Oracle® Retail Merchandising System

Operations Guide, Volume 1 - Batch Overviews and Designs
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Preface

This *Oracle Retail Merchandising System Operations Guide, Volume 1 - Batch Overviews and Designs* provides critical information about the processing and operating details of Oracle Retail Merchandising System (RMS), including the following:

- System configuration settings
- Technical architecture
- Functional integration dataflow across the enterprise
- Batch processing

Audience

This guide is for:

- Systems administration and operations personnel
- Systems analysts
- Integrators and implementers
- Business analysts who need information about Merchandising System processes and interfaces

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Related Documents

For more information, see the following documents:

- *Oracle Retail Merchandising System Installation Guide*
- *Oracle Retail Merchandising System Reports User Guide*
- *Oracle Retail Merchandising System User Guide and Online Help*
- *Oracle Retail Merchandising System Release Notes*
- *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide*
- *Oracle Retail Merchandising System Data Model*
- *Oracle Retail Merchandising System Data Access Schema Data Model*
- *Oracle Retail Merchandising Security Guide*
- *Oracle Retail Merchandising Implementation Guide*
- *Oracle Retail Merchandising Data Conversion Operations Guide*
- *Oracle Retail Merchandising Batch Schedule*
- *Oracle Retail POS Suite/Merchandising Operations Management Implementation Guide*

- *Oracle Retail Xstore Suite 15.0/Merchandising 15.0 Implementation Guide*
- Oracle Retail Sales Audit documentation
- Oracle Retail Trade Management documentation
- Oracle Retail Fiscal Management documentation

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- Exact error message received
- Screen shots of each step you take

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Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement "the Window Name window opens".

```
This is a code sample
   It is used to display examples of code
```

1 Introduction

Welcome to the Oracle Retail Merchandising Operations Guide. The guide is designed to inform you about the 'backend' of RMS: data inputs, processes, and outputs. As a member of the Oracle Retail family, RMS provides the many benefits of enterprise application integration (EAI).

A primary benefit of EAI is the near real-time view of data that results from message-based processes between RMS and other products on the Oracle Retail Integration Bus (RIB). RIB integration allows RMS to overcome time lags to data updates. As a result, RMS is less dependent upon the batch window.

Contents of This Guide

The major components of the Operations Guide include the three volumes described below.

Volume 1 – Batch Overviews and Designs

Batch overviews tie a functional area description to the batch processes illustrated in the designs.

Batch designs describe how, on a technical level, an individual batch module works and the database tables that it affects. In addition, batch designs contain file layout information that is associated with the batch process.

Batch designs can be referenced by name through the table of contents of this volume.

Volume 2 – Message Publication and Subscription Designs

Oracle Retail Integration Bus (RIB) RMS functional overviews are incorporated into the publication and subscription designs. Therefore, the retailer can extract the business rationale behind each publication or subscription as well as the technical details that describe, on a technical level, how RMS publishes messages to the RIB or how RMS subscribes to messages from the RIB. A chapter in this volume also addresses how RMS utilizes the Oracle Retail Service Layer (RSL).

External Subscription RIB APIs

Subscription APIs that are designated as 'External' are designed to be interfaces for external systems that maintain the applicable data. In other words, RMS is not the 'system of record' for maintaining the data. Instead, RMS subscribes to consume the data when it is published so that the corresponding data in RMS can be kept in sync with the external system that maintains the data.

Volume 3 – Back-End Configuration and Operations

This volume describes the important features that necessary to run the Pro*C programs and the RETL programs associated with RMS. Additional RMS configuration and operations information is also included in this volume. Topics include:

- Pro*C Restart and Recovery
- Pro*C Multi-Threading
- Pro*C Array Processing

- Pro*C Input and Output Formats
- Internationalization
- Custom Post Processing
- Integrating RMS with Oracle Retail Workspace
- Setting up Oracle Business Intelligence Publisher

RMS Modules

For RMS retailers who purchase additional modules, the guide includes descriptions of the batch programs related to the following:

- Oracle Retail Trade Management™ (RTM)

Phases of the Batch Cycle & Dependencies

The RMS batch cycle is divided into a number of processing phases. Phase design is an important part of overall RMS batch design. Respecting the phases is critically important to ensuring data integrity throughout the batch cycle.

Each phase has a high level theme, but also generally contains some programs with a different major purpose. All programs in one processing phase should complete before any programs in the next phase begin.

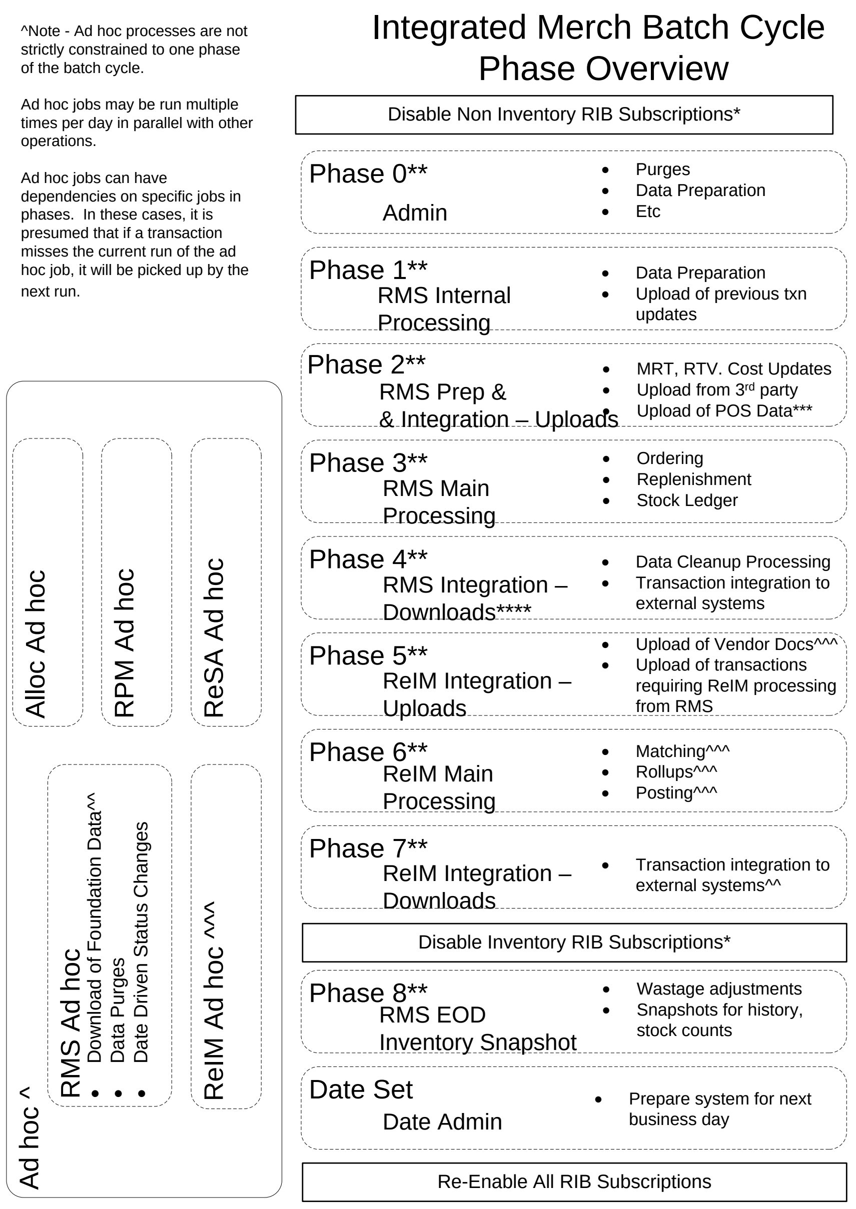
Programs are assigned to specific phases. Each program should run in its designated processing phase of the batch cycle. Both within and across phases, individual programs also have dependencies. These dependencies ensure that data is in the correct state for processing.

The following diagram gives a high level overview of the processing phases of the RMS batch cycle:

^Note - Ad hoc processes are not strictly constrained to one phase of the batch cycle.

Ad hoc jobs may be run multiple times per day in parallel with other operations.

Ad hoc jobs can have dependencies on specific jobs in phases. In these cases, it is presumed that if a transaction misses the current run of the ad hoc job, it will be picked up by the next run.



Integrated Merch Batch Cycle
Phase Overview
Disable Non Inventory RIB Subscriptions*
Phase 0**
Admin
• Purges
• Data Preparation
• Etc
Phase 1**
RMS Internal Processing
• Data Preparation
• Upload of previous txn updates
Phase 2**
RMS Prep & & Integration – Uploads
• MRT, RTV. Cost Updates
• Upload from 3rd party
• Upload of POS Data***
Phase 3**
RMS Main Processing
• Ordering
• Replenishment
• Stock Ledger
Phase 4**
RMS Integration – Downloads****
• Data Cleanup Processing
• Transaction integration to external systems
Phase 5**
ReIM Integration – Uploads
• Upload of Vendor Docs^^^
• Upload of transactions requiring ReIM processing from RMS
Phase 6**
ReIM Main Processing
• Matching^^^
• Rollups^^^
• Posting^^^
Phase 7**
ReIM Integration – Downloads
• Transaction integration to external systems^^
Disable Inventory RIB Subscriptions*
Phase 8**
RMS EOD Inventory Snapshot
• Wastage adjustments
• Snapshots for history, stock counts
Date Set
Date Admin
• Prepare system for next business day
Re-Enable All RIB Subscriptions
Ad hoc ^
Alloc Ad hoc
RPM Ad hoc
ReSA Ad hoc
RMS Ad hoc
• Download of Foundation Data^^
• Data Purges
• Date Driven Status Changes
ReIM Ad hoc ^^^

* Note – See 24x7 Inventory Availability whitepaper in the Merchandising Functional Library (Doc ID: 1585843.1). for more information about which subscriptions are inventory vs non inventory.

** Note - All jobs that belong to a phase must finish before any jobs in the next phase begin.

***Note - POS data can be uploaded throughout the day via trickle polling.

If the client does not trickle poll, this is the main POS upload slot.

If the client does trickle poll, sales trickled in after this point may or may not affect inventory related processing like replenishment, depending on when the transactions trickle in. It is assumed that if trickle polling, the vast majority of daily sales have been loaded at this point, resulting in reasonable calculated results.

^^Note - Integration of foundation data can occur ad hoc, but integration of transactions occurs after the RMS batch processes that create transactions

^^^ Note – Most ReIM jobs can be run both ad hoc and in their scheduled phases.

ReIM jobs should be run at a minimum in these scheduled phase positions. Running in these positions ensures that all order, receipt and invoice information from the day is considered.

But some can also be run ad hoc. Running ad hoc during the day or prior to these positions may match/post/etc many documents prior to the batch cycle.

2

Administration Batch

Overview

This chapter contains information about a number of batch processes perform administrative processes in RMS. These processes range from incrementing the 'current business date for transactions' (known in RMS as vdate) to purging unused data and auditing database transactions.

Program Summary

Program	**Description**
async_job_status_retry_cleanup.ksh	Purge Asynchronous Job Tables
async_queue_cleanup.ksh	Cleanup Asynchronous Job Queue
auditsys.pc	Add Database Level Audit to RMS Tables
auditprg.pc	Audit Purge
pre/post	Pre/Post Helper Processes for Batch Programs
dlyprg.pc	Daily Purge of Foundation Data
taxevntprg.pc	Tax Event Purge
dtesys.pc	Increment Virtual Business Date
trunctbl	Truncate Table Script

async_job_status_retry_cleanup.ksh (Purge Asynchronous Job Tables)

Module Name	async_job_status_retry_cleanup.ksh
Description	Purge Asynchronous Job Tables
Functional Area	Administration
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS180
Runtime Parameters	

Design Overview

This is a batch job that will clean up the RMS asynchronous jobs tables. The asynchronous job management tables (RMS_ASYNC_STATUS and RMS_ASYNC_RETRY) track each asynchronous call that is made. These tables are used to see error information and help with retrying failed calls.
This program will be run Adhoc and will accept a parameter of # days of information that will be deleted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed (regular intervals recommended)
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
RMS_ASYNC_STATUS	No	No	No	Yes
RMS_ASYNC_RETRY	No	No	No	Yes

Input/Out Specification

N/A

async_queue_cleanup.ksh (Cleanup Asynchronous Job Queue)

Module Name	async_queue_cleanup.ksh
Description	Cleanup Asynchronous Job Queue
Functional Area	Administration
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS181
Runtime Parameters	

Design Overview

The purpose of this module is to remove old entries in the RMS_NOTIFICATION_QUEUE. The RMS Asynchronous feature notifies users of successful/failed processes, and uses Oracle AQ to do this. As a result, RMS_NOTIFICATION_QUEUE accumulates messages that need to be purged periodically.

This batch will clean up the queue by doing a dequeue on entries that meet a certain age criteria. The time based clean-up criteria can be passed in as a Parameter when executing the batch. If not specified, the default age will be 24 hours.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	4
Frequency	As Needed (regular intervals recommended)
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
RMS_NOTIFICATION_QTAB	No	No	No	Yes

Input/Out Specification

N/A

auditsys (Add Database Level Audit to RMS Tables)

Module Name	auditsys.pc
Description	Add Database Level Audit to RMS Tables
Functional Area	Administration
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS183
Runtime Parameters	

Design Overview

This program adds audit logic for a specified RMS table.

This program creates an audit table (named [master_table]_AU) and adds a database trigger to the master table that populates the audit table. The program executes DDL and compiles a trigger, so the batch user id must have the following privileges:

- create any table
- create any trigger

This program only needs to be run if clients are using the application level audit features in RMS.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	Only needs to be scheduled only when new audit info has been requested
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A (single threaded)

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
AUDIT_TBL	Yes	No	No	No

Table	Select	Insert	Update	Delete
ALL_TABLES	Yes	No	No	No
ALL_INDEXES	Yes	No	No	No
ALL_TAB_PARTITIONS	Yes	No	No	No
ALL_TAB_COLUMNS	Yes	No	No	No
ALL_IND_COLUMNS	Yes	No	No	No
AUDIT_FLD	Yes	No	No	No

Input/Out Specification

N/A

auditprg (Audit Purge)

Module Name	auditprg.pc
Description	Audit Purge
Functional Area	Administration
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS182
Runtime Parameters	

Design Overview

The audit purge process truncates auditing tables based on the purge frequency code specified on the audit table (AUDIT_TBL).

This program only needs to be run if clients are using the application level audit features in RMS (as defined executed by the auditsys.pc program)

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	This job will be scheduled depending on the type of information to be audited in the system
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
AUDIT_TBL	Yes	No	No	No
CALENDAR	Yes	No	No	No
PERIOD	Yes	No	No	No

Input/Out Specification

N/A

prepost (Pre/Post Helper Processes for Batch Programs)

Module Name	prepost.pc
Description	Pre/Post Helper Processes for Batch Programs
Functional Area	Administration
Module Type	Business Processing
Module Technology	ProC
Catalog ID	N/A Individual pre/post jobs have Catalog IDs
Runtime Parameters	

Design Overview

The pre/post module facilitates multi-threading by allowing general system administration functions (such as table deletions or mass updates) to be completed after all threads of a particular program have been processed.

This program will take three parameters: username/password to log on to Oracle, a program before or after which this script must run and an indicator telling whether the script is a pre or post function. It will act as a shell script for running all pre-program and post-program updates and purges (the logic was removed from the programs themselves to enable multi-threading and restart/recovery).

Pre/Post contains the following helper functions, which are should be individually scheduled with the related main programs.

