GREEN_SUM,0,1,TUA C_RED_SUM+TUAC_YELLO W_SUM+TUAC_GREEN))*1 00</pre> | <pre>sum(TUAC_RED_SUM)/sum (decode(TUAC_RED_SUM+ TUAC_YELLOW_SUM+TUAC_ GREEN_SUM,0,1,TUAC_RE D_SUM+TUAC_YELLOW_SUM +TUAC_GREEN))*100</pre> | Percentage of Tuxedo service executions, which Breached<br>their SLA. The percentage is calculated out of the Tuxedo<br>services, for which the SLA was established.   |

| Oracle   | SQL Server  | Expression description  |
|--|---|---|
| <pre>sum(TUAC_YELLOW_SUM) /sum(decode(TUAC_RED _SUM+TUAC_YELLOW_SUM +TUAC_GREEN_SUM,0,1, TUAC_RED_SUM+TUAC_YE LLOW_SUM+TUAC_GREEN) )*100</pre> | <pre>sum(TUAC_YELLOW_SUM)/<br/>sum(decode(TUAC_RED_S<br/>UM+TUAC_YELLOW_SUM+TU<br/>AC_GREEN_SUM,0,1,TUAC<br/>_RED_SUM+TUAC_YELLOW_<br/>SUM+TUAC_GREEN))*100</pre> | Percentage of Tuxedo service executions, which Near<br>Breached their SLA. The percentage is calculated out of<br>the Tuxedo services, for which the SLA was established. |
| <pre>sum(TUAC_GREEN_SUM)/ sum(decode(TUAC_RED_ SUM+TUAC_YELLOW_SUM+ TUAC_GREEN_SUM,0,1,T UAC_RED_SUM+TUAC_YEL LOW_SUM+TUAC_GREEN)) *100</pre>  | <pre>sum(TUAC_GREEN_SUM)/s um(decode(TUAC_RED_SU M+TUAC_YELLOW_SUM+TUA C_GREEN_SUM,0,1,TUAC_ RED_SUM+TUAC_YELLOW_S UM+TUAC_GREEN))*100</pre>                      | Percentage of Tuxedo service executions, which Not<br>Breached their SLA. The percentage is calculated out of<br>the Tuxedo services, for which the SLA was established.  |

# N

# Insight MQ Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

### PW\_MQBD\_BODY\_N

The WebSphere message body normalization table.

| Column name       | Column description                      |
|-------------------|---|
| MQBD_ID           | The ID of the WebSphere message body.   |
| MQBD_STRING_VALUE | The name of the WebSphere message body. |

### PW\_MQAT\_ATTRIBUTES\_N

The WebSphere message header fields normalization table.

| Column name       | Column description                               |
|-------------------|--|
| MQAT_ID           | The ID of the WebSphere message header fields.   |
| MQAT_STRING_VALUE | The name of the WebSphere message header fields. |

### PS\_MQMT\_MSG\_TYPES

The WebSphere message type normalization table.

| Column name | Column description                      |
|-------------|---|
| MQMT_ID     | The ID of the WebSphere message type.   |
| MQMT_TYPE   | The name of the WebSphere message type. |

### PW\_MQSG\_SERVER\_GRP

The Web Sphere server group table.

| Column name  | Column description   |
|--------------|--|
| MQSG_INSM_ID | The ID of servers passing the WebSphere message.           |
| MQSG_INGD_ID | The ID of the servers group passing the WebSphere message. |

### PW\_MQMG\_QUEUE\_MGR\_NAME\_GRP

The WebSphere queue manager group table.

| Column name  | Column description   |
|--------------|--|
| MQMG_MQMN_ID | The ID of the queue manager passing the WebSphere message.       |
| MQMG_INGD_ID | The ID of the queue manager group passing the WebSphere message. |

### PW\_MQUG\_USER\_GRP

The WebSphere user group table.

| Column name  | Column description                                      |
|--------------|---|
| MQUG_MQUN_ID | The ID of the user passing the WebSphere message.       |
| MQUG_INGD_ID | The ID of the user group passing the WebSphere message. |

### PW\_MQQG\_QUEUE\_NAME\_GRP

The WebSphere queue group table.

| Column name  | Column description                                       |
|--------------|--|
| MQQG_MQQN_ID | The ID of the queue passing the WebSphere message.       |
| MQQG_INGD_ID | The ID of the queue group passing the WebSphere message. |

### PW\_MQLG\_APPLICATION\_GRP

The WebSphere reader and writer applications group table.

| Column name  | Column description   |
|--------------|--|
| MQLG_MQLN_ID | The ID of the reader or writer applications passing the WebSphere message.       |
| MQLG_INGD_ID | The ID of the reader or writer applications group passing the WebSphere message. |

### PW\_MQUN\_USER\_N

The WebSphere user normalization table.

| Column name       | Column description                                  |
|-------------------|---|
| MQUN_ID           | The ID of the user passing the WebSphere message.   |
| MQUN_STRING_VALUE | The name of the user passing the WebSphere message. |

### PW\_MQLN\_APPLICATION\_N

The WebSphere application normalization table.

| Column name       | Column description   |
|-------------------|--|
| MQLN_ID           | The ID of the application passing the WebSphere message.   |
| MQLN_STRING_VALUE | The name of the application passing the WebSphere message. |

### PW\_MQMN\_QUEUE\_MGR\_NAME\_N

The WebSphere queue manager normalization table.

| Column name       | Column description   |
|-------------------|--|
| MQMN_ID           | The ID of the queue manager passing the WebSphere message.   |
| MQMN_STRING_VALUE | The name of the queue manager passing the WebSphere message. |

### PW\_MQQN\_QUEUE\_NAME\_N

The WebSphere queue name normalization table.

| Column name       | Column description                                   |
|-------------------|--|
| MQQN_ID           | The ID of the queue passing the WebSphere message.   |
| MQQN_STRING_VALUE | The name of the queue passing the WebSphere message. |

### PW\_MQAC\_ACTIONS\_T

The WebSphere message activity summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| MQAC_TIMESTAMP        | The time summary.   |
| MQAC_PWII_INSTANCE_ID | The ID of the instance passing the WebSphere message.   |
| MQAC_MAJOR_MSG_ID     | The ID of the WebSphere message.  |
| MQAC_QUEUE_NAME       | The ID of the queue passing the WebSphere message.  |
| MQAC_QUEUE_MGR_NAME   | The ID of the queue manager passing the WebSphere message.  |
| MQAC_MSG_TYPE         | The ID of the WebSphere message type.   |
| MQAC_USER             | The ID of the user passing the WebSphere message.   |
| MQAC_RD_APPLICATION   | The ID of the reader application passing the WebSphere message.   |
| MQAC_WR_APPLICATION   | The ID of the writer application passing the WebSphere message.   |
| MQAC_ATTRIBUTES       | The ID of the WebSphere message header fields.  |
| MQAC_BODY             | The ID of the WebSphere message body.   |
| MQAC_STAT1_SUM        | The number of message bytes, transferred while passing the WebSphere message.   |
| MQAC_TIME1_SUM        | Total time the WebSphere message waited in a queue.   |
| MQAC_TIME2_SUM        | Total WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue. |
| MQAC_REQUESTS_SUM     | Total number of WebSphere message executions.   |
| MQAC_RED_SUM          | Total number of WebSphere message executions, which Breached their SLA.   |
| MQAC_YELLOW_SUM       | Total number of WebSphere message executions, which Near Breached their SLA.  |
| MQAC_GREEN_SUM        | Total number of WebSphere message executions, which did Not Breach their SLA.   |

### Expressions

| Oracle   | SQL Server  | Expression description                                    |
|--|---|---|
| <pre>sum(MQAC_TIME1_SUM+M QAC_TIME2_SUM)</pre> | <pre>sum(MQAC_TIME1_SUM+MQAC _TIME2_SUM)</pre>  | Total time WebSphere message was between 2 queue inserts. |
| SUM)/sum(decode(MQAC                           | <pre>sum(MQAC_TIME1_TIME_SUM )/sum(decode(MQAC_REQUE STS_SUM,0,1,MQAC_REQUES TS_SUM))</pre> | Average time the WebSphere message waited in a queue.     |

### (Continued)

| Oracle   | SQL Server   | Expression description   |
|--|--|--|
| <pre>sum(MQAC_TIME2_TIME_<br/>SUM)/sum(decode(MAAC<br/>_REQUESTS_SUM,0,1,MQ<br/>AC_REQUESTS_SUM))</pre>  | <pre>sum(MQAC_TIME2_TIME_SUM )/sum(decode(MAAC_REQUE STS_SUM,0,1,MQAC_REQUES TS_SUM))</pre>  | Average WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue.  |
| <pre>sum(MQAC_TIME1_SUM+M<br/>QAC_TIME2_SUM)/sum(d<br/>ecode(MQAC_REQUESTS_<br/>SUM,0,1,MQAC_REQUEST<br/>S_SUM))</pre>                         | <pre>sum(MQAC_TIME1_SUM+MQAC<br/>_TIME2_SUM)/sum(decode(<br/>MQAC_REQUESTS_SUM,0,1,M<br/>QAC_REQUESTS_SUM))</pre>  | Average time the WebSphere message was between 2 queues inserts.   |
| <pre>sum(MQAC_REQUESTS_SU M-MQAC_RED_SUM-MQAC_ YELLOW_SUM-MQAC_GREE N_SUM)</pre>   | <pre>sum(MQAC_REQUESTS_SUM-M QAC_RED_SUM-MQAC_YELLOW _SUM-MQAC_GREEN_SUM)</pre>  | Total number of WebSphere service executions, for which the SLA was not defined.   |
| <pre>sum(MQAC_RED_SUM)/su m(decode(MQAC_RED_SU M+MQAC_YELLOW_SUM+MQ AC_GREEN_SUM,0,1,MQA C_RED_SUM+MQAC_YELLO W_SUM+MQAC_GREEN))*1 00</pre>    | <pre>sum(MQAC_RED_SUM)/sum(d ecode(MQAC_RED_SUM+MQAC _YELLOW_SUM+MQAC_GREEN_ SUM,0,1,MQAC_RED_SUM+MQ AC_YELLOW_SUM+MQAC_GREE N))*100</pre>                       | Percentage of WebSphere message executions, which<br>Breached their SLA. The percentage is calculated out of<br>the WebSphere messages, for which SLA was<br>established.      |
| <pre>sum(MQAC_YELLOW_SUM) /sum(decode(MQAC_RED _SUM+MQAC_YELLOW_SUM +MQAC_GREEN_SUM,0,1, MQAC_RED_SUM+MQAC_YE LLOW_SUM+MQAC_GREEN) )*100</pre> | <pre>sum(MQAC_YELLOW_SUM)/su m(decode(MQAC_RED_SUM+M QAC_YELLOW_SUM+MQAC_GRE EN_SUM,0,1,MQAC_RED_SUM +MQAC_YELLOW_SUM+MQAC_G REEN))*100</pre>                    | Percentage of WebSphere message executions, which<br>Near Breached their SLA. The percentage is calculated<br>out of the WebSphere messages, for which SLA was<br>established. |
| <pre>sum(MQAC_GREEN_SUM)/ sum(decode(MQAC_RED_ SUM+MQAC_YELLOW_SUM+ MQAC_GREEN_SUM,0,1,M QAC_RED_SUM+MQAC_YEL LOW_SUM+MQAC_GREEN)) *100</pre>  | <pre>sum(MQAC_GREEN_SUM)/sum<br/>(decode(MQAC_RED_SUM+MQ<br/>AC_YELLOW_SUM+MQAC_GREE<br/>N_SUM,0,1,MQAC_RED_SUM+<br/>MQAC_YELLOW_SUM+MQAC_GR<br/>EEN))*100</pre> | Percentage of WebSphere message executions, which<br>Not Breached their SLA. The percentage is calculated<br>out of the WebSphere messages, for which SLA was<br>established.  |

### PW\_MQAC\_ACTIONS\_QMUAT\_T

The WebSphere message activity summarized by each aggregated invocation.

| Column name           | Column description                                    |
|-----------------------|---|
| MQAC_TIMESTAMP        | The time summary.                                     |
| MQAC_PWII_INSTANCE_ID | The ID of the instance passing the WebSphere message. |
| MQAC_QUEUE_NAME       | The ID of the queue passing the WebSphere message.    |

### (Continued)

| Column name         | Column description  |
|---------------------|---|
| MQAC_QUEUE_MGR_NAME | The ID of the queue manager passing the WebSphere message.  |
| MQAC_MSG_TYPE       | The ID of the WebSphere message type.   |
| MQAC_USER           | The ID of the user passing the WebSphere message.   |
| MQAC_RD_APPLICATION | The ID of the reader application passing the WebSphere message.   |
| MQAC_WR_APPLICATION | The ID of the writer application passing the WebSphere message.   |
| MQAC_STAT1_SUM      | The number of message bytes, transferred while passing the WebSphere message.   |
| MQAC_TIME1_SUM      | Total time the WebSphere message waited in a queue.   |
| MQAC_TIME2_SUM      | Total WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue. |
| MQAC_REQUESTS_SUM   | Total number of WebSphere message executions.   |
| MQAC_RED_SUM        | Total number of WebSphere message executions, which Breached their SLA.   |
| MQAC_YELLOW_SUM     | Total number of WebSphere message executions, which Near Breached their SLA.  |
| MQAC_GREEN_SUM      | Total number of WebSphere message executions, which did Not Breach their SLA.   |

### Expressions

| Oracle  | SQL Server   | Expression description  |
|---|--|---|
| <pre>sum(MQAC_TIME1_SUM+MQA<br/>C_TIME2_SUM)</pre>  | <pre>sum(MQAC_TIME1_SUM+MQ AC_TIME2_SUM)</pre>   | Total time WebSphere message was between 2 queue inserts.   |
| <pre>sum(MQAC_TIME1_TIME_SU M)/sum(decode(MQAC_REQ UESTS_SUM,0,1,MQAC_REQ UESTS_SUM))</pre>                       | <pre>sum(MQAC_TIME1_TIME_S UM)/sum(decode(MQAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>                            | Average time the WebSphere message waited in a queue.   |
| <pre>sum(MQAC_TIME2_TIME_SU M)/sum(decode(MAAC_REQ UESTS_SUM,0,1,MQAC_REQ UESTS_SUM))</pre>                       | <pre>sum(MQAC_TIME2_TIME_S UM)/sum(decode(MAAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>                            | Average WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue. |
| <pre>sum(MQAC_TIME1_SUM+MQA<br/>C_TIME2_SUM)/sum(decod<br/>e(MQAC_REQUESTS_SUM,0,<br/>1,MQAC_REQUESTS_SUM))</pre> | <pre>sum(MQAC_TIME1_SUM+MQ<br/>AC_TIME2_SUM)/sum(dec<br/>ode(MQAC_REQUESTS_SUM<br/>,0,1,MQAC_REQUESTS_SU<br/>M))</pre> | Average time the WebSphere message was between 2 queues inserts.  |
| sum(MQAC_REQUESTS_SUM-<br>MQAC_RED_SUM-MQAC_YELL<br>OW_SUM-MQAC_GREEN_SUM)  | <pre>sum(MQAC_REQUESTS_SUM -MQAC_RED_SUM-MQAC_YE LLOW_SUM-MQAC_GREEN_S UM)</pre>                                       | Total number of WebSphere service executions, for which the SLA was not defined.  |

| Oracle   | SQL Server  | Expression description   |
|--|---|--|
| <pre>sum(MQAC_RED_SUM)/sum(<br/>decode(MQAC_RED_SUM+MQ<br/>AC_YELLOW_SUM+MQAC_GRE<br/>EN_SUM,0,1,MQAC_RED_SU<br/>M+MQAC_YELLOW_SUM+MQAC<br/>_GREEN))*100</pre> | <pre>sum(MQAC_RED_SUM)/sum<br/>(decode(MQAC_RED_SUM+<br/>MQAC_YELLOW_SUM+MQAC_<br/>GREEN_SUM,0,1,MQAC_RE<br/>D_SUM+MQAC_YELLOW_SUM<br/>+MQAC_GREEN))*100</pre>    | Percentage of WebSphere message executions, which<br>Breached their SLA. The percentage is calculated out of<br>the WebSphere messages, for which SLA was<br>established.      |
| <pre>sum(MQAC_YELLOW_SUM)/s um(decode(MQAC_RED_SUM +MQAC_YELLOW_SUM+MQAC_ GREEN_SUM,0,1,MQAC_RED _SUM+MQAC_YELLOW_SUM+M QAC_GREEN))*100</pre>                  | <pre>sum(MQAC_YELLOW_SUM)/<br/>sum(decode(MQAC_RED_S<br/>UM+MQAC_YELLOW_SUM+MQ<br/>AC_GREEN_SUM,0,1,MQAC<br/>_RED_SUM+MQAC_YELLOW_<br/>SUM+MQAC_GREEN))*100</pre> | Percentage of WebSphere message executions, which<br>Near Breached their SLA. The percentage is calculated<br>out of the WebSphere messages, for which SLA was<br>established. |
| <pre>sum(MQAC_GREEN_SUM)/su m(decode(MQAC_RED_SUM+ MQAC_YELLOW_SUM+MQAC_G REEN_SUM,0,1,MQAC_RED_ SUM+MQAC_YELLOW_SUM+MQ AC_GREEN))*100</pre>                   | <pre>sum(MQAC_GREEN_SUM)/s um(decode(MQAC_RED_SU M+MQAC_YELLOW_SUM+MQA C_GREEN_SUM,0,1,MQAC_ RED_SUM+MQAC_YELLOW_S UM+MQAC_GREEN))*100</pre>                      | Percentage of WebSphere message executions, which<br>Not Breached their SLA. The percentage is calculated<br>out of the WebSphere messages, for which SLA was<br>established.  |

## PW\_MQAC\_ACTIONS\_UAT\_T

The WebSphere message activity summarized by each aggregated invocation.

| Column name           | Column description  |
|-----------------------|---|
| MQAC_TIMESTAMP        | The time summary.   |
| MQAC_PWII_INSTANCE_ID | The ID of the instance passing the WebSphere message.   |
| MQAC_MSG_TYPE         | The ID of the WebSphere message type.   |
| MQAC_USER             | The ID of the user passing the WebSphere message.   |
| MQAC_RD_APPLICATION   | The ID of the reader application passing the WebSphere message.   |
| MQAC_WR_APPLICATION   | The ID of the writer application passing the WebSphere message.   |
| MQAC_STAT1_SUM        | The number of message bytes, transferred while passing the WebSphere message.   |
| MQAC_TIME1_SUM        | Total time the WebSphere message waited in a queue.   |
| MQAC_TIME2_SUM        | Total WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue. |
| MQAC_REQUESTS_SUM     | Total number of WebSphere message executions.   |
| MQAC_RED_SUM          | Total number of WebSphere message executions, which Breached their SLA.   |
| MQAC_YELLOW_SUM       | Total number of WebSphere message executions, which Near Breached their SLA.  |
| MQAC_GREEN_SUM        | Total number of WebSphere message executions, which did Not Breach their SLA.   |

