Oracle® Retail POS Suite

Operations Guide

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Value-Added Reseller (VAR) Language

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Preface

Oracle Retail Operations Guides are designed so that you can view and understand the application's behind-the-scenes processing, including such information as the following:

- Key system administration configuration settings
- Technical architecture
- Functional integration dataflow across the enterprise
- Batch processing

Audience

Anyone who has an interest in better understanding the inner workings of the Oracle Retail POS Suite system can find valuable information in this guide. There

are three audiences in general for whom this guide is written:

- Systems analysts and system operations personnel who need information about Oracle Retail POS Suite processes.
- Integrators and implementers who are responsible for implementing POS Suite.
- Business analysts who need information about Oracle Retail POS Suite
- processes and interfaces.

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Related Documents

For more information, see the following Release 13.4.1 documentation sets or Oracle Retail Returns Management Release 2.4.1 documentation set:

- Oracle Retail Back Office documentation set
- Oracle Retail Central Office documentation set
- Oracle Retail Labels and Tags documentation set
- Oracle Retail Point-of-Service documentation set
- Oracle Retail Returns Management documentation set

Customer Support

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https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.4) or a later patch release (for example, 13.4.1). If you are installing the base release, additional patch, and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Data Purge

Data purging is based upon logical sets of data. Logical sets of data can be contained in multiple tables. An example of a logical set of data is all the records associated to a particular Retail Transaction.

A purge of a logical set is not considered complete until all relevant rows of data are deleted.

Data purging is based upon a data-retention schedule whereupon all data existing prior to the computed date are purged. The data within this timeframe must meet constraints as required. For example, if a customer wants to retain the last 180 days worth of retail transaction data, then the integer 180 should be passed into the purge retail transaction routine and the system will purge COMPLETED transactions more than 180 days old.

The stored procedures reads the absolute value of a negative integer. For example, a value of **-30** passed into the stored procedures will be read as **30**, and the data will be retained for 30 days.

If no value is passed into the stored procedures, then the default value is used. The default value is 30.

The number of data retention days is passed into the stored procedures. The constraints are built into the stored procedures and are therefore not parameterized.

A logical set purge will succeed even if data is not found in an expected table.

The Financial History and Financial Summary data purge scripts do not address the issue of the weekly sum of daily totals that will no longer match weekly totals. For example, if the purge occurs on a Wednesday, the sum of the daily totals from Wednesday through Saturday will not match the weekly total that was based upon a Sunday through Saturday timeframe.

Caution: Passing in a **zero** (**0**) as a parameter to the purge transaction routines will result in the deletion of all completed transactional data. Oracle is not responsible for loss or damage of any sort that might incur from passing in zero as a parameter.

The customer is fully responsible for the database configuration. Oracle assumes the purge routines will operate within the confines of the database configuration, such as the size of the rollback segments and other such parameters that might affect the functioning of the purge routines.

Invoking Stored Procedures

The following are examples how to invoke stored procedures for both Oracle and DB2 databases:

Note: It is assumed that the user calling the stored procedures has the necessary privileges to invoke these procedures.

Stored Procedures on Oracle

The following examples show how to invoke the stored procedures on an Oracle database:

Example 1–1 Invoking The Stored Procedures—SQL Plus Method 1

```
SQL> EXECUTE <procedure name (parameters)>;

Example:

EXECUTE PURGE_FN_SMY(90);
```

Example 1–2 Invoking The Stored Procedures—SQL Plus Method 2

```
SQL> BEGIN
SQL> <procedure name (parameters)>;
SQL> END;

Example:

SQL> BEGIN
SQL> PURGE_FN_SMY(90);
SQL> END;
```

Example 1–3 Invoking The Stored Procedures—SQL Plus Method 3

```
SQL> CALL  <procedure name (parameters)>;

Example:

CALL PURGE_FN_SMY(90);
```

You can choose to create a script file that contains these commands and have a scheduler execute the script on a nightly basis. To do this, you must be logged into the database.

The scheduler must be able to log in to the database to be able to run the scripts, or the log in must be the first line in the script.

Stored Procedures on DB2

The following example shows how to invoke the stored procedures on a DB2 database:

Example 1–4 Invoking The Stored Procedures—DB2 Method

```
DB2=> CALL  <procedure name (parameters)>;

Example:

CALL PURGE_FN_SMY(90);
```

You can choose to create a script file that contains these commands and have a scheduler execute the script on a nightly basis. To do this, you must be logged into the database.

The scheduler must be able to log in to the database to be able to run the scripts, or the log in must be the first line in the script.

Calls to Invoke Stored Procedures

Table 1–1 contains the calls to use to invoke stored procedures.