Catalog ID	Prepost Job	Related Main Program
RMS400	prepost rpl pre	Full Replenishment Cycle
RMS401	prepost salweek post	salweek
RMS402	prepost salmth post	salmth

RMS403	prepost rplapprv pre	rplapprv
RMS404	prepost rplatupd pre	rplatupd
RMS405	prepost rplatupd post	rplatupd
RMS406	prepost rilmaint pre	rilmaint
RMS407	prepost rilmaint post	rilmaint
RMS409	prepost sccext post	sccext
RMS410	prepost hstbld pre	hstbld
RMS411	prepost hstbld post	hstbld
RMS412	prepost posdnld post	posdnld
RMS413	prepost edidlprd post	edidlprd
RMS414	prepost edidlprd pre	edidlprd
RMS415	prepost fcstrbld post	fcstrbld
RMS417	prepost cntrordb post	cntrordb
RMS418	prepost fsadnld post	
RMS419	prepost btchcycl	No related main process. Is used to enable DB policies that might have been disabled in order to run batch
RMS421	prepost poscdnld post	poscdnld
RMS423	prepost htsupld pre	htsupld
RMS424	prepost onordext pre	onordext
RMS425	prepost reclsdly pre	reclsdly
RMS426	prepost reclsdly post	reclsdly
RMS427	prepost ibcalc pre	ibcalc
RMS428	prepost fcstprg pre	fcstprg
RMS429	prepost fcstprg post	fcstprg
RMS430	prepost reqext pre	reqext
RMS431	prepost reqext post	reqext
RMS433	prepost replroq pre	replroq
RMS434	prepost rplext post	rplext
RMS438	prepost saleoh pre	saleoh
RMS440	prepost salweek pre	salweek
RMS441	prepost dealinc pre	dealinc
RMS442	prepost dealday pre	dealday
RMS443	prepost dealday post	dealday
RMS444	prepost dealact_nor pre	dealact
RMS445	prepost dealact_po pre	dealact
RMS446	prepost dealact_sales pre	dealact
RMS447	prepost dealfct pre	dealfct

RMS448	prepost dealcls post	dealcls
RMS449	prepost hstbldmth post	hstbldmth
RMS454	prepost docclose pre	docclose
RMS458	prepost replsizeprofile pre	replsizeprofile
RMS460	prepost batch_orpos_extract post	batch_orpos_extract
RMS461	prepost batch_ordcostcompupd pre	batch_ordcostcompupd
RMS462	prepost batch_ordcostcompupd post	batch_ordcostcompupd
RMS463	prepost batch_costcompupd post	costcompupd
RMS464	prepost ediupadd post	ediupadd
RMS465	prepost dlyprg post	dlyprg
RMS468	prepost fcexec pre	fcexec
RMS469	prepost start_batch pre	Sets the batch running ind to Y to limit front end use of the system
RMS470	prepost end_batch post	Sets the batch running ind to N to reenable all front end use of the system

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Varies by pre-post function. See the batch schedule for more details
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
ALL_CONSTRAINTS	Y	N	N	N	N	N	N	N
ALL_IND_PARTITIONS	Y	N	N	N	N	N	N	N
ALL_POLICIES	Y	N	N	N	N	N	N	N
ALLOC_DETAIL	Y	N	N	N	N	N	Y	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
ALLOC_HEADER	Y	N	N	N	N	N	Y	N
CLASS	Y	N	N	N	N	N	N	N
CLASS_SALES_FORECAST	N	N	N	Y	N	Y	N	N
CLASS_SALES_HIST	N	N	N	N	Y	N	N	N
CLASS_SALES_HIST_MTH	Y	N	N	N	Y	N	N	N
COST_COMP_UPD_STG	N	N	N	N	Y	N	N	N
COST_SUSP_SUP_HEAD	N	N	Y	N	N	N	N	N
CUSTOMER_SEGMENT_POS_STG	N	N	N	N	N	Y	N	N
DAILY_DATA	Y	N	N	N	N	N	N	N
DAILY_DATA_BACKPOST	N	N	N	N	N	Y	N	N
DAILY_DATA_TEMP	Y	N	N	N	N	Y	N	N
DBA_INDEXES	Y	N	N	N	N	N	N	N
DEALFCT_TEMP	N	Y	N	N	N	Y	N	N
DEAL_ACTUALS_FORECAST	Y	N	N	N	N	N	N	N
DEAL_ACTUALS_ITEM_LOC	Y	Y	N	N	N	N	N	N
DEAL_BB_NO_REBATE_TEMP	N	Y	N	N	N	Y	N	N
DEAL_BB_REBATE_PO_TEMP	N	Y	N	N	N	Y	N	N
DEAL_BB_RECEIPT_SALES_TEMP	Y	N	N	N	N	Y	N	N
DEAL_HEAD	Y	N	Y	N	N	N	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
DEAL_DETAIL	Y	N	N	N	N	N	N	N
DEAL_PERF_TRAN_DATA	Y	N	N	N	N	N	N	N
DEAL_ITEM_LOC_EXPLODE	Y	N	N	N	N	N	N	N
DEAL_TRAN_DATA_TEMP	N	Y	N	N	N	Y	N	N
DEAL_ITEMLOC_ITEM	N	N	Y	N	N	N	N	N
DEAL_ITEMLOC_PARENT_DIFF	N	N	Y	N	N	N	N	N
DEAL_ITEMLOC_DCS	N	N	Y	N	N	N	N	N
DEAL_ITEMLOC_DIV_GRP	N	N	Y	N	N	N	N	N
DEPS	Y	N	N	N	N	N	N	N
DEPT_SALES_FORECAST	N	N	N	Y	N	Y	N	N
DEPT_SALES_HIST	N	N	N	N	Y	N	N	N
DEPT_SALES_HIST_MTH	Y	N	N	N	Y	N	N	N
DOC_CLOSE_QUEUE	N	Y	N	N	Y	N	N	N
DOC_CLOSE_QUEUE_TEMP	Y	Y	N	N	N	N	N	N
DOC_PURGE_QUEUE	N	Y	N	N	N	Y	N	N
DOMAIN_CLASS	N	N	Y	N	N	N	N	N
DOMAIN_DEPT	N	N	Y	N	N	N	N	N
DOMAIN_SUBCLASS	N	N	Y	N	N	N	N	N
EDI_DAILY_SALES	N	N	N	N	Y	N	N	N
EDI_ORD_TEMP	N	N	N	Y	N	Y	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
EDI_SUPS_TEMP	N	Y	N	N	N	N	N	N
FIXED_DEAL	Y	N	Y	N	N	N	N	N
FIXED_DEAL_DATES	N	N	Y	N	N	N	N	N
FORECAST_REBUILD	N	N	N	Y	N	Y	N	N
GROUPS	Y	N	N	N	N	N	N	N
HIST_REBUILD_MASK	Y	N	N	Y	N	Y	N	N
IB_RESULTS	N	N	Y	N	N	N	N	N
INVC_DETAIL	N	N	Y	N	N	N	N	N
INVC_DETAIL_TEMP	Y	N	N	N	N	Y	N	N
INVC_DETAIL_TEMP2	N	N	N	N	N	Y	N	N
INVC_HEAD	N	N	Y	N	N	N	N	N
INVC_HEAD_TEMP	Y	N	N	N	N	Y	N	N
ITEM_FORECAST	N	N	N	Y	N	N	N	N
ITEM_LOC	Y	N	N	N	N	N	N	N
ITEM_MASTER	Y	N	N	N	N	N	N	N
MC_REJECTIONS	N	N	N	Y	N	Y	N	N
MOD_ORDER_ITEM_HTS	N	N	N	N	Y	N	N	N
MV_RESTART_STORE_WH	N	N	N	N	N	N	N	Y
MV_LOC_PRIM_ADDR	N	N	N	N	N	N	N	Y
MV_L10N_ENTITY	N	N	N	N	N	N	N	Y
ON_ORDER_TEMP	N	N	N	Y	N	Y	N	N
ORD_MISSED	N	N	N	Y	N	Y	N	N
ORD_TEMP	N	N	N	Y	N	Y	N	N
ORDHEAD	Y	N	N	N	N	N	N	N
ORDLOC	Y	N	N	N	N	N	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
ORDSKU	Y	N	N	N	N	N	N	N
OTB	N	Y	Y	N	N	N	N	N
OTB_CASCADE_STG	Y	N	N	N	N	Y	N	N
PERIOD	Y	N	N	N	N	N	N	N
POS_BUTTON_HEAD	N	N	Y	N	N	N	N	N
POS_COUPON_HEAD	N	N	Y	N	N	N	N	N
POS_MERCH_CRITERIA	N	N	Y	N	N	N	N	N
POS_MODS	N	Y	N	Y	N	Y	N	N
POS_MONEY_ORD_HEAD	N	N	Y	N	N	N	N	N
POS_PAYINOUT_HEAD	N	N	Y	N	N	N	N	N
POS_PROD_REST_HEAD	N	N	Y	N	N	N	N	N
POS_STORE	N	N	Y	N	N	N	N	N
POS_SUP_PAY_CRITERIA	N	N	Y	N	N	N	N	N
POS_TENDER_TYPE_HEAD	N	N	Y	N	N	N	N	N
RECLASS_ITEM	Y	N	N	N	N	N	N	N
RECLASS_ITEM_TEMP	N	N	N	N	N	Y	N	N
REPL_ATTR_UPDATE_EXCLUDE	Y	Y	N	N	Y	N	N	N
REPL_ATTR_UPDATE_HEAD	Y	Y	N	N	Y	N	N	N
REPL_ATTR_UPDATE_ITEM	Y	Y	Y	N	Y	N	N	N
REPL_ATTR_UPDATE_LOC	Y	Y	N	N	Y	N	N	N
REPL_ITEM_LOC	Y	N	N	N	N	N	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
REPL_ITEM_LOC_UPDATES	N	N	N	Y	N	N	N	N
RESTART_CONTROL	Y	N	N	N	N	N	N	N
RESTART_PROGRAM_HISTORY	N	Y	N	N	N	N	N	N
RMS_BATCH_STATUS	N	N	Y	N	N	N	N	N
RMS_SIZE_PROFILE	N	N	N	N	N	Y	N	N
RPL_ALLOC_IN_TMP	N	Y	N	N	N	Y	N	N
RPL_DISTRO_TMP	N	Y	N	Y	N	Y	N	N
RPL_NET_INVENTORY_TMP	N	N	N	N	N	Y	N	N
RTV_HEAD	Y	N	N	N	N	N	N	N
SALWEEK_C_DAILY	N	Y	N	N	N	Y	N	N
SALWEEK_C_WEEK	Y	Y	N	N	N	Y	N	N
SALWEEK_RESTART_DEPT	Y	Y	Y	N	N	Y	N	N
SHIPMENT	N	N	N	N	Y	N	N	N
SHIPMENT_PUB_INFO	N	N	N	N	Y	N	N	N
SHIPMENT_PURGE_TEMP	Y	N	N	N	N	Y	N	N
STAGE_COMPLEX_DEAL_DETAIL	N	N	N	N	N	Y	N	N
STAGE_COMPLEX_DEAL_HEAD	N	N	N	N	N	Y	N	N
STAGE_FIXED_DEAL_DETAIL	N	N	N	N	N	Y	N	N
STAGE_FIXED_DEAL_HEAD	N	N	N	N	N	Y	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
STAKE_HEAD	Y	N	N	N	N	N	N	N
STAKE_PROD_LOC	Y	N	N	N	N	N	N	N
STAKE_PRODUCT	N	N	N	N	Y	N	N	N
STAKE_SKU_LOC	Y	N	N	N	N	N	N	N
STORE	Y	N	N	N	N	N	N	N
SUBCLASS_SALES_FORECAST	N	N	N	Y	N	N	N	N
SUBCLASS_SALES_HIST	N	N	N	N	Y	N	N	N
SUBCLASS_SALES_HIST_MTH	Y	N	N	N	Y	N	N	N
SUPS	Y	N	N	N	N	N	N	N
SUP_DATA	N	N	N	N	Y	N	N	N
SUPS_MIN_FAIL	N	N	N	Y	N	Y	N	N
SVC_WF_ORD_DETAIL	N	N	N	N	N	Y	N	N
SVC_WF_ORD_HEAD	N	N	N	N	N	Y	N	N
SVC_WF_ORD_TAIL	N	N	N	N	N	Y	N	N
SVC_WF_RET_DETAIL	N	N	N	N	N	Y	N	N
SVC_WF_RET_HEAD	N	N	N	N	N	Y	N	N
SVC_WF_RET_TAIL	N	N	N	N	N	Y	N	N
SYSTEM_OPTIONS	Y	N	N	N	N	N	N	N
SYSTEM_VARIABLES	Y	N	Y	N	N	N	N	N
TEMP_TRAN_DATA	Y	N	N	Y	N	Y	N	N
TEMP_TRAN_DATA_SUM	N	Y	N	Y	N	Y	N	N
TIF_EXPLODE	N	N	N	Y	N	Y	N	N

Table	Select	Insert	Update	Index	Delete	Truncate	Trigger	Refresh
TRAN_DATA	N	Y	N	N	N	N	N	N
TSFHEAD	Y	N	Y	N	Y	N	N	N
TSFHEAD_CFA_EXT	N	N	N	N	Y	N	N	N
VAT_CODE_RATES	Y	N	N	N	N	N	N	N
VAT_ITEM	Y	N	N	N	N	N	N	N
VENDINVC_TEMP	N	Y	N	N	N	Y	N	N
WEEK_DATA	Y	N	N	N	N	N	N	N
WH	Y	N	N	N	N	N	N	N
WH_STORE_ASSIGN	N	N	N	N	Y	N	N	N

dlyprg (Daily Purge of Foundation Data)

Module Name	dlyprg.pc
Description	Daily Purge of Foundation Data
Functional Area	Administration
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS218
Runtime Parameters	

Design Overview

The purpose of this program is to delete specific Foundation Data entities from RMS.

When users delete a record in the RMS user interface, information is generally not immediately deleted at the database level; instead, data is marked as being in deleted status and also inserted into the DAILY_PURGE table.

Complex referential integrity relationships determine whether data can actually be deleted from the database (for example, a store can not be deleted if any transactions related to the store are still on current transaction tables). Dlyprg.pc checks these complex rules. If the deletion request passes the rules, dlyprg.pc deletes the data. If dlyprg.pc is not able to delete the data, it writes a record to the DAILY_PURGE_ERROR_LOG table for further investigation. Dlyprg will continue to attempt to delete marked data until all references have been purged from the system and the deletion of the foundation data entity finally succeeds.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	0
Frequency	Daily
Scheduling Considerations	This program runs early in the batch cycle to ensure that deleted entities are not included in any subsequent processing
Pre-Processing	N/A
Post-Processing	prepost dlyprg post
Threading Scheme	N/A

Restart/Recovery

This program has inherent restart ability. Records that have been successfully purged are deleted from the DAILY_PURGE table. This ensures that if the program is restarted, it does not attempt to delete records that have been previously processed.

Key Tables Affected

Table	Select	Insert	Update	Delete
DAILY_PURGE	Yes	No	No	Yes
DAILY_PURGE_ERROR_LOG	Yes	Yes	No	Yes
LOC_LIST_DETAIL	No	No	No	Yes
MONTH_DATA_BUDGET	Yes	No	No	Yes
HALF_DATA_BUDGET	Yes	No	No	Yes
VAT_DEPS	Yes	No	No	Yes
SKULIST_CRITERIA	Yes	No	No	Yes
STORE_DEPT_AREA	Yes	No	No	Yes
DOMAIN_DEPT	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
FORECAST_REBUILD	Yes	No	No	Yes
SUP_DATA	Yes	No	No	Yes
DEPT_SALES_HIST	Yes	No	No	Yes
DEPT_SALES_FORECAST	Yes	No	No	Yes
DEAL_ITEMLOC	Yes	No	No	Yes
DEPS	Yes	No	No	Yes
STOCK_LEDGER_INSERTS	Yes	No	No	Yes
STAKE_SCHEDULE	Yes	No	No	Yes
PRODUCT_TAX_CODE	Yes	No	No	Yes
DEPT_CHRG_DETAIL	Yes	No	No	Yes
WH_DEPT	Yes	No	No	Yes
DEPT_CHRG_HEAD	Yes	No	No	Yes
SUP_BRACKET_COST	Yes	No	No	Yes
SUP_REPL_DAY	Yes	No	No	Yes
SUP_INV_MGMT	Yes	No	No	Yes
FILTER_GROUP_MERCH	Yes	No	No	Yes
IB_RESULTS	Yes	No	No	Yes
WEEK_DATA	Yes	No	No	Yes
DAILY_DATA	Yes	No	No	Yes
MONTH_DATA	Yes	No	No	Yes
TRAN_DATA_HISTORY	Yes	No	No	Yes
HALF_DATA	Yes	No	No	Yes
PARTNER	Yes	No	No	Yes
SHIPMENT	Yes	No	No	Yes
COST_ZONE_GROUP_LOC	Yes	No	No	Yes
COST_ZONE	Yes	No	No	Yes
COST_ZONE_GROUP	Yes	No	No	Yes
UDA_ITEM_DEFAULTS	Yes	No	No	Yes
DOMAIN_CLASS	Yes	No	No	Yes
CLASS_SALES_HIST	Yes	No	No	Yes
CLASS_SALES_FORECAST	Yes	No	No	Yes
CLASS	Yes	No	No	Yes
DOMAIN_SUBCLASS	Yes	No	No	Yes
OTB_FWD_LIMIT	Yes	No	No	Yes
OTB	Yes	No	No	Yes
DIFF_RATIO_DETAIL	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
DIFF_RATIO_HEAD	Yes	No	No	Yes
SUBCLASS_SALES_HIST	Yes	No	No	Yes
SUBCLASS_SALES_FORECAST	Yes	No	No	Yes
SUBCLASS	Yes	No	No	Yes
MERCH_HIER_DEFAULT	Yes	No	No	Yes
WH	Yes	No	No	Yes
WH_ATTRIBUTES	Yes	No	No	Yes
WH_ADD	Yes	No	No	Yes
STORE_SHIP_DATE	Yes	No	No	Yes
LOC_TRAITS_MATRIX	Yes	No	No	Yes
COST_ZONE_GROUP_LOC	Yes	No	No	Yes
ITEM_EXP_DETAIL	Yes	No	No	Yes
ITEM_EXP_HEAD	Yes	No	No	Yes
EXP_PROF_DETAIL	Yes	No	No	Yes
EXP_PROF_HEAD	Yes	No	No	Yes
STORE_ATTRIBUTES	Yes	No	No	Yes
STORE_DEPT_AREA	Yes	No	No	Yes
STORE_GRADE_STORE	Yes	No	No	Yes
DAILY_SALES_DISCOUNT	Yes	No	No	Yes
LOAD_ERR	Yes	No	No	Yes
STORE	Yes	No	No	Yes
EDI_SALES_DAILY	Yes	No	No	Yes
COMP_STORE_LINK	Yes	No	No	Yes
REPL_RESULTS	Yes	No	No	Yes
SEC_GROUP_LOC_MATRIX	Yes	No	No	Yes
LOC_CLSF_HEAD	Yes	No	No	Yes
LOC_CLSF_DETAIL	Yes	No	No	Yes
SOURCE_DLVRY_SCHED	Yes	No	No	Yes
SOURCE_DLVRY_SCHED_DAYS	Yes	No	No	Yes
SOURCE_DLVRY_SCHED_EXC	Yes	No	No	Yes
COMPANY_CLOSED_EXCEP	Yes	No	No	Yes
LOCATION_CLOSED	Yes	No	No	Yes
GENCODE_STORE	Yes	No	No	Yes
POS_STORE	Yes	No	No	Yes
SUB_ITEMS_DETAIL	Yes	No	No	Yes
SUB_ITEMS_HEAD	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
STORE_HIERARCHY	Yes	No	No	Yes
ADDR	Yes	No	No	Yes
TIF_EXPLODE	Yes	No	No	Yes
WALK_THROUGH_STORE	Yes	No	No	Yes
SKULIST_DETAIL	Yes	No	No	Yes
INV_STATUS_QTY	Yes	No	No	Yes
REPL_ATTR_UPDATE_EXCLUDE	Yes	No	No	Yes
REPL_ATTR_UPDATE_LOC	Yes	No	No	Yes
REPL_ATTR_UPDATE_HEAD	Yes	No	No	Yes
MASTER_REPL_ATTR	Yes	No	No	Yes
REPL_ATTR_UPDATE_ITEM	Yes	No	No	Yes
REPL_DAY	Yes	No	No	Yes
REPL_ITEM_LOC	Yes	No	No	Yes
REPL_ITEM_LOC_UPDATES	Yes	Yes	No	Yes
COST_SUSP_SUP_DETAIL_LOC	Yes	No	No	Yes
COST_SUSP_SUP_DETAIL	Yes	No	No	Yes
ITEM_HTS_ASSESS	Yes	No	No	Yes
ITEM_HTS	Yes	No	No	Yes
REQ_DOC	Yes	No	No	Yes
ITEM_IMPORT_ATTR	Yes	No	No	Yes
TIMELINE	Yes	No	No	Yes
COND_TARIFF_TREATMENT	Yes	No	No	Yes
ITEM_IMAGE	Yes	No	No	Yes
ITEM_SUPP_UOM	Yes	No	No	Yes
DEAL_SKU_TEMP	Yes	No	No	Yes
FUTURE_COST	Yes	No	No	Yes
DEAL_DETAIL	Yes	No	No	Yes
ITEM_SUPP_COUNTRY	Yes	No	No	Yes
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	Yes
RECLASS_ITEM	Yes	No	No	Yes
SUP_AVAIL	Yes	No	No	Yes
ITEM_ATTRIBUTES	Yes	No	No	Yes
ITEM_LOC	Yes	No	No	Yes
ITEM_LOC_SOH	Yes	No	No	Yes
ITEM_SUPPLIER	Yes	No	No	Yes
ITEM_MASTER	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
PACK_TMPL_DETAIL	Yes	No	No	Yes
SUPS_PACK_TMPL_DESC	Yes	No	No	Yes
PACK_TMPL_HEAD	Yes	No	No	Yes
UDA_ITEM_LOV	Yes	No	No	Yes
UDA_ITEM_DATE	Yes	No	No	Yes
UDA_ITEM_FF	Yes	No	No	Yes
ITEM_SEASONS	Yes	No	No	Yes
ITEM_TICKET	Yes	No	No	Yes
COMP_SHOP_LIST	Yes	No	Yes	Yes
TICKET_REQUEST	Yes	No	No	Yes
PRODUCT_TAX_CODE	Yes	No	No	Yes
PRICE_HIST	Yes	Yes	No	Yes
POS_MODS	Yes	Yes	No	Yes
ITEM_LOC_TRAITS	Yes	No	No	Yes
PACKITEM_BREAKOUT	Yes	No	No	Yes
PACKITEM	Yes	No	No	Yes
ITEM_SUPP_COUNTRY_BRACKET_COST	Yes	No	No	Yes
ITEM_SUP_COUNTRY_LOC	Yes	No	No	Yes
POS_MERCH_CRITERIA	Yes	No	No	Yes
ITEM_CHRG_HEAD	Yes	No	No	Yes
ITEM_CHRG_DETAIL	Yes	No	No	Yes
RECLASS_COST_CHG_QUEUE	Yes	No	No	Yes
ITEM_PUB_INFO	Yes	No	No	Yes
ITEM_MFQUEUE	Yes	No	No	Yes
ITEM_XFORM_HEAD	Yes	No	No	Yes
ITEM_XFORM_DETAIL	Yes	No	No	Yes
DEAL_ITEM_LOC_EXPLODE	Yes	No	No	Yes
ITEM_APPROVAL_ERROR	Yes	No	No	Yes