### Expressions

| Oracle  | SQL Server  | Expression description   |
|---|---|--|
| <pre>sum(MQAC_TIME1_SUM+MQ AC_TIME2_SUM)</pre>  | <pre>sum(MQAC_TIME1_SUM+MQ AC_TIME2_SUM)</pre>  | Total time WebSphere message was between 2 queue inserts.  |
| <pre>sum(MQAC_TIME1_TIME_S UM)/sum(decode(MQAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>   | <pre>sum(MQAC_TIME1_TIME_S UM)/sum(decode(MQAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>   | Average time the WebSphere message waited in a queue.  |
| <pre>sum(MQAC_TIME2_TIME_S UM)/sum(decode(MAAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>   | <pre>sum(MQAC_TIME2_TIME_S UM)/sum(decode(MAAC_R EQUESTS_SUM,0,1,MQAC_ REQUESTS_SUM))</pre>   | Average WebSphere message processing time. This time includes the time the message was processed till it was placed in another queue.  |
| <pre>sum(MQAC_TIME1_SUM+MQ<br/>AC_TIME2_SUM)/sum(dec<br/>ode(MQAC_REQUESTS_SUM<br/>,0,1,MQAC_REQUESTS_SU<br/>M))</pre>  | <pre>sum(MQAC_TIME1_SUM+MQ<br/>AC_TIME2_SUM)/sum(dec<br/>ode(MQAC_REQUESTS_SUM<br/>,0,1,MQAC_REQUESTS_SU<br/>M))</pre>  | Average time the WebSphere message was between 2 queues inserts.   |
| <pre>sum(MQAC_REQUESTS_SUM -MQAC_RED_SUM-MQAC_YE LLOW_SUM-MQAC_GREEN_S UM)</pre>  | <pre>sum(MQAC_REQUESTS_SUM -MQAC_RED_SUM-MQAC_YE LLOW_SUM-MQAC_GREEN_S UM)</pre>  | Total number of WebSphere service executions, for which the SLA was not defined.   |
| <pre>sum(MQAC_RED_SUM)/sum<br/>(decode(MQAC_RED_SUM+<br/>MQAC_YELLOW_SUM+MQAC_<br/>GREEN_SUM,0,1,MQAC_RE<br/>D_SUM+MQAC_YELLOW_SUM<br/>+MQAC_GREEN))*100</pre>    | <pre>sum(MQAC_RED_SUM)/sum (decode(MQAC_RED_SUM+ MQAC_YELLOW_SUM+MQAC_ GREEN_SUM,0,1,MQAC_RE D_SUM+MQAC_YELLOW_SUM +MQAC_GREEN))*100</pre>                        | Percentage of WebSphere message executions, which<br>Breached their SLA. The percentage is calculated out of<br>the WebSphere messages, for which SLA was established.         |
| <pre>sum(MQAC_YELLOW_SUM)/<br/>sum(decode(MQAC_RED_S<br/>UM+MQAC_YELLOW_SUM+MQ<br/>AC_GREEN_SUM,0,1,MQAC<br/>_RED_SUM+MQAC_YELLOW_<br/>SUM+MQAC_GREEN))*100</pre> | <pre>sum(MQAC_YELLOW_SUM)/<br/>sum(decode(MQAC_RED_S<br/>UM+MQAC_YELLOW_SUM+MQ<br/>AC_GREEN_SUM,0,1,MQAC<br/>_RED_SUM+MQAC_YELLOW_<br/>SUM+MQAC_GREEN))*100</pre> | Percentage of WebSphere message executions, which<br>Near Breached their SLA. The percentage is calculated out<br>of the WebSphere messages, for which SLA was<br>established. |
| <pre>sum(MQAC_GREEN_SUM)/s um(decode(MQAC_RED_SU M+MQAC_YELLOW_SUM+MQA C_GREEN_SUM,0,1,MQAC_ RED_SUM+MQAC_YELLOW_S UM+MQAC_GREEN))*100</pre>                      | <pre>sum(MQAC_GREEN_SUM)/s um(decode(MQAC_RED_SU M+MQAC_YELLOW_SUM+MQA C_GREEN_SUM,0,1,MQAC_ RED_SUM+MQAC_YELLOW_S UM+MQAC_GREEN))*100</pre>                      | Percentage of WebSphere message executions, which Not<br>Breached their SLA. The percentage is calculated out of<br>the WebSphere messages, for which SLA was established.     |

# Precise for J2EE Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

### PW\_JESR\_SERVICE\_REQUESTS\_H

Summarizes each aggregated invocation.

| Column name             | Column description   |
|-------------------------|--|
| JESR_TIMESTAMP          | Time summary.  |
| JESR_PWII_INSTANCE_ID   | Instance ID.   |
| JESR_IS_SERVICE_REQUEST | True if this row describes a HTTP or EJB service request aggregated invocation or false if this row describes a Custom, HTTP, EJB, or other non-service request aggregated invocation.   |
| JESR_NAME               | Name of the aggregated invocation.   |
| JESR_TYPE               | Type of the aggregated invocation.   |
| JESR_HIT_COUNT_SUM      | Total completions (hits) of the aggregated invocation.   |
| JESR_RESPONSE_TIME_SUM  | Total response time of the aggregated invocation.  |
| JESR_CPU_TIME_SUM       | Total estimated CPU time of the aggregated invocation.   |
| JESR_INTERNAL_TIME_SUM  | Portion of total response time of the aggregated invocation that excludes the response time spent in calls (invocations) that were instrumented. In other words, internal time is the portion of the invocation response time that was not instrumented. |
| JESR_JDBC_TIME_SUM      | Total response time of the aggregated invocation to directly call JDBC calls.  |
| JESR_THRESHOLD_BREACH   | True if this aggregated invocation's average response time exceeded the breaching activities threshold value <u>and</u> if this invocation's IS_SERVICE_REQUEST value is True.   |

## PW\_JEAS\_APPLICATION\_SR\_H

Summarizes each type of invocation.

| Column name             | Column description  |
|-------------------------|---|
| JEAS_TIMESTAMP          | Time summary.   |
| JEAS_PWII_INSTANCE_ID   | Instance ID.  |
| JEAS_IS_SERVICE_REQUEST | True if this row summarizes all HTTP or EJB type service requests or false if this row describes all Custom, HTTP, EJB, or other non-service request invocations.                                 |
| JEAS_TYPE               | Type of the summarized invocation type.   |
| JEAS_HIT_COUNT_SUM      | Total hits of the summarized invocation type.   |
| JEAS_RESPONSE_TIME_SUM  | Total response time of the summarized invocation type.  |
| JEAS_CPU_TIME_SUM       | Total estimated CPU time of the summarized invocation type.   |
| JEAS_INTERNAL_TIME_SUM  | Total internal time of the summarized invocation type excludes all calls to other invocations that were instrumented.   |
| JEAS_JDBC_TIME_SUM      | Total response time of the summarized invocation type to directly call JDBC calls.  |
| JEAS_THRESHOLD_BREACH   | True if this summarized invocation type's average response time exceeded the breaching activities threshold value <u>and</u> if this summarized invocation type IS_SERVICE_REQUEST value is True. |
| JEAS_ACTIVE_THREADS_AVG | Average number of active threads of this summarized invocation type <u>and</u> only when this row has IS_SERVICE_REQUEST = True.  |

### PW\_JEJV\_JVM\_H

Summarizes the JVM.

| Column name                    | Column description   |
|--------------------------------|--|
| JEJV_TIMESTAMP                 | Time summary.  |
| JEJV_PWII_INSTANCE_ID          | Instance ID.   |
| JEJV_HEAP_USED_PCT_AVG         | Percent of this JVMs heap in use.                            |
| JEJV_MAJOR_GC_TIME_PCT_A<br>VG | Percent of time this JVM spent doing garbage collection.     |
| JEJV_ACTIVE_THREADS_AVG        | Average number of active threads of all types.               |
| JEJV_CPU_PCT                   | Percentage of the available CPU time that this JVM consumed. |

## PW\_JEAV\_AVAILABILITY\_H

Summarizes the JVM.

| Column name      | Column description  |
|------------------|---|
| JEAV_INSTANCE_ID | Instance ID.  |
| JEAV_TIMESTAMP   | Slice end time.   |
| JEAV_AVAIL_PCT   | The percentage of the slice in which the JVM was available. |

### PW\_JEAG\_ACTION\_GRP

The J2EE Method group table.

| Column name  | Column description |
|--------------|--------------------|
| JEAG_JEAN_ID | Method ID.         |
| JEAG_INGD_ID | Method group ID.   |

### PW\_JEIG\_INSTANCE\_GRP

The J2EE JVM group table.

| Column name  | Column description |
|--------------|--------------------|
| JEIG_INCE_ID | Instance ID.       |
| JEIG_INGD_ID | Instance group ID. |

### PW\_JESG\_SERVER\_GRP

The J2EE server group table.

| Column name  | Column description                               |
|--------------|--|
| JESG_INCE_ID | ID of the J2EE instance installed on the server. |
| JESG_INGD_ID | Server group ID.                                 |

# Precise for Microsoft .NET Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

# PW\_DNCS\_COUNTER\_STAT\_T

This table contains all the performance counters that have been collected and aggregated during the defined interval. It reflects the Perfmon categories and counters, and also contains daily, weekly and monthly summarization levels.

| Column name             | Column description   |
|-------------------------|--|
| DNCS_PWII_INSTANCE_ID   | The unique identifier of the instance.                                   |
| DNCS_TIMESTAMP          | The end time of the transaction.   |
| DNCS_RECIEVED_TIMESTAMP | The received timestamp.  |
| DNCS_MINUTES_COUNT_SUM  | The hours count.   |
| DNCS_PWHG_ID            | The hour group in the PW.  |
| DNCS_ANONYM_REQ         | The number of requests utilizing anonymous authentication.               |
| DNCS_CACHE_ENTRIES      | The number of entries within the cache.                                  |
| DNCS_CACHE_HITS         | The number of hits from the cache.                                       |
| DNCS_CACHE_MISSES       | The number of failed cache requests per application.                     |
| DNCS_CACHE_API_ENTRIES  | The number of entries in the application cache from external Cache APIs. |
| DNCS_CACHE_API_HITS     | The number of hits from the cache only through the external Cache APIs.  |

| Column name              | Column description   |
|--------------------------|--|
| DNCS_CACHE_API_TURN_RATE | The number of additions and removals to the API cache per second.  |
| DNCS_CACHE_API_MISSES    | The number of failed requests to the cache through the external Cache APIs.                                    |
| DNCS_COMPILATIONS        | The number of compilations that have taken place.  |
| DNCS_DEBUG_REQ           | The number of requests while debugging was enabled.  |
| DNCS_ERR_PREPROCESSING   | The number of errors during parsing.   |
| DNCS_ERR_COMPILATION     | The number of errors during dynamic compilation.   |
| DNCS_ERR_EXECUTION       | The number of errors during the execution of an HTTP request.  |
| DNCS_ERR_DURING_EXEC     | The number of unhandled errors during the execution of HTTP requests.  |
| DNCS_ERR_TOTAL           | The number of errors during the execution of HTTP requests.  |
| DNCS_OUT_CACHE_ENTRIES   | The number of entries in the output cache.   |
| DNCS_OUT_CACHE_HITS      | The number of requests serviced from the output cache.   |
| DNCS_OUT_CACHE_MISSES    | The number of failed output cache requests per application.  |
| DNCS_OUT_TURN_RATE       | The number of additions and removals to the output cache per second.   |
| DNCS_PIPELINE_COUNT      | The number of active pipeline instances.   |
| DNCS_REQ_TOTAL_BYTES     | The size (in bytes) of all requests.   |
| DNCS_REQ_OUT_TOTAL       | The total size (in bytes) of responses sent to a client. This does not include standard HTTP response headers. |
| DNCS_REQ_EXECUTING       | The number of requests currently being executed.   |
| DNCS_REQ_FAILED          | The number of failed requests.   |
| DNCS_REQ_QUEUE           | The number of requests in the application request queue.   |
| DNCS_REQ_NOT_FOUND       | The number of requests that failed because resources were not found.   |
| DNCS_REQ_NOT_AUTHORIZED  | The number of requests that failed due to no authorization (status code 401).                                  |
| DNCS_REQ_SUCCEEDED       | The number of requests that executed successfully (status code 200).   |
| DNCS_REQ_TIME_OUT        | The number of requests that timed out.   |
| DNCS_REQ_TOTAL           | The number of requests since the service was started.  |
| DNCS_SESSION_SQL_CONN    | The number of connections to the SQL Server used by session state.   |
| DNCS_SESSION_SERVER_CONN | The number of connections to the State Server used by session state.   |
| DNCS_SESSION_ACTIVE      | The number of sessions currently active.   |
| DNCS_SESSION_ABANDONED   | The number of sessions that have been explicitly abandoned.  |
| DNCS_SESSION_TIMEOUT     | The number of sessions timed out.  |
| DNCS_SESSION_TOTAL       | The total number of sessions since the application was started.  |
| DNCS_TRANS_ABORTED       | The number of transactions aborted.  |

| Column name              | Column description  |
|--------------------------|---|
| DNCS_TRANS_COMMITTED     | The number of transactions committed.   |
| DNCS_TRANS_PENDING       | The number of transactions in progress.   |
| DNCS_TRANS_TOTAL         | The number of transactions since the service was started.   |
| DNCS_TRANS_TOTAL_SEC     | The number of transactions started per second.  |
| DNCS_APP_RESTART         | The number of times that an application has been restarted.   |
| DNCS_APP_RUN             | The number of applications running on the server computer.  |
| DNCS_REQUEST_DISCON      | The number of requests that were disconnected.  |
| DNCS_REQUEST_EXEC_TIME   | The number of milliseconds that it took to execute the most recent request.   |
| DNCS_REQUEST_CURRENT     | The number of requests, including those that are queued, currently executing, or waiting to be written to the client. |
| DNCS_REQUEST_REJECT      | The number of requests rejected, because the request queue was full.  |
| DNCS_REQUEST_QUEUED      | The number of requests waiting for service from the queue.  |
| DNCS_REQ_WAIT            | The number of milliseconds that the most recent request waited.   |
| DNCS_WP_RESTARTS         | The number of times a worker process has been restarted.  |
| DNCS_WP_RUNNING          | The number of worker processes running on the server computer.  |
| DNCS_EXCEPTION_THROWN    | The number of exceptions thrown since the application started.  |
| DNCS_FILTERS_SEC         | The number of .NET exception filters executed per second.   |
| DNCS_FINALLY_SEC         | The number of finally blocks executed per second.   |
| DNCS_CATCH_SEC           | The number of stack frames traversed.   |
| DNCS_CCW                 | The number of managed objects referenced by unmanaged COM code.   |
| DNCS_MARSHALING          | The number of times object have been marshaled from managed to unmanaged code.  |
| DNCS_STUBS               | The number of stubs created by the common language runtime.   |
| DNCS_IL_BYTES_JITTED     | The number of MSIL bytes compiled by the just-in-time (JIT) compiler.   |
| DNCS_IL_METHODS_JITTED   | The number of methods JIT-compiled.   |
| DNCS_PERCENT_TIME_IN_JIT | Percentage of elapsed time spent in JIT compilation.  |
| DNCS_JIT_METHODS_FAILED  | The number of methods the JIT compiler has failed to compiled.  |
| DNCS_BYTES_LOADER        | Size of the memory committed by the class loader.   |
| DNCS_APPDOMAINS_CURRENT  | The number of application domains loaded.   |
| DNCS_ASSEMBLIES_CURRENT  | The number of assemblies loaded.  |
| DNCS_CLASSES_CURRENT     | The number of classes loaded in all assemblies.   |
| DNCS_UNLOAD_APPDOMAINS   | The number of application domains unloaded.   |
| DNCS_LOAD_FAIL_MAX       | This counter displays the peak number of classes that have failed to load since the start of the application.         |

| Column name                    | Column description   |
|--------------------------------|--|
| DNCS_APPDOMAINS_MAX            | This counter displays the peak number of AppDomains loaded since the start of this application.                                |
| DNCS_APPDOMAINS_UNLOAD_M<br>AX | This counter displays the total number of AppDomains unloaded since the start of the application.                              |
| DNCS_ASSEMBLIES_MAX            | This counter displays the total number of Assemblies loaded since the start of this application.                               |
| DNCS_CLASSES_MAX               | This counter displays the cumulative number of classes loaded in all Assemblies since the start of this application.           |
| DNCS_LOGICAL_THREADS           | The number of current managed thread objects in the application.   |
| DNCS_PHYSICAL_THREADS          | The number of native operating system threads created by the CLR.  |
| DNCS_RECO_THREADS              | The number of threads that are currently recognized by the runtime.  |
| DNCS_TOTAL_RECO_THREADS        | This counter displays the total number of threads that have been recognized by the CLR since the start of this application.    |
| DNCS_QUEUE_LENGTH              | The number of threads currently waiting to acquire a managed lock.   |
| DNCS_QUEUE_LENGTH_MAX          | This counter displays the total number of threads that waited to acquire some managed lock since the start of the application. |
| DNCS_CONTENTIONS               | The number of times that threads in the runtime have attempted to acquire a managed lock unsuccessfully.                       |
| DNCS_BYTES_ALL_HEAPS           | Memory allocated in bytes on the garbage collection heaps.   |
| DNCS_GC_HANDLES                | The number of garbage collection handles in use.   |
| DNCS_COLLECT_GEN0              | The number of times the generation 0 objects are garbage collected.  |
| DNCS_COLLECT_GEN1              | The number of times the generation 1 objects are garbage collected.  |
| DNCS_COLLECT_GEN2              | The number of times the generation 2 objects are garbage collected.  |
| DNCS_INDUCED_GC                | This counter displays the peak number of times a garbage collection was performed because of an explicit call to GC.Collect.   |
| DNCS_PINNED_OBJECTS            | The number of pinned objects encountered in the last garbage collection.   |
| DNCS_SYNC_BLOCKS               | The number of synchronization blocks in use.   |
| DNCS_COMMITTED_BYTES           | Amount of virtual memory, currently committed by the garbage collector.  |
| DNCS_RESERVED_BYTES            | Amount of virtual memory, currently reserved by the garbage collector.   |
| DNCS_TIME_IN_GC                | Percentage of time that was spent performing a garbage collection.   |
| DNCS_FINAL_SURVIVE             | The number of garbage-collected objects that survive a collection.   |
| DNCS_GEN0_HEAP_SIZE            | The number of bytes in generation 0.   |
| DNCS_GEN1_HEAP_SIZE            | The number of bytes in generation 1.   |
| DNCS_GEN2_HEAP_SIZE            | The number of bytes in generation 2.   |
| DNCS_LARG_HEAP_SIZE            | Size of the Large Object Heap.   |
| DNCS_GEN0_PROMOTE              | Bytes of memory that are promoted from generation 0 to generation 1.   |

| Column name             | Column description   |
|-------------------------|--|
| DNCS_GEN1_PROMOTE       | Bytes of memory that are promoted from generation 1 to generation 2.   |
| DNCS_PROMOTE_FROM_GEN0  | This counter displays the bytes of memory that survive garbage collection (GC) and are promoted from generation 0 to generation 1. |
| DNCS_PROMOTE_FROM_GEN1  | This counter displays the bytes of memory that survive garbage collection (GC) and are promoted from generation 1 to generation 2. |
| DNCS_BYTES_RECEIVED     | The number of bytes received over all open socket connections.   |
| DNCS_BYTES_SENT         | The number of bytes sent over all open socket connections.   |
| DNCS_CONN_ESTABLISHED   | The number of socket connections established.  |
| DNCS_DATAGRAMS_RECEIVED | The number of datagram packets received.   |
| DNCS_DATAGRAMS_SENT     | The number of datagram packets sent.   |
| DNCS_CHANNELS           | The number of remoting channels registered.  |
| DNCS_CONT_PROXIES       | The number of remoting proxy objects.  |
| DNCS_CONT_BOUND_CLASSES | The number of context-bound classes that are loaded.   |
| DNCS_CONT               | The number of remoting contexts in the application.  |
| DNCS_REMOTE_CALLS       | The number of remote procedure calls invoked.  |
| DNCS_TIME_CHECK         | The number of link-time code access security checks.   |
| DNCS_PERCENT_RT_CHECK   | Percentage of elapsed time spent performing runtime code access security checks.   |
| DNCS_STACK_DEPTH        | Depth of the stack during that last runtime code access security check.  |
| DNCS_RT_CHECK           | The number of runtime code access security checks performed.   |
| DNCS_CONN_POOLS         | Current number of pools associated with the process.   |
| DNCS_CONNECTIONS        | Current number of connections, pooled or not.  |
| DNCS_POOLED_CONN        | Current number of connections in all pools associated with the process.  |
| DNCS_POOLED_CONN_MAX    | The highest number of connections in all pools since the process started.  |
| DNCS_FAILED_COMMAND     | The total number of command executes that have failed for any reason.  |
| DNCS_FAILED_CONN        | The total number of connection open attempts that have failed for any reason.  |
| DNCS_CPU                | CPU consumption.   |
| DNCS_MEMORY             | Memory Usage.  |

### PW\_DNCD\_COUNTER\_DYNAMIC\_STAT\_T

This table contains all the dynamic performance counters that have been collected and aggregated during the defined interval. It also contains daily, weekly and monthly summarization levels.

| Column name             | Column description                     |
|-------------------------|--|
| DNCD_PWII_INSTANCE_ID   | The unique identifier of the instance. |
| DNCD_TIMESTAMP          | The end time of the transaction.       |
| DNCD_RECIEVED_TIMESTAMP | The received timestamp.                |
| DNCD_MINUTES_COUNT_SUM  | The hours count.                       |
| DNCD_PWHG_ID            | The hour group in the PW.              |
| DNCD_DNCC_CATEGORY_CODE | The counter category.                  |
| DNCD_COUNTER_NAME       | The counter name.                      |
| DNCD_COUNTER_DESC       | The counter full name (logical key).   |
| DNCD_COUNTER_TYPE       | SUM/MIN/MAX/AVG.                       |
| DNCD_VALUE_SUM          | Counter value when type is SUM.        |
| DNCD_VALUE_AVG          | Counter value when type is AVG.        |
| DNCD_VALUE_MAX          | Counter value when type is MAX.        |
| DNCD_VALUE_MIN          | Counter value when type is MIN.        |

# PW\_DNSS\_SERVER\_STAT\_T

This table contains all the server performance counters that have been collected and aggregated during the defined interval. It also contains daily, weekly and monthly summarization levels.

| Column name             | Column description                     |
|-------------------------|--|
| DNSS_PWII_INSTANCE_ID   | The unique identifier of the instance. |
| DNSS_TIMESTAMP          | The end time of the transaction.       |
| DNSS_RECIEVED_TIMESTAMP | The received timestamp.                |
| DNSS_MINUTES_COUNT_SUM  | The hours count.                       |
| DNSS_PWHG_ID            | The hour group in the PW.              |
| DNSS_DNCC_CATEGORY_CODE | The counter category.                  |
| DNSS_COUNTER_NAME       | The counter name.                      |
| DNSS_COUNTER_DESC       | The counter full name (logical key).   |
| DNSS_COUNTER_TYPE       | SUM/MIN/MAX/AVG.                       |
| DNSS_VALUE_SUM          | Counter value when type is SUM.        |

| Column name    | Column description              |
|----------------|---------------------------------|
| DNSS_VALUE_AVG | Counter value when type is AVG. |
| DNSS_VALUE_MAX | Counter value when type is MAX. |
| DNSS_VALUE_MIN | Counter value when type is MIN. |