Table 1–1 Stored Procedure Calls

Subject Area	Procedure Call	Description
Advanced Pricing Rules	PURGE_PRDV(<Number of Retention Days>)	Removes all advanced pricing rules older than the specified number of retention days.
Control Transactions	PURGE_CTL_TRN(<Number of Retention Days>)	Removes all Store Operation, Void, NoSale, and BankDeposit transactions older than the specified number of retention days.
Duplicate Price Changes	PURGE_DUP_PRC_CHN_EV()	Removes all duplicated price change events older than the current date.
eJournal	PURGE_EJRL(<Number of Retention Days>)	Removes all EJournal tape records older than the specified number of retention days.
Financial Histories	PURGE_FN_HST(<Number of Retention Days>)	Removes all financial totals from history tables older than the specified number of retention days.
Financial Summaries	PURGE_FN_SMY(<Number of Retention Days>)	Removes all aggregate financial totals from summary tables older than the specified number of retention days.
Financial Transaction	PURGE_FN_TRN(<Number of Retention Days>)	Removes all Financial transaction-related tables that are older than the number of retention days specified and meeting the identified constraints then executes the PURGE_TRN procedure.
Layaways	PURGE_LY(<Number of Retention Days>)	Removes all Layaways in the completed, deleted, suspended, and voided status older than the specified number of retention days.
Orders	PURGE_ORD(<Number of Retention Days>)	Removes all Orders in the complete, canceled, suspended, and voided status older than the specified number of retention days.
Price Changes	PURGE_PRC_CHN_EV(<Number of Retention Days>)	Removes all permanent price changes older than the specified number of retention days.

Table 1–1 (Cont.) Stored Procedure Calls

Subject Area	Procedure Call	Description
Promotions	PURGE_TMP_PRC_EV(<Number of Retention Days>)	Removes all expired temporary price changes (promotions) older than the specified number of retention days.
Retail Transactions	PURGE_RTL_TRN(<Number of Retention Days>)	Removes all Sale, Return, House Account Payment, Instant Credit Enrollment, and Redeem transaction types older than specified number of retention days.
Retail Transaction Common	PURGE_RTL_TRN_COMMON	Removes immediate RetailTransaction-related tables and also executes other purges common to all Retail Transactions that meet the passed in criteria. **Note:** This routine is only called by other purge routines and not directly executed.
Retail Transaction Line Item	PURGE_RTL_TRN_LTM	Removes all immediate RetailTransaction-related child tables that meet the passed in criteria. **Note:** This routine is only called by PURGE_RTL_TRN_COMMON and not directly executed.
Sale Return Line Item	PURGE_SLS_RTN_LTM	Removes all immediate SaleReturnLineItem-related child tables that are older than the number of retention days specified. **Note:** This routine is only called by PURGE_RTL_TRN_COMMON and not directly executed.
Tender Line Item	PURGE_TND_LTM	Removes tender line items from a specific transaction. In the script, a specific transaction ID has to be specified.
Training Mode Transactions	PURGE_TRG_TRN(<Number of Retention Days>)	Removes all transactions performed in training mode older than the specified number of retention days.
Transaction	PURGE_TRN	Removes all transaction header tables that meet the purge criteria.

Data Purge Scripts

The following data purge scripts are available for Back Office, Central Office, Point-of-Service, and Returns Management:

- CreateProcedurePurgeAdvancedPricing.sql
- CreateProcedurePurgeControlTransaction.sql
- CreateProcedurePurgeDuplicatePriceChangeEvent.sql
- CreateProcedurePurgeEJournal.sql
- CreateProcedurePurgeFinancialHistory.sql
- CreateProcedurePurgeFinancialSummary.sql
- CreateProcedurePurgeFinancialTransaction.sql
- CreateProcedurePurgeLayaway.sql
- CreateProcedurePurgeOrder.sql

- CreateProcedurePurgePriceChangeEvent.sql
- CreateProcedurePurgePromotionEvent.sql
- CreateProcedurePurgeRetailTransaction.sql
- CreateProcedurePurgeRetailTransactionCommon.sql
- CreateProcedurePurgeRetailTransactionLineItem.sql
- CreateProcedurePurgeSaleReturnLineItem.sql
- CreateProcedurePurgeTenderLineItem.sql
- CreateProcedurePurgeTrainingModeTransaction.sql
- CreateProcedurePurgeTransaction.sql

Restricting Access To Data Purge Scripts

For more information about restricting access to data purge scripts, see the *Oracle Retail POS Suite Security Guide*.

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Database Downtime in Central Office

When the Central Office database is down for maintenance or backing up, the Central Office application should be brought down as well. See your application server documentation for information on stopping the application server container running Central Office.

While the Central Office database is down, Point-of-Service continues sending messages containing retail transaction information to Central Office. This information cannot be persisted in the Central Office database until the database is once again available. If the database remains down, and the number of messages, sends, and retries exceeds a specified number, Point-of-Service stops attempting to send the messages to Central Office and instead places the messages into an error queue. At that point, manual intervention is required to resend the messages from Point-of-Service or to retrieve the messages from the error queue.