Input/Out Specification

N/A

taxevntprg (Tax Event Purge)

Module Name	Taxevntprg
Description	Tax Event Purge
Functional Area	Purchase Order
Module Type	Admin
Module Technology	PROC
Catalog ID	RMS373

Design Overview

This batch purges the tax events from TAX_CALC_EVENT table. The records to be purged are based on its last_update_datetime along with tax_event_result.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	This program can run on need basis
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
TAX_CALC_EVENT	No	No	No	Yes
PERIOD	Yes	No	No	No

Input/Out Specification

N/A

dtesys (Increment Virtual Business Date)

Module Name	dtesys.pc
Description	Increment Virtual Business Date
Functional Area	Administration
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS220
Runtime Parameters	

Design Overview

This batch program updates the PERIOD table for various dates required in RMS such as vdate, end-of-month and end-of-week dates.

Vdate (short for virtual business date) is used by RMS to maintain a consistent 'virtual' business date (without regard for actual date changes at midnight or different dates in different timezone) for accounting purposes. Note that vdate is used to determine the business date for the financial impact of transactions. Sysdate from the database is used to capture audit time and date stamps on transactions.

Generally, dtesys is run without additional input parameters and increments the data by one day. However, if a specific date is passed into the program as a parameter, the system date will be updated to that date.

Special processing also occurs:

- Weekly

  When vdate = next_eow_date_unit, the program increments the last_eow_date_unit and next_eow_date_unit columns on system_variables. The last_eow_date_unit is updated to the current next_eow_date_unit and the next_eow_date_unit is updated to the next end-of-week date (calculated).
- Monthly

  When vdate = next_eom_date_unit, the program updates the last_eom_date_unit and next_eom_date_unit columns on system_variables. The last_eom_date_unit is updated to the current next_eom_date_unit and the next_eom_date_unit is updated to the next end-of-month date (calculated).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Date Set Phase
Frequency	Daily
Scheduling Considerations	This program should run at the end of the batch cycle
Pre-Processing	N/A

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	Yes	No
SYSTEM_VARIABLES	Yes	No	Yes	No

Input/Out Specification

N/A

trunctbl.ksh (Truncate Table Script)

Module Name	trunctbl.ksh
Description	Truncate Table Script
Functional Area	Foundation
Module Type	Admin
Module Technology	KSH
Catalog ID	RMS475
Runtime Parameters	

Design Overview

This program performs truncate operation on an RMS table or a specific partition. It accepts an input table name and an optional partition name. If no partition name is passed, then the truncate is applied on the entire table.

This program must be run as either the RMS schema owner, or be run by a user that has been granted the following system privileges:

- drop any table
- alter any table

Currently, the following action and tables are processed by the batch. For the runtime parameters, refer to the Merchandising Batch Schedule.

Table	Partition
NIL_INPUT_WORKING	N/A

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Suggestion is to run twice. One before the batch window starts and another after while the affected table is not in use
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

N/A

Design Assumptions

N/A

3

Foundation Data Maintenance

Overview

Foundation Data is basic information that is required for RMS to function properly. Most foundation data is managed through the RMS user interface or integrations (often RIB) from external systems. However, there are some batch processes that relate to Foundation Data. This chapter describes the batch processes that are used to maintain general foundation data.

Programs in this chapter can be divided into five basic categories:

- Updates to Cost Components that must be applied other foundation data and transactions
  - batch_compeffupd.ksh
  - batch_alloctsfupd.ksh
  - batch_depchrgupd.ksh
  - batch_expprofupd.ksh
  - batch_itmcostcompupd.ksh
  - batch_ordcostcompupd.ksh
  - elcexcprg.ksh
- Rebuilds of detail information for lists/groups
  - dfrtbld.pc
  - lclrbld.pc
  - batch_rfmvcurrconv.ksh
  - refmvlocprimadd.ksh
- Application of pending changes
  - whstrasg.pc
  - cremhierdly.pc
  - reclsdly.pc
- Rollup of detailed information
  - supmth.pc
- Foundation Data Purges
  - schedprg.pc
  - prchstprg.pc

Note: For more information on Foundation Data, see Item Maintenance.

Batch Design Summary

The following batch designs are included in this functional area:

- batch_compeffupd.ksh (Update ELC Components)
- batch_expprofupd.ksh (Apply Pending Rate Changes to Expense Profiles)
- batch_depchrgupd.ksh (Apply Pending to Up-Charge Cost Component Changes to Departments)
- batch_itmcostcompupd.ksh (Apply Pending Item Cost Component Updates)
- batch_alloctsfupd.ksh (Update Allocation and Transfer Based on Changes to Up-Charges)
- batch_ordcostcompupd.ksh (Apply Pending Cost Component and ELC Changes to Purchase Orders)
- elcexcprg.pc (Purge Aged Cost Component Exceptions)
- dfrtbld.pc (Build Diff Ratios Based on Sales History)
- lclrbld.pc (Rebuild Dynamic Location Lists)
- batch_rfmvcurrconv.ksh **(**Refresh Currency Conversion Materialized View)
- refmvlocprimadd.ksh (Refresh Address Materialized View)
- whstrasg.pc (Apply Pending Warehouse Store Assignment Updates**)**
- cremhierdly.pc (Process Pending Merchandise Hierarchy Changes from External Systems)
- reclsdly.pc (Reclassify Items in Merchandise Hierarchy)
- supmth.pc (Rollup of Supplier Data)
- schedprg.pc (Purge Aged Store Ship Schedule)
- prchstprg.pc (Purge Aged Price History Data)
- gcupld (Geocode Hierarchy Upload)
- edidladd (EDI Location Address Download)
- ediupadd (EDI Supplier Address Upload)
- txrtupld (Tax Rate Upload)
- tcktdnld (Download of Data to be Printed on Tickets)
- ang_stdnld (Stores Extract)
- refmvl10entity (Refresh MV MV_L10N_ENTITY)

batch_compeffupd (Update ELC Components)

Module Name	batch_compeffupd.ksh
Description	Apply Pending Cost Component, Up-charge and ELC Changes
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS185
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to cost components, up-charges and expense profiles and assign future effective dates to the changes. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. The options for how the updates can be cascaded are described in the table below:

Updated Entity	Cascade Options
Expense Profiles (Country, Supplier, or Partner)	Order, Item
Cost Component (Expense)	Country, Supplier, Partner, Item, Order
Cost Component (Assessment)	Item, Order
Cost Component (Up-charge)	Department, Item, Transfer/Allocation
Department Level Up-Charges	Item, Transfer/Allocation

This batch process is used to process updates to cost components of all types at the expense component level, updates to department level up-charges, and updates to expense profiles at the supplier, country, or partner level. The cascading to other levels is handled in the dependent processes which are run after this process:

- Allocation and Transfer Up-charge Update (batch_alloctsfupd)
- Expense Profile Update (batch_expprofupd)
- Item Cost Component Update (batch_itmcostcompupd)
- Purchase Order Cost Component Update (batch_ordcostcompupd)
- Department Up-charge (batch_depchrgupd)

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2 (Daily)
Frequency	Daily
Scheduling Considerations	Must be run before the following scripts: ▪ batch_alloctsfupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh ▪ batch_depchrgupd.ksh
Pre-Processing	N/A
Post-Processing	▪ batch_alloctsfupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh ▪ batch_depchrgupd.ksh
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_UPD_STG	Yes	No	No	No
DEPT_CHRG_DETAIL	Yes	No	Yes	No
EXP_PROF_DETAIL	Yes	No	Yes	No
ELC_COMP	Yes	No	Yes	No

Design Assumptions

N/A

batch_expprofupd (Apply Pending Rate Changes to Expense Profiles)

Module Name	batch_expprofupd.ksh
Description	Apply Pending Rate Changes to Expense Profiles
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Integration Catalog ID	RMS188
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to expense type cost components and assign future effective dates to the changes. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. For expense type cost components, this includes the ability to cascade the changes to country, supplier, and partner expense profiles. This script will process the updates to country, supplier, and partner expense profiles once the rate changes reach their effective date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase
Frequency	Daily
Scheduling Considerations	The following scripts can be executed in parallel: ▪ batch_alloctsfupd.ksh ▪ batch_depchrgupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh The pre-post job batch_costcompupd post should be run after all 5 complete
Pre-Processing	batch_compeffupd.ksh
Post-Processing	batch_costcompupd post (see note above)
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_UPD_GL_TEMP	Yes	Yes	No	Yes
COST_COMP_UPD_STG	Yes	No	No	No
EXP_PROF_HEAD	Yes	No	No	No
EXP_PROF_DETAIL	Yes	No	Yes	No
COST_COMP_EXC_LOG	No	Yes	No	No

Design Assumptions

N/A

batch_depchrgupd (Apply Pending Up-Charge Cost Component Changes to Departments)

Module Name	batch_depchrgupd.ksh
Description	Apply Pending Up-Charge Cost Component Changes to Departments
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS186
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to up-charges and assign future effective dates for the updates. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. For up-charges, this includes the ability to cascade the changes made at the cost component level (for up-charge components) to department level up-charges. This script will process the updates to department level up-charges once the rate changes reach their effective date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	The following scripts can be executed in parallel: ▪ batch_alloctsfupd.ksh ▪ batch_depchrgupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh The pre-post job batch_costcompupd post should be run after all 5 complete
Pre-Processing	batch_compeffupd.ksh
Post-Processing	batch_costcompupd post (see note above)
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_UPD_GL_TEMP	Yes	Yes	No	Yes
COST_COMP_UPD_STG	Yes	No	No	No
DEPT_CHRG_DETAIL	Yes	No	Yes	No
COST_COMP_EXC_LOG	No	Yes	No	No

Design Assumptions

N/A

batch_itmcostcompupd (Apply Pending Item Cost Component Updates)

Module Name	batch_itmcostcompupd.ksh
Description	Apply Pending Item Cost Component Updates
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS189
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to cost components, up-charges and expense profiles and assign future effective dates to the changes. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. For items, changes can be cascaded down from each of the different types:

- Expense Profiles (country, supplier, or partner)
- Cost Components (expense, assessment, or up-charge)
- Department-level Up-charges

This script will process the updates for items for each of these types of rate updates once the rate changes reach their effective date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	The following scripts can be executed in parallel: ▪ batch_alloctsfupd.ksh ▪ batch_depchrgupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh The pre-post job batch_costcompupd post should be run after all 5 complete
Pre-Processing	batch_compeffupd.ksh
Post-Processing	batch_costcompupd post (see note above)
Threading Scheme	Threaded by from_loc for item up-charges, by supplier for item expenses. It is not threaded for item assessments

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_UPD_GL_TEMP	Yes	Yes	No	Yes
COST_COMP_UPD_STG	Yes	No	No	No
ITEM_EXP_HEAD	Yes	No	No	No
ITEM_EXP_DETAIL	Yes	No	Yes	No
EXP_PROF_HEAD	Yes	No	No	No
COST_COMP_EXC_LOG	No	Yes	No	No
ITEM_HTS_ASSESS	Yes	No	Yes	No

Table	Select	Insert	Update	Delete
ITEM_CHRG_DETAIL	Yes	No	Yes	No

Design Assumptions

N/A

batch_alloctsfupd (Update Allocation and Transfer Based on Changes to Up-Charges)

Module Name	batch_alloctsfupd.ksh
Description	Update Allocation and Transfer Based on Changes to Up-Charges
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS184
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to up-charge cost components and department level up-charges and assign future effective dates to the changes. One of the things that can be designated when these future rate changes are specified is whether this update should also impact any open transfers or allocations with items in the department. If they have been flagged to update open transfers and allocations, then this script will process the updates once they reach their effective date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	The following scripts can be executed in parallel: ▪ batch_alloctsfupd.ksh ▪ batch_depchrgupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh The pre-post job batch_costcompupd post should be run after all 5 complete
Pre-Processing	Batch_compeffupd.ksh

Schedule Information	Description
Post-Processing	batch_costcompupd post (see note above)
Threading Scheme	Threaded by alloc_no and tsf_no.

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_UPD_GL_TEMP	Yes	Yes	No	Yes
COST_COMP_UPD_STG	Yes	No	No	No
ALLOC_CHRG	Yes	No	Yes	No
ALLOC_HEADER	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
SHIPMENT	No	No	No	Yes
SHIPSKU	No	No	No	Yes
TSFDETAIL_CHRG	Yes	No	Yes	No
TSFHEAD	Yes	No	No	No
COST_COMP_EXC_LOG	No	Yes	No	No

Design Assumptions

N/A

batch_ordcostcompupd (Apply Pending Cost Component and ELC Changes to Purchase Orders)

Module Name	batch_ordcostcompupd.ksh
Description	Apply Pending Cost Component and ELC Changes to Purchase Orders
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS190
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to cost components and expense profiles and assign future effective dates for the updates. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. For orders, changes can be cascaded down from each of the different types:

- Expense Profiles (country, supplier, or partner)
- Cost Components (expense or assessment)

This script will process the updates for open orders for each of these types of rate updates once the rate changes reach their effective date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	The following scripts can be executed in parallel: ▪ batch_alloctsfupd.ksh ▪ batch_depchrgupd.ksh ▪ batch_expprofupd.ksh ▪ batch_itmcostcompupd.ksh ▪ batch_ordcostcompupd.ksh The pre-post job batch_costcompupd post should be run after all 5 complete
Pre-Processing	batch_compeffupd.ksh prepost batch_ordcostcompupd pre
Post-Processing	prepost batch_ordcostcompupd post prepost batch_costcompupd post (see note above)
Threading Scheme	Threaded by order number (order_no)

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
COST_COMP_UPD_GL_TEMP	Yes	Yes	No	Yes
COST_COMP_UPD_STG	Yes	No	No	No
ORDSKU_HTS	Yes	No	No	No
ORDSKU_HTS_ASSESS	Yes	No	No	No
CVB_DETAIL	Yes	No	No	No
CE_ORD_ITEM	Yes	No	No	No
CE_HEAD	Yes	No	No	No

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	No	No
ORDLOC	Yes	No	No	No
ORDSKU	Yes	No	No	No
ORDLOC_EXP	Yes	No	Yes	No
SHIPMENT	Yes	No	No	No
SHIPSKU	Yes	No	No	No
EXP_PROF_HEAD	Yes	No	No	No
COST_ZONE_GROUP_LOC	Yes	No	No	No
CE_CHARGES	No	No	No	Yes
COST_COMP_EXC_LOG	No	Yes	No	No

Design Assumptions

N/A

elcexcprg (Purge Aged Cost Component Exceptions)

Module Name	ELCEXCPRG.PC
Description	Purge Aged Cost Component Exceptions
Functional Area	Costing
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS222
Runtime Parameters	

Design Overview

In RMS, users are allowed to make rate changes to cost components, up-charges and expense profiles with future effective dates. Additionally, when these future rate changes are specified, users can choose to cascade these changes to lower levels. The options for how the updates can be cascaded are described in the table below:

Updated Entity	Cascade Options
Expense Profiles (Country, Supplier, or Partner)	Order, Item
Cost Component (Expense)	Country, Supplier, Partner, Item, Order
Cost Component (Assessment)	Item, Order
Cost Component (Up-charge)	Department, Item, Transfer/Allocation
Department Level Up-Charges	Item, Transfer/Allocation

When the processes that apply these changes run, they may raise exceptions if the rate for an entity has been overwritten prior to the application of the future rate change. If so, then exceptions are written to the COST_COMP_EXC_LOG table. This program purges the records from this table based on a number of retention months that is passed as a runtime parameter.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	This batch should run after all cost component scripts and their corresponding prepost jobs have finished execution: • batch_alloctsfupd.ksh • batch_deptchrgupd.ksh • batch_expprofupd.ksh • batch_itemcostcompupd.ksh • batch_ordcostcompupd.ksh • Prepost batch_costcompupd post
Pre-Processing	Prepost batch_costcompupd post
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_COMP_EXC_LOG	No	No	No	Yes

Design Assumptions

N/A

dfrtbld (Build Diff Ratios Based on Sales History)

Module Name	dfrtbld.pc
Description	Build Diff Ratios Based on Sales History
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS214
Runtime Parameters	

Design Overview

Diff ratios are used by RMS as a way to assign a ratio to a group of diffs or diff combinations based on sales history. The parameters for how these are created are setup online in RMS and include specifying a subclass and one or more diff groups for a particular date range. Users also specify how often the ratios should be refreshed and what types of sales should be considered, regular, promotional and/or clearance.