## PW\_DNMC\_METHOD\_CONTEXT

This table contains the method context (Method/Caller).

| Column name            | Column description            |
|------------------------|-------------------------------|
| DNMC_METHOD_NAME       | The name of the method.       |
| DNMC_METHOD_SHORT_NAME | The short name of the method. |
| DNMC_METHOD_CONTEXT    | The method context.           |
| DNMC_CALLER_CONTEXT    | The caller context.           |
| DNMC_ROOT_CONTEXT      | The root context.             |
| DNMC_CHANGED_DT        | The last changed date.        |
| DNMC_IS_DELETED        | The deleted Ind.              |

### PW\_DNIS\_INVOCATIONS\_STAT\_T

This table contains the invocation information with specific context. It also contains daily, weekly and monthly summarization levels.

| Column name                    | Column description                     |
|--------------------------------|--|
| DNIS_PWII_INSTANCE_ID          | The unique identifier of the instance. |
| DNIS_TIMESTAMP                 | The end time of the transaction.       |
| DNIS_RECIEVED_TIMESTAMP        | The received timestamp.                |
| DNIS_MINUTES_COUNT_SUM         | The hours count.                       |
| DNIS_PWHG_ID                   | The hour group in the PW.              |
| DNIS_INVOCATION_CONTEXT        | The context.                           |
| DNIS_URI_TYPE_CODE             | The URI type.                          |
| DNIS_INVOCATION_TYPE_COD<br>E  | The invocation type.                   |
| DNIS_INVOCATIONS_COUNT_S<br>UM | The invocation count.                  |
| DNIS_RESPONSE_TIME_SUM         | The summarized response time.          |

| Column name                   | Column description              |
|-------------------------------|---------------------------------|
| DNIS_RESPONSE_TIME_MAX        | The maximum response time.      |
| DNIS_RESPONSE_TIME_MIN        | The minimum response time.      |
| DNIS_INVOCATIONS_TIME_SU<br>M | The summarized invocation time. |
| DNIS_CPU_TIME_SUM             | The summarized CPU time.        |
| DNIS_DB_TIME_SUM              | The summarized DB time.         |
| DNIS_WS_TIME_SUM              | The summarized WS time.         |
| DNIS_GREEN_SUM                | Sum green.                      |
| DNIS_YELLOW_SUM               | Sum yellow.                     |
| DNIS_RED_SUM                  | Sum red.                        |
| DNIS_HAS_CHILD                | The has child indicator.        |
| DNIS_DEPTH                    | The depth.                      |

## PW\_DNSI\_SQL\_INVOC\_STAT\_T

This table contains the SQL invocation information in context. It also contains daily, weekly and monthly summarization levels.

| Column name                     | Column description                     |
|---------------------------------|--|
| DNSI_PWII_INSTANCE_ID           | The unique identifier of the instance. |
| DNSI_TIMESTAMP                  | The end time of the transaction.       |
| DNSI_RECIEVED_TIMESTAMP         | The received timestamp.                |
| DNSI_MINUTES_COUNT_SUM          | The minutes count in the PW.           |
| DNSI_PWHG_ID                    | The hour group in the PW.              |
| DNSI_DNMI_METHOD_CONTEXT        | The context.                           |
| DNSI_DNSQ_SQL_ID                | The ID of the SQL process.             |
| DNSI_DNSQ_RESPONSE_TIME_<br>SUM | The summarized response time.          |
| DNSI_DNSQ_RESPONSE_TIME_<br>MAX | The maximum response time.             |
| DNSI_INVOCATIONS_COUNT_S<br>UM  | The invocation count.                  |
| DNSI_CONN_STRING                | The connection string.                 |
| DNSI_DB_ID                      | The ID of the DB.                      |
| DNSI_SERVER_ID                  | The server name.                       |

| Column name | Column description |
|-------------|--------------------|
| DNIS_DEPTH  | The depth.         |

## PW\_DNAV\_AVAIL\_STAT\_T

This table contains the availability information. It also contains daily, weekly and monthly summarization levels.

| Column name                      | Column description                        |
|----------------------------------|---|
| DNAV_PWII_INSTANCE_ID            | The unique identifier of the instance.    |
| DNAV_TIMESTAMP                   | The end time of the transaction.          |
| DNAV_RECIEVED_TIMESTAMP          | The received timestamp.                   |
| DNAV_MINUTES_COUNT_SUM           | The minutes count in the PW.              |
| DNAV_PWHG_ID                     | The hour group in the PW.                 |
| DNAV_PARALLEL_EXEC_AVG           | The average number of parallel processes. |
| DNAV_REAL_AVAILABILITY_A<br>VG   | The normalized availability.              |
| DNAV_AVAIL_WITH_DOWNTIME<br>_AVG | The availability for normalized downtime. |

## PW\_DNCA\_CURR\_AVAIL

This table contains the current availability information.

| Column name           | Column description                     |
|-----------------------|--|
| DNCA_PWII_INSTANCE_ID | The unique identifier of the instance. |
| DNCA_TIMESTAMP        | The end time of the transaction.       |
| DNCA_IS_AVAIL         | Is available.                          |

## PW\_DNCC\_COUNTER\_CATEGORY\_N

This table contains the normalized counter categories (ASP.NET general, ASP.NET specific, CLR memory, CLR JIT, and so on).

| Column name       | Column description                     |
|-------------------|--|
| DNCC_ID           | The unique identifier of the instance. |
| DNCC_HASH_VALUE   | The hash value of the instance.        |
| DNCC_STRING_VALUE | The category name of the instance.     |

| Column name    | Column description                |
|----------------|-----------------------------------|
| DNCC_TIMESTAMP | The timestamp of the transaction. |

#### PW\_DNSD\_SQL\_DB\_N

This table contains the normalizedDB name (from the connection string).

| Column name       | Column description                     |
|-------------------|--|
| DNSD_ID           | The unique identifier of the instance. |
| DNSD_HASH_VALUE   | The hash value of the instance.        |
| DNSD_STRING_VALUE | The DB name of the instance.           |
| DNSD_TIMESTAMP    | The timestamp of the transaction.      |

#### PW\_DNSS\_SQL\_SERVER\_N

This table contains the normalized server name (from the SQL connection string).

| Column name       | Column description                     |
|-------------------|--|
| DNSS_ID           | The unique identifier of the instance. |
| DNSS_HASH_VALUE   | The hash value of the instance.        |
| DNSS_STRING_VALUE | The server name of the instance.       |
| DNSS_TIMESTAMP    | The timestamp of the transaction.      |

## PW\_DNSQ\_SQL\_N

This table contains the normalized SQL names.

| Column name           | Column description                              |
|-----------------------|---|
| DNSQ_SQL_ID           | The unique identifier of the instance.          |
| DNSQ_SQL_HASH_CODE    | The SQL hash value of the SQL statement.        |
| DNSQ_SQL_STRING       | The SQL string of the instance.                 |
| DNSQ_CHANGED_DT       | The last change date.                           |
| DNSQ_IS_DELETED       | The deleted Ind.                                |
| DNSQ_LAUNCH_HASH_CODE | The launch SQL hash value of the SQL statement. |

#### PW\_DNST\_STATEMENTS\_N

This table contains the SQL statements.

| Column name     | Column description                     |
|-----------------|--|
| DNST_SQL_ID     | The unique identifier of the instance. |
| DNST_TEXT       | The text of the instance.              |
| DNST_HASH_CODE  | The hash value of the instance.        |
| DNST_CHANGED_DT | The changed time.                      |
| DNST_IS_DELETED | Is deleted.                            |

#### PW\_DNCS\_CONNECTION\_STRING\_N

This table contains the connection strings.

| Column name                   | Column description                              |
|-------------------------------|---|
| DNCS_CONNECTION_STRING_I<br>D | The unique identifier of the connection string. |
| DNCS_CONNECTION_STRING        | The connection string text.                     |

#### PW\_DNSQ\_SEQ

This table contains the sequences.

| Column name        | Column description      |
|--------------------|-------------------------|
| DNSQ_TABLE_COLUMN  | The column.             |
| DNSQ_NEXT_FREE_SEQ | The next free sequence. |

#### **PS\_DNIN\_INSTANCES**

This table contains the .NET instance types.

| Column name           | Column description                      |
|-----------------------|---|
| DNIN_PWII_INSTANCE_ID | The unique identifier of the instance.  |
| DNIN_INSTANCE_TYPE    | 0 = Web                                 |
|                       | 1 = Non-Web (no need to use DIM table). |

#### PW\_DNCE\_COUNTER\_EXPLAIN

This table contains the explanation of the counters (from Perfmon).

| Column name           | Column description           |
|-----------------------|------------------------------|
| DNCE_COUNTER_NAME     | The name of the counter.     |
| DNCE_COUNTER_CATEGORY | The category of the counter. |
| DNCE_COUNTER_EXPLAIN  | The counter explanation.     |

#### PW\_DNWS\_WEB\_SERVICES

This table contains the Web services information.

| Column name              | Column description                     |
|--------------------------|--|
| DNWS_PWII_INSTANCE_ID    | The unique identifier of the instance. |
| DNWS_DNMI_METHOD_CONTEXT | The method context FK.                 |
| DNWS_URL_STRING          | The Web service URL.                   |

#### PS\_DNIV\_INSTANCE\_VIEW

This table contains the instances view.

| Column name        | Column description   |
|--------------------|--|
| DNIV_ID            | The unique identifier of the instance (base table - PS_INCE_INSTANCE).       |
| DNIV_NAME          | The name of the instance (base table - PS_INCE_INSTANCE).                    |
| DNIV_INTE_CODE     | The technology code (DN) of the instance (base table - PS_INCE_INSTANCE).    |
| DNIV_INSM_ID       | The unique identifier of the server (base table - PS_INSM_SERVER_MACHINE).   |
| DNIV_INSM_NAME     | The name of the server (base table - PS_INCE_INSTANCE).                      |
| DNIV_CREATE_TIME   | The time the instance was created (base table - PS_INCE_INSTANCE).           |
| DNIV_UPDATE_TIME   | The time the instance was updated (base table - PS_INCE_INSTANCE).           |
| DNIV_DELETED       | Is deleted (base table - PS_INCE_INSTANCE).                                  |
| DNIV_INSTANCE_TYPE | 0 = Web  |
|                    | 1 = Non-Web (no need to use the DIM table) (base table - PS_DNIN_INSTANCES). |
| DNIV_INAP_ID       | The unique identifier of the environment (base table - PS_INCE_INSTANCE).    |

#### PW\_DNAM\_ANCESTOR\_METHODS

This table contains the hierarchy of the methods.

| Column name           | Column description           |
|-----------------------|------------------------------|
| DNAM_METHOD_CONTEXT   | The method context.          |
| DNAM_ANCESTOR_CONTEXT | The ancestor method context. |
| DNAM_ANCESTOR_DEPTH   | The ancestor depth.          |
| DNAM_CHANGED_DT       | The last changed date.       |
| DNAM_IS_DELETED       | The deleted Ind.             |

#### PW\_DNBN\_INVOCATION\_BITS\_N

Normalization table for the correlated methods in SmartLink.

| Column name       | Column description                     |
|-------------------|--|
| DNBN_ID           | The unique identifier of the instance. |
| DNBN_HASH_VALUE   | The hash value of the instance.        |
| DNBN_STRING_VALUE | The method name of the instance.       |
| DNBN_TIMESTAMP    | The end time of the transmission.      |

## PW\_DNIB\_INVOCATION\_BITS\_T

This table contains the bit vector of the methods.

| Column name             | Column description                      |
|-------------------------|---|
| DNIB_PWII_INSTANCE_ID   | The unique identifier of the instance.  |
| DNIB_TIMESTAMP          | The end time of the transmission.       |
| DNIB_RECIEVED_TIMESTAMP | The received timestamp.                 |
| DNIB_MINUTES_COUNT_SUM  | The minutes count in the PMDB database. |
| DNIB_PWHG_ID            | The hour group in the PMDB database.    |
| DNIB_METHOD_ID          | The method ID.                          |
| DNIB_METHOD_TYPE_CODE   | The method type code.                   |
| DNIB_SERVICE_TIME_SUM   | The summarized service time.            |
| DNIB_INVOCATIONS_SUM    | The invocations summary.                |
| DNIB_BIT_VECTOR         | The bit vector.                         |
| DNIB_RED_SUM            | Sum red.                                |

#### (Continued)

| Column name       | Column description |
|-------------------|--------------------|
| DNIB_YELLOW_SUM   | Sum yellow.        |
| DNIB_GREEN_SUM    | Sum green.         |
| DNIB_IDENTIFIER_1 | Identifier 1.      |
| DNIB_IDENTIFIER_2 | Identifier 2.      |
| DNIB_IDENTIFIER_3 | Identifier 3.      |
| DNIB_IDENTIFIER_4 | Identifier 4.      |

## PW\_DNSR\_SMARTUNE\_RESULTS\_T

This table contains the SmarTune results.

| Column name             | Column description                      |
|-------------------------|---|
| DNSR_PWII_INSTANCE_ID   | The unique identifier of the instance.  |
| DNSR_TIMESTAMP          | The end time of the transmission.       |
| DNSR_RECIEVED_TIMESTAMP | The received timestamp.                 |
| DNSR_MINUTES_COUNT_SUM  | The minutes count in the PMDB database. |
| DNSR_PWHG_ID            | The hour group in the PMDB database.    |
| DNSR_PROBLEM_ID         | The problem ID.                         |
| DNSR_RANK_MAX           | The problem rank.                       |
| DNSR_FINDINGS_COUNT_SUM | The number of findings.                 |
| DNSR_METHOD_CONTEXT     | The method context.                     |
| DNSR_IDENTIFIER1        | Identifier 1.                           |
| DNSR_IDENTIFIER2        | Identifier 2.                           |
| DNSR_IDENTIFIER3        | Identifier 3.                           |
| DNSR_IDENTIFIER4        | Identifier 4.                           |
| DNSR_IDENTIFIER5        | Identifier 5.                           |
| DNSR_PARAMETER1_MAX     | Counter value when type is MAX.         |
| DNSR_PARAMETER2_MAX     | Counter value when type is MAX.         |
| DNSR_PARAMETER3_MAX     | Counter value when type is MAX.         |
| DNSR_PARAMETER4_MAX     | Counter value when type is MAX.         |
| DNSR_PARAMETER5_MAX     | Counter value when type is MAX.         |
| DNSR_PARAMETER6_MIN     | Counter value when type is MIN.         |
| DNSR_PARAMETER7_MIN     | Counter value when type is MIN.         |

| Column name          | Column description              |
|----------------------|---------------------------------|
| DNSR_PARAMETER8_MIN  | Counter value when type is MIN. |
| DNSR_PARAMETER9_MIN  | Counter value when type is MIN. |
| DNSR_PARAMETER10_MIN | Counter value when type is MIN. |
| DNSR_PARAMETER11_SUM | Counter value when type is SUM. |
| DNSR_PARAMETER12_SUM | Counter value when type is SUM. |
| DNSR_PARAMETER13_SUM | Counter value when type is SUM. |
| DNSR_PARAMETER14_SUM | Counter value when type is SUM. |
| DNSR_PARAMETER15_SUM | Counter value when type is SUM. |
| DNSR_THRESHOLD1      | The problem threshold.          |
| DNSR_THRESHOLD2      | The problem threshold.          |
| DNSR_THRESHOLD3      | The problem threshold.          |
| DNSR_THRESHOLD4      | The problem threshold.          |
| DNSR_THRESHOLD5      | The problem threshold.          |

#### PW\_DNSP\_SMARTUNE\_PROBLEM

This table contains the SmarTune problems.

| Column name       | Column description     |
|-------------------|------------------------|
| DNSP_PROBLEM_ID   | The problem ID.        |
| DNSP_PROBLEM_NAME | The problem name.      |
| DNSP_IS_DISPLAYED | The display indicator. |

# Q

## Precise for Sybase RS Tables PW\_RSRS\_REP\_SERVER\_STATS\_T

Replication server statistics.

| Column name                     | Column description  |
|---------------------------------|---|
| RSRS_PWII_INSTANCE_ID           | ID of the Replication Server instance   |
| RSRS_ASE_INST_ID                | ID of the Sybase ASE Instance   |
| RSRS_DATABASE_ID                | Name of the database, normalized in table PW_SYDN_DATABASE_NAMES_N  |
| RSRS_THREADID                   | ID of the thread  |
| RSRS_TIMESTAMP                  | Date and time the statistic was sampled.  |
| RSRS_PWHG_ID                    | Hour group ID.  |
| RSRS_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).  |
| RSRS_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.   |
| RSRS_DSIE_CMDS_SUCCEED_S<br>UM  | Commands successfully applied to the target database by a DSI/E.  |
| RSRS_DSIE_FS_MAP_TIME_SU<br>M   | Time, in seconds, to perform function string mapping on commands in DSI/E.  |
| RSRS_DSIE_BATCH_TIME_SUM        | Time, in seconds, to process command batches submitted by a DSI.  |
| RSRS_DSIE_SEND_TIME_SUM         | Time, in seconds, spent in sending command buffers to the RDS.  |
| RSRS_DSIE_SEND_RPC_TIME_<br>SUM | Time, in 100ths of a second, spent in sending RPCs to the RDS.  |
| RSRS_DSIE_SEND_DT_TIME_S<br>UM  | Time, in 100ths of a second, spent in sending chunks of text or image data to the RDS.  |
| RSRS_DSIE_RESULT_TIME_SU<br>M   | Time, in seconds, to process the results of command batches submitted by a DSI.   |
| RSRS_DSIE_SCC_TIME_SUM          | Time, in seconds, to check the sequencing on commits.   |
| RSRS_DSIE_SCB_TIME_SUM          | Time, in seconds, to check the sequencing on command batches which require some kind of synchronization, such as wait_for_commit. |

| Column name                      | Column description  |
|----------------------------------|---|
| RSRS_DSIE_TRAN_TIME_SUM          | Time, in seconds, to process transactions by a DSI/E thread. This includes function string mapping, sending, and processing results. A transaction may span command batches.                              |
| RSRS_DSIE_TRAN_EXEC_SUM          | Time neto, in seconds, to execute transactions by a DSI/E thread. This is computed by deducting the time for function string mapping, sending, and processing the result from the Total Transaction Time. |
| RSRS_DSIE_CMDS_READ_SUM          | DSI Cmds Read   |
| RSRS_REPAGENT_BYTES_RCVD<br>_SUM | Cmds Send   |
| RSRS_SQM_CMDS_WRITTEN_SU<br>M    | SQM Cmds Written  |
| RSRS_SQMR_BLCK_READ_CCHD<br>_SUM | SQMR Blcks Read   |
| RSRS_SQMR_CMDS_READ_SUM          | SQMR Cmds Read  |
| RSRS_SQT_TRANS_REMOVED_S<br>UM   | Transaction Removed from Cache  |
| RSRS_SQT_CACHE_MEM_USED_<br>MAX  | Cache Memory Used   |
| RSRS_ROWID                       | ID of the row   |

#### PW\_RSRO\_REPLICATED\_OBJECTS

Replicated Objects.

| Column name           | Column description  |
|-----------------------|---|
| RSRO_PWII_INSTANCE_ID | ID of the Replication Server instance                                 |
| RSRO_ASE_INST_ID      | ID of the Sybase ASE Instance   |
| RSRO_DATABASE_ID      | Name of the database, normalized in table PW_SYDN_DATABASE_NAMES_N    |
| RSRO_FULL_OBJECT_ID   | Name of the Object, normalized in table PW_SYKN_LOCKED_OBJECT_NAMES_N |

## PW\_RSRD\_REPLICATED\_DATABASES

**Replicated Databases** 

| Column name           | Column description   |
|-----------------------|--|
| RSRD_PWII_INSTANCE_ID | ID of the Replication Server instance                              |
| RSRD_ASE_INST_ID      | ID of the Sybase ASE Instance                                      |
| RSRD_DATABASE_ID      | Name of the database, normalized in table PW_SYDN_DATABASE_NAMES_N |

## PW\_RSRC\_REPLICATION\_COUNTERS

**Replication counters** 

| Column name              | Column description   |
|--------------------------|--|
| RSRC_MODULE_NAME         | Module Name  |
| RSRC_DIRECTION           | IUO (Internal Use Only)  |
| RSRC_COUNTER_NAME        | Counter name in Sybase   |
| RSRC_COUNTER_VALUE_TYPE  | IUO  |
| RSRC_ACCUMULATIVE        | IUO  |
| RSRC_TABLE_NAME          | Name of the table in Precise   |
| RSRC_COLUMN_NAME         | IUO  |
| RSRC_COUNTER_DESCRIPTION | Description of the Counter   |
| RSRC_FROM_VERSION        | The Sybase version that starts collecting the current counter.                       |
| RSRC_TILL_VERSION        | The Sybase version that versions later than it stops collecting the current counter. |