For ratios that are due to be rebuilt, this batch program uses this information and summarizes the total sales for items with the subclass and diff groups selected. It then calculates a percent to each diff combination/store. Diff ratios are used for PO distribution within RMS.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Daily
Scheduling Considerations	This program will likely be run after sales information is uploaded into Oracle Retail
Pre-Processing	uploadsales_all.ksh
Post-Processing	The SQL*Loader control file dfrtbld.ctl to load the data from ouput file.
Threading Scheme	Threaded by department

Restart/Recovery

This program will be setup for multithreading and restart/recovery. The Logical Unit of Work will be at subclass level and will be threaded by department using the view v_restart_dept. The commit_max_ctr field on the RESTART_CONTROL table will determine the number of transactions that will be processed before committing to the database.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
DIFF_RATIO_HEAD	Yes	No	Yes	No
DIFF_RATIO_DETAIL	No	No	No	Yes
DIFF_GROUP_DETAIL	Yes	No	No	No
V_RESTART_DEPT	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No

I/O Specification

This batch will create a comma delimited output data file for sql loader to upload data to table DIFF_RATIO_DETAIL. The control script for the sql loader is dfrtbld.ctl.

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
N/A	Diff_ratio_id	N/A	N/A	
	Seq_no	N/A	N/A	
	store	N/A	N/A	
	Diff_1	N/A	N/A	
	Diff_2	N/A	N/A	
	Diff_3	N/A	N/A	
	qty	N/A	N/A	
	pct	N/A	N/A	

Design Assumptions

N/A

lclrbld (Rebuild Dynamic Location Lists)

Module Name	lclrbld.pc
Description	Rebuild Dynamic Location Lists
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS255
Runtime Parameters	

Design Overview

This program is used to rebuild dynamic location lists based on the criteria defined when the location list was created. Once run, the location list will be updated to include only the locations that currently meet the defined criteria for the list, including adding any new locations. Any locations which no longer fit the criteria will be removed.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by location list

Restart/Recovery

The logical unit of work for this program is a location list. The v_restart_loc_list view is used for threading. Table-based restart/recovery is used by the batch program.

Key Tables Affected

Table	Select	Insert	Update	Delete
LOC_LIST_HEAD	Yes	No	Yes	No
LOC_LIST_DETAIL	Yes	Yes	No	Yes

Design Assumptions

N/A

batch_rfmvcurrconv (Refresh Currency Conversion Materialized View)

Module	batch_rfmvcurrconv.ksh
Description	Refresh Currency Conversion Materialized View
Functional Area	Foundation Data
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS193
Runtime Parameters	

Design Overview

This script calls the REFRESH_MV_CURR_CONV_RATES function to refresh the materialized view MV_CURRENCY_CONVERSION_RATES.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	It must be scheduled after receiving currency rates from external systems
Pre-Processing	NA
Post-Processing	NA
Threading Scheme	NA

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
MV_CURRENCY_CONVERSION_RATES	Yes	Yes	Yes	Yes
CURRENCY_RATES	Yes	No	No	No
EURO_EXCHANGE_RATE	Yes	No	No	No

Design Assumptions

N/A

refmvlocprimaddr (Refresh Address Materialized View)

Module Name	refmvlocprimaddr.pc
Description	Refresh Address Materialized View
Functional Area	Foundation Data
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS305
Runtime Parameters	

Design Overview

This batch program refreshes the materialized view MV_LOC_PRIM_ADDR based on the ADDR and WH tables. The view will contain primary address information for all locations, including company stores, customer stores, physical and virtual warehouses and external finishers.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	As needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ADDR	Yes	No	No	No
WH	Yes	No	No	No

Design Assumptions

N/A

whstrasg (Apply Pending Warehouse Store Assignment Updates)

Module	whstrag.pc
Description	Apply Pending Warehouse Store Assignment Updates
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS398
Runtime Parameters	

Design Overview

This program is used to update the default warehouse attribute on the STORE table and the sourcing warehousing replenishment attribute on the REPL_ITEM_LOC table based on the warehouse-store assignments. These tables will be updated nightly for assignments that go into effect the next day. For the replenishment update, a system parameter can be used to further define which records will be updated. The Warehouse Store Assignment Type system parameter determines if all items will have their source warehouse updated for that store, or only those that use Warehouse Stocked, Cross-dock, or Warehouse Cross-link stock category.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Must be run after all replenishment batch programs
Pre-Processing	rplapprv
Post-Processing	prepost whstrasg post
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is a store. A commit takes place when number of store records processed is equal to commit max counter from the RESTART CONTROL table. This program can be restarted based on the last store successfully processed.

Key Tables Affected

Table	Select	Insert	Update	Delete
WH_STORE_ASSIGN	Yes	No	Yes	No
STORE	Yes	No	Yes	No
ITEM_LOC	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	Yes	No

Design Assumptions

If an item/location relationship does not exist for the item whose REPL_ITEM_LOC record is being updated, this program will raise a non-fatal error.

cremhierdly (Process Pending Merchandise Hierarchy Changes from External Systems)

Module Name	cremhierdly.pc
Description	Process Pending Merchandise Hierarchy Changes from External Systems
Functional Area	Foundation Data
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS204
Runtime Parameters	

Design Overview

This batch program reads merchandise hierarchy records from the PEND_MERCH_HIER table whose effective date is tomorrow or earlier. The PEND_MERCH_HIER table is populated by the Merchandise Hierarchy Reclass Subscription API. Each record is then used to either insert or update existing merchandise hierarchy data in RMS based on the action and hierarchy types. The inserted/updated records are deleted from the PEND_MERCH_HIER table after they have been successfully processed.

This program is only required if updates to the merchandise hierarchy in RMS are being managed outside the application.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	Must run prior to reclsdly.pc
Pre-Processing	N/A
Post-Processing	reclsdly.pc
Threading Scheme	N/A

Restart/Recovery

The logical unit of work for this program is set at the hier_type, action_type, and merch_hier_id level.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PEND_MERCH_HIER	Yes	No	No	Yes
DIVISION	No	Yes	Yes	No
GROUPS	No	Yes	Yes	No
DEPS	No	Yes	Yes	No
CLASS	No	Yes	Yes	No
SUBCLASS	No	Yes	Yes	No

Design Assumptions

N/A

reclsdly (Reclassify Items in Merchandise Hierarchy)

Module Name	reclsdly.pc
Description	Reclassify Items in Merchandise Hierarchy
Functional Area	Foundation
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS302
Runtime Parameters	

Design Overview

This batch program is used to reclassify items from one department/class/subclass combination to another. Reclassification events that are due to go into effect the next day are processed by this batch process. Before the reclassification is executed, validation is performed to make sure that there are no issues which would prevent the reclassification from moving forward. If not, then the updates are made to update the item's merchandise hierarchy, as well as other related updates, such as moving the value of the inventory in the stock ledger and notifying RPM of the update. Any issues that prevent the item from being reclassified raise a non-fatal error in the program and write the error to the MC_REJECTIONS table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	Should run after cremhierdly
Pre-Processing	prepost pre reclsdly
Post-Processing	prepost reclsdly post
Threading Scheme	Threaded by reclass_no

Restart/Recovery

The logical unit of work is the combination of reclass_no and item. Restart ability is also based on reclass_no and item.

Key Tables Affected

Table	Select	Insert	Update	Delete
RECLASS_ITEM	Yes	No	No	Yes
RECLASS_HEAD	Yes	No	No	Yes
ITEM_MASTER	Yes	No	Yes	No
DEPS	Yes	No	No	No
GROUPS	Yes	No	No	No
PACKITEM	Yes	No	No	No
DEAL_ITEM_LOC_EXPLODE	Yes	No	No	Yes
DEAL_ITEMLOC	Yes	No	No	No
DEAL_HEAD	Yes	No	No	No
ORDHEAD	Yes	No	Yes	No
ORDSKU	Yes	No	No	No
DEAL_CALC_QUEUE	Yes	Yes	No	No
HIST_REBUILD_MASK	No	Yes	No	No
RECLASS_ERROR_LOG	No	Yes	Yes	Yes
STAKE_SKU_LOC	Yes	Yes	Yes	Yes
ITEM_LOC_SOH	Yes	No	Yes	No
REPL_ITEM_LOC_UPDATES	No	Yes	No	No
POS_MODS	No	Yes	No	No
TRAN_DATA	No	Yes	No	No
SKULIST_DEPT	Yes	Yes	No	No
MC_REJECTIONS	No	Yes	No	No
RPM_ITEM_MODIFICATION	No	Yes	Yes	No

Design Assumptions

N/A

supmth (Rollup of Supplier Data)

Module Name	supmth.pc
Description	Rollup of Supplier Data
Functional Area	Inventory
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS369
Runtime Parameters	

Design Overview

The primary function of supmth.pc is to convert daily transaction data to monthly data. After all data is converted, the daily information is deleted to reset the system for the next period by the batch module prepost and its supmth_post function.
The supmth.pc batch accumulates SUP_DATA amounts by department/supplier/transaction type and creates or updates one SUP_MONTH row for each department/supplier combination. Based on the transaction type on SUP_DATA, the following transactions are written to SUP_MONTH:

- type 1 – purchases at cost (written for consignment sales and orders received at POS or online)
- type 2 – purchases at retail (written for consignment sales and orders received at POS or online)
- type 3 – claims at cost (written for claim dollars refunded on RTV orders)
- type 10 – markdowns at retail (net amount based on markdowns, markups, markdown cancellations and markup cancellations)
- type 20 – order cancellation costs (written for all supplier order cancellations)
- type 30 – sales at retail (written for consignment stock sales)
- type 40 – quantity failed (written for QC shipments with failed quantities)
- type 70 – markdowns at cost (net amount based on supplier cost markdowns)

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	Prepost supmth post
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work is dept, supplier.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUP_DATA	Yes	No	No	No
SUP_MONTH	No	Yes	No	No
SYSTEM_VARIABLES	Yes	No	No	No

Design Assumptions

N/A

schedprg (Purge Aged Store Ship Schedule)

Module Name	schedprg.pc
Description	Purge Aged Store Ship Schedule
Functional Area	Foundation Data
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS356
Runtime Parameters	

Design Overview

This program will purge all old records related to store ship dates and location and company closed dates and exceptions. Old records are determined by the Ship Schedule History months and Location Closed History months system parameters.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program will use the commit_max_ctr on the RESTART_CONTROL table to periodically commit delete operations. Periodic commits are performed to ensure that rollback segments are not exceeded in case of considerable volume.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
STORE_SHIP_DATE	No	No	No	Yes
COMPANY_CLOSED_EXCEP	No	No	No	Yes
COMPANY_CLOSED	No	No	No	Yes
LOCATION_CLOSED	No	No	No	Yes

Design Assumptions

N/A

prchstprg(Purge Aged Price History Data)

Module Name	prchstprg.pc
Description	Purge Aged Price History Data
Functional Area	Foundation Data
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS298
Runtime Parameters	

Design Overview

The PRCHSTPRG program deletes PRICE_HIST records, which are older than a number of retention days specified SYSTEM_OPTIONS price_hist_retention_days.

This program ensures the most recent PRICE_HIST record for the item/location/tran type combination is preserved and deletes all aged records.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	Recommend this is run prior to phase 3 to improve phase 3 performance
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi threaded. Threaded by table partition

Restart/Recovery

This program will use the commit_max_ctr on the restart_control table to periodically commit SQL delete operations. Restart/Recovery is achieved by processing records that have not been deleted. Table restart_bookmark stores the ps_cur_restart_partition_position for partition position as bookmark_string to restart a thread.
However, in cases where the price_hist table is very large, a particularly large rollback segment may be specified to reduce the risk of exceeding rollback segment space. This will depend on the size of normal rollback segments and the size of the price_hist table.

Performance Considerations

The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 10000 records (subject to change based on experimentation). In case price_hist table is very large then the number of partitions on the table may be increased and then after the number of threads for this program should be increased.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
PRICE_HIST	No	No	No	Yes
DBA_TAB_PARTITIONS	Yes	No	No	No

gcupld (Geocode Hierarchy Upload)

Module Name	gcupld.pc
Description	Geocode Hierarchy Upload
Functional Area	Foundation Data
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS43
Runtime Parameters	

Design Overview

A geocode identifies a combination of the country, state, county and city in which locations operate. They are used for defining sales tax information in RMS. This batch process provides the ability to create and delete geocodes from an external source in RMS.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	Ad Hoc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a file based upload and a file based restart/recovery logic. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of the file I/O. The recommended commit counter setting is 10000 records (subject to change based on implementation).

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
GEOCODE_TEMP	YES	YES	NO	YES
DISTRICT_GEOCODES	YES	YES	NO	YES
CITY_GEOCODES	YES	YES	NO	YES
COUNTY_GEOCODES	YES	YES	NO	YES

Table	Select	Insert	Update	Delete
STATE_GEOCODES	YES	YES	NO	YES
COUNTRY_GEOCODES	YES	YES	NO	YES
GEOCODE_STORE	YES	NO	NO	NO
GEOCODE_TXCDE	YES	NO	NO	NO

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000023

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes the file line type
	Line id	Char(10)	0000000001	Sequential file line number
	Gentran ID	Char(4)	'GCUP'	Identifies which translation Gentran uses
	Current date	Char(14)		File date in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	FDETL	Describes file line type
	Line id	Char(10)		Sequential file line number
	Country Geocode	Char(4)		Country Geocode
	State Geocode	Char(4)		State Geocode
	County Geocode	Char(4)		County Geocode
	City Geocode	Char(4)		City Geocode
	District Geocode	Char(4)		District Geocode
	Geocode Level	Char(6)		Geocode Level Valid values are: 'CNTRY,'STATE','COUNTY', 'CITY', 'DIST'
	Geocode Description	Char(250)		Geocode Description
	Add Delete Ind	Char(1)		Indicates if this is an addition or a deletion. Valid values are: 'A', 'D'
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file

Record Name	Field Name	Field Type	Default Value	Description
	Line id	Char(10)		Sequential file line number
	Number of lines	Number(10)		Number of lines in file not counting FHEAD and FTAIL

Design Assumptions

N/A

edidladd (EDI Location Address Download)

Module Name	edidladd.pc
Description	EDI Location Address Download
Functional Area	Foundation Data
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS44
Runtime Parameters	

Design Overview

The purpose of this module is to download addresses of stores and warehouses to suppliers. Depending on the runtime parameters, either all addresses will be sent or only those with changes. The output file format is a standard Oracle Retail file format that is assumed to be translated into EDI format by a translator, such as Gentran.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program uses Oracle Retail's standard restart/recovery only minimally. In the event of a fatal error it is assumed that the program will be restarted from the beginning without recovery.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
ADDR	Yes	No	Yes	No
ADD_TYPE_MODULE	Yes	No	No	No
ADD_TYPE	Yes	No	No	No
WH	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download From RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000010

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number(10)	0000000001	Sequential file line number
	Gentran ID	Char(4)	'DLADD'	Identifies file source
	Purpose code	Char(2)	04 (change) or 05 (replace)	Indicates if what is being sent are changes or a replacement list that should overwrite previous records sent
TDETL	File record descriptor	Char(5)	TDETL	Identifies file record type
	Line id	Char(10)	increment	Line number of file
	Transaction number	Number(10)	Start at 1, increment	Identifies Transaction
	Date	Char(8)		Indicates the date that the file was created in YYYYMMDD format
	Store or warehouse	Char(2)		Indicates the type of location in this row. Valid values are SN (store) or WH (warehouse)
	Location	Number(10)		Indicates the unique ID for the store or warehouse from the STORE or WH tables in RMS
	Location name	Char(150)		Indicates the name given to the store or warehouse from the STORE or WH tables in RMS

Record Name	Field Name	Field Type	Default Value	Description
	Address line 1	Char(240)		The first line of the address for the address type related to the store or warehouse
	Address line 2	Char(240)		The second line of the address for the address type related to the store or warehouse
	City	Char(120)		The city of the address for the address type related to the store or warehouse
	State	Char(3)		The state of the address for the address type related to the store or warehouse
	Postal code	Char(30)		The postal code of the address for the address type related to the store or warehouse
	Country	Char(3)		The country of the address for the address type related to the store or warehouse
	Address Type Description	Char(40)		The description of the address type in the file
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	Total No Lines	Char(10)		Total lines in file
	Total No TDETL lines	Number(10)		Total number of transaction lines excluding FHEAD and FTAIL

Design Assumptions

N/A

ediupadd (EDI Supplier Address Upload)

Module Name	ediupadd.pc
Description	EDI Supplier Address Upload
Functional Area	Foundation Data
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS49
Runtime Parameters	

Design Overview

This batch program is used to read supplier address information sent via an EDI 838 transaction and use the information to update RMS supplier information. Five different types of supplier addresses can be managed via this EDI interface: business, postal, returns, order, and invoice. This program always assumes that address information is the primary address for the type.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	prepost ediupadd post
Threading Scheme	N/A – File-based processing

Restart/Recovery

The program uses non-fatal error handling to process input files. A commit will not occur until the end of file processing and therefore if fatal errors are encountered updates will not have been committed and the program can be restarted without recovery.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUPS	Yes	No	No	No
STATE	Yes	No	No	No
COUNTRY	Yes	No	No	No
ADDR	Yes	Yes	Yes	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000015

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File record descriptor	Char(5)	FHEAD	Describes file line type
	Line number	Number(10)	0000000001	Sequential file line number
	Gentran_id	Char(5)	UPADD	Identifies the file type

Record Name	Field Name	Field Type	Default Value	Description
	File create date	Char(14)		Indicates the date that the file was created in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	FDETL	Describes file line type
	Line number	Number(10)		Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	Add or Update	Char(1)		Indicates if this is a new address ('A') or an update to an existing address ('U')
	Address type	Char(2)		Indicates the type of address included in the file. Valid options are: 01 – Business 02 – Postal 03 – returns 04 – Order 05 – Invoice
	Supplier	Number(10)		Indicates the supplier for whom the address applies, which corresponds to the SUPS table in RMS
	Address line 1	Char(240)		The first line of the address for the address type related to the supplier
	Address line 2	Char(240)		The second line of the address for the address type related to the supplier
	Address line 3	Char(240)		The third line of the address for the address type related to the supplier
	Contact name	Char(120)		The contact name at the address for the address type related to the supplier
	Contact Phone	Char(20)		The contact phone for the address for the address type related to the supplier
	Contact fax	Char(20)		The fax number for the address for the address type related to the supplier
	City	Char(120)		The city of the address for the address type related to the supplier
	State	Char(3)		The state of the address for the address type related to the supplier
	Postal code	Char(30)		The postal code of the address for the address type related to the supplier
	Country	Char(3)		The country of the address for the address type related to the supplier
FTAIL	File record descriptor	Char(5)		Describes file record type

Record Name	Field Name	Field Type	Default Value	Description
	Line number	Number(10)		Sequential file line number (total number of lines in file)
	Number of transactions	Number(10)		Number of transactions in file

Design Assumptions

N/A

txrtupld (Tax Rate Upload)

Module Name	txrtupld
Description	Tax Rate Upload
Functional Area	Foundation Data
Module Type	Integration
Module Technology	PROC
Catalog ID	RMS58
Runtime Parameters	

Design Overview

This program is used to upload tax rates from an external source into the RMS sales tax tables. The upload will provide the means to create new tax jurisdictions, tax codes and tax rates. In addition, it will also be able to update the rates for existing tax codes. The input file will contain the tax jurisdiction, tax type, level and tax rates, which will allow the batch programs to correctly update the tax rates to reflect any changes that have occurred.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program reads the FDETL records one by one, validates them and then loads it to different insert or update arrays. When the commit point is reached, all the arrays are written into the database. The LUW (Logical Unit of Work) is each detailed record in the upload file. The recommended commit max counter is 1000 (this depends on the implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
TAX_JURISDICTIONS	Yes	Yes	Yes	No
TAX_CODES	Yes	Yes	No	No
TAX_RATES	Yes	Yes	Yes	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000106

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number(10)	0000000001	Sequential file line number
	Gentran ID	Char(4)	'TXUP'	Identifies which translation Gentran uses
	Current date	Char(14)		File date in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	THEAD	Start of an invoice transaction
	Line id	Number(10)		Sequential file line number
	Tax Jurisdiction	Number(8)		Tax Jurisdiction
	Tax Jurisdiction Description	Char(120)		Tax Jurisdiction description
	Tax Level	Char(6)		Tax level of the Jurisdiction
	Tax Type	Char(6)		Tax Type
	Tax Rate	Number(8,5)		Tax rate of the tax code
	Start Date	Char (14)		Start Date of the tax rate

Record Name	Field Name	Field Type	Default Value	Description
	End Date	Char (14)		End Date of the tax rate
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	Line id	Number(10)		Sequential file line number
	Number of lines	Number(10)		Number of lines in file not counting FHEAD and FTAIL

Design Assumptions

N/A

tcktdnld (Download of Data to be Printed on Tickets)

Module Name	tcktdnld.pc
Description	Download of Data to be Printed on Tickets
Functional Area	Foundation Data
Module Type	Integration
Module Technology	PROC
Catalog ID	RMS59
Runtime Parameters	

Design Overview

This program creates an output file containing the information to be printed on a ticket or label for a particular item/location. This program is driven by the “requests” for tickets generated from RMS and RPM. The details of what should be printed on each ticket are defined in RMS on the TICKET_TYPE_DETAIL table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
TICKET_REQUEST	Yes	No	No	Yes
STORE	Yes	No	No	No
TICKET_TYPE_HEAD	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
TICKET_TYPE_DETAIL	Yes	No	No	No
UDA_VALUES	Yes	No	No	No
UDA_ITEM_LOV	Yes	No	No	No
UDA	Yes	No	No	No
TL_SHADOW	Yes	No	No	No
UDA_ITEM_FF	Yes	No	No	No
UDA_ITEM_DATE	Yes	No	No	No
ITEM_TICKET	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
DEPS	Yes	No	No	No
CLASS	Yes	No	No	No
SUBCLASS	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDSKU	Yes	No	No	No
WH	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
RPM_PC_TICKET_REQUEST	Yes	No	No	Yes
GTAX_ITEM_ROLLUP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000107

Output File Layout

Record Name	**Field Name**	**Field Type**	**Default Value**	**Description**
FHEAD	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	File Type Definition	Char(4)	TCKT	Identifies file as 'Print Ticket Requests'
	File Create Date	Char(14)		The date on which the file was created in 'YYYMMDDHHMISS' format
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	ITEM	Char(25)		ID number of the transaction level item for which the ticket applies.
	Ticket Type	Char(4)		ID which indicates the ticket type to be printed
	Location Type	Char(1)		Identifies the type of location for which tickets will be printed. Valid values are store (S) and warehouse (W).
	Location	Char(10)		The ID of the store or warehouse for which tickets will be printed
	Quantity	Number(12,4)		The quantity of tickets to be printed; which includes 4 implied decimal places
TCOMP	File Type Record Descriptor	Char(5)	TCOMP	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	ITEM	Char(25)		ID number of the item which is only populated if the item in THEAD is a pack item

Record Name	Field Name	Field Type	Default Value	Description
	Quantity	Number(12,4)		Quantity of the component item as a part of the pack; includes 4 implied decimal places
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	Detail Sequence Number	Number(10)		Sequential number assigned to the detail records
	Ticket Item	Char(4)		ID indicating the detail to be printed on the ticket. If the attribute is a UDA, then this will contain the ID of the UDA. Otherwise, it is the code associated with the attribute in RMS (e.g. CLSS = class)
	Attribute Description	Char(120)		Description of the attribute – either the UDA description or the RMS description for the attribute
	Value	Char(250)		Detail to be printed on the ticket (i.e. Item number, Department Number, Item description)
	Supplement	Char(120)		Supplemental description to the Value (i.e. Department Name)
TTAIL	File Type Record Descriptor	Char(5)	TTAIL	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	Transaction Detail Line Count	Number(6)	sum of detail lines	Sum of the detail lines within a transaction
FTAIL	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file

Design Assumptions

N/A

ang_stdnld (Stores Extract)

Module	ang_stdnld.ksh
Description	Extract of Store Information for Web Search
Functional Area	Foundation Data
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS121
Runtime Parameters	

Design Overview

The purpose of this batch module is to fetch all Store related information for communication to a third party search engine in support of web shopping to show which locations have a particular product available across multiple retailers.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
ADDR	Yes	No	No	No
STORE_HIERARCHY	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

This file deviates from the standard RMS flat file format because the file format is dictated differently. The file is flat and is tab delimited. Additionally there are more complex naming conventions.

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000003

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
	RetailStoreID	CHAR(10)		The store corresponding to a particular chain from Store table
	Name	CHAR(5)		The name of the store from the RMS STORE table
	Main Phone	CHAR(20)		The phone number designated for the store on the STORE table
	Address Line 1	CHAR(240)		The first line of the address for address type 1 (business address) related to the store
	Address Line 2	CHAR(240)		The second line of the address for address type 1 (business address) related to the store
	City	CHAR(120)		The city of the address for address type 1 (business address) related to the store
	State	CHAR(3)		The state of the address for address type 1 (business address) related to the store
	Postal Code	CHAR(30)		The postal code of the address for address type 1 (business address) related to the store
	Country Code	CHAR(3)		The country of the address for address type 1 (business address) related to the store
	Home Page	CHAR		It is the value from the exported variable HOMEPAGE
	Hours	N/A		'Null' is used in the script
	Category	N/A		'Null' is used in the script
	Description	N/A		'Null' is used in the script

Currency	CHAR(3)	Indicates the currency of the store on the STORE table in RMS
Established Date	Date	Contains the date on which the store opened on the STORE table in RMS
Latitude	N/A	'Null' is used in the script
Longitude	N/A	'Null' is used in the script

Design Assumptions

- This file format was design for Google, but was intended to be built generic enough to be used with other search engines.

refmvl10entity (Refresh MV MV_L10N_ENTITY)

Module Name	REFMVL10ENTITY.PC
Description	Refresh Materialized view MV_L10N_ENTITY
Functional Area	Admininstration
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS304

Design Overview

This is a new ad hoc batch program that refreshes the materialized view MV_L10N_ENTITY that is based on ADDR, OUTLOC, COMPHEAD, COUNTRY_ATTRIB table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ADDR	Yes	No	No	No
OUTLOC	Yes	No	No	No
COMPHEAD	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No

Integration Contract

N/A

4 Item Maintenance

Overview

This chapter contains information about the batch processes that related to item maintenance. These processes include general item integration and processes to make mass changes to low level item information.

Program Summary

Program	**Description**
sitmain.pc	Scheduled Item Maintenance
vatdlxpl.pc	Mass VAT Updates for Items/Locations
ang_prcqtydnld.ksh	Extract of Retail Price and Current Inventory by Store for Web Search
ang_proddnld.ksh	Extract of Item Information for Web Search
iindbatch.ksh	Upload item induction data through batch

sitmain (Scheduled Item Maintenance)

Module Name	sitmain.pc
Description	Scheduled Item Maintenance
Functional Area	Item Maintenance
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS357
Runtime Parameters	

Design Overview

Scheduled item maintenance is a method of performing mass changes on item/location information. Scheduled item maintenance uses item and location lists to make the process of changing lots of information very easy for end users.

This program explodes the intersection of these item and location lists to make the scheduled changes at the specific item/location level.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	This module should run after LCLRBLD.PC
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program has inherent restart ability because records are deleted from SIT_DETAIL as they are processed. The logical unit of work is an item/location combination.

Key Tables Affected

Table	Select	Insert	Update	Delete
SIT_EXPLODE	Yes	No	Yes	No
SIT_DETAIL	Yes	No	No	Yes
ITEM_LOC	Yes	Yes	Yes	No
MC_REJECTIONS	No	Yes	No	No
ITEM_MASTER	Yes	No	No	No
POS_MODS	No	Yes	No	No
PRICE_HIST	No	Yes	No	No
ITEM_LOC_SOH	No	Yes	No	No

vatdlxpl (Mass VAT Updates for Items/Locations)

Module Name	vatdlxpl.pc
Description	Mass VAT Updates for Items/Locations
Functional Area	Item Maintenance
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS384
Runtime Parameters	

Design Overview

This batch program updates VAT information for each item associated with a given VAT region and VAT code.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 0
Frequency	Daily
Scheduling Considerations	Run as Needed
Pre-Processing	N/A
Post-Processing	prepost vatdlxpl post
Threading Scheme	N/A

Restart/Recovery

This batch program does commits to the database for every pi_commit_max_ctr number of rows.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
VAT_CODE_RATES	Yes	No	No	No
POS_MODS	No	Yes	No	No
VAT_ITEM	Yes	Yes	Yes	No
ITEM_LOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
CLASS	Yes	No	No	No

ang_prcqtydnld (Extract of Retail Price and Current Inventory by Store for Web Search)

Module	ang_prcqtydnld.pc
Description	Extract of Retail Price and Current Inventory by Store for Web Search
Functional Area	Item Maintenance
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS120
Runtime Parameters	

Design Overview

This program extracts current retail price and inventory for stores. The resulting flat file is tab delimited.

This integration was designed to provide inventory and price information a third party web search engine in support of web shopping to show which locations have a particular product available across multiple retailers.

This integration only needs to be run if the implementation includes integration with an external web search engine.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc.
Frequency	Daily
Scheduling Considerations	This program should run after RPM price changes, clearance and promotions batches have completed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by STORE

Restart/Recovery

The logical unit of work for this module is defined as STORE. Records are committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Security Considerations

Product data for price qty file are stored in a Unix file with the processes default permissions (umask). Care should be exercised so that this file cannot be tampered with.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
STORE_HIERARCHY	Yes	No	No	No
PERIOD	Yes	No	No	No
ITEM_LOC	Yes	No	No	No

Integration Contract

This file deviates from the standard RMS flat file format and is tab delimited.

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000004

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
	RetailStoreID	CHAR(10)		It is the Loc from the Item_Loc table
	ItemId	CHAR(25)		It is the Item from the Item_Loc table
	Price	NUMBER(20,4)		It is the Selling_Unit_Retail from the Item_Loc table
	Price Effective Date	DATE		It is the Action_Date from the Price_Hist table
	Sale Price	N/A		'Null' is used in the script
	Sale Price Effective Date	N/A		'Null' is used in the scrip.
	Quantity	NUMBER(12)		It is derived from ITEMLOC_QUANTITY_SQL.GET_LOC_CURRENT_AVAIL
	Promotional Text	N/A		'Null' is used in the script

Design Assumptions

- This file format was design for Google, but was intended to be built generic enough to be used with other search engines.

ang_proddnld (Extract of Item Information for Web Search)

Module	ang_proddnld.pc
Description	Extract of Item Information for Web Search
Functional Area	Item Maintenance
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS119

Design Overview

This program extracts item information. The resulting flat file is tab delimited.

This integration was designed to provide item information to a third party web search engine in support of web shopping to show which locations have a particular product available across multiple retailers.

This integration only needs to be run if the implementation includes integration with an external web search engine.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	This program should run after dlyprg.pc
Pre-Processing	Dlyprg.pc
Post-Processing	N/A
Threading Scheme	Multi-threaded by DEPT

Restart/Recovery

The logical unit of work for this module is defined as Dept. Records are committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Security Considerations

Product data for stores are stored in a Unix file with the processes default permissions (umask). Care should be exercised so that this file cannot be tampered with.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
STORE_HIERARCHY	Yes	No	No	No
PERIOD	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_IMAGE	Yes	No	No	No
DEPS	Yes	No	No	No
CLASS	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000005

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
	ItemId	CHAR(25)		It is the Item from Item_Master table
	WebItemId	N/A		'Null' is used in the script
	Title	CHAR(120)		It is the short_desc from the Item_Master table
	Description	CHAR(250)		It is the Item_Desc from the Item_Master table
	Price	N/A		'Null' is used in the script
	Price Effective Date	N/A		'Null' is used in the script
	Sale Price	N/A		'Null' is used in the script
	Sale Price Effective Date	N/A		'Null' is used in the script
	Promotional Text	N/A		'Null' is used in the script
	Condition	N/A		'Null' is used in the script
	Gtin	CHAR(25)		It is the Item from the Item_Master table
	Mpn	CHAR(30)		It is the vpn from the Item_Supplier table

Record Name	Field Name	Field Type	Default Value	Description
	Brand	N/A		'Null' is used in the script
	Link	N/A		'Null' is used in the script
	Image Link	CHAR(240)		It is the Image_Addr and Image_Name from Item_Image table
	Product Type	N/A		'Null' is used in the script
	Weight	NUMBER(12,4)		It is the Weight from the Item_Supp_Country_Dim table
	Size	N/A		'Null' is used in the script
	Color	N/A		'Null' is used in the script
	Group	CHAR(120)		It is the Dept_Name from the Deps table
	Subgroup	CHAR(120)		It is the Class_Name from the Class table

Design Assumptions

- This file format was design for Google, but was intended to be built generic enough to be used with other search engines.

iindbatch.ksh (Upload Item Data)

Module Name	iindbatch.ksh
Description	Upload Item Data
Functional Area	Item Maintenance
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS474
Runtime Parameters	Database connection, Input File Name, Template Name, Destination (Optional Input Parameter)

Design Overview

This batch program is used to Bulk upload xml file data from template files to S9T_FOLDER table (into content_xml column).
This batch will be responsible for validating the input parameters, below are the list of validations.

- The Input file should exist.
- The Input file's extension must be ".xml".

- The template_name should be valid. Function S9T_PKG.CHECK_TEMPLATE is called for validation.
- Destination (Optional Parameter) should be STG or RMS. If destination is not passed then default it to STG.