#### PW\_RSAR\_ASE\_REP\_SERVER

Adaptive Server Enterprise Replication Server

| Column name           | Column description                                    |
|-----------------------|---|
| RSAR_PWII_INSTANCE_ID | ID of the Replication Server instance                 |
| RSAR_ASE_INST_ID      | ID of the Sybase ASE Instance                         |
| RSAR_TYPE             | Marks if this is the last or current counter's value. |

## PW\_RSRP\_REP\_PART\_INFO\_T

**Replication Server Stable Partitions** 

| Column name             | Column description                                       |
|-------------------------|--|
| RSRP_PWII_INSTANCE_ID   | ID of the Replication Server instance                    |
| RSRP_ASE_INST_ID        | ID of the Sybase ASE Instance                            |
| RSRP_TIMESTAMP          | Date and time the statistic was sampled.                 |
| RSRP_PWHG_ID            | Hour group ID.   |
| RSRP_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes). |
| RSRP_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.    |
| RSRP_PARTITION_PATH     | Partition Path.  |

| Column name                     | Column description    |
|---------------------------------|-----------------------|
| RSRP_PARTITION_LOGICAL_N<br>AME | Partition Name        |
| RSRP_TOTAL_SEGMENTS_MAX         | Total Segments Number |
| RSRP_USED_SEGMENTS_MAX          | Used Segments Number  |
| RSRP_ROWID                      | ID of row             |

## PW\_RSCP\_REP\_SERVER\_CONFIG\_T

Replication Server Configuration

| Column name             | Column description                                       |
|-------------------------|--|
| RSCP_PWII_INSTANCE_ID   | ID of the Replication Server instance                    |
| RSCP_TIMESTAMP          | Date and time the statistic was sampled.                 |
| RSCP_PWHG_ID            | Hour group ID.   |
| RSCP_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes). |
| RSCP_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.    |
| RSCP_SQT_CACHE_SIZE_MAX | SQT Cache Size.  |
| RSCP_ROWID              | ID of row.   |

# R

## Precise for Sybase Tables PW\_PWII\_INSTANCE\_ID

Defines the instances in the Precise installation.

| Column name        | Column description  |
|--------------------|---|
| PWII_ID            | ID of the instance. Columns of XXXX_PWII_INSTANCE_ID have values from the column.               |
| PWII_INSTANCE_NAME | Name of the instance.   |
| PWII_TECHNOLOGY    | Two characters defining the technology of the instance (such as OR for Oracle and JE for J2EE). |
| PWII_SERVER        | Name of the server on which the instance is installed.  |

## PW\_SYMP\_MONITORS\_PREV

Stores the last and current collected Sysmonitor counter values. Serves the Statistics process for the calculation of the delta values of the counters.

| Column name           | Column description                                    |
|-----------------------|---|
| SYMP_PWII_INSTANCE_ID | ID of the counter instance.                           |
| SYMP_GROUP_NAME       | Group that includes the counter.                      |
| SYMP_FIELD_NAME       | Counter name in the sysmonitor table.                 |
| SYMP_FIELD_ID         | Counter ID in the sysmonitor table.                   |
| SYMP_VALUE            | Counter value in the sysmonitor table.                |
| SYMP_TYPE             | Marks if this is the last or current counter's value. |

#### PW\_SYOU\_OBJECTS\_SPACE\_USAGE\_D

Holds statistics on objects space. By default, this process runs every 24 hours.

Note: The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month.

| Column name                     | Column description   |
|---------------------------------|--|
| SYOU_PWII_INSTANCE_ID           | ID of the Sybase instance.   |
| SYOU_DATABASE_ID                | Name of the database, normalized in table PW_SYDN_DATABASE_NAMES_N.  |
| SYOU_PRODUCTION_DATABASE_I<br>D | ID of the database in Sybase.  |
| SYOU_OBJECT_ID                  | ID of the table.   |
| SYOU_FULL_OBJECT_ID             | The full object ID, normalized in table PW_SYKN_LOCKED_OBJECT_NAMES_N.   |
| SYOU_INDEX_ID                   | ID of the index.   |
| SYOU_TIMESTAMP                  | Date and time the statistic was sampled. On a slice summary level, the date and time are in GMT. On all other summary levels, the time part is zeroed. |
| SYOU_PWHG_ID                    | Hour group ID.   |
| SYOU_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).   |
| SYOU_O_ALL_ALLOC_MAX            | Size in Megabytes allocated to the object.   |
| SYOU_O_ALL_USED_MAX             | Size in Megabytes used by the object.  |
| SYOU_O_TEXT_ALLOC_MAX           | Size in Megabytes allocated to text pages of the object.   |
| SYOU_O_TEXT_USED_MAX            | Size in Megabytes used for text pages of the object.   |
| SYOU_O_DATA_USED_MAX            | Size of data pages in Megabytes used by the objects.   |
| SYOU_O_INDEX_ALLOC_MAX          | Size in Megabytes allocated to the indexes of the object.  |
| SYOU_O_INDEX_USED_MAX           | Size in Megabytes used by the indexes of the object.   |
| SYOU_ROW_COUNT_MAX              | Number of rows the table has.  |
| SYOU_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.  |

#### PW\_SYDU\_DEVICES\_SPACE\_USAGE\_D

Holds statistics on the space of devices. By default, this process runs every 24 hours.

Note: The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month

| Column name           | Column description  |
|-----------------------|---|
| SYDU_PWII_INSTANCE_ID | ID of the Sybase instance.  |
| SYDU_DEVICE_ID        | ID of the device, normalized in table PW_SYEN_DEVICE_NAMES_N.                                     |
| SYDU_TIMESTAMP        | Date the statistic was sampled. The time part is zeroed because the data is collected once a day. |

(Continued)

| Column name             | Column description                                       |
|-------------------------|--|
| SYDU_PWHG_ID            | Hour group ID.   |
| SYDU_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes). |
| SYDU_DEVICE_SIZE_MAX    | Maximum device size in Megabytes.                        |
| SYDU_SPACE_USED_MAX     | Maximum space used in Megabytes.                         |
| SYDU_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.    |

## PW\_SYSU\_SEGMENTS\_SPACE\_USAGE\_D

Holds statistics on the space of segments. By default, this process runs every 24 hours.

Note: The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month

| Column name                     | Column description  |
|---------------------------------|---|
| SYSU_PWII_INSTANCE_ID           | ID of the Sybase instance.  |
| SYSU_DATABASE_ID                | ID of the database, normalized in table PW_SYDN_DATABASE_NAMES_N.                                 |
| SYSU_SEGMENT_ID                 | ID of the segment, normalized in table PW_SYSN_SEGMENT_NAMES_N.                                   |
| SYSU_PRODUCTION_DATABASE_I<br>D | ID of the database in Sybase.   |
| SYSU_PRODUCTION_SEGMENT_ID      | ID of the segment in Sybase   |
| SYSU_DEVICE_ID                  | ID of the device, normalized in table PW_SYEN_DEVICE_NAMES_N.                                     |
| SYSU_SEGMENT_TYPE               | Segment type:<br>3:Data only (system and default segments)<br>4:Log only<br>7:Data and log        |
| SYSU_TIMESTAMP                  | Date the statistic was sampled. The time part is zeroed because the data is collected once a day. |
| SYSU_PWHG_ID                    | Hour group ID.  |
| SYSU_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).  |
| SYSU_SEGMENT_SIZE_MAX           | Maximum segment size in Megabytes.  |
| SYSU_SPACE_FREE_MAX             | Maximum free space in Megabytes.  |
| SYSU_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into the PMDB.   |

#### PW\_SYSC\_STMT\_CATALOG

Holds information on statements in the SQL workspace.

| Column name           | Column description  |
|-----------------------|---|
| SYSC_PWII_INSTANCE_ID | ID of the Sybase instance.  |
| SYSC_CABINET          | Name of the cabinet in which the statement is stored.   |
| SYSC_FOLDER           | Name of the folder within the cabinet.  |
| SYSC_STATEMENT_ID     | Unique identifier (string) assigned to the statement.   |
| SYSC_WORKSHOP_HV      | Unique identifier (number) assigned to statements inserted in the statement workshop workspace. Statements loaded into the PMDB have the value 0. |

#### PW\_SYEO\_EXPLN\_OPER

Holds information on batch access plans.

| Column name                    | Column description  |
|--------------------------------|---|
| SYEO_PWII_INSTANCE_ID          | ID of the Sybase instance.  |
| SYEO_DATABASE_NAME             | Name of the database to which the statement belongs.  |
| SYEO_PARSING_USER              | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SYEO_BATCH_HV                  | Unique identifier (number) assigned to the batch.   |
| SYEO_WORKSHOP_HV               | Unique identifier (number) assigned to statements inserted in the SQL workspace.<br>Statements loaded into the PMDB have the value 0.   |
| SYEO_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.  |
| SYEO_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.  |
| SYEO_OPERATOR_ID               | Sequence order of this operation in the access plan for a statement.  |
| SYEO_OPERATOR_TYPE             | Physical operation in the access plan.  |
| SYEO_EXECUTION_ORDER           | Sequence order of this operation in the whole access plan.  |
| SYEO_TREE_LEVEL                | Tree level of this operation in the access plan.  |
| SYEO_OBJ_DATABASE_NAME         | Database name of the object accessed in this operation.   |
| SYEO_OBJ_OWNER_NAME            | Owner of the object accessed in this operation.   |
| SYEO_OBJ_NAME                  | Name of the object accessed in this operation.  |
| SYEO_OBJ_NAME_ALIAS            | Alias name of the object accessed in this operation.  |
| SYEO_INDEX_NAME                | Name of the index accessed in this operation. Otherwise NULL.   |
| SYEO_ADDITIONAL_INFORMATION    | Additional Information provided for this Explain step.  |

| Column name             | Column description  |
|-------------------------|---|
| SYEO_LOGICAL_READS      | The optimizer is estimating how many pages will not be available in cache and will need to be read from disk.                   |
| SYEO_PHYSICAL_READS     | Number of logical reads performed on the specified table. The optimizer is estimating how many pages are likely to be in cache. |
| SYEO_ROWS               | Number of rows from the current table that is estimated to satisfy the join.  |
| SYEO_SCAN_COUNT         | Number of times we scan the table.  |
| SYEO_LOGICAL_READS_SUB  | Number of logical reads of sub-query.   |
| SYEO_PHYSICAL_READS_SUB | Number of physical reads of sub-query.  |
| SYEO_PARALLEL_IND       | Indicates if the operation is performed in parallel.  |
| SYEO_LAST_EXPLAIN_IND   | Indicates that this operation belongs to the last explain of the batch.   |
| SYEO_OPERATOR_COST      | Estimated cost for the operator in the execution plan   |
| SYEO_AVG_WIDTH          | Estimated average width of row returned by the operator   |
| SYEO_CPU                | Estimated CPU cost for the operator in the execution plan   |
| SYEO_CPU_SUB            | Estimated CPU cost for the sub tree starting from the operator  |
| SYEO_PAGES              | Estimated number of pages accessed by the operator  |
| SYEO_PREFETCH           | Indication if prefetch performed by the operator  |
| SYEO_IOSIZE             | Estimated I/O size for the operator   |
| SYEO_BUFREPLACE         | Buffer replacement strategy used in the operator  |

## PW\_SYEA\_EXPLN\_ACCESS\_PATH

Holds the history of access plans.

| Column name                    | Column description  |
|--------------------------------|---|
| SYEA_PWII_INSTANCE_ID          | ID of the Sybase instance.  |
| SYEA_DATABASE_NAME             | Name of the database to which the statement belongs.  |
| SYEA_PARSING_USER              | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SYEA_BATCH_HV                  | Unique identifier (number) assigned to the batch.   |
| SYEA_WORKSHOP_HV               | Unique identifier (number) assigned to statements inserted in the SQL workspace.<br>Statements loaded into the PMDB have the value 0.   |
| SYEA_EXPLAIN_TIME              | Date and time the batch was explained and its access plan was changed.  |
| SYEA_STATEMENT_ID_IN_BAT<br>CH | A statement number in the first batch sampled running the statement.  |
| SYEA_ACCESS_PATH_HV            | Unique identifier (number) assigned to the access.  |
| SYEA_ESTIMATE_COST             | Estimated cost of this operation.   |

## PW\_SYEH\_EXPLN\_HIST

Holds information on batch execution plans. Each batch can have up to three different execution plans.

| Column name           | Column description  |
|-----------------------|---|
| SYEH_PWII_INSTANCE_ID | ID of the Sybase instance.  |
| SYEH_DATABASE_NAME    | Database to which the statement belongs.  |
| SYEH_PARSING_USER     | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch. |
| SYEH_BATCH_HV         | Unique identifier (number) assigned to the batch.   |
| SYEH_WORKSHOP_HV      | Unique identifier (Number) assigned to statements inserted in the SQL workspace.<br>Statements loaded into the PW have the value 0.   |
| SYEH_EXPLAIN_TIME     | Date and time the batch was explained and its access plan was changed.  |
| SYEH_PHYSICAL_READS   | The optimizer is estimating how many pages will not be available in cache and will need to be read from disk.   |
| SYEH_LOGICAL_READS    | Number of logical reads performed on the specified table. The optimizer is estimating how many pages are likely to be in the cache.   |
| SYEH_SCAN_COUNT       | Number of times we scan the table.  |
| SYEH_LAST_EXPLAIN_IND | Indicates that this access plan is the last access plan of the batch.   |
| SYEH_PHYSICAL_READS   | Estimated number of physical reads for the execution plan   |
| SYEH_LOGICAL_READS    | Estimated number of logical reads for the execution plan  |
| SYEH_SCAN_COUNT       | Estimated number of scans for the execution plan  |
| SYEH_CPU              | Estimated CPU cost for the execution plan   |
| SYEH_COST             | Estimated cost for the execution plan   |

#### PW\_SYSM\_STATEMENTS

Holds statements collected by the Precise for Sybase Collector agent and statements inserted through the statement workshop (SQL workspace). The table holds one row per statement and connects it to the first batch in which the statement was sampled. You can join the statement with other batches run, but only for statistics tables. (PW\_SYST\_STATEMENTS\_STATS or PW\_SYSE\_SESS\_STMT\_STATS).

| Column name                     | Column description  |
|---------------------------------|---|
| SYSM_PWII_INSTANCE_ID           | ID of the Sybase instance.  |
| SYSM_STATEMENT_HV               | Unique identifier (number) assigned to the statement.                       |
| SYSM_STATEMENT_ID               | Unique identifier (string) assigned to the statement.                       |
| SYSM_COLLAPSED_STATEMENT<br>_HV | Unique identifier (number) assigned to the statement in its collapsed form. |
| SYSM_COLLAPSED_STATEMENT<br>_ID | Unique identifier (string) assigned to the statement in its collapsed form. |

| Column name                        | Column description  |
|------------------------------------|---|
| SYSM_INSERT_TIME                   | Date and time the statement was saved in the database.  |
| SYSM_PARSING_USER                  | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch.   |
| SYSM_PARSING_USER_ID               | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SYUN_USE_NAMES_N.  |
| SYSM_WORKSHOP_HV                   | Unique identifier (Number) assigned to statements inserted in the SQL workspace.  |
| SYSM_SOURCE                        | Indicates how the statement was loaded. Possible values:<br>PMDB—Sampled and loaded by the Collector<br>Manually—Entered through the statement workshop (SQL workspace).<br>Saved automatically—Explained from the Current workspace or Activity workspace.   |
| SYSM_LAST_EXPLAINED                | Last time the statement was explained.  |
| SYSM_TOTAL_INSYBASE_TIME           | Not in use.   |
| SYSM_DO_NOT_EXPLAIN                | Indicates an error during the explain of the statement (if 'Y', do not try to re-explain).  |
| SYSM_EXPLAIN_ERROR_MSG             | Error that occurred during the last explain process.  |
| SYSM_LAST_ACC_PATH_CHANG<br>ED     | Last time the access plan of the statement changed.   |
| SYSM_ACCESS_PATH_HV                | Unique identifier (number) assigned to the access plan of the statement.  |
| SYSM_TOTAL_ESTIMATED_COS<br>T      | Estimated cost of the statement's execution. A high cost value may indicate a problem in the current implementation of the statement. To determine which operation may have caused the problem, you can use the "Estimated cost breakdown" graph to drill down easily and see the most resource consuming operation. To determine whether the operation is an I/O consuming operation or a CPU consuming operation (or both), check the "Estimated I/O cost" and "Estimated CPU cost" values. |
| SYSM_DATABASE_NAME                 | Name of the database to which the statement belongs.  |
| SYSM_DATABASE_ID                   | ID of the database, in which the statement belongs, normalized in table PW_SYDN_DATABASE_NAMES_N.   |
| SYSM_BATCH_HV                      | Unique identifier (number) assigned to the batch. Only the first batch appears.   |
| SYSM_COLLAPSED_BATCH_HV            | Unique identifier (number) assigned to the batch. Only the first batch appears.   |
| SYSM_STATEMENT_OFFSET              | The offset of the statement in the first batch sampled, running the statement by the Collector agent.   |
| SYSM_STATEMENT_LENGTH              | Length of the statement in the first batch sampled running the statement.   |
| SYSM_STATEMENT_ID_IN_BAT<br>CH     | Statement number in the first batch sampled running the statement.  |
| SYSM_START_EXEC_ORDER_IN<br>_BATCH | Execution order the statement started with in the access plan of the batch.   |

| Column name         | Column description                         |
|---------------------|--|
| SYSM_STATEMENT_TYPE | ID representing the type of the statement: |
|                     | Type code - Type name                      |
|                     | 0 - alter                                  |
|                     | 1 - begin                                  |
|                     | 2 - beginTran                              |
|                     | 3 - break                                  |
|                     | 4 - call                                   |
|                     | 5 - checkpoint                             |
|                     | 6 - close                                  |
|                     | 7 - commit                                 |
|                     | 8 - continue                               |
|                     | 9 - create                                 |
|                     | 10 - dbcc                                  |
|                     | 11- deallocate                             |
|                     | 12 - declare                               |
|                     | 13 - delete                                |
|                     | 14 - deny                                  |
|                     | 15 - disk                                  |
|                     | 16 - drop                                  |
|                     | 17 - dump                                  |
|                     | 18 - else                                  |
|                     | 19 - end                                   |
|                     | 20 - exec                                  |
|                     | 21 - execute                               |
|                     | 22 - fetch                                 |
|                     | 23 - go                                    |
|                     | 24 - goto                                  |
|                     | 25 - grant                                 |
|                     | 26 - if                                    |
|                     | 27 - insert                                |
|                     | 28 - kill                                  |
|                     | 29 - load                                  |

| Column name            | Column description   |
|------------------------|--|
|                        | 30 - lock  |
|                        | 31 - online  |
|                        | 32 - open  |
|                        | 33 - print   |
|                        | 34 - quiesce   |
|                        | 35 - raiserror   |
|                        | 36 - readtext  |
|                        | 37 - reconfigure   |
|                        | 38 - remove  |
|                        | 39 - reorg   |
|                        | 40 - restore   |
|                        | 41 - return  |
|                        | 42 - reverse   |
|                        | 43 - rollback  |
|                        | 44 - save  |
|                        | 45 - select  |
|                        | 46 - set   |
|                        | 47 - setuser   |
|                        | 48 - shutdown  |
|                        | 49 - truncate  |
|                        | 50 - update  |
|                        | 51 - updatetext  |
|                        | 52 - use   |
|                        | 53 - waitfor   |
|                        | 54 - while   |
|                        | 55 - writetext   |
| SYSM_EXPLAIN_USAGE_MAP | Internal bit representative of the types of operators in the execution plan. |

## PW\_SYBA\_BATCHES

Holds information on batches.