Once xml data is loaded into S9T_FOLDER table, the script will do post processing by calling below packages

- ITEM_INDUCT_SQL.INIT_PROCESS - This initialize a row in svc_process_tracker for asynchronous processing.
- RMS_ASYNC_PROCESS_SQL.ENQUEUE_ITEM_INDUCT – This function en-queues the record for processing.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
S9T_FOLDER	No	Yes	No	No
S9T_TEMPLATE	Yes	No	No	No
SVC_PROCESS_TRACKER	No	Yes	No	No
RMS_ASYNC_STATUS	No	Yes	No	No
RMS_ASYNC_RETRY	No	Yes	No	No

5

Custom Flexible Attributes Solution

Overview

This chapter describes the batch processes related to the Custom Flexible Attributes Solution (CFAS). CFAS consists of a series of UI, database and batch processes that allow clients to configure and use sophisticated custom attributes on common RMS entities. For additional information about CFAS, including detailed flow diagrams, see the *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide.*

Program Summary

The following batch designs are included in this functional area:

Program	**Description**
cfagen.ksh	CFAS Database Object Creation Script
cfamigrate.ksh	CFAS Metadata Migration Script
cfastgload.ksh	Bulk load of CFAS Attribute Data

cfagen (CFAS Database Object Creation Script)

Module Name	cfagen.ksh
Description	CFAS Database Object Creation Script
Functional Area	CFAS
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS471
Runtime Parameters	

Design Overview

This script creates the database objects required for CFAS.

For more information, see the following documents in the Oracle Retail Merchandising System documentation set:

- *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide*

This script only needs to be run if a client is using CFAS and changing CFAS configuration.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Theading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
cfa_ext_entity	Yes	No	No	No
cfa_attrib_group_set	Yes	No	No	No
system_option	Yes	No	No	No
cfa_attrib	Yes	No	No	No
cfa_attrib_group	Yes	No	No	No
cfa_ext_entity_key	Yes	No	No	No

I/O Specification

N/A

cfamigrate (CFAS Metadata Migration script)

Module Name	cfamigrate.ksh
Description	CFAS Metadata Migration Script
Functional Area	CFAS
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS472
Runtime Parameters	

Design Overview

This script extracts CFAS metadata from the current environment so the metadata can be migrated to other environments. This allows CFAS metadata to be created and tested in a development/sandbox environment, then moved to production environments when it is fully ready.

For more information, see the following documents in the Oracle Retail Merchandising System Release 14.1 documentation set:

- *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide*

This script only needs to be run if the client needs to move CFAS configuration from one environment to another.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Theading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
cfa_code_head	Yes	Yes	Yes	No
cfa_code_detail	Yes	Yes	Yes	No
cfa_rec_group	Yes	Yes	Yes	No
cfa_rec_group_labels	Yes	Yes	Yes	No
cfa_ext_entity	Yes	Yes	Yes	No
cfa_ext_entity_key	Yes	Yes	Yes	No
cfa_ext_entity_key_labels	Yes	Yes	Yes	No
cfa_attrib_group_set	Yes	Yes	Yes	No
cfa_attrib_group_set_labels	Yes	Yes	Yes	No
cfa_attrib_group	Yes	Yes	Yes	No
cfa_attrib_group_labels	Yes	Yes	Yes	No
cfa_attrib	Yes	Yes	Yes	No
cfa_attrib_labels	Yes	Yes	Yes	No

cfastgload (Bulk load of CFAS Attribute Data)

Module Name	cfastgload.ksh
Description	Bulk load of CFAS Attribute Data
Functional Area	CFAS
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS117
Runtime Parameters	

Design Overview

This script allows clients to bulk load data into CFAS attributes. This utility is handy when upgrading from earlier versions of RMS or adding a new attribute with data already existing in another system.
For more information, see the following documents in the Oracle Retail Merchandising System Release 14.1 documentation set:

- *Oracle Retail Merchandising System Custom Flex Attribute Solution Implementation Guide*

This script only needs to be run if a client is using CFAS and needs to bulk load information from an external system (including previous version of RMS).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Theading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
cfa_attrib_group_set	Yes	No	No	No
cfa_ext_entity_key	Yes	No	No	No
cfa_ext_entity	Yes	No	No	No

Table	Select	Insert	Update	Delete
cfa_attrib_group	Yes	No	No	No
cfa_attrib	Yes	No	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000001

Note: The staging table where the data will be inserted is determined during runtime.

6

Purchase Order

Overview

RMS is the system of record in the Oracle Retail Suite for Purchase Orders (POs). Purchase orders can be created via the RMS UI, integration with products like *Oracle Retail Advanced Inventory Planning* or integration with other 3rd party systems. Once purchase orders are created in RMS, there are a number of batch processes that manage PO data.

Batch Design Summary

The following batch designs are included in this functional area:

- edidlord.pc (Download of Purchase Order from RMS to Suppliers)
- ediupack.pc (Upload Purchase Order and Purchase Order Change Acknowledgements from Suppliers to RMS)
- vrplbld.pc (Build Purchase Orders for Vendor Generated Orders)
- genpreiss.pc (Generate Pre-Issued Order Numbers)
- supcnstr.pc (Scale Purchase Orders Based on Supplier Constraints)
- orddscnt.pc (Apply Deal Discounts to Purchase Orders)
- ordupd.pc (Update Retail Values on Open Purchase Orders)
- ordautcl.pc (Auto Close Purchase Orders)
- ordrev.pc (Write Purchase Order Information to Purchase Order History Tables)
- ordprg.pc (Purge Aged Purchase Orders)
- poindbatch.ksh(Upload of PO induction data through batch)
- po_indctn_purge.ksh(Purge data from PO induction staging tables)

edidlord (Download of Purchase Orders from RMS to Suppliers)

Module Name	edidlord.pc
Description	Download of Purchase Order from RMS to Suppliers
Functional Area	Purchase Order
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS46
Runtime Parameters	

Design Overview

Orders created within the Oracle Retail system are written to a flat file if they are approved and marked as EDI orders. This module is used to write new and changed purchase order data to a flat file in the Oracle Retail standard format. The translation to EDI format is expected to take place via a 3rd party translation utility. The order revision tables and allocation revision tables are also used to ensure that the latest changes are being sent and to allow both original and modified values to be sent. These revision tables are populated during the online ordering process and the batch replenishment process whenever an order has been approved, and constitutes a history of all revisions to the order.

The program sums up all quantities to the physical warehouse level from the virtual warehouse level for an order, before writing it into the output file.

If shipments are to be pre-marked by the supplier for cross docking, then along with the order information: allocation, location and quantities are also sent.

If the backhaul type is specified as “Calculated”, then the backhaul allowances will be calculated.

If the order contains pack items; hierarchical pack information is sent (this may include outer packs, inner packs, and fashion styles with associated pack templates as well as component item information).

If the order is a Drop Ship Customer Order (location is a non-stockholding store), the customer billing and delivery information will be written to the flat file.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program needs to be scheduled after replenishment and ordrev
Pre-Processing	N/A
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	Multi-threaded by supplier

Restart/Recovery

The logical unit of work for this program is set at the supplier level. Threading is performed by the supplier using the v_restart_supplier view.

Restart ability is implied because the program updates ordhead.edi_sent_ind as records and are written out. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of the file I/O. The recommended commit counter setting is 10000 records.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	Yes	No
ORDHEAD_REV	Yes	No	No	No
TERM	Yes	No	No	No
SUPS	Yes	No	No	No
ORDSKU	Yes	No	No	No
ORDSKU_REV	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ORDLOC	Yes	No	No	No
ORDLOC_REV	Yes	No	No	No
ORDLOC_DISCOUNT	Yes	No	No	No
ORDCUST	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
ALLOC_REV	Yes	No	No	No
WH	Yes	No	No	No
PACKITEM_BREAKOUT	Yes	No	No	No
SUPS_PACK_TMPL_DESC	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	No
STORE	Yes	No	No	No
ADDR	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000012

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	File head marker
	Line id	Number(10)	0000000001	Unique line id
	Translator id	Char(5)	DLORD	Identifies transaction type
	File create date	Char(14)		Vdate in YYYYMMDDHH24MISS format
TORDR	Record descriptor	Char(5)	TORDR	Order header information
	Line id	Number(10)		Unique file line id
	Transaction id	Number(10)		Unique transaction id
	Order change type	Char(2)		'CH' (changed) or 'NW' (new)
	Order number	Number(12)		Internal Oracle Retail order no
	Supplier	Number(10)		Internal Oracle Retail supplier id
	Vendor order id	Char(15)		External vendor_order_no (if available)
	Order written date	Char(14)		Order created date in YYYYMMDDHH24MISS format
	Original order approval date	Char(14)		Original order approval date in YYYYMMDDHH24MISS format
	Old Currency Code	Char(3)		Old order currency_code (ISO standard)
	New Currency Code	Char(3)		Changed order currency_code (ISO standard)
	Old Shipment Method of payment	Char(2)		Old ship_pay_method
	New Shipment Method of Payment	Char(2)		Changed ship_pay_method
	Old Transportation Responsibility	Char(2)		Old fob_trans_res
	Old Transportation Responsibility Description	Char(250)		Old fob_trans_res_desc
	New Transportation Responsibility	Char(2)		Changed fob_trans_res
	New Trans. Resp. Description	Char(250)		New fob_trans_res_desc

Record Name	Field Name	Field Type	Default Value	Description
	Old Title Passage Location	Char(2)		Old fob_title_pass
	New Title Passage Location	Char(2)		Changed fob_title_pass
	Old Title Passage Description	Char(250)		Old fob_title_pass_desc
	New Title Passage Description	Char(250)		Changed fob_title_pass_desc
	Old not before date	Char(14)		Old not_before_date in YYYYMMDDHH24MISS format
	New not before date	Char(14)		Changed not_before_date in YYYYMMDDHH24MISS format
	Old not after date	Char(14)		Old not_after_date in YYYYMMDDHH24MISS format
	New not after date	Char(14)		Changed not_after_date in YYYYMMDDHH24MISS format
	Old Purchase type	Char(6)		Old Purchase type
	New Purchase type	Char(6)		New Purchase type
	Backhaul allowance	Char(20)		Backhaul allowance
	Old terms description	Char(240)		Old terms description from terms table
	New terms description	Char(240)		New terms description from terms table
	Old pickup date	Char(14)		Old pickup date YYYYMMDDHH24MISS
	New pickup date	Char(14)		New pickup date YYYYMMDDHH24MISS
	Old ship method	Char(6)		Old ship method
	New ship method	Char(6)		New ship method
	Old comment description	Char(2000)		Old comment description
	New comment description	Char(2000)		New comment description
	Supplier DUNS number	Char(9)		Supplier DUNS number
	Supplier DUNS location	Char(4)		Supplier DUNS location
	Customer order number	Char(48)		Master customer order number from the Order Management System
	Fulfillment order number	Char(48)		Master fulfillment order number from the Order Management System

Record Name	Field Name	Field Type	Default Value	Description
TITEM	File record descriptor	Char(5)	TITEM	Item info
	Line id	Number(10)		Unique line id
	Transaction id	Number(10)		Unique transaction id
	Item Number Type	Char(6)		Item_number_type
	Item	Char(25)		Item (For a pack item, this will be the pack number)
	Old Ref Item Number type	Char(6)		Item_number_type for old ref_item
	Old Ref Item	Char(25)		Old Ref_Item
	New Ref Item Number type	Char(6)		Item_number_type for new ref_item
	New Ref Item	Char(25)		Changed Ref_Item
	Vendor catalog number	Char(30)		Supplier_item (VPN)
	Free Form Description	Char(250)		Item_desc
	Supplier Diff 1	Char(120)		Supplier's diff 1
	Supplier Diff 2	Char(120)		Supplier's diff 2
	Supplier Diff 3	Char(120)		Supplier's diff 3
	Supplier Diff 4	Char(120)		Supplier's diff 4
	Pack Size	Number(12)		Supplier defined pack size * 10000 (4 implied decimal places)
TPACK	File record descriptor	Char(5)	TPACK	Pack component info
	Line id	Number(10)		Unique line id
	Transaction id	Number(10)		Unique transaction id
	Pack id	Char(25)		Packitem_breakout.pack_no (same as item for the pack item)
	Inner pack id	Char(25)		Inner pack identification
	Pack Quantity	Number(12)		Packitem_breakout.pack_item_qty*10000 (4 implied decimal places)
	Component Pack Quantity	Number(12)		Packitem_breakout.comp_pack_qty*10000 (4 implied decimal places)
	Item Parent Part Quantity	Number(12)		Packitem_breakout.item_parent_pt_qty*10000 (4 implied decimal places)
	Item Quantity	Number(12)		Packitem_breakout.item_qty*10000 (4 implied decimal places)

Record Name	Field Name	Field Type	Default Value	Description
	Item Number Type	Char(6)		Item number type
	Item	Char(25)		Item
	Ref Item Number Type	Char(6)		Ref_item_number_type
	Ref Item	Char(25)		Ref_item
	VPN	Char(30)		Supplier item (vpn)
	Supplier Diff 1	Char(120)		Supplier's diff 1
	Supplier Diff 2	Char(120)		Supplier's diff 2
	Supplier Diff 3	Char(120)		Supplier's diff 3
	Supplier Diff 4	Char(120)		Supplier's diff 4
	Item Parent	Char(25)		Required when Pack Template is not NULL
	Pack template	Number(8)		Pack template associated w/style (packitem_breakout.pack_tmpl_id)
	Template description	Char(250)		Description of pack template. sups_pack_tmpl_desc.supp_pack_desc
TSHIP	Record type	Char(5)	TSHIP	Describes the file record-shipment information
	Line id	Number(10)		Unique file line number
	Transaction id	Number(10)		Unique transaction number
	Location type	Char(2)		'ST' store or 'WH' warehouse
	Ship to location	Number(10)		Location value form ordloc (store or warehouse – For warehouse,if multichannel option is ON, physical warehouse value is taken from warehouse)
	Old unit cost	Number(20)		Old unit cost*10000 (4 implied decimal places)
	New unit cost	Number(20)		New unit cost*10000 (4 implied decimal places)
	Old quantity	Number(12)		Old qty_ordered *10000 or qty_allocated*10000 (4 implied decimal places)
	New quantity	Number(12)		Changed qty_ordered*10000 or qty_allocated*10000 (4 implied decimal places)

Record Name	Field Name	Field Type	Default Value	Description
	Old outstanding quantity	Number(12)		Old (qty_ordered-qty_received)*10000 or (qty_allocated-qty transferred)*10000 for an allocation (4 implied decimal places)
	New outstanding quantity	Number(12)		Changed qty_ordered-qty_received (4 implied decimal places)(or qty_allocated-qty_transferred, for an allocation)
	Cancel code	Char(1)		
	Old cancelled quantity	Number(12)		Previous quantity cancelled (4 implied decimal places)
	New cancelled quantity	Number(12)		Changed quantity cancelled (4 implied decimal places)
	Quantity type flag	Char(1)		'S'hip to 'A'llocate
	Store or warehouse indicator	Char(2)		'ST' (store) or 'WH' (warehouse)
	Old x-dock location	Number(10)		Alloc_detail location (store or wh)
	New x-dock location	Number(10)		Alloc_detail location (store or wh)
	Case length	Number(12)		Case length (4 implied decimal places)
	Case width	Number(12)		Case width (4 implied decimal places)
	Case height	Number(12)		Case height (4 implied decimal places)
	Case LWH unit of measure	Char(4)		Case LWH unit of measure
	Case weight	Number(12)		Case weight (4 implied decimal places)
	Case weight unit of measure	Char(4)		Case weight unit of measure
	Case liquid volume	Number(12)		Case liquid volume (4 implied decimal places)
	Case liquid volume unit of measure	Char(4)		Case liquid volume unit of measure
	Location DUNS number	Char(9)		Location DUNS number
	Location DUNS loc	Char(4)		Location DUNS loc
	Old unit cost init	Number(20)		Old unit cost init (4 implied decimal places)

Record Name	Field Name	Field Type	Default Value	Description
	New unit cost init	Number(20)		New unit cost init (4 implied decimal places)
	Item/loc discounts	Number(20)		Item/loc discounts (4 implied decimal places)
TCUST	Record type	Char(5)	TCUST	Describes the file record-customer order information
	Line id	Number(10)		Unique file line number
	Transaction id	Number(10)		Unique transaction number
	Delivery first name	Char(120)		First name for the delivery address on the order
	Delivery phonetic first name	Char(120)		Phonetic first name for the delivery address on the order
	Delivery last name	Char(120)		Last name for the delivery address on the order
	Delivery phonetic last name	Char(120)		Phonetic last name for the delivery address on the order
	Delivery preferred name	Char(120)		Preferred name for the delivery address on the order
	Delivery company name	Char(120)		Company name for the delivery address on the order
	Delivery address Line 1	Char(240)		First line of the delivery address of the customer
	Delivery address Line 2	Char(240)		Second line of the delivery address of the customer
	Delivery address Line 3	Char(240)		Third line of the delivery address of the customer
	Delivery county	Char(250)		County portion of the delivery address
	Delivery city	Char(120)		City portion of the delivery address
	Delivery state	Char(3)		State portion of the delivery address
	Delivery country ID	Char(3)		Country portion of the delivery address
	Delivery post	Char(30)		Postal code portion of the delivery address
	Delivery jurisdiction	Char(10)		Jurisdiction code of the delivery country-state relationship

Record Name	Field Name	Field Type	Default Value	Description
	Delivery phone	Char(20)		Phone number in the delivery information
	Billing first name	Char(120)		First name for the billing address on the order
	Billing phonetic first name	Char(120)		Phonetic first name for the billing address on the order
	Billing last name	Char(120)		Last name for the billing address on the order
	Billing phonetic last name	Char(120)		Phonetic last name for the billing address on the order
	Billing preferred name	Char(120)		Preferred name for the billing address on the order
	Billing company name	Char(120)		Company name for the billing address on the order
	Billing address Line 1	Char(240)		First line of the billing address of the customer
	Billing address Line 2	Char(240)		Second line of the billing address of the customer
	Billing address Line 3	Char(240)		Third line of the billing address of the customer
	Billing county	Char(250)		County portion of the billing address
	Billing city	Char(120)		City portion of the billing address
	Billing state	Char(3)		State portion of the billing address
	Billing country ID	Char(3)		Country portion of the billing address
	Billing post	Char(30)		Postal code portion of the billing address
	Billing jurisdiction	Char(10)		Jurisdiction code of the billing country-state relationship
	Billing phone	Char(20)		Phone number in the billing information
TTAIL	Record type	Char(5)	TTAIL	Describes file record – marks end of order
	Line id	Number(10)		Unique file line id
	Transaction id	Number(10)		Unique transaction id
	#Lines in transaction	Number(10)		Number of lines in transaction
FTAIL	Record type	Char(5)	FTAIL	Describes file record – marks end of file
	Line id	Number(10)		Unique file line id

Record Name	Field Name	Field Type	Default Value	Description
	#lines	Number(10)		Total number of transaction lines in file (not including FHEAD and FTAIL)

For a new order, the "old" fields should be blank. For a changed order, both old and new fields should hold values. If the value has changed, "old" values come from the revision tables for the latest revision before the current one (the last one sent), while new orders come from the ordering tables.

FHEAD – REQUIRED: File identification, one line per file.

TORDR – REQUIRED: Order level information, one line per order.

TITEM – REQUIRED: Item description, multiple lines per order possible.

TPACK – OPTIONAL: Pack contents, multiple lines per order possible. This line will be written only for pack items.

TSHIP – REQUIRED: Ship to location and quantity, allocation location, multiple lines per item possible. Allocation information is optional on this line—will exist if premark_ind is 'Y'.

TCUST – OPTIONAL: Customer order information, one line per order. This line will be written only for Drop Ship Customer Orders.

TTAIL – REQUIRED: Order end, one line per order.

FTAIL – REQUIRED: End of file marker, one line per file.Output File Layout

Design Assumptions

N/A

ediupack (Upload Purchase Order and Purchase Order Change Acknowledgements from Suppliers to RMS)

Module Name	ediupack.pc
Description	Upload Purchase Order and Purchase Order Change Acknowledgements from Suppliers to RMS
Functional Area	Purchase Orders
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS48
Runtime Parameters	

Design Overview

This program has four functions: 1) to acknowledge vendor receipt of a buyer-generated order without changes, 2) to acknowledge vendor receipt of a buyer-generated order with date, cost or quantity modifications, 3) to notify buyer of a vendor-generated order, and 4) to acknowledge order cancellations.

All acknowledgements update the ORDHEAD table with acknowledgement information.

When the supplier sends the acknowledgement with modifications, they can send the entire purchase order or only the changes. The file details are matched to the current order. If the Not Before Date, Not After Date, Quantity, Price, and item all match the current order, then no changes were submitted. If one of the variables is blank, for example the price, assume that no pricing changes were made. As soon as one of the variables does not match, the order has been changed. These changes will not be written directly to the order; they will be written to the revision tables. Revisions will be accepted in the on-line ordering screens and changed orders will be resubmitted via EDIDLORD.

Vendor generated orders will create new orders by inserting new records on the EDI temporary order tables.

For Customer Order POs created through an external Order Management System (OMS) and Franchise Order POs, the modifications to the dates, quantity and cost are applied automatically (and will not need to be accepted online). Also, changes to Franchise POs through this program will not affect their associated Franchise orders.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 1
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The files will not have enough volume to warrant the implementation of restart recovery for commit/rollback considerations but minimal file-based restart/recovery capability will be added. The logical unit of work is a complete transaction represented by detail lines between the transaction header and transaction tail.

A savepoint will be issued before each transaction header record is successfully processed. If a non-fatal error occurs, a rollback to the last savepoint will be issued so that the rejected records are not posted to the database. If a fatal error occurs and restart is necessary, processing will restart at the last commit point.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
EDI_ORD_TEMP	No	Yes	Yes	No
DAILY_PURGE	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	Yes	Yes	No
ORDHEAD	Yes	No	Yes	No
ORDLOC	Yes	No	No	No
ORDSKU	Yes	No	No	No
ORDHEAD_REV	Yes	Yes	No	No
ORDLOC_REV	No	Yes	Yes	No
ORDSKU_REV	No	Yes	No	No
ORG_UNIT	Yes	No	No	No
PARTNER_ORG_UNIT	Yes	No	No	No
SUPS	Yes	No	No	No
PRICE_HIST	No	Yes	No	No
POS_MODS	No	Yes	No	No
ITEM_LOC_SOH	No	Yes	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000014

Input File

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number(10)	0000000001	Sequential file line number
	File Type Definition	Char(4)	ORAK	Identifies file as 'Order Acknowledgment Import'
THEAD	File record descriptor	Char(5)	THEAD	Describes file line type
	Line id	Number(10)	Line number in file	Sequential file line number

Record Name	Field Name	Field Type	Default Value	Description
	Transaction number	Number(10)		Sequential transaction number
	Acknowledge type	Char(2)		AP-product replenishment AK- Acknowledge or change CA-cancel order (no detail)
	Order number	Char(15)		May be external order number (vendor order number) OR Oracle Retail order number
	Written_date	Char(8)		Written date in YYYYMMDD format
	Supplier number	Number(10)		Supplier number
	Not before date	Char(8)		Not_before_date YYYYMMDD
	Not after date	Char(8)		Not_after_date YYYYMMDD
	Purchase type	Char(6)		Specifies type of purchase – may be blank
	Pickup date	Char(8)		Pickup_date YYYYMMDD – may be blank
TITEM	File record descriptor	Char(5)	TITEM	Describes file line type
	Line id	Number(10)	Line number in file	Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	ITEM	Char(25)		Item (either item or ref_item must be defined)
	Ref_item	Char(25)		Reference item (either item or ref_item must be defined)
	Vendor catalog number	Char(30)		VPN (Vendor Product Number)
	Unit cost value	Number(20)		Unit_cost * 10000 (4 implied decimal places)
	Loc_type	Char(2)		'ST' for store, 'WH' for warehouse
	Location	Number(10)		If NULL, apply to all locations for this item
	Pickup location	Char(250)		Location to pick up item – may be blank
TSHIP	File record descriptor	Char(5)	TSHIP	Describes file line type
	Line id	Number(10)	Line number in file	Sequential file line number
	Transaction number	Number(10)		Sequential transaction number

Record Name	Field Name	Field Type	Default Value	Description
	Store/wh indicator	Char(2)		'ST' for store, 'WH' for warehouse
	Ship to location	Number(10)		Store or warehouse number
	Quantity	Number(12)		Quantity ordered * 10000 (4 implied decimal places)
TTAIL	File record descriptor	Char(5)	TTAIL	Describes file line type
	Line id	Number(10)	Line number in file	Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	Lines in transaction	Number(6)		Total number of lines in this transaction
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	Line id	Number(10)	Line number in file	Sequential file line number
	Number of transactions	Number(10)		Number of lines between FHEAD and FTAIL

Design Assumptions

N/A

vrplbld (Build Purchase Orders for Vendor Generated Orders)

Module Name	vrplbld.pc
Description	Build Purchase Orders for Vendor Generated Orders
Functional Area	Purchase Orders
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	RMS387
Runtime Parameters	

Design Overview

This purpose of this module is to continue the process started by the batch program ediupack.pc of building purchase orders that reflect the vendor-generated orders as received through the EDI 855. This module will process records from the EDI_ORD_TEMP table and create the purchase orders on the PO tables.

prepost vrplbld post - truncates EDI_ORD_TEMP table.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Run after ediupack.pc
Pre-Processing	ediupack.pc
Post-Processing	prepost vrplbld post
Threading Scheme	Threaded by supplier

Restart/Recovery

The logical unit of work for the program is a vendor order number, department and supplier combination. The program's restartability is dependent on the value of the dept_level_orders column on the PROCUREMENT_UNIT_OPTIONS. Allowing multi-department orders ('N') will restart the program from the last successfully processed vendor order number and supplier. If the system requires a department on the orders ('Y'), then the program will restart from the last successfully processed vendor order number, department, and supplier.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
SUP_IMPORT_ATTR	Yes	No	No	No
SUPS	Yes	No	No	No
EDI_ORD_TEMP	Yes	No	No	No
WH	Yes	No	No	No
ORDSKU	Yes	Yes	Yes	No
ORDHEAD	Yes	Yes	Yes	No
ORDLOC	No	Yes	No	No
DEAL_CALC_QUEUE	Yes	Yes	Yes	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
PROCUREMENT_UNIT_OPTIONS	Yes	No	No	No
L10N_DOC_DETAILS_GTT	Yes	Yes	No	No
MV_L10N_ENTITY	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No
L10N_PKG_CONFIG	Yes	No	No	No
TSFHEAD	Yes	No	No	No
ORDHEAD_L10N_EXT	No	Yes	No	No
TSFHEAD_L10N_EXT	No	Yes	No	No
MRT_L10N_EXT	No	Yes	No	No
FM_SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

genpreiss (Generate Pre-Issued Order Numbers)

Module Name	genpreiss.pc
Description	Generate Pre-Issued Order Numbers
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS237
Runtime Parameters	

Design Overview

Based on records on the SUPP_PREISSUE table, this batch program reserves order numbers for suppliers that do Vendor Managed Inventory (VMI) by placing these pre-generated order numbers on the ORD_PREISSUE table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	This module can be run at any stage in the batch cycle. It is independent of other programs. If a custom program is created to download the pre-issued numbers, it will need to be run after genpreiss.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by supplier

Restart/Recovery

The logical unit of work for this program is set at thesupplier level, based on a single record from the SUPP_PREISSUE table. It uses v_restart_supplier to achieve restart/recovery.

The changes will be posted when the commit_max_ctr value is reached and the value of the counter is subject to change based on implementation. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUPP_PREISSUE	Yes	No	Yes	No
ORD_PREISSUE	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

supcnstr (Scale Purchase Orders Based on Supplier Constraints)

Module Name	supcnstr.pc
Description	Scale Purchase Orders Based on Supplier Constraints
Functional Area	Purchase Orders
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS368

Design Overview

This new batch program will process all orders eligible for scaling during the nightly replenishment run. The purpose of this program will be to select all of the orders created by the replenishment programs which are eligible for scaling. Once selected, the program will serve as a wrapper program and send each order number into the supplier constraint scaling library to actually perform the scaling on the order.
The orders which will be eligible for scaling are as follows:
If due order processing was used, only orders with a written date of today, origin type = 0 (replenishment order), due order processing indicator = 'Y', due order indicator = 'Y' and a scale order to constraint indicator = 'Y' will be processed. This encompasses all due orders created by replenishment which have constraints associated with them.

If due order processing was not used, only orders with a written date of today, origin type = 0 (replenishment order), ord_approve_ind = 'Y', status = 'W'orksheet, due order processing indicator = 'N', due order indicator = 'Y', and a scale order to constraint indicator = 'Y' will be processed. This encompasses all approved orders created by replenishment which have constraints associated with them.

For Franchise POs, their associated Franchise Orders will be updated when quantities of the franchise POs are changed due to supplier constraint.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Run after rplbld and before rplsplit
Pre-Processing	rplbld
Post-Processing	rplsplit
Threading Scheme	Threaded by supplier

Restart/Recovery

The logic unit of work for this program is an order number.

Locking Strategy

This batch locks ORD_INV_MGMT and ORDHEAD tables during day runs.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	Yes	No
ORD_INV_MGMT	Yes	No	Yes	No
PERIOD	Yes	No	No	No
WF_ORDER_HEAD	Yes	No	No	No
WF_ORDER_DETAIL	Yes	No	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

orddscnt (Apply Deal Discounts to Purchase Orders)

Module Name	orddscnt.pc
Description	Apply Deal Discounts to Purchase Orders
Functional Area	Purchase Orders
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS283
Runtime Parameters	

Design Overview

This module applies deals to a purchase order by calculating the discounts and rebates that are applicable to a purchase order. It will fetch orders that need to be recalculated for cost from the DEAL_CALC_QUEUE table. Using the dealordlib shared library, it will update the unit cost and populate the ORDLOC_DISCOUNT and ORDHEAD_DISCOUNT tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program should run after DITINSRT. It should run before DISCOTBAPPLY in Phase 4, and before DEALCLS or DEALPRG in the deals batch cycle
Pre-Processing	Ditinsrt, sccext, reclsdly
Post-Processing	Discotapply, dealcls
Threading Scheme	Multithreaded by supplier

Restart/Recovery

This program has inherent restart ability, since records are deleted from deal_calc_queue as they are processed. Recommended maximum commit counter is low.

Key Tables Affected

Table	Select	Insert	Update	Delete
DISC_OTB_APPLY	No	Yes	No	No
REV_ORDERS	No	Yes	No	No
ORD_LC_AMENDMENTS	No	Yes	Yes	Yes

Table	Select	Insert	Update	Delete
DEAL_CALC_QUEUE	Yes	No	No	Yes
ORDHEAD	Yes	No	No	No
SUPS	Yes	No	No	No
CURRENCIES	Yes	No	No	No
ORDLOC_INVC_COST	No	Yes	Yes	Yes
ORDLOC	Yes	No	Yes	No
ORDLOC_DISCOUNT	No	Yes	Yes	Yes
ORDHEAD_DISCOUNT	No	Yes	No	Yes
ORDLOC_DISCOUNT_BUILD	No	Yes	No	Yes
ORD_LC_AMENDMENTS	No	Yes	Yes	Yes
L10N_DOC_DETAILS_GTT	Yes	Yes	No	No
MV_L10N_ENTITY	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No
L10N_PKG_CONFIG	Yes	No	No	No
TSFHEAD	Yes	No	No	No
FM_SYSTEM_OPTIONS	Yes	No	No	No
WH	Yes	No	No	No
EXCHANGE_RATES	Yes	No	No	No
STATE	Yes	No	No	No
COUNTRY	Yes	No	No	No
ADDR	Yes	No	No	No
COUNTRY_TAX_JURISDICTION	Yes	No	No	No
VAT_CODES	Yes	No	No	No
ELC_COMP	Yes	No	No	No
FM_FISCAL_UTILIZATION	Yes	No	No	No
RURAL_PROD_IND	Yes	No	No	No
RETAIL_SERVICE_REPORT_URL	Yes	No	No	No
ORD_TAX_BREAKUP	Yes	Yes	Yes	No
GTAX_ITEM_ROLLUP	Yes	Yes	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ordupd (Update Retail Values on Open Purchase Orders)

Module Name	ordupc.pc
Description	Update Retail Values on Open Purchase Orders
Functional Area	Purchase Orders
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	RMS287
Runtime Parameters	

Design Overview

This program will be used to automatically change all retail prices on purchase orders when a retail price change is implemented for an item on the order with the status of 'Worksheet',' Submit' and 'Approve'.

Open to buy is updated to give a more accurate picture of the retail value of open orders if the order is 'Approved' and if the department calculate the OTB as retail.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program should be run after RPM price change extraction process to ensure that all price changes have been handled by batch processing
Pre-Processing	sccext
Post-Processing	Otbdnld, otbdlsal, otbdlord
Threading Scheme	Multithreaded on Location

Restart/Recovery

This program does not contain restart/recovery logic.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDLOC	Yes	No	Yes	No
ORDHEAD	Yes	No	No	No
PRICE_HIST	Yes	No	No	No
OTB	Yes	No	Yes	No
ITEM_MASTER	Yes	No	No	No
DEPS	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ordautcl (Auto Close Purchase Orders)

Module Name	ordautcl.pc
Description	Auto Close Purchase Orders
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS282
Runtime Parameters	

Design Overview

This batch program is used to process POs that need to be deleted or closed that meet certain conditions. The criteria are as mentioned below:

Category 1:

- The order is not in 'C'ompleted status and was previously approved.
- The number of days between the latest ship date and the current date is greater than the 'Approved PO Close Delay' system parameter.
- There are no open shipments for the order.

Category 2:

- The order is not in 'C'ompleted status and was previously approved.
- A specified amount of time ('Approved PO Close Delay' system parameter) after the not after date of the PO has passed.
- A specified amount of time ('Partially Received PO Close Delay' system parameter) after the not after date has passed.
- A specified amount of time ('Partially Received PO Close Delay' system parameter) after the expected receipt date (or shipped date if the expected date has not been captured) has passed.
- There are no open appointments in the system for the order.

Category 3:

- The order has a status of worksheet or submitted, and the order has never been previously approved.
- The number of days between the current date and the order creation date is greater than the 'Worksheet PO Clean Up Delay' system parameter.
- The order is a manual order (not created by replenishment).