| Column name             | Column description  |
|-------------------------|---|
| SYBA_PWII_INSTANCE_ID   | ID of the Sybase instance   |
| SYBA_BATCH_HV           | Unique identifier (number) assigned to the batch.   |
| SYBA_COLLAPSED_BATCH_HV | Unique identifier (number) assigned to the batch in its collapsed form.   |
| SYBA_PARSING_USER       | One of the Sybase users who executed this batch. If this batch is a stored procedure, this is the user used as the parsing user when explaining this batch. |

| Column name                    | Column description  |
|--------------------------------|---|
| SYBA_PARSING_USER_ID           | One of the Sybase users who executed this batch. If this batch is a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SYUN_USER_NAMES_N.   |
| SYBA_DATABASE_NAME             | Name of the database to which the batch belongs.  |
| SYBA_DATABASE_ID               | The ID of the database, to which the batch belongs, normalized in table PW_SYDN_DATABASE_NAMES_N.   |
| SYBA_BATCH_ID                  | Unique identifier (string) assigned to the batch.   |
| SYBA_COLLAPSED_BATCH_ID        | Unique identifier (string) assigned to the batch in its collapsed form.   |
| SYBA_LAST_EXPLAINED            | Last time the statement was explained.  |
| SYBA_DO_NOT_EXPLAIN            | Indicates an error during the explain of the statement (if 'Y', do not try to re-explain).  |
| SYBA_EXPLAIN_ERROR_MSG         | Error that occurred during the last explain process.  |
| SYBA_LAST_ACC_PATH_CHANG<br>ED | Last time the access plan of the batch changed.   |
| SYBA_ACCESS_PATH_HV            | Unique identifier (number) assigned to the access plan.   |
| SYBA_TOTAL_ESTIMATED_COS<br>T  | Estimated cost of the statement's execution. A high cost value may indicate a problem in the current implementation of the statement. To determine which operation may have caused the problem, you can use the "Estimated cost breakdown" graph to drill down easily and see the most resource consuming operation. To determine whether the operation is an I/O consuming operation or a CPU consuming operation (or both), check the "Estimated I/O cost" and "Estimated CPU cost" values. |
| SYBA_PROC_DB_ID                | ID of the database that holds the stored procedure.   |
| SYBA_PROC_OBJECT_ID            | ID of the stored procedure.   |
| SYBA_EXPLAIN_USAGE_MAP         | Internal bit representative of the types of the operators in the execution plan.  |
| SYBA_MIGRATED                  | Only in the data migration process to update several columns and distinguish between new batches and previous batches.  |
| SYBA_CONSISTENT_HV             | Used for correlation between all the other products and Precise for Sybase  |

## PW\_SYIN\_INSTANCES

Holds information on the Sybase instances monitored by Precise.

| Column name                   | Column description  |
|-------------------------------|---|
| SYIN_PWII_INSTANCE_ID         | ID of the Sybase instance.                                      |
| SYIN_CLUSTER_ID               | Used to share text of statements and batches between instances. |
| SYIN_SYSTEM_NAME              | Server on which the Collector agent is installed.               |
| SYIN_INSTANCE_NAME            | Name of the monitored Sybase instance.                          |
| SYIN_LAST_PW_EXPLAIN_DAT<br>E | Last date the explain process run.                              |

| Column name                     | Column description  |
|---------------------------------|---|
| SYIN_LAST_PERF_LOAD_DATE        | Last date the instance performance was loaded.  |
| SYIN_LAST_STMT_LOAD_DATE        | Last date the statement text was loaded.  |
| SYIN_DB_FILES_LAST_SAMPL<br>E   | For future use.   |
| SYIN_LAST_AVAIL_LOADED          | For future use.   |
| SYIN_LAST_AVAIL_LOADED_D<br>B   | For future use.   |
| SYIN_UNAVAIL_DB_STATUS          | For future use.   |
| SYIN_POINTS_INSTALLED           | For future use.   |
| SYIN_INSTANCE_TYPE              | User defined instance group name. And be updated by using stored procedure udp_sy_update_instance_type. |
| SYIN_LAST_STATS_STATUS          | The status of the Collect Instance Statistics process for each instance.                                |
| SYIN_JOB_SAMPLE_STATUS          | For future use.   |
| SYIN_SCHEDULE_SAMPLE_STATU<br>S | For future use.   |
| SYIN_STEP_SAMPLE_STATUS         | For future use.   |
| SYIN_LAST_STATS_LOAD            | Last time the Collect Instance Statistics process was run for each instance.                            |
| SYIN_INSTANCE_VERSION           | String representation of the instance's ASE version.  |
| SYIN_IS_PUBLISHER               | Indicates whether the instance is a replication publisher.  |
| SYIN_IS_SUBSCRIBER              | Indicates whether the instance is a replication subscriber.   |

## PW\_SYPC\_PERFORMANCE\_COUNTERS

Lists all the counters and information relevant to them. Correlates counters in the Precise environment to counter/counters in Sybase.

| Column name          | Column description   |
|----------------------|--|
| SYPC_OBJECT_NAME     | Name of the Sybase group that includes the counter.                                  |
| SYPC_COUNTER_NAME    | Counter name in Sybase (<br>onitor table).   |
| SYPC_TABLE_NAME      | Name of the table in Precise that stores the overtime counter values.                |
| SYPC_COLUMN_NAME     | Name of the column in the Precise table that stores the overtime counter values.     |
| SYPC_FROM_VERSION    | The Sybase version that starts collecting the current counter.                       |
| SYPC_TILL_VERSION    | The Sybase version that versions later than it stops collecting the current counter. |
| SYPC_UI_COUNTER_NAME | Counter name as it appears in the GUI.   |
| SYPC_UI_FORMAT       | Counter value's format (number, byte, and so on).                                    |

| Column name               | Column description   |
|---------------------------|--|
| SYPC_UI_PERFORMANCE_GROUP | Precise group that includes the counter (as it appears in the GUI).                          |
| SYPC_HAS_INSTANCE         | Marks if the counter is part of a specific instance (such as engine, data cache, and so on). |
| SYPC_EXPLANATION          | Counter's explanation.   |
| SYPC_XACT_PRESENTATION    | Marks if to include a transactions graph in the GUI next to the counter graph.               |

## PW\_SYBX\_BATCH\_TEXT

Holds the text of batches.

| Column name     | Column description                                |
|-----------------|---|
| SYBX_BATCH_HV   | Unique identifier (number) assigned to the batch. |
| SYBX_BATCH_TEXT | The text of the batch.                            |

#### PW\_SYST\_STATEMENTS\_STATS\_T

Stores statistics on statement and batch performance per timeslice.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name             | Column description  |
|-------------------------|---|
| SYST_PWII_INSTANCE_ID   | ID of the Sybase instance.  |
| SYST_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SYST_PWHG_ID should be used.  |
| SYST_PWHG_ID            | Hour group ID.  |
| SYST_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).  |
| SYST_DATABASE_ID        | Database to which the statement belongs, normalized in table<br>PW_SYDN_DATABASE_NAMES_N.   |
| SYST_USER_ID            | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SYUN_USER_NAMES_N. |
| SYST_BATCH_HV           | Unique identifier (number) assigned to the batch.   |
| SYST_STATEMENT_HV       | Unique identifier (number) assigned to the statement.   |
| SYST_COLLAPSED_BATCH_HV | Unique identifier (number) assigned to the batch after replacing the literals with a parameters marker (collapsed form).  |

| Column name                       | Column description   |
|-----------------------------------|--|
| SYST_COLLAPSED_STATEMENT<br>_HV   | Unique identifier (number) assigned to the statement in its collapsed form.  |
| SYST_TOTAL_INSYBASE_TIME<br>_SUM  | Indicates the total amount of time Sybase was actively executing queries. It is also the sum of the columns.   |
| SYST_NUM_ENDED_EXECUTION<br>S_SUM | Number of statement executions which ended during the row's timeframe.   |
| SYST_NUM_EXECUTIONS_NOT_<br>ENDED | Number of statement executions which were still running at the end of the row's timeframe  |
| SYST_TOTAL_DURATION_SUM           | Total amount of time Sybase spent executing this statement.  |
| SYST_REQUEST_WAIT_SUM             | Not in use in this table.  |
| SYST_CPU_SUM                      | Amount of time the process was actively executing a statement.   |
| SYST_LOCK_WAIT_SUM                | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.                                      |
| SYST_IO_WAIT_SUM                  | Amount of time the process was waiting for I/O operations to terminate.  |
| SYST_REMOTE_WAIT_SUM              | Amount of time the process was waiting for a remote query to terminate.  |
| SYST_LOG_WAIT_SUM                 | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation. |
| SYST_SYNC_SUM                     | Amount of time the process was waiting to synchronize with another process.  |
| SYST_LOG_SUSPEND_SUM              | The amount of time the process was waiting for an operation of the log file to terminate.<br>This state is generally encountered during a transaction log full.  |
| SYST_NET_IO_SUM                   | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SYST_BUFFER_WAIT_SUM              | Amount of time the process was waiting to access a user log cache.   |
| SYST_INTERNAL_LOCK_SUM            | Amount of time the process was waiting for an internal lock to be released.  |
| SYST_WAITFOR_COMMAND_SUM          | Amount of time the process was executing the WAITFOR DELAY command.  |
| SYST_OTHER_WAIT_SUM               | Amount of time the process was waiting for unknown reasons.  |
| SYST_STAT_CPU_SUM                 | Statistics summing the amount of the process's read memory usage.  |
| SYST_STAT_PHYSICAL_IO_SU<br>M     | Number of physical disk reads and writes for the process.  |
| SYST_STAT_MEM_USAGE_MAX           | Number of pages in the procedure cache allocated to the process.   |
| SYST_STAT_OPEN_TRANS_MAX          | Number of transactions the process opened.   |
| SYST_PARALLEL_DEGREE_MIN          | For future use.  |
| SYST_PARALLEL_DEGREE_MAX          | For future use.  |
| SYST_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.  |
| SYST_SLA_RED_SUM                  | For future use.  |
| SYST_SLA_YELLOW_SUM               | For future use.  |

| Column name        | Column description |
|--------------------|--------------------|
| SYST_SLA_GREEN_SUM | For future use.    |
| SYST_ROWID         | Unique row number. |

## PW\_SYSS\_SESSIONS\_STATS\_T

Stores application performance statistics per timeslice for every combination of instance, database, program, user, logon, machine, and work type.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                      | Column description  |
|----------------------------------|---|
| SYSS_PWII_INSTANCE_ID            | ID of the Sybase instance.  |
| SYSS_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SYSS_PWHG_ID should be used.  |
| SYSS_PWHG_ID                     | Hour group ID.  |
| SYSS_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).  |
| SYSS_PROGRAM_ID                  | ID of the application program, normalized in table PW_SYPN_PROGRAM_NAMES_N.   |
| SYSS_DATABASE_ID                 | ID of the database to which the statement belongs, normalized in table PW_SYDN_DATABASE_NAMES_N.  |
| SYSS_USER_ID                     | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SYUN_USER_NAMES_N. |
| SYSS_LOGIN_ID                    | The name used to log in to the database. In case of Windows Authentication mode, it contains the domain and the Windows NT user name, normalized in table PW_SYLN_LOGIN_NAMES_N.  |
| SYSS_MACHINE_ID                  | The ID of the client workstation, normalized in table PW_SYMN_MACHINE_NAMES_N.  |
| SYSS_WORK_TYPE                   | Type of session, such as batch, dialog, queue. Used only in ERP components.   |
| SYSS_TOTAL_INSYBASE_TIME<br>_SUM | Total amount of time Sybase was actively executing queries. It is also the sum of the columns.  |
| SYSS_TOTAL_DURATION_SUM          | Total amount of time Sybase spent executing this session.   |
| SYSS_REQUEST_WAIT_SUM            | Amount of time the process was waiting for the client to issue a statement.   |
| SYSS_CPU_SUM                     | Amount of time the process was actively executing a statement.  |
| SYSS_LOCK_WAIT_SUM               | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.   |
| SYSS_IO_WAIT_SUM                 | Amount of time the process was waiting for I/O operations to terminate.   |

| Column name                        | Column description  |
|------------------------------------|---|
| SYSS_REMOTE_WAIT_SUM               | Amount of time the process was waiting for remote query to terminate.   |
| SYSS_LOG_WAIT_SUM                  | Amount of time the process was waiting on an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation. |
| SYSS_SYNC_SUM                      | Amount of time the process was waiting to synchronize with another process.   |
| SYSS_LOG_SUSPEND_SUM               | The amount of time the process was waiting for an operation of the log file to terminate.<br>This state is generally encountered during a transaction log full. |
| SYSS_NET_IO_SUM                    | Amount of time the process was waiting for the client process to acknowledge data sent to it.   |
| SYSS_BUFFER_WAIT_SUM               | Amount of time the process was waiting to access a user log cache.  |
| SYSS_INTERNAL_LOCK_SUM             | Amount of time the process was waiting for an internal lock to be released.   |
| SYSS_WAITFOR_COMMAND_SUM           | Amount of time the process was executing the WAITFOR DELAY command.   |
| SYSS_OTHER_SUM                     | Amount of time the process was waiting for unknown reasons.   |
| SYSS_NUM_OF_ENDED_SESSIONS<br>_SUM | Number of sessions, which ended during the row's timeframe.   |
| SYSS_NUM_OF_SESSIONS_NOT_E<br>NDED | Number of sessions, which were still open at the end of the row's timeframe.  |
| SYSS_NUM_ENDED_EXECUTIONS_<br>SUM  | Number of statement executions, which ended during the row's timeframe.   |
| SYSS_NUM_EXECUTIONS_NOT_EN<br>DED  | Number of statement executions, which were still running at the end of the row's timeframe.   |
| SYSS_STAT_CPU_SUM                  | Statistics summing the amount of the process's read memory usage.   |
| SYSS_STAT_PHYSICAL_IO_SU<br>M      | Number of physical disk reads and writes for the process.   |
| SYSS_STAT_MEM_USAGE_MAX            | Number of pages in the procedure cache allocated to the process.  |
| SYSS_STAT_OPEN_TRANS_MAX           | Number of transactions the process opened.  |
| SYSS_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.   |
| SYSS_SLA_RED_SUM                   | For future use.   |
| SYSS_SLA_YELLOW_SUM                | For future use.   |
| SYSS_SLA_GREEN_SUM                 | For future use.   |
| SYSS_ROWID                         | Unique row number.  |

#### PW\_SYSE\_SESSIONS\_STMT\_STATS\_T

Stores statistics about performance of statements inside applications per timeslice for every combination of instance, database, program, user, logon, machine, and work type.

Note: The \_T table summarizes the data per timeslice. The \_D table summarizes the data per day. The \_W table summarizes the data per week.

| Column name                      | Column description  |
|----------------------------------|---|
| SYSE_PWII_INSTANCE_ID            | ID of the Sybase instance.  |
| SYSE_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SYSE_PWHG_ID should be used.  |
| SYSE_PWHG_ID                     | Hour group ID.  |
| SYSE_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).  |
| SYSE_PROGRAM_ID                  | ID of the application program, normalized in table PW_SYPN_PROGRAM_NAMES_N.   |
| SYSE_DATABASE_ID                 | The database to which the statement belongs, normalized in table PW_SYDN_DATABASE_NAMES_N.  |
| SYSE_USER_ID                     | One of the Sybase users who executed this statement. If this statement is not part of a stored procedure, this is the user used as the parsing user when explaining this batch, normalized in table PW_SYUN_USER_NAMES_N. |
| SYSE_LOGIN_ID                    | The name used to log in to the database. In case of Windows Authentication mode, it contains the domain and the Windows NT user name, normalized in table PW_SYLN_LOGIN_NAMES_N.  |
| SYSE_MACHINE_ID                  | The ID of the client workstation, normalized in table PW_SYMN_MACHINE_NAMES_N.  |
| SYSE_WORK_TYPE                   | Type of session, such as batch, dialog, queue.  |
| SYSE_BATCH_HV                    | Unique identifier (number) assigned to the batch.   |
| SYSE_STATEMENT_HV                | Unique identifier (number) assigned to the statement.   |
| SYSE_COLLAPSED_BATCH_HV          | Unique identifier (number) assigned to the batch.   |
| SYSE_COLLAPSED_STATEMENT<br>_HV  | Unique identifier (number) assigned to the batch in its collapsed form.   |
| SYSE_TOTAL_INSYBASE_TIME<br>_SUM | Total amount of time Sybase was actively executing queries. It is also the sum of the columns.  |
| SYSE_TOTAL_DURATION_SUM          | Total amount of time Sybase spent executing this statement.   |
| SYSE_REQUEST_WAIT_SUM            | Amount of time the process was waiting for the client to issue a statement.   |
| SYSE_CPU_SUM                     | Amount of time the process was actively executing a statement.  |
| SYSE_LOCK_WAIT_SUM               | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.   |
| SYSE_IO_WAIT_SUM                 | Amount of time the process was waiting for I/O operations to terminate.   |
| SYSE_REMOTE_WAIT_SUM             | Amount of time the process was waiting for a remote query to terminate.   |
| SYSE_LOG_WAIT_SUM                | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.  |

| Column name                        | Column description  |
|------------------------------------|---|
| SYSE_SYNC_SUM                      | Amount of time the process was waiting to synchronize with another process.   |
| SYSE_LOG_SUSPEND_SUM               | The amount of time the process was waiting for an operation of the log file to terminate.<br>This state is generally encountered during a transaction log full. |
| SYSE_NET_IO_SUM                    | Amount of time the process was waiting for the client process to acknowledge data sent to it.   |
| SYSE_BUFFER_WAIT_SUM               | Amount of time the process was waiting to access a user log cache.  |
| SYSE_INTERNAL_LOCK_SUM             | Amount of time the process was waiting for an internal lock to be released.   |
| SYSE_WAITFOR_COMMAND_SUM           | Amount of time the process was executing the WAITFOR DELAY command.   |
| SYSE_OTHER_WAIT_SUM                | Amount of time the process was waiting for unknown reasons.   |
| SYSE_NUM_OF_ENDED_SESSIONS<br>_SUM | Number of sessions, which ended during the row's timeframe.   |
| SYSE_NUM_OF_SESSIONS_NOT_E<br>NDED | Number of statement executions, which ended during the row's timeframe.   |
| SYSE_NUM_ENDED_EXECUTIONS_<br>SUM  | Number of statement executions, which ended during the row's timeframe.   |
| SYSE_NUM_EXECUTIONS_NOT_EN<br>DED  | Number of statement executions, which were still running at the end of the row's timeframe.   |
| SYSE_STAT_CPU_SUM                  | Statistics summing the amount of the process's read memory usage.   |
| SYSE_STAT_PHYSICAL_IO_SU<br>M      | Number of physical disk reads and writes for the process.   |
| SYSE_STAT_MEM_USAGE_MAX            | Number of pages in the procedure cache allocated to the process.  |
| SYSE_STAT_OPEN_TRANS_MAX           | Number of transaction the process opened.   |
| SYSE_PARALLEL_DEGREE_MIN           | Minimum number of sessions executing this statement in parallel.  |
| SYSE_PARALLEL_DEGREE_MAX           | Maximum number of sessions executing this statement in parallel.  |
| SYSE_SLA_RED_SUM                   | For future use.   |
| SYSE_SLA_YELLOW_SUM                | For future use.   |
| SYSE_SLA_GREEN_SUM                 | For future use.   |
| SYSE_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.   |
| SYSE_ROWID                         | Unique row number.  |
| SYSE_START_BIT_ID                  | For future use.   |

## PW\_SYNS\_INSTANCE\_STATS\_T

Stores application performance statistics per timeslice for every combination of instance and database.

Note: The \_T table summarizes the data per timeslice. The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                        | Column description   |
|------------------------------------|--|
| SYNS_PWII_INSTANCE_ID              | ID of the Sybase instance.   |
| SYNS_TIMESTAMP                     | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SYNS_PWHG_ID should be used. |
| SYNS_PWHG_ID                       | Hour group ID.   |
| SYNS_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SYNS_DATABASE_ID                   | The database to which the statement belongs, normalized in table PW_SYDN_DATABASE_NAMES_N.   |
| SYNS_TOTAL_INSYBASE_TIME<br>_SUM   | Total amount of time Sybase was actively executing queries. It is also the sum of the columns.   |
| SYNS_TOTAL_DURATION_SUM            | Total amount of time Sybase spent executing this statement.  |
| SYNS_REQUEST_WAIT_SUM              | Amount of time the process was waiting for the client to issue a statement.  |
| SYNS_CPU_SUM                       | Amount of time the process was actively executing a statement.   |
| SYNS_LOCK_WAIT_SUM                 | Amount of time the process was waiting for locks held by other processes to be released.<br>All types of locks are counted.  |
| SYNS_IO_WAIT_SUM                   | Amount of time the process was waiting for I/O operations to terminate.  |
| SYNS_REMOTE_WAIT_SUM               | Amount of time the process was waiting for a remote query to terminate.  |
| SYNS_LOG_WAIT_SUM                  | Amount of time the process was waiting for an operation on the log file to terminate. This state is generally encountered during a COMMIT or ROLLBACK operation.                 |
| SYNS_SYNC_SUM                      | Amount of time the process was waiting to synchronize with another process.  |
| SYNS_LOG_SUSPEND_SUM               | The amount of time the process was waiting for an operation of the log file to terminate.<br>This state is generally encountered during a transaction log full.                  |
| SYNS_NET_IO_SUM                    | Amount of time the process was waiting for the client process to acknowledge data sent to it.  |
| SYNS_BUFFER_WAIT_SUM               | Amount of time the process was waiting to access a user log cache.   |
| SYNS_INTERNAL_LOCK_SUM             | Amount of time the process was waiting for an internal lock to be released.  |
| SYNS_WAITFOR_COMMAND_SUM           | Amount of time the process was executing the WAITFOR DELAY command.  |
| SYNS_OTHER_WAIT_SUM                | Amount of time the process was waiting for unknown reasons.  |
| SYNS_NUM_OF_ENDED_SESSION<br>S_SUM | Number of sessions, which ended during the row's timeframe.  |
| SYNS_NUM_OF_SESSIONS_NOT_E<br>NDED | Number of sessions, which were still open at the end of the row's timeframe.   |
| SYNS_NUM_ENDED_EXECUTIONS<br>_SUM  | Number of statement executions, which ended during the row's timeframe.  |

| Column name                       | Column description  |
|-----------------------------------|---|
| SYNS_NUM_EXECUTIONS_NOT_E<br>NDED | Number of statement executions, which were still running at the end of the row's timeframe. |
| SYNS_STAT_CPU_SUM                 | Statistics summing the amount of the process's read memory usage.                           |
| SYNS_STAT_PHYSICAL_IO_SU<br>M     | Number of physical disk reads and writes for the process.                                   |
| SYNS_STAT_MEM_USAGE_MAX           | Number of pages in the procedure cache allocated to the process.                            |
| SYNS_STAT_OPEN_TRANS_MAX          | Number of transaction the process opened.   |
| SYNS_SLA_RED_SUM                  | For future use.   |
| SYNS_SLA_YELLOW_SUM               | For future use.   |
| SYNS_SLA_GREEN_SUM                | For future use.   |
| SYNS_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.                                       |
| SYNS_ROWID                        | Unique row number.  |
| SYNS_WORK_TYPE                    | Type of session, such as batch, dialog, queue.  |

#### PW\_SYPQ\_PLL\_QUERY\_STATS\_T

Contains overtime counter values. Includes counters that are relevant to Parallel Queries statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                        | Column description   |
|------------------------------------|--|
| SYPQ_PWII_INSTANCE_ID              | ID of the Sybase instance.   |
| SYPQ_TIMESTAMP                     | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYPQ_PWHG_ID                       | Hour group ID.   |
| SYPQ_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).   |
| SYPQ_PARALLEL_QUERIES_SU<br>M      | Total number of queries eligible to be run in parallel.  |
| SYPQ_PLL_THREAD_LIMIT_AD<br>J_SUM  | Number of times the number of worker processes for a cached query plan was adjusted, due to a session-level limit.                             |
| SYPQ_PLL_NOTHREAD_ADJ_SU<br>M      | Number of times the number of worker processes for a cached query plan was adjusted, due to lack of available worker processes.                |
| SYPQ_NETWORK_BUF_IMMEDIA<br>TE_SUM | Number of parallel network buffer merge locks with no wait.  |

| Column name                        | Column description  |
|------------------------------------|---|
| SYPQ_NETWORK_BUF_WAIT_SU<br>M      | Number of parallel network buffer merge locks with wait.  |
| SYPQ_RESULT_BUF_IMMEDIAT<br>E_SUM  | Number of parallel result buffer merge locks with no wait.  |
| SYPQ_RESULT_BUF_WAIT_SUM           | Number of parallel result buffer merge locks with wait.   |
| SYPQ_WORKTAB_BUF_IMMEDIA<br>TE_SUM | Number of parallel work table merge locks with no wait.   |
| SYPQ_WORKTAB_BUF_WAIT_SU<br>M      | Number of parallel work table merge locks with wait.  |
| SYPQ_PLL_SORT_MERGE_WAIT<br>_SUM   | Number of contention on a parallel sort buffer merge locks that are caused by producers (returning rows from parallel scans). |
| SYPQ_PLL_SORTING_WAIT_SU<br>M      | Number of contention on a parallel sort buffer merge locks that are caused by consumers (performing the parallel sort).       |
| SYPQ_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.   |

#### PW\_SYMS\_MISC\_STATISTICS\_T

Contains overtime counter values. Includes miscellaneous counters.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name             | Column description   |
|-------------------------|--|
| SYMS_PWII_INSTANCE_ID   | ID of the Sybase instance.   |
| SYMS_TIMESTAMP          | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYMS_PWHG_ID            | Hour group ID.   |
| SYMS_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SYMS_ESP_REQUESTS_SUM   | Number of extended stored procedure calls.   |
| SYMS_ESP_EXEC_TICKS_SUM | Average time for all extended stored procedures.   |
| SYMS_HK_GC_WAKES_SUM    | Number of times the housekeeper garbage collection checked for space that can be reclaimed.  |
| SYMS_HK_GC_PAGES_SUM    | Number of pages reclaimed by the housekeeper garbage collection.   |
| SYMS_HK_STATS_WAKES_SUM | Number of times the housekeeper chore tasks checked to see if statistics needed to be written.   |
| SYMS_SPINS_FOR_PLAN_SUM | Number of times that a process attempting to use sp_showplan had to wait to acquire read access to the query plan.                             |

| Column name                       | Column description   |
|-----------------------------------|--|
| SYMS_TXT_SIZE_OVERFLOWS_SU<br>M   | Number of times that SQL batch text exceeded the text buffer size.   |
| SYMS_TXT_REQS_MAX                 | Maximum size of a SQL batch.   |
| SYMS_PROC_READS_SUM               | Number of times that stored procedures were read from disk, rather than found and copied in the procedure cache. |
| SYMS_PROC_REMOVALS_SUM            | Number of times that a procedure aged out of cache.  |
| SYMS_PROC_REQS_SUM                | Number of times stored procedures were executed.   |
| SYMS_PROC_WRITES_SUM              | Number of procedures created.  |
| SYMS_MEM_PAGES_ALLOCS_SUM         | Number of times that a new page was allocated in the memory.   |
| SYMS_MEM_PAGES_FREES_SUM          | Number of times that a page was freed.   |
| SYMS_CHECKPOINT_TOTAL_SUM         | Number of normal checkpoints.  |
| SYMS_HK_FREE_DB_CKPTS_SUM         | Number of checkpoints performed by the housekeeper wash task.  |
| SYMS_CHECKPOINT_TIME_SUM          | Interval of normal checkpoints.  |
| SYMS_HK_TIME_DB_CKPTS_SUM         | Interval of free checkpoints.  |
| SYMS_NET_PACKETS_RECEIVED_<br>SUM | Number of network packets ASE received.  |
| SYMS_NET_PACKETS_SENT_SUM         | Number of network packets ASE sent.  |
| SYMS_RECIEVED_TIMESTAMP           | Local date and time the row was loaded into the PMDB.  |
| SYMS_RECOMP_CURSOR_CHANG<br>E_SUM | Number of times stored procedures were recompiled due to cursor permission change.                               |
| SYMS_RECOMP_INDEX_CHANGE<br>_SUM  | Number of times stored procedures were recompiled due to index change.   |
| SYMS_RECOMP_ISOLEVEL_SUM          | Number of times stored procedures were recompiled due to isolation level change.                                 |
| SYMS_RECOMP_PERMISSIONS_<br>SUM   | Number of times stored procedures were recompiled due to permissions change.                                     |
| SYMS_RECOMP_SCHEMA_SUM            | Number of times stored procedures were recompiled due to schema change.  |
| SYMS_RECOMP_TABLE_MISSIN<br>G_SUM | Number of times stored procedures were recompiled due to table missing.  |
| SYMS_RECOMP_TEMP_TAB_MIS<br>S_SUM | Number of times stored procedures were recompiled due to temporary table missing.                                |
| SYMS_RECOMP_COMP_PHASE_S<br>UM    | Number of times recompilation was triggered at compilation phase.  |
| SYMS_RECOMP_EXEC_PHASE_S<br>UM    | Number of times recompilation was triggered at execution phase.  |
| SYMS_RECOMP_EXEC_CURSOR_<br>SUM   | Number of times recompilation was triggered at execute cursor execution phase.                                   |
| SYMS_RECOMP_REDEFIN_PHAS<br>E_SUM | Number of times recompilation was triggered at redefinition phase.   |

| Column name                     | Column description  |
|---------------------------------|---|
| SYMS_STATEMENTS_DROPPED_<br>SUM | Number of statements that were dropped instead of cached.                                   |
| SYMS_STMT_IN_CACHE_SUM          | Number of times a query plan was reused.  |
| SYMS_STMT_NOT_IN_CACHE_S<br>UM  | Number of times an SQL statement was not found in cache.                                    |
| SYMS_STMT_NOT_CACHED_SUM        | Number of statements Adaptive Server would have cached if the statement cache were enabled. |
| SYMS_STMT_CACHED_SUM            | Number of SQL statements in cache.  |
| SYMS_STMT_RESTORED_SUM          | Number of query plans regenerated from the SQL text.  |

#### PW\_SYLM\_LOCK\_MANAGEMENTS\_T

Contains overtime counter values. Includes counters that are relevant to Lock statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                       | Column description   |
|-----------------------------------|--|
| SYLM_PWII_INSTANCE_ID             | ID of the Sybase instance.   |
| SYLM_TIMESTAMP                    | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYLM_PWHG_ID                      | Hour group ID.   |
| SYLM_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes).   |
| SYLM_WAIT_EX_LATCH_SUM            | Number of times a task was switched out because it needed to wait for an EX latch type.  |
| SYLM_WAIT_NO_LATCH_SUM            | Number of times a task was switched out because it needed to wait for a NO latch type.   |
| SYLM_WAIT_SH_LATCH_SUM            | Number of times a task was switched out because it needed to wait for an SH latch type.  |
| SYLM_SPLIT_INDEX_DEADLOC<br>K_SUM | Number of times ASE server retried to split a page, due to contention and ended in a deadlock.   |
| SYLM_GRANTED_LOCKS_SUM            | Number of times locks were granted immediately.  |
| SYLM_WAITED_LOCKS_SUM             | Number of times a task had to wait for a lock.   |
| SYLM_LOCK_CONTENTION_SUM          | Number of times there was lock contention.   |
| SYLM_DEADLOCKS_SUM                | Number of deadlocks.   |
| SYLM_HASHTABLE_LOOKUPS_S<br>UM    | Number of times the lock hash table was searched for a lock on a page, row, or table.  |
| SYLM_GRANTED_EX_TAB_SUM           | Number of times an exclusive table lock type was granted immediately.  |

| Column name                     | Column description  |
|---------------------------------|---|
| SYLM_WAITED_EX_TAB_SUM          | Number of times a task had to wait for an exclusive table lock type.    |
| SYLM_GRANTED_SH_TAB_SUM         | Number of times a shared table lock type was granted immediately.       |
| SYLM_WAITED_SH_TAB_SUM          | Number of times a task had to wait for a shared table lock type.        |
| SYLM_GRANTED_EX_INT_SUM         | Number of times an exclusive intent lock type was granted immediately.  |
| SYLM_WAITED_EX_INT_SUM          | Number of times a task had to wait for an exclusive intent lock type.   |
| SYLM_GRANTED_SH_INT_SUM         | Number of times a shared intent lock type was granted immediately.      |
| SYLM_WAITED_SH_INT_SUM          | Number of times a task had to wait for a shared Intent lock type.       |
| SYLM_GRANTED_EX_PAGE_SUM        | Number of times an exclusive page lock type was granted immediately.    |
| SYLM_WAITED_EX_PAGE_SUM         | Number of times a task had to wait for an exclusive page lock type.     |
| SYLM_GRANTED_SH_PAGE_SUM        | Number of times a shared page lock type was granted immediately.        |
| SYLM_WAITED_SH_PAGE_SUM         | Number of times a task had to wait for a shared page lock type.         |
| SYLM_GRANTED_UP_PAGE_SUM        | Number of times an update page lock type was granted immediately.       |
| SYLM_WAITED_UP_PAGE_SUM         | Number of times a task had to wait for an update page lock type.        |
| SYLM_GRANTED_EX_ROW_SUM         | Number of times an exclusive row lock type was granted immediately.     |
| SYLM_WAITED_EX_ROW_SUM          | Number of times a task had to wait for an exclusive row lock type.      |
| SYLM_GRANTED_SH_ROW_SUM         | Number of times a shared row lock type was granted immediately.         |
| SYLM_WAITED_SH_ROW_SUM          | Number of times a task had to wait for a shared row lock type.          |
| SYLM_GRANTED_UP_ROW_SUM         | Number of times an update row lock type was granted immediately.        |
| SYLM_WAITED_UP_ROW_SUM          | Number of times a task had to wait for an update row lock type.         |
| SYLM_GRANTED_SH_NKL_SUM         | Number of times a shared next key lock type was granted immediately.    |
| SYLM_WAITED_SH_NKL_SUM          | Number of times a task had to wait for a shared next key lock type.     |
| SYLM_GRANTED_EX_ADDRESS_S<br>UM | Number of times an exclusive address lock type was granted immediately. |
| SYLM_WAITED_EX_ADDRESS_SUM      | Number of times a task had to wait for an exclusive address lock type.  |
| SYLM_GRANTED_SH_ADDRESS_S<br>UM | Number of times a shared address lock type was granted immediately.     |
| SYLM_WAITED_SH_ADDRESS_SU<br>M  | Number of times a task had to wait for a shared address lock type.      |
| SYLM_EX_TAB_DEADLOCK_SUM        | Number of times an exclusive table deadlock has occurred.               |
| SYLM_SH_TAB_DEADLOCK_SUM        | Number of times a shared table deadlock has occurred.                   |
| SYLM_EX_INT_DEADLOCK_SUM        | Number of times an exclusive intent deadlock has occurred.              |
| SYLM_SH_INT_DEADLOCK_SUM        | Number of times a shared intent deadlock has occurred.                  |
| SYLM_EX_PAGE_DEADLOCK_SUM       | Number of times an exclusive page deadlock has occurred.                |
| SYLM_UP_PAGE_DEADLOCK_SUM       | Number of times an updated page deadlock has occurred.                  |
| SYLM_SH_PAGE_DEADLOCK_SUM       | Number of times a shared page deadlock has occurred.                    |
| SYLM_EX_ROW_DEADLOCK_SUM        | Number of times an exclusive row deadlock has occurred.                 |

#### (Continued)

| Column name                     | Column description   |
|---------------------------------|--|
| SYLM_UP_ROW_DEADLOCK_SUM        | Number of times an updated row deadlock has occurred.  |
| SYLM_SH_ROW_DEADLOCK_SUM        | Number of times a shared row deadlock has occurred.  |
| SYLM_SH_NKL_DEADLOCK_SUM        | Number of times a shared next key deadlock has occurred.   |
| SYLM_EX_ADDR_DEADLOCK_SUM       | Number of times an exclusive address deadlock has occurred.  |
| SYLM_SH_ADDR_DEADLOCK_SUM       | Number of times a shared address deadlock has occurred.  |
| SYLM_DEADLOCK_SRCH_SUM          | Number of times Adaptive Server initiated a deadlock search.   |
| SYLM_DEADLOCK_SRCH_SKIP_SU<br>M | Number of times a task started to perform deadlock checking, but found deadlock checking in progress and skipped its check.                                |
| SYLM_TOTAL_PROMOTIONS_SUM       | Number of lock promotions.   |
| SYLM_EX_TAB_PROMOTIONS_SUM      | Number of times an exclusive page to exclusive table escalation has occurred.  |
| SYLM_SH_TAB_PROMOTIONS_SU<br>M  | Number of times a shared page to shared table escalation has occurred.   |
| SYLM_EX_ROW_PROMOTIONS_SU<br>M  | Number of times an exclusive row to exclusive table escalation has occurred.   |
| SYLM_SH_ROW_PROMOTIONS_SU<br>M  | Number of times a shared row to shared table escalation has occurred.  |
| SYLM_SH_NKL_PROMOTIONS_SU<br>M  | Number of times a shared next key to shared table escalation has occurred.   |
| SYLM_TOTAL_TIMEDOUTS_SUM        | Number of times a task was waiting for a lock and the transaction was rolled back, due to a session-level or server-level lock time-out.                   |
| SYLM_EX_TAB_TIMEDOUTS_SUM       | Number of times a task was waiting for an exclusive table lock and the transaction was rolled back, due to a session-level or server-level lock time-out.  |
| SYLM_SH_TAB_TIMEDOUTS_SUM       | Number of times a task was waiting for a shared table lock and the transaction was rolled back, due to a session-level or server-level lock time-out.      |
| SYLM_EX_INT_TIMEDOUTS_SUM       | Number of times a task was waiting for an exclusive intent lock and the transaction was rolled back, due to a session-level or server-level lock time-out. |
| SYLM_SH_INT_TIMEDOUTS_SUM       | Number of times a task was waiting for a shared intent lock and the transaction was rolled back, due to a session-level or server-level lock time-out.     |
| SYLM_EX_PAGE_TIMEDOUTS_SUM      | Number of times a task was waiting for an exclusive page lock and the transaction was rolled back, due to a session-level or server-level lock time-out.   |
| SYLM_UP_PAGE_TIMEDOUTS_SUM      | Number of times a task was waiting for an update page lock and the transaction was rolled back, due to a session-level or server-level lock time-out.      |
| SYLM_SH_PAGE_TIMEDOUTS_SUM      | Number of times a task was waiting for a shared page lock and the transaction was rolled back, due to a session-level or server-level lock time-out.       |
| SYLM_EX_ROW_TIMEDOUTS_SUM       | Number of times a task was waiting for an exclusive row lock and the transaction was rolled back, due to a session-level or server-level lock time-out.    |
| SYLM_UP_ROW_TIMEDOUTS_SUM       | Number of times a task was waiting for an update row lock and the transaction was rolled back, due to a session-level or server-level lock time-out.       |
| SYLM_SH_ROW_TIMEDOUTS_SUM       | Number of times a task was waiting for a shared row lock and the transaction was rolled back, due to a session-level or server-level lock time-out.        |

| Column name                        | Column description  |
|------------------------------------|---|
| SYLM_EX_ADDR_TIMEDOUTS_SU<br>M     | Number of times a task was waiting for an exclusive address lock and the transaction was rolled back, due to a session-level or server-level lock time-out. |
| SYLM_SH_ADDR_TIMEDOUTS_SU<br>M     | Number of times a task was waiting for a shared address lock and the transaction was rolled back, due to a session-level or server-level lock time-out.     |
| SYLM_SH_NKL_TIMEDOUTS_SUM          | Number of times a task was waiting for a shared next key lock and the transaction was rolled back, due to a session-level or server-level lock time-out.    |
| SYLM_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.   |
| SYLM_HASH_CHAIN_LENGTH_S<br>UM     | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_TABLE_HASHTAB_LKUP_<br>SUM    | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_TAB_AVG_CHAIN_LEN_S<br>UM     | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_PAGEROW_HASHTAB_LKU<br>P_SUM  | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_PAGEROWAVG_CHAIN_LE<br>N_SUM  | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_ADDRESS_HASHTAB_LKU<br>P_SUM  | For more information, search for "performance counters" on http://msdn.microsoft.com.   |
| SYLM_ADDRESS_AVG_CHAIN_L<br>EN_SUM | For more information, search for "performance counters" on http://msdn.microsoft.com.   |

# PW\_SYTM\_TRAN\_MANAGEMENTS\_T

Contains overtime counter values. Includes counters that are relevant to Transactions statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                       | Column description   |
|-----------------------------------|--|
| SYTM_PWII_INSTANCE_ID             | ID of the Sybase instance.   |
| SYTM_TIMESTAMP                    | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYTM_PWHG_ID                      | Hour group ID.   |
| SYTM_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes).   |
| SYTM_LOG_SEMAPHORE_WAITE<br>D_SUM | Number of context switches, caused by contention an on log semaphore.  |

| Column name                        | Column description   |
|------------------------------------|--|
| SYTM_ULC_SEMAPHORE_WAITS<br>_SUM   | Number of context switches, caused by contention on PLC.   |
| SYTM_TRANSACTIONS_SUM              | Number of committed transactions.  |
| SYTM_INS_HEAP_ROWS_SUM             | Number of rows inserted to heap tables.  |
| SYTM_INS_CLUS_ROWS_SUM             | Number of rows inserted to clustered tables.   |
| SYTM_INS_DOL_ROWS_SUM              | Number of rows inserted to data-only-lock tables.  |
| SYTM_UPD_DEFERED_ROWS_SU<br>M      | Number of rows updated in deferred mode.   |
| SYTM_UPD_DIRECT_PLACE_RO<br>WS_SUM | Number of rows updated directly, in-place.   |
| SYTM_UPD_CHEAP_DIRECT_RO<br>WS_SUM | Number of rows updated directly, not in-place.   |
| SYTM_UPD_EXPENSIVE_ROWS_<br>SUM    | Number of rows updated directly, expansive (causing row movement).   |
| SYTM_UPD_DOL_DEFERED_ROW<br>S_SUM  | Number of rows updated in deferred mode in DOL tables.   |
| SYTM_UPD_DOL_ROWS_SUM              | Number of rows updated in DOL tables.  |
| SYTM_UPD_DOL_REPLACE_ROWS<br>_SUM  | Number of rows replaced in DOL tables.   |
| SYTM_UPD_DOL_SHRINK_ROWS_<br>SUM   | Number of rows shrunken, while updated in DOL tables.  |
| SYTM_CHEAP_EXPANDS_SUM             | Number of rows expanded, while updated in DOL tables. (The row was the last row on the page.)                              |
| SYTM_DOL_EXPENSIVE_EXPANDS<br>_SUM | Number of rows expanded, while updated in DOL tables. (The update caused row movement.)                                    |
| SYTM_DOL_EXPANDS_FORWARDS<br>_SUM  | Number of rows expanded and forwarded, while updated in DOL tables.  |
| SYTM_DOL_FORWARDS_RET_RO<br>WS_SUM | Number of rows that were forwarded already and now fit in original page and returned to original page in DOL tables.       |
| SYTM_DEL_DEFERED_ROWS_SUM          | Number of rows deleted in deferred mode.   |
| SYTM_DEL_APL_ROWS_SUM              | Number of rows deleted directly.   |
| SYTM_DEL_DOL_ROWS_SUM              | Number of rows deleted from DOL tables.  |
| SYTM_FULL_LOG_FLUSHES_SUM          | Number of times that ULC was flushed to transaction log because the ULC became full.                                       |
| SYTM_ENDXACT_FLUSHES_SUM           | Number of times that ULC was flushed to transaction log because a transaction ended.                                       |
| SYTM_CHANGE_DB_FLUSHES_SU<br>M     | Number of times that ULC was flushed to transaction log because a database changed.  |
| SYTM_SYS_LOG_REC_FLUSHES_S<br>UM   | Number of times that ULC was flushed to transaction log because a system transaction occurred within the user transaction. |
| SYTM_UNPIN_FLUSHES_SUM             | Number of times that ULC was flushed to transaction log because of other reasons.  |

| Column name                        | Column description  |
|------------------------------------|---|
| SYTM_LOG_RECORDS_SUM               | Average number of log records per transaction.                          |
| SYTM_ULC_SIZE_MAX                  | Maximum number of bytes used in ULCs.                                   |
| SYTM_LOG_SEMAPHORE_GRANTE<br>D_SUM | Number of log semaphore requests granted immediately.                   |
| SYTM_ULC_SEMAPHORE_REQ_SU<br>M     | Number of ULC semaphore requests.                                       |
| SYTM_TRAN_LOG_ALLOC_SUM            | Number of times additional pages were allocated to the transaction log. |
| SYTM_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.                   |