Retrieved orders are subsequently processed based on their category:

1. Category 1 orders will be closed. Closing an order involves adjusting the order quantities, shipment quantities and OTB. Any allocation associated with the order will also be closed if it is released 'X' number of days before vdate. The 'X' number of days is defaulted from an external system and set on the RMS codes table for code_type 'DEFT'.
2. For category 2 orders, orders will be closed if there are no pending receipts or if the 'Auto Close Partially Received' system indicator is set to 'Y'.
3. Category 3 orders will be deleted from the system.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	The program should be run in the final phase of the batch along with the other purging modules

Schedule Information	Description
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Restart recovery is implicit since the program purges and cancels records in the database one order at a time.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	Yes	Yes
SHIPMENT	Yes	No	Yes	No
APPT_HEAD	Yes	No	No	No
APPT_DETAIL	Yes	No	No	No
SHIPSKU	Yes	No	Yes	No
ORDLOC	No	No	Yes	Yes
ALLOC_DETAIL	No	No	Yes	Yes
OBLIGATION_COMP	No	No	No	Yes
WO_DETAIL	No	No	No	yes
WO_HEAD	No	No	No	Yes
WO_SKU_LOC	No	No	No	Yes
WO_WIP	No	No	No	Yes
ALLOC_CHRG	No	No	No	Yes
ALLOC_HEADER	No	No	No	Yes
ORDLOC_DISCOUNT	No	No	No	Yes
TIMELINE	No	No	No	Yes
ORDSKU_TEMP	No	No	No	Yes
ORDLOC_TEM	No	No	No	Yes
ALLOC_CHRG_TEMP	No	No	No	Yes
ALLOC_DETAIL_TEMP	No	No	No	Yes
ALLOC_HEADER_TEMP	No	No	No	Yes
ORDLOC_EXP_TEMP	No	No	No	Yes
ORDSKU_HTS_ASSESS_TEMP	No	No	No	Yes
ORDSKU_HTS_TEMP	No	No	No	Yes
ORDLOC_DISCOUNT_TEMP	No	No	No	Yes

Table	Select	Insert	Update	Delete
TIMELINE_TEMP	No	No	No	Yes
REQ_DOC_TEMP	No	No	No	Yes
WO_DETAIL_TEMP	No	No	No	Yes
WO_HEAD_TEMP	No	No	No	Yes
ORDLOC_WKSHT	No	No	No	Yes
ORDLOC_REV	No	No	No	Yes
ORDSKU_REV	No	No	No	Yes
ORDSKU	No	No	No	Yes
ORDCUST	No	No	No	Yes
ORDHEAD_REV	No	No	No	Yes
ORDLC	No	No	No	Yes
DEAL_COMP_PROM	No	No	No	Yes
DEAL_ITEMLOC	No	No	No	Yes
DEAL_THRESHOLD	No	No	No	Yes
DEAL_DETAIL	No	No	No	Yes
DEAL_QUEUE	No	No	No	Yes
DEAL_CALC_QUEUE	No	No	No	Yes
DEAL_HEAD	No	No	No	Yes
ORD_INV_MGMT	No	No	No	Yes
REPL_RESULTS	No	No	No	Yes
REV_ORDERS	No	No	No	Yes
REQ_DOC	No	No	No	Yes
ORD_PREISSUE	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ordrev (Write Purchase Order Information to Purchase Order History Tables)

Module Name	ordrev.pc
Description	Write Purchase Order Information to Purchase Order History Tables
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS286
Runtime Parameters	

Design Overview

Ordrev.pc will write versions of approved orders to the order revision history tables. When orders are approved or when approved orders are modified, this program selects order numbers from the REV_ORDERS table and writes current order information to the order/allocation revision tables. After the new version has been written to the order revision tables, all records will be deleted from the REV_ORDERS table for that order_no.

This program processes order changes made by the client that may need to be sent to the vendor. The order changes should always be referred to as 'versions' and kept clearly distinct from order 'revisions' which are vendor changes uploaded via the ediupack program.

If an order is not in approved status at the time the batch program runs, then none of the above processing will occur. These records will stay on the REV_ORDERS table until the PO is approved or deleted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After orddscnt.pc and before edidlord.pc
Pre-Processing	orddscnt.pc
Post-Processing	edidlord.pc.
Threading Scheme	Multithreading based on order_no.

Restart/Recovery

Restart ability will be implied because the records that are selected from the driving cursor will be deleted before the commit. Restart library functions will still be included to ensure that rollback segments are not exceeded (by committing at intervals) and to perform basic record keeping functionality. The logical unit of work is order_no.

Key Tables Affected

Table	Select	Insert	Update	Delete
REV_ORDERS	Yes	No	No	Yes
ORDHEAD	Yes	No	Yes	No
SUPS	Yes	No	No	No
ORDHEAD_REV	Yes	Yes	No	No
ORDSKU	Yes	No	No	No
ORDLOC	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
ORDSKU_REV	No	Yes	No	No
ORDLOC_REV	No	Yes	No	No
ALLOC_REV	No	Yes	No	No
FIF_ORDHEAD	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ordprg (Purge Aged Purchase Orders)

Module Name	ordprg.pc
Description	Purge Aged Purchase Orders
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS285
Runtime Parameters	

Design Overview

The purpose of this module is to remove old purchase orders from the system.

If importing is not enabled in the system (as defined by the import system indicator = 'N') and if invoice matching is not installed, then all details associated with an order are deleted when the order has been closed for more months than specified in 'Order History Months' purge parameter. Orders will only be deleted if all allocations associated, if any, have been closed.

If invoice matching is installed, then all details associated with an order are deleted when the order has been closed for more months than specified in the 'Order History Months' purge parameter. Orders are deleted only if allocations associated have been closed, shipments from the order have been completely matched to invoices or closed, and all those invoices have been posted.

If importing is enabled in the system (as defined by the import system indicator = 'Y') and if invoice matching is not installed, then all details associated with the order are deleted when the order has been closed for more months than specified in the 'Order History Months' purge option. This action presupposes that all ALC records associated with an order are in 'Processed' status, specified in ALC_HEAD (status) and allocations associated to the order, if any, have been closed.

If invoice matching is installed, then all details associated with an order are deleted when the order has been closed for more months than specified in the 'Order History Months' purge parameter. This action presupposes that all ALC records associated with an order are in 'Processed' status, specified in ALC_HEAD (status), all allocations associated to the order, if any, have been closed, all shipments from the order have been completely matched to invoices or closed, and all those invoices have been posted.

If the order to be purged is an import PO and it doesn't have a letter of credit (LC) then purge the related records related to obligations, ALC and ICB transfers.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	Run before invprg, wfrtnprg
Pre-Processing	N/A
Post-Processing	invprg, wfrtnprg
Threading Scheme	N/A

Restart/Recovery

Restart ability will be implied, because the records that are selected from the driving cursor will be deleted before the commit. Restart library functions will still be included to ensure that rollback segments are not exceeded (by committing at intervals) and to perform basic record keeping functionality.

Key Tables Affected

Table	Select	Insert	Update	Delete
PURGE_CONFIG_OPTIONS	Yes	No	No	No
ORDHEAD	Yes	No	No	Yes
ORDLC	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	Yes
SHIPMENT	Yes	No	No	Yes
SHIPSKU	Yes	No	Yes	Yes
INVC_HEAD	Yes	No	No	Yes
ORDLOC_REV	No	No	No	Yes
ORDHEAD_REV	No	No	No	Yes
ALLOC_REV	No	No	No	Yes
ALC_HEAD	Yes	No	No	Yes
ALC_COMP_LOC	No	No	No	Yes
OBLIGATION_COMP_LOC	No	No	No	Yes
OBLIGATION_COMP	No	No	No	Yes
OBLIGATION	No	No	No	Yes
TRANSPORTATION	Yes	No	No	Yes
MISSING_DOC	No	No	No	Yes
TRANS_PACKING	No	No	No	Yes
TRANS_DELIVERY	No	No	No	Yes
TRANS_CLAIMS	No	No	No	Yes
TRANS_LIC_VISA	No	No	No	Yes
TRANS_SKU	No	No	No	Yes
CE_ORD_ITEM	Yes	No	No	Yes
CE_LIC_VISA	No	No	No	Yes
CE_CHARGES	No	No	No	Yes
CE_SHIPMENT	No	No	No	Yes
CE_PROTEST	No	No	No	Yes
CE_FORMS	No	No	No	Yes
CE_HEAD	v	No	No	Yes
APPT_HEAD	Yes	No	No	Yes
APPT_DETAIL	Yes	No	No	Yes
DOC_CLOSE_QUEUE	No	No	No	Yes
DAILY_PURGE	No	Yes	No	No
ORDSKU	Yes	No	No	Yes
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
PACKITEM	Yes	No	No	No
PACK_TMPL_HEAD	Yes	No	No	No
RTV_DETAIL	No	No	No	Yes
WO_DETAIL	No	No	No	Yes
CARTON	No	No	No	Yes
WO_HEAD	Yes	No	No	Yes
ALLOC_CHRG	No	No	No	Yes
ALLOC_DETAIL	No	No	No	Yes
TIMELINE	No	No	No	Yes
ORDLOC	No	No	No	Yes
ORDLOC_DISCOUNT	No	No	No	Yes
ORDLOC_EXP	No	No	No	Yes
ORDSKU_HTS_ASSESS	No	No	No	Yes
ORDSKU_HTS	No	No	No	Yes
REQ_DOC	No	No	No	Yes
ORDSKU_REV	No	No	No	Yes
ORDLOC_INVC_COST	No	No	Yes	Yes
ORDCUST	No	No	No	Yes
ORD_XDOCK_TEMP	No	No	No	Yes
INVC_XREF	No	No	No	Yes
INVC_MATCH_WKSHT	No	No	No	Yes
ORDLOC_WKSHT	No	No	No	Yes
SUP_VIOLATION	No	No	No	Yes
REV_ORDERS	No	No	No	Yes
LC_ORDAPPLY	No	No	No	Yes
ORDHEAD_DISCOUNT	No	No	No	Yes
RUA_RIB_INTERFACE	No	No	No	Yes
ORDLOC_TEMP	No	No	No	Yes
ALLOC_CHRG_TEMP	No	No	No	Yes
ALLOC_DETAIL_TEMP	No	No	No	Yes
ALLOC_HEADER_TEMP	No	No	No	Yes
ORDSKU_TEMP	No	No	No	Yes
ORDLOC_EXP_TEMP	No	No	No	Yes
ORDSKU_HTS_ASSESS_TEMP	No	No	No	Yes
ORDSKU_HTS_TEMP	No	No	No	Yes
ORDLOC_DISCOUNT_TEMP	No	No	No	Yes

Table	Select	Insert	Update	Delete
TIMELINE_TEMP	No	No	No	Yes
REQ_DOC_TEMP	No	No	No	Yes
WO_DETAIL_TEMP	No	No	No	Yes
WO_HEAD_TEMP	No	No	No	Yes
REPL_RESULTS_TEMP	No	No	No	Yes
DEAL_COMP_PROM	No	No	No	Yes
DEAL_HEAD	Yes	No	No	Yes
DEAL_THRESHOLD	No	No	No	Yes
DEAL_DETAIL	No	No	No	Yes
DEAL_QUEUE	No	No	No	Yes
ORD_INV_MGMT	No	No	No	Yes
REPL_RESULTS	No	No	No	Yes
INVC_DETAIL	No	No	No	Yes
INVC_NON_MERCH	No	No	No	Yes
INVC_MERCH_VAT	No	No	No	Yes
INVC_DETAIL_VAT	No	No	No	Yes
INVC_DISCOUNT	No	No	No	Yes
INVC_TOLERANCE	No	No	No	Yes
INVC_MATCH_QUEUE	No	No	No	Yes
TSFHEAD	No	No	No	Yes
TSFDETAIL	No	No	No	Yes
TSFDETAIL_CHRG	No	No	No	Yes
DEAL_ITEMLOC_ITEM	No	No	No	Yes
DEAL_ITEMLOC_DCS	No	No	No	Yes
DEAL_ITEMLOC_DIV_GRP	No	No	No	Yes
DEAL_ITEMLOC_PARENT_DIFF	No	No	No	Yes
ORDHEAD_L10N_EXT	No	No	No	Yes
ORD_TAX_BREAKUP	No	No	No	Yes
ORDHEAD_CFA_EXT	No	No	No	Yes
DEALHEAD_CFA_EXT	No	No	No	Yes
TSFHEAD_CFA_EXT	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

poindbatch.ksh (Upload Order Data)

Module Name	poindbatch.ksh
Description	Upload Order Data
Functional Area	Purchase Order Maintenance
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	Database connection, Input File Name, Template Name, Destination (Optional Input Parameter.)

Design Overview

This batch program is used to Bulk upload xml file data from template files to S9T_FOLDER table (into content_xml column).

This batch will be responsible for validating the input parameters, below are the list of validations.

- The Input file should exist.
- The Input file's extension must be ".xml".
- The template_name should be valid. Function S9T_PKG.CHECK_TEMPLATE is called for validation.
- Destination (Optional Parameter) should be STG or RMS. If destination is not passed then default it to STG.

Once xml data is loaded into S9T_FOLDER table, the script will do post processing by calling below packages

- PO_INDUCT_SQL.INIT_PROCESS - This initialize a row in svc_process_tracker for asynchronous processing.

- RMS_ASYNC_PROCESS_SQL.ENQUEUE_PO_INDUCT – This function en-queues the record for processing.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
S9T_FOLDER	No	Yes	No	No
S9T_TEMPLATE	Yes	No	No	No
SVC_PROCESS_TRACKER	No	Yes	No	No
RMS_ASYNC_STATUS	No	Yes	No	No
RMS_ASYNC_RETRY	No	Yes	No	No

po_indctn_purge.ksh (Purge PO Induction Staging Tables)

Module Name	po_indctn_purge.ksh
Description	Purge PO induction staging tables
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	Shell Script
Catalog ID	
Runtime Parameters	

Design Overview

The purpose of this module is to remove old purchase order records from the staging tables. Records that are candidates for deletion are:

- Processes that have successfully been processed or processed with warnings that have been uploaded to RMS or downloaded to S9T
- Processes that have status = 'PE' processed with errors and have no liked data
- Processes in error status where all other related records containing the process ID have been processed successfully
- Processes that are passed the data retention days (system_options.proc_data_retention_days)
- All order records within a process where all related records for the order in the other staging tables are successfully uploaded to RMS. The process tracker record should not be deleted if there are other orders that are not uploaded to RMS.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Restart ability will be implied, because the records that are selected from the cursor will be deleted before the commit.

Key Tables Affected

Table	Select	Insert	Update	Delete
PROC_DATA_RETENTION_DAYS	Yes	No	No	No
SVC_PROCESS_TRACKER	Yes	No	No	Yes
SVC_ORDHEAD	Yes	No	No	Yes
SVC_ORDDETAIL	Yes	No	No	Yes
SVC_ORDLOC_EXP	Yes	No	No	Yes
SVC_ORDLC	Yes	No	No	Yes
SVC_ORDSKU_HTS	Yes	No	No	Yes
SVC_ORDSKU_HTS_ASSESS	Yes	No	No	Yes
SVC_CFA_EXT	Yes	No	No	Yes
CORESVC_PO_ERR	No	No	No	Yes
S9T_ERRORS	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
CORESVC_PO_CHUNKS	Yes	No	No	Yes
S9T_FOLDER	Yes	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

7 Deals

Overview

Deals are complex business processes that can either affect the cost a retailer pays for goods purchased from a supplier (off invoice deals) or generate income from suppliers/partners (billback/rebate deals). These basic types of deals require different processing. This chapter contains information about the batch processes that support all types of Deals.

For additional information about Deals, including detailed flow diagrams, see the Merchandising Functional Library (Doc ID: 1585843.1).

Note: The White Papers in this library are intended only for reference and educational purposes and may not reflect the latest version of Oracle Retail software.

Program Summary

Program	**Description**
dealupld.pc	Upload of Deals from 3rd Party Systems
batch_ditinsrt.ksh	Deal Calculation Queue Insert Multithreading
ditinsrt.pc	Insert into Deal Calculation Queue
discotbapply.pc	Update OTB After Deal Discounts
dealact.pc	Calculate Actual Impact of Billback Deals
dealinc.pc	Calculate Weekly/Monthly Income Based on Turnover
dealday.pc	Daily Posting of Deal Income to Stock & General Ledgers
dealfct.pc	Calculates/Update Forecasted Values for Deals
vendinvc.pc	Stage Complex Deal Invoice Information
vendinvf.pc	Stage Fixed Deal Invoice Information
dealcls.pc	Close Expired Deals
dealprg.pc	Purge Closed Deals

dealupld (Upload of Deals from 3rd Party Systems)

Module Name	dealupld.pc
Description	Upload of Deals from 3rd Party Systems
Functional Area	Deals
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS42
Runtime Parameters	

Design Overview

Dealupld.pc uploads deals from external systems into RMS. Generally, deals are uploaded from merchandise suppliers and other trading partners. Dealupld uses a proprietary file format (not any EDI standard).

Both deals uploaded via dealupld.pc and deals created via the user interface are written to a series of deals tables for deals processing.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 0
Frequency	Daily
Scheduling Diagram	This program should run as the first batch in the Deals batch cycle
Pre-processing	N/A
Post-Processing	N/A

Restart/Recovery

The program uses File based restart recovery process. The logical unit of work is a single deal head detail record and its associated component records in the input file.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	No	No
SUPS	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
DEAL_COMP_TYPE	Yes	No	No	No

Table	Select	Insert	Update	Delete
DEPS	Yes	No	No	No
GROUPS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
STORE	Yes	No	No	No
DISTRICT	Yes	No	No	No
REGION	Yes	No	No	No
AREA	Yes	No	No	No
CHAIN	Yes	No	No	No
WH	Yes	No	No	No
LOC_LIST_HEAD	Yes	No	No	No
LOC_LIST_DETAIL	Yes	No	No	No
COUNTRY	Yes	No	No	No
PACKITEM_BREAKOUT	Yes	No	No	No
PACKITEM	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
DEAL_HEAD	No	Yes	No	No
DEAL_DETAIL	No	Yes	No	No
DEAL_ITEM_LOC	No	Yes	No	No
POP_TERMS_DEF	No	Yes	No	No
DEAL_THRESHOLD	No	Yes	No	No
PARTNER_ORG_UNIT	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000008

The input file structure should be as below:

```
FHEAD
{
      THEAD of DHDTL    REQUIRED    for deal head record
            TDETL       REQUIRED    1 deal head record
      TTAIL             REQUIRED    end of deal head record
      THEAD of DCDTL    REQUIRED    for deal component records
      [
            TDETL       OPTIONAL    for deal component records
      ]
      TTAIL             REQUIRED    end of deal component records
      THEAD of DIDTL    REQUIRED    for item-loc records
      [
            TDETL       OPTIONAL    for item-loc records
      ]
      TTAIL             REQUIRED    end of item-loc records
      THEAD of PPDTL    REQUIRED    for proof of performance
records
      [
            TDETL       OPTIONAL    for proof of performance
records
      ]
      TTAIL             REQUIRED    end of proof of performance
records
      THEAD of DTDTL    REQUIRED    for threshold records
      [
            TDETL       OPTIONAL    for threshold records
      ]
      TTAIL             REQUIRED    end of threshold records
}
FTAIL
```

Record Name	Field Name	Field Type	Default Value	Description/Constraints
FHEAD	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type (the beginning of the input file)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	File Type Definition	Char(5)	EDIDU	Identifies file as 'EDI Deals Upload'
	File Create Date	Char(14)	Create date	Current date, formatted to 'YYYYMMDDHH24MISS'
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type to upload a new deal header
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Transaction Detail Record Type	Char(5)	DHDTL	Identifies file record type Deal Header. This record MUST