### PW\_SYDC\_DATA\_CACHE\_MANAGEMENT\_T

Contains overtime counter values. Includes counters that are relevant to Data Caches statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                       | Column description   |
|-----------------------------------|--|
| SYDC_PWII_INSTANCE_ID             | ID of the Sybase instance.   |
| SYDC_TIMESTAMP                    | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYDC_PWHG_ID                      | Hour group ID.   |
| SYDC_MINUTES_COUNT_SUM            | The timeframe needed to calculated the row (in minutes).   |
| SYDC_COUNTER_INSTANCE             | The Instance of this counter.  |
| SYDC_READ_WAITS_SUM               | Number of cache search misses resulting in a read.   |
| SYDC_SYSTEM_DISK_WRITES_<br>SUM   | Number of I/O waits caused by I/O requests or restarted I/O requests.  |
| SYDC_HK_EXECUTIONS_SUM            | Number of times the housekeeper executes on a cache.   |
| SYDC_IO_PACING_SUM                | Number of times an I/O extensive task was switched off, due to exceeding an I/O batch limit.   |
| SYDC_CNTXSW_GROUP_COMMIT<br>_SUM  | Number of times a task issued a commit and had to wait till the buffer log got full and was written to disk.                                   |
| SYDC_LOG_LASTPAGE_WRITES<br>_SUM  | Number of times a task issued a commit and had to wait till the buffer log was written to disk.  |
| SYDC_CNTXSW_MODIFY_CNFLC<br>T_SUM | Number of times a task issued a commit and had to wait till the buffer log was written to disk.  |
| SYDC_HK_WASH_SUM                  | Number of time the housekeeper tasks perform buffer cache washes.  |

| Column name                     | Column description  |
|---------------------------------|---|
| SYDC_HK_WASH_CLEAN_SUM          | Number of time the housekeeper tasks perform buffer cache washes and found it clean.  |
| SYDC_LOG_PAGE_WRITES_SUM        | Number of times a buffer transaction log page is written to disk.   |
| SYDC_BUFSEARCH_FINDS_SUM        | Number of times a needed page was found in a cache.   |
| SYDC_BUFSEARCH_FINDS_IN_SU<br>M | Number of times a needed page was found in a cache in the wash mark.  |
| SYDC_BUFSEARCH_CALLS_SUM        | Number of times a cache was searched for a specific page.   |
| SYDC_LRU_BUFGRAB_2K_SUM         | Number of times a buffer is replaced from the pool with I/O size 2K. The page that was replaced, was not changed or was already written to disk, known as clean.        |
| SYDC_LRU_BUFGRAB_4K_SUM         | Number of times a buffer is replaced from the pool with I/O size 4K. The page that was replaced, was not changed or was already written to disk, known as clean page.   |
| SYDC_LRU_BUFGRAB_8K_SUM         | Number of times a buffer is replaced from the pool with I/O size 8K. The page that was replaced, was not changed or was already written to disk, known as clean page.   |
| SYDC_LRU_BUFGRAB_16K_SUM        | Number of times a buffer is replaced from the pool with I/O size 16K. The page that was replaced, was not changed or was already written to disk, known as clean page.  |
| SYDC_LRU_BUFGRAB_32K_SUM        | Number of times a buffer is replaced from the pool with I/O size 32K. The page that was replaced was not changed or was already written to disk, known as clean page.   |
| SYDC_LRU_BUFGRAB_64K_SUM        | Number of times a buffer is replaced from the pool with I/O size 64K. The page that was replaced, was not changed or was already written to disk, known as clean page.  |
| SYDC_LRU_BUFGRAB_128K_SUM       | Number of times a buffer is replaced from the pool with I/O size 128K. The page that was replaced, was not changed or was already written to disk, known as clean page. |
| SYDC_LRU_BUFGRAB_256K_SUM       | Number of times a buffer is replaced from the pool with I/O size 256K. The page that was replaced, was not changed or was already written to disk, known as clean page. |
| SYDC_LRU_BUFGRAB_512K_SUM       | Number of times a buffer is replaced from the pool with I/O size 512K. The page that was replaced, was not changed or was already written to disk, known as clean page. |
| SYDC_BUFGRAB_DIRTY_2K_SUM       | Number of times a buffer is replaced from the pool with I/O size 2K. The page that was replaced, was changed and not written to disk, known as dirty page.              |
| SYDC_BUFGRAB_DIRTY_4K_SUM       | Number of times a buffer is replaced from the pool with I/O size 4K. The page that was replaced, was changed and not written to disk, known as dirty page.              |
| SYDC_BUFGRAB_DIRTY_8K_SUM       | Number of times a buffer is replaced from the pool with I/O size 8K. The page that was replaced, was changed and not written to disk, known as dirty page.              |
| SYDC_BUFGRAB_DIRTY_16K_SUM      | Number of times a buffer is replaced from the pool with I/O size 16K. The page that was replaced, was changed and not written to disk, known as dirty page.             |
| SYDC_BUFGRAB_DIRTY_32K_SUM      | Number of times a buffer is replaced from the pool with I/O size 32K. The page that was replaced, was changed and not written to disk, known as dirty page.             |
| SYDC_BUFGRAB_DIRTY_64K_SUM      | Number of times a buffer is replaced from the pool with I/O size 64K. The page that was replaced, was changed and not written to disk, known as dirty page.             |
| SYDC_BUFGRAB_DIRTY_128K_SU<br>M | Number of times a buffer is replaced from the pool with I/O size 128K. The page that was replaced, was changed and not written to disk, known as dirty page.            |
| SYDC_BUFGRAB_DIRTY_256K_SU<br>M | Number of times a buffer is replaced from the pool with I/O size 256K. The page that was replaced, was changed and not written to disk, known as dirty page.            |
| SYDC_BUFGRAB_DIRTY_512K_SU<br>M | Number of times a buffer is replaced from the pool with I/O size 512K. The page that was replaced, was changed and not written to disk, known as dirty page.            |

| Column name                      | Column description   |
|----------------------------------|--|
| SYDC_BUFUNKEEP_LRU_SUM           | Number of buffers that used the normal cache strategy and were placed at the MRU end of the cache. |
| SYDC_BUFUNKEEP_MRU_SUM           | Number of buffers that were placed at the wash marker, using the fetch-and-discard strategy.       |
| SYDC_LARGE_IO_PERFORMED_S<br>UM  | Number of times a request for a large I/O was performed for a buffer.                              |
| SYDC_PREFETCH_REQ_SUM            | Number of times a large I/O was requested for a buffer.  |
| SYDC_LEVEL0_BUFPREDIRTY_SU<br>M  | Average number of pages requested at isolation level 0 for a cache.                                |
| SYDC_BUFWASH_THROUPUT_SUM        | Throughput of the buffer wash mark.  |
| SYDC_BUFWASH_PASS_CLEAN_S<br>UM  | Number of buffers that were clean, when they passed the wash marker.                               |
| SYDC_BUFWASH_PASS_WRITE_SU<br>M  | Number of times that I/O was already active on a buffer, when it entered the wash area.            |
| SYDC_BUFWASH_WRITE_DIRTY_S<br>UM | Number of times that a buffer entered the wash area dirty and was not already in I/O.              |
| SYDC_RECIEVED_TIMESTAMP          | Local date and time the row was loaded into the PMDB.  |

### PW\_SYIM\_INDEX\_MANAGEMENTS\_T

Contains overtime counter values. Includes counters that are relevant to Index Management statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                | Column description   |
|----------------------------|--|
| SYIM_PWII_INSTANCE_ID      | ID of the Sybase instance.   |
| SYIM_TIMESTAMP             | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYIM_PWHG_ID               | Hour group ID.   |
| SYIM_MINUTES_COUNT_SUM     | The timeframe needed to calculated the row (in minutes).   |
| SYIM_NC_UPDATES_SUM        | Number of insert and update operations to a table with indexes that potentially requires modifications to one or more indexes.                 |
| SYIM_NC_UPDATE_INDEXES_SUM | Number of non-clustered indexes that require maintenance, as a result of insert and update operations.   |
| SYIM_NC_DELETES_SUM        | Number of delete operations to a table with indexes that potentially required modifications to one or more indexes.                            |

| Column name                        | Column description   |
|------------------------------------|--|
| SYIM_NC_DELETE_INDEXES_SUM         | Number of non-clustered indexes that required maintenance, as a result of delete operations.   |
| SYIM_NC_RID_UPDATES_SUM            | Number of page splits that required maintenance of a non-clustered index.  |
| SYIM_NC_RID_UPDATE_INDEXES_<br>SUM | Number of non-clustered indexes that required maintenance, as a result of a clustered page split.  |
| SYIM_NC_DOL_NC_DELETES_SUM         | Number of update / delete operations for DOL tables that required maintenance of a non-clustered index.                                    |
| SYIM_NC_DOL_NC_DELETE_INDX_<br>SUM | Number of non-clustered indexes that required maintenance, as a result of update / delete operations for DOL tables.                       |
| SYIM_PAGE_SPLITS_SUM               | Number of page splits for data pages, clustered index pages or non-clustered index pages, because there was not enough room for a new row. |
| SYIM_INDEX_RETRIES_SUM             | Number of times the ASE server retried to split a page, due to contention.   |
| SYIM_ADD_INDEX_LEVEL_SUM           | Number of times a new index level was added.   |
| SYIM_PAGE_SHRINKS_SUM              | Number of page shrinks, due to deleting index rows.  |
| SYIM_BT_BACKWARD_SCANS_SU<br>M     | Number of backward scans on DOL tables.  |
| SYIM_BT_FORWARD_SCANS_SUM          | Number of forward scans on DOL tables.   |
| SYIM_BACKWARD_SCANS_SUM            | Number of backward scans on APL tables.  |
| SYIM_FORWARD_SCANS_SUM             | Number of forward scans on APL tables.   |
| SYIM_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.  |

# PW\_SYCM\_CACHE\_MANAGMENTS\_T

Contains overtime counter values. Includes counters that are relevant to Metadata Cache statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name                      | Column description   |
|----------------------------------|--|
| SYCM_PWII_INSTANCE_ID            | ID of the Sybase instance.   |
| SYCM_TIMESTAMP                   | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYCM_PWHG_ID                     | Hour group ID.   |
| SYCM_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SYCM_ACTIVE_OPEN_OBJECTS<br>_MAX | Number of objects that were active.  |
| SYCM_OPEN_OBJECTS_MAX            | Maximum number of objects that were active (from server reboot).   |

| Column name                        | Column description   |
|------------------------------------|--|
| SYCM_OPEN_OBJECTS_FAILED_S<br>UM   | Number of times the objects cache had to be searched for reusable descriptors and all descriptors were in use.   |
| SYCM_OPEN_OBJECTS_REUSES_<br>SUM   | Number of times the objects cache had to be searched for reusable descriptors.                                   |
| SYCM_ACTIVE_OPEN_INDEXES_M<br>AX   | Number of indexes that were active.  |
| SYCM_OPEN_INDEXES_MAX              | Maximum number of indexes that were active (from server reboot).   |
| SYCM_OPEN_INDEXES_FAILED_SU<br>M   | Number of times the indexes cache had to be searched for reusable descriptors and all descriptors were in use.   |
| SYCM_OPEN_INDEXES_REUSES_S<br>UM   | Number of times the indexes cache had to be searched for reusable descriptors.                                   |
| SYCM_ACTIVE_OPEN_DATABASES<br>_SUM | Number of databases that were active.  |
| SYCM_OPEN_DATABASES_MAX            | Maximum number of databases that were active (from server reboot).   |
| SYCM_OPEN_DATABASES_FAILED<br>_SUM | Number of times the databases cache had to be searched for reusable descriptors and all descriptors were in use. |
| SYCM_OPEN_DATABASES_REUSE<br>S_SUM | Number of times the databases cache had to be searched for reusable descriptors.                                 |
| SYCM_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.  |

# PW\_SYES\_ENGINES\_T

Contains overtime counters values. Includes counters that are relevant to Engine statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name            | Column description   |
|------------------------|--|
| SYES_PWII_INSTANCE_ID  | ID of the Sybase instance.   |
| SYES_TIMESTAMP         | Date and time the statistic was sampled. On an slice summary level, the date and time are in GMT. On all other summary levels, the time is zeroed. |
| SYES_PWHG_ID           | Hour group ID.   |
| SYES_MINUTES_COUNT_SUM | The timeframe needed to calculated the row (in minutes).   |
| SYES_COUNTER_INSTANCE  | Instance of this counter.  |
| SYES_CLOCK_TICKS_SUM   | Number of clock ticks an engine got from the operating system.   |
| SYES_IDLE_TICKS_SUM    | Number of clock ticks an engine was idle.  |

| Column name                        | Column description   |
|------------------------------------|--|
|                                    |  |
| SYES_ENGINE_SLEEPS_SUM             | Number of times an engine yielded (gave up) to the operating system.               |
| SYES_DCHECK_CALLS_SUM              | Number of times an engine checks for disk I/O.                                     |
| SYES_DCHECKS_CALLING_DPO<br>LL_SUM | Number of times an I/O request was completed, when an engine checked for disk I/O. |
| SYES_DPOLL_COMPLETED_AIO<br>S_SUM  | Number of completed I/O requests.  |
| SYES_ENGINE_DELAYED_AIOS<br>_SUM   | Number of delayed I/O requests, due to engine limit.                               |
| SYES_OS_DELAYED_AIOS_SUM           | Number of delayed I/O requests, due to an OS limit.                                |
| SYES_SERVER_DELAYED_AIOS<br>_SUM   | Number of delayed I/O requests, due to a server limit.                             |
| SYES_CONTEXT_SWITCHES_SU<br>M      | Number of times an engine switches context from one user task to another.          |
| SYES_INCOMPATIBLE_TASKS_<br>SUM    | Number of times an engine skipped a user task at the head of a run queue.          |
| SYES_OUTSTANDING_AIOS_MA<br>X      | Maximum number of pending I/Os.  |
| SYES_BYTES_RECEIVED_SUM            | Number of bytes an engine received from the network.                               |
| SYES_BYTES_SENT_SUM                | Number of bytes an engine sent to the network.                                     |
| SYES_PACKETS_RECEIVED_SU<br>M      | Number of packets an engine received from the network.                             |
| SYES_PACKETS_SENT_SUM              | Number of packets an engine sent to the network.                                   |
| SYES_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.                              |

# PW\_SYKN\_KERNELS\_T

Contains overtime counters values. Includes counters that are relevant to Kernel statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

| Column name           | Column description  |
|-----------------------|---|
| SYKN_PWII_INSTANCE_ID | ID of the Sybase instance.  |
| SYKN_TIMESTAMP        | Date and time the statistic was sampled. On an slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYKN_PWHG_ID          | Hour group ID.  |

| Column name                        | Column description   |
|------------------------------------|--|
| SYKN_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes).                                   |
| SYKN_WTM_CONNECT_REQS_SU<br>M      | Total number of requests for a worker process.   |
| SYKN_WTM_DENIED_REQS_SUM           | Number of denied worker process requests.  |
| SYKN_WTM_TERMINATIONS_SU<br>M      | Number of worker process requests terminated by the user.                                  |
| SYKN_WTM_THREAD_REQS_SUM           | Total number of worker processes used.   |
| SYKN_WTM_HWM_MAX                   | Maximum number of worker processes used.   |
| SYKN_WTM_MEMORY_ALLOC_RE<br>QS_SUM | Number of requests for memory allocation for worker processes.                             |
| SYKN_WTM_MEMORY_FAIL_REQ<br>S_SUM  | Number of failed requests for memory allocation for worker processes.                      |
| SYKN_WTM_MEMORY_HWM_MAX            | Total memory used by a worker process.   |
| SYKN_PROCESSES_CREATED_S<br>UM     | Summary of opened connections.   |
| SYKN_PROCESSES_CREATED_M<br>AX     | Number of maximum opened connections.  |
| SYKN_TASK_YIELDS_CNTXSW_<br>SUM    | Number of context switches caused by voluntary yields.                                     |
| SYKN_PRIORITY_CHANGED_HI<br>GH_SUM | Number of times the priority changes to high priority.                                     |
| SYKN_PRIOIRTY_CHANGED_LO<br>W_SUM  | Number of times the priority changes to low priority.                                      |
| SYKN_PRIORITY_CHANGED_ME<br>D_SUM  | Number of times the priority changes to medium priority.                                   |
| SYKN_PRIORITY_HIGH_SLICE<br>S_SUM  | Number of times a user task in high priority exceeded the time allotted for execution.     |
| SYKN_PRIORITY_LOW_SLICES<br>_SUM   | Number of times a user task in low priority exceeded the time allotted for execution.      |
| SYKN_PRIORITY_MED_SLICES<br>_SUM   | Number of times a user task with medium priority exceeded the time allotted for execution. |
| SYKN_GINEMASK_CALLS_SUM            | Number of time a user changed the engine group binding of any user task.                   |
| SYKN_OUTSTANDING_AIOS_MA<br>X      | Maximum number of I/Os pending in the server.  |
| SYKN_UDALLOC_SLEEPS_SUM            | Number of I/Os delayed by reaching the limit of disk I/O structures.                       |
| SYKN_UDALLOC_CALLS_SUM             | Number of times that ASE requested disk I/Os.  |
| SYKN_KSALLOC_CALLS_SUM             | Total number of packets received and sent.   |

| Column name                        | Column description   |
|------------------------------------|--|
| SYKN_KSALLOC_SLEEPS_SUM            | Total number of times the network I/O was delayed.         |
| SYKN_NET_CHECK_BLOCKING_SU<br>M    | Number of times ASE performed blocking network checks.     |
| SYKN_NET_CHECK_NONBLOCKIN<br>G_SUM | Number of times ASE performed non-blocking network checks. |
| SYKN_RECIEVED_TIMESTAMP            | Local date and time the row was loaded into the PMDB.      |

### PW\_SYDI\_DISK\_IO\_T

Contains overtime counter values. Includes counters that are relevant to Disk I/O statistics.

Note: The \_T table summarizes the data per timeslice.

The \_D table summarizes the data per day.

The \_W table summarizes the data per week.

The \_M table summarizes the data per month.

| Column name                 | Column description   |
|-----------------------------|--|
| SYDI_PWII_INSTANCE_ID       | ID of the Sybase instance.   |
| SYDI_TIMESTAMP              | Date and time the statistic was sampled. On a slice summary level, the date and time are GMT. On all other summary levels, the time is zeroed. |
| SYDI_PWHG_ID                | Hour group ID.   |
| SYDI_MINUTES_COUNT_SUM      | The timeframe needed to calculated the row (in minutes).   |
| SYDI_COUNTER_INSTANCE       | The Instance of this counter.  |
| SYDI_P_MISSES_SUM           | Number of misses in the disk cache.  |
| SYDI_P_HITS_SUM             | Number of hits in the disk cache.  |
| SYDI_TOTAL_READS_SUM        | Number of pages read from the device.  |
| SYDI_TOTAL_WRITES_SUM       | Number of pages written to the device.   |
| SYDI_APF_PHYSICAL_READS_SUM | Number of pages read from the device by an asynchronous prefetch.  |
| SYDI_RECIEVED_TIMESTAMP     | Local date and time the row was loaded into the PMDB.  |

### PW\_SYWI\_WAIT\_INFO

Contains wait event counters info.

| Column name     | Column description            |
|-----------------|-------------------------------|
| SYWI_WAIT_GROUP | Normalized, wait group names. |
| SYWI_WAIT_TYPE  | Wait type identifier.         |

| Column name                   | Column description                      |
|-------------------------------|---|
| SYWI_GROUP_FROM_VERSION       | Group from - based on Sybase version.   |
| SYWI_GROUP_TILL_VERSION       | Group till - based on Sybase version.   |
| SYWI_COUNTER_FROM_VERSIO<br>N | Counter from - based on Sybase version. |
| SYWI_COUNTER_TILL_VERSIO<br>N | Counter till - based on Sybase version. |
| SYWI_EXPLANATION              | Counter explanation.                    |

# PW\_SYWC\_WAIT\_COUNTERS \_T

Contains wait counter's data.

| Column name                      | Column description   |
|----------------------------------|--|
| SYWC_PWII_INSTANCE_ID            | ID of the Sybase instance.   |
| SYWC_TIMESTAMP                   | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQAM_PWHG_ID should be used. |
| SYWC_PWHG_ID                     | Hour group ID.   |
| SYWC_MINUTES_COUNT_SUM           | The timeframe needed to calculated the row (in minutes).   |
| SYWC_RECIEVED_TIMESTAMP          | Local date and time the row was loaded into the PMDB.  |
| SYWC_WAIT_TYPE                   | Wait type ID.  |
| SYWC_WAITING_TASKS_COUNT<br>_SUM | Wait event's counter.  |
| SYWC_TOTAL_WAIT_TIME_SUM         | Summarized wait event's total wait time.   |

# PW\_SYWG\_WAIT\_GROUPS \_T

Contains wait counters data group by wait groups.

| Column name             | Column description   |
|-------------------------|--|
| SYWG_PWII_INSTANCE_ID   | ID of the Sybase instance.   |
| SYWG_TIMESTAMP          | Date and time the statistic was sampled. On an hourly summary level, the date and time are GMT. On all other summary levels, the time is zeroed and SQAM_PWHG_ID should be used. |
| SYWG_PWHG_ID            | Hour group ID.   |
| SYWG_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).   |
| SYWG_RECIEVED_TIMESTAMP | Local date and time the row was loaded into the PMDB.  |

#### (Continued)

| Column name                      | Column description                       |
|----------------------------------|--|
| SYWG_WAIT_GROUP                  | Wait group ID.                           |
| SYWG_WAITING_TASKS_COUNT<br>_SUM | Wait event's counter.                    |
| SYWG_TOTAL_WAIT_TIME_SUM         | Summarized wait event's total wait time. |

# PW\_SYRA\_REP\_AGENT\_STATS\_T

| Column name                        | Column description  |
|------------------------------------|---|
| SYRA_PWII_INSTANCE_ID              | Adaptive Server Enterprise Instance Name  |
| SYRA_REP_SERVER_ID                 | Replication Server Name   |
| SYRA_DATABASE_ID                   | Database Name   |
| SYRA_TIMESTAMP                     | Time Stamp  |
| SYRA_PWHG_ID                       | Hour group ID   |
| SYRA_MINUTES_COUNT_SUM             | The timeframe needed to calculated the row (in minutes)   |
| SYRA_RECIEVED_TIMESTAMP            | Received Time Stamp   |
| SYRA_SUM_IO_WAIT_SUM               | Time that the RepAgent waited for RS to parse the LTL, normalized the LTL according to the replication definitions, pack the LTL into a binary format and send to the SQM |
| SYRA_TRUNCPT_MOVED_SUM             | Number of times the RepAgent has asked the RS for a new secondary truncation point and moved the secondary truncation point in the log                                    |
| SYRA_TRUNCPT_GOTTEN_SUM            | Number of times the RepAgent has asked the RS for a new secondary truncation point and got it.  |
| SYRA_PACKETS_SENT_SUM              | Total number of packets sent  |
| SYRA_FULL_PACKETS_SENT_S<br>UM     | Number of packets that were sent full   |
| SYRA_LOG_RECORDS_SCANNED<br>_SUM   | Number of log records scanned   |
| SYRA_LOG_RECORDS_PROCESS<br>ED_SUM | Number of log records scanned, converted to LTL and sent to the RS  |
| SYRA_XCMDTEXT_PROCESSED_<br>SUM    | Number of DML commands read from the log  |
| SYRA_XWRTEXT_PROCESSED_S<br>UM     | Number of writetext operations that are being replicated  |
| SYRA_XROWIMAGE_PROCESSED<br>_SUM   | Number of row images that are processed   |
| SYRA_ROWID                         | Row ID  |

# Precise for vCenter Server Tables PW\_VMEV\_VM\_EVENT\_S

Virtualization fact table.

Note: The \_T table summarizes the data per timeslice. The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month.

| Column name                     | Column description  |
|---------------------------------|---|
| VMEV_PWII_INSTANCE_ID           | ID of the Physical server instance which was relevant to the event. |
| VMEV_VM_INSTANCE_ID             | ID of the VM server instance which was relevant to the event.       |
| VMEV_EVENT_TIMESTAMP            | The actual event timestamp.   |
| VMEV_NEW_PARENT_INSTANCE<br>_ID | ID of the physical server where the VM was moved to.                |
| VMEV_EVENT_ID                   | ID of the event.  |
| VMEV_TIMESTAMP                  | Date and time the statistic was sampled.                            |
| VMEV_PWHG_ID                    | Hour group ID.  |
| VMEV_MINUTES_COUNT_SUM          | The timeframe needed to calculated the row (in minutes).            |
| VMEV_RECIEVED_TIMESTAMP         | Local date and time the row was loaded into PMDB.                   |
| VMEV_EVENT_DATA                 | Event data, text describing the event.                              |
| VMEV_EVENT_COUNT_SUM            | A summary of the number of events.                                  |

# PW\_VMST\_VM\_STAT\_S

Contains statistics and releations between VMs and physical server.

Note: The \_T table summarizes the data per timeslice. The \_D table summarizes the data per day. The \_W table summarizes the data per week. The \_M table summarizes the data per month.

| Column name             | Column description  |
|-------------------------|---|
| VMST_PWII_INSTANCE_ID   | ID of the VM instance.  |
| VMST_VM_INSTANCE_ID     | ID of the VM server.  |
| VMST_TIMESTAMP          | Date and time the statistic was sampled.                          |
| VMST_PWHG_ID            | Hour group ID.  |
| VMST_MINUTES_COUNT_SUM  | The timeframe needed to calculated the row (in minutes).          |
| VMST_RECIEVED_TIMESTAMP | Local date and time the row was loaded into Performance Warehouse |
| VMST_RELATION_COUNT_SUM | A summary of the number of relations.                             |

# Examples

This chapter includes the following topics:

- DDML Document Example
- Retrieve Request Examples
- Retrieve Response Examples
- Load Request Example
- Load Response Examples

#### **DDML** Document Example

The following example presents a possible DDML document:

```
<tables-definition product="CD"> <!-- CD for customer data -->
   <!-- example for a timeslice statistics level table for the Customer's J2EE data
   -->
   <table-definition name="PW_JECD_CUSTOMER_DATA_T" type="STATISTICS"
   filterable="TRUE" oracle-storage-clause="NEXT 4M PCTINCREASE 0">
      <column-definition name="JECD_TIMESTAMP" data-type="TIMESTAMP" null="FALSE"</pre>
      type="DATE" />
                               <!-- mandatory column -->
      <column-definition name="JECD PWHG ID" data-type="INTEGER" data-length="4"</pre>
      null="FALSE" type="IDENTIFIER" default="0"/>
      <!-- mandatory column -->
      <column-definition name="JECD_MINUTES_COUNT_SUM" data-type="INTEGER"
      data-length="9" null="FALSE" type="SUM" default="1"/> <!-- mandatory column
      -->
      <column-definition name="JECD_PWII_INSTANCE_ID" data-type="INTEGER"</pre>
      data-length="9" null="FALSE" type="IDENTIFIER"/> <!-- mandatory column -->
      <column-definition name="JECD RECIEVED_TIMESTAMP" data-type="TIMESTAMP"</pre>
      null="FALSE" default="CURRENT TIMESTAMP" type="DATE"/> <!-- mandatory column
      -->
      <column-definition name="JECD_IS_SERVICE_REQUEST" data-type="BOOLEAN"
      null="FALSE" type="IDENTIFIER" default="FALSE" baseline-value="F"/>
      <!-- identifer definition -->
      <column-definition name="JECD_THRESHOLD_BREACH" data-type="BOOLEAN"
      null="TRUE" type="IDENTIFIER"/>
      <!-- identifer definition -->
      <column-definition name="JECD_TYPE" data-type="VARCHAR" data-length="254"</pre>
      null="FALSE" type="IDENTIFIER" />
      <!-- identifer definition -->
```

```
<column-definition name="JECD_RESPONSE_TIME_SUM" data-type="FLOAT"
   data-length="15" null="FALSE" type="SUM" default="0"/> <!-- counter</pre>
   definition -->
   <column-definition name="JECD HIT_COUNT_SUM" data-type="INTEGER"
   data-length="19" null="FALSE" type="SUM" default="0"/> <!-- counter</pre>
   definition -->
   <column-definition name="JECD_INTERNAL_TIME_SUM" data-type="FLOAT"
   data-length="15" null="FALSE" type="SUM" default="0"/> <!-- counter</pre>
   definition -->
   <column-definition name="JECD_JDBC_TIME_AVG" data-type="FLOAT"
   data-length="15" null="FALSE" type="AVG" default="0"/> <!-- counter</pre>
   definition -->
   <column-definition name="JECD ACTIVE THREADS AVG" data-type="FLOAT"</pre>
   data-length="15" null="TRUE" type="AVG"/>
   <!-- counter definition -->
   <index-definition name="IW JECD_01_T" unique="FALSE" primary="FALSE"</pre>
   clustered="FALSE" columns-order="JECD_PWII_INSTANCE_ID ASC
   JECD_RECIEVED_TIMESTAMP ASC JECD_TIMESTAMP ASC" oracle-storage-clause="NEXT
   4M PCTINCREASE 0"/>
   <!-- index definition -->
   <summary-hour name="PW_JECD_CUSTOMER_DATA_H"/> <!-- indication to summarize</pre>
   the data at an hourly level -->
   <summary-day name="PW JECD CUSTOMER DATA D"/> <!-- indication to summarize</pre>
   the data at a dayly level -->
   <summary-week name="PW JECD CUSTOMER DATA W"/> <!-- indication to summarize</pre>
   the data at a weekly level -->
   <summary-month name="PW_JECD_CUSTOMER_DATA_M"/> <!-- indication to summarize</pre>
   the data at a monthly level -->
      <baseline name="PW_JECD_CUSTOMER_DATA_B"</pre>
      oracle-additional-clause="NOLOGGING"/>
       <!-- indication to create a baseline for that table -->
</table-definition>
<!-- example for a nonstatistcs table that should be part of the PMDB schema -->
<table-definition name="PW_ORSR_STRUCTURE_CONTROL" type="PWOTHER"
oracle-storage-clause="initial 1M next 10M minextents 1 maxextents unlimited
pctincrease 0">
   <column-definition name="ORSR_DATABASE_ID" data-type="VARCHAR"
   data-length="255" null="TRUE"/>
   <column-definition name="ORSR_UPDATE_START" data-type="TIMESTAMP"
   null="TRUE"/>
   <column-definition name="ORSR_STATUS" data-type="VARCHAR" data-length="30"</pre>
   null="TRUE"/>
   <column-definition name="ORSR_ROW_TYPE" data-type="VARCHAR" data-length="2"</pre>
   null="TRUE"/>
   <column-definition name="ORSR_PURGE_DATE" data-type="TIMESTAMP"
   null="TRUE"/>
   <column-definition name="ORSR_LAST_PURGED_TABLE" data-type="VARCHAR"</pre>
   data-length="30" null="TRUE"/>
</table-definition>
```

<!-- example for a view creation -->

```
<view-definition name="ACTIVE_STATUS_VIEW" view-columns="DATABASE_ID
DATABASE_STATUS" as-query="SELECT ORSR_DATABASE_ID,ORSR_STATUS FROM
PW_ORSR_STRUCTURE_CONTROL WHERE ORSR_STATUS='ACTIVE'"/>
<!-- example for DDL/DML commands that should be performed during installation
-->
<ddl-definition dbms="ORACLE" version="" event="INSTALL" statement="create
sequence PRECISE_STATEMENT_ID_SEQ"/>
<!-- example for DDL/DML commands that should be performed during uninstallation
-->
<ddl-definition dbms="ORACLE" version="" event="INSTALL" statement="create
sequence PRECISE_STATEMENT_ID_SEQ"/>
<ddl-definition dbms="ORACLE" version="" event="UNINSTALL" statement="drop
sequence PRECISE_STATEMENT_ID_SEQ"/>
```

```
</tables-definition>
```

### **Retrieve Request Examples**

The following example sends one query to retrieve data:

```
<queries connection-pool="pw" single-connection="true">
  <free-query id="501">
    <!-- meta-data is optional -->
    <meta-data>
        <fetch-rows value="10000" /> <!-- number of rows to retrieve -->
        <skip-rows value="0" />        <!-- number of rows to skip -->
        <timeout value="30" />        <!-- maximum time to wait for database
        execution -->
        </meta-data>
        <query-text value="SELECT * FROM PS_PWTR_TABLE_RANGE WHERE PWTR_TABLE_NAME =
        ?" />
        <bind-variable id="1" value="PW_NTAC_ACTIONS_M" type="string" />
        </free-query>
```

</queries>

The following example sends several queries to retrieve data:

```
<queries connection-pool="pw" single-connection="false"> <!-- with
single-connection set to false, queries are performed in parallel -->
   <free-query id="601">
      <!-- meta-data is optional -->
      <meta-data>
         <fetch-rows value="1" /> <!-- number of rows to retrieve (fetching only</pre>
         one row) -->
         <skip-rows value="0" /> <!-- number of rows to skip -->
         <timeout value="30" /> <!-- Maximum time to wait for database execution
         -->
      </meta-data>
      <!-- bind variables are optional -->
      <query-text value="SELECT * FROM PW_PWII_INSTANCE_ID" />
   </free-query>
   <free-query id= "602">
      <!-- meta-data is optional -->
      <meta-data>
```

```
<timeout value="45" />
                                 <!-- Maximum time to wait for database
         execution -->
      </meta-data>
      <query-text value="UPDATE PS_PWSE_SCHEDULED_EVENTS SET PWSE_START_TIMESTAMP
      = SYSDATE+4/1440, PWSE_STATUS = `UPDATE' WHERE PWSE_ID = 6" />
   </free-query>
   <free-query id="603">
      <!-- meta-data is optional -->
      <meta-data>
         <timeout value="45" /> <!-- Maximum time to wait for database</pre>
         execution -->
      </meta-data>
      <query-text value="SELECT * FROM PS_PWTR_T" />
   </free-query>
</queries>
```

#### **Retrieve Response Examples**

The following example shows a retrieve response to one query executed without errors:

```
<rowsets>
   <rowset id="501">
      <row rownum="1">
         <pwtr_pwii_id>1005</pwtr_pwii_id>
         <pwtr_table_name>pw_ntac_actions_m</pwtr_table_name>
         <PWTR_START_TIMESTAMP></PWTR_START_TIMESTAMP> <!-- indication of null -->
         <pwtr_end_timestamp></pwtr_end_timestamp>
         <pwtr_LAST_PARTITION_TIMESTAMP>2008-08-01
         00:00:00.0</PWTR_LAST_PARTITION_TIMESTAMP>
      </row>
      <row rownum="2">
         <pwtr_pwii_id>1011</pwtr_pwii_id>
         <pwtr_table_name>pw_ntac_actions_m</pwtr_table_name>
         <PWTR_START_TIMESTAMP>2003-08-02 12:00:00.0</pwtr_START_TIMESTAMP>
         <PWTR_END_TIMESTAMP>2003-08-23 23:00:00.0/PWTR_END_TIMESTAMP>
         <pwtr_LAST_PARTITION_TIMESTAMP>2008-08-01
         00:00:00.0</PWTR_LAST_PARTITION_TIMESTAMP>
      </row>
      <rowset-info>
         <affected-rows>2</affected-rows>
         <more-rows>false</more-rows> <!-- indication that all the rows where
         fetched -->
      </rowset-info>
      <error>
         <code>0</code> <!-- rowset level error indication that there ware no</pre>
         errors with the query -->
      </error>
```

```
</rowset>
<error> <!-- rowsets level error, indication that there were no problems with
the database connection -->
        <code>0/code>
</error>
```

</rowsets>

The following example shows a retrieve response to several queries. Note that some queries have encountered an error during execution.

```
<rowsets>
   <rowset id="601">
      <row rownum="1">
         <PWII_ID>1005</PWII_ID>
         <pwII_INSTANCE_NAME>network_instance</pwII_INSTANCE_NAME>
         <PWII_TECHNOLOGY>NT</PWII_TECHNOLOGY>
         <PWII_SERVER>my_server</PWII_SERVER>
      </row>
      <rowset-info>
         <affected-rows>1</affected-rows>
         <more-rows>true</more-rows> <!-- indication that there are more rows to
         fetch -->
      </rowset-info>
      <error>
         <code>0</code> <!-- rowset level error indication that there ware no
         errors with the query -->
      </error>
   </rowset>
   <rowset id="602">
      <rowset-info>
         <affected-rows>1</affected-rows>
         <more-rows>false</more-rows>
      </rowset-info>
      <error>
         <code>0</code> <!-- rowset level error indication that there ware no</pre>
         errors with the query -->
      </error>
   </rowset>
   <rowset id="603">
      <error>
         <code>8200</code> <!-- indication that there was an error performing the
         query -->
         <description>com.precise.shared.retriever.RetrieverJDBCException: ERROR
         could not execute the sql command in query id : 502 for sql text : SELECT
         * FROM PS_PWTR_T</description>
         <external-code>942</external-code>
         <external-description>ORA-00942: table or view does not
         exist</external-description>
      </error>
   </rowset>
      <error>
```

```
<code>0</code>
```

```
</error>
```

</rowsets>

The following example presents an error connecting to the database:

```
<rowsets>
  <error>
    <code>9100</code>
    <description>ERROR at statement 72000</description>
    <external-code>1034</external-code>
    <external-description>ORA-01034: ORACLE not available</external-description>
</error>
</rowsets>
```

### Load Request Example

Note: Do NOT enter blanks, nor new lines between the tags.

The following example presents a request to load data:

```
<rowsets connection-pool="pw"><!-- the connection pool names should always be "pw"
--><rowset object="PW_NTAC_ACTIONS_T" single-commit="true"> <!--table name and
indication to commit only after all rows are loaded into PW --><columns> <!-- the
list of columns should be kept in the rows creation
```

--><column>NTAC\_TIMESTAMP</column><column>NTAC\_ID1</column><column>NTAC\_CONSUMER\_I P</column><column>NTAC\_REQUESTS\_SUM</column><column>NTAC\_NETWORK\_TIME\_SUM</column> <column>NTAC\_TIME1\_SUM</column><column>NTAC\_STAT1\_SUM</column><column>NTAC\_STAT2\_S UM</column><column>NTAC\_SOURCE\_ID</column><column>NTAC\_PWII\_INSTANCE\_ID</column><c olumn>NTAC\_INSTANCE</column><column>NTAC\_SERVER</column><column>NTAC\_INSTANCE\_GID< /column><column>NTAC\_SERVER\_GID</column><column>NTAC\_CONSUMER\_IP\_GID</column><colu mn>NTAC\_RED\_SUM</column><column>NTAC\_YELLOW\_SUM</column><column>NTAC\_GREEN\_SUM</co lumn></column><row

```
rownum="1"><![CDATA[2212003-08-2811:30:00.0^21010.1.0.218^1910.1.1.94^17175.000^16
21.600^150.000^1514963^1820227220^12SQ^141009^210SAPSQLSRV2^210sapsqlsrv2^0^0^0^13
0.0^130.0^130.0^]]></row>
```

rownum="2"><![CDATA[2212003-08-2811:30:00.0^21010.1.0.218^1910.1.1.94^17175.000^16 21.600^150.000^1514963^1820227220^12SQ^141009^210SAPSQLSRV2^210sapsqlsrv2^0^0^0^13 0.0^130.0^130.0^]]></rowset></rowsets>

### Load Response Examples

The following example presents a response to a successful load request:

```
</rowset>
```

```
</rowsets>
```

The following example presents an error connecting to the database:

```
<?xml version="1.0" encoding="UTF-8"?>
<rowsets>
    <error>
        <code>9200</code>
        <description>Error connecting to the PW DB</description>
        <external-code>12154</external-code>
        <external-description>TNS:could not resolve service
        name</external-description>
    <//error>
```

</rowsets>

The following example presents the response to a load request that has encountered an error during execution:

```
<?xml version="1.0" encoding="UTF-8"?>
<rowsets>
    <rowset object="PW_NTAC_ACTIONS_T">
        <error>
            <code>10200</code>
            <description>Error loading table PW_NTAC_ACTIONS_T</description>
            <external-code>1</external-code>
            <external-description>Unique index violation</external-description>
            </error>
            <code>0</code>
            </error>
            <code>0</code>
            </error>
            </rowset>
            </error>
            </ode>
</rowset>
</rowset>
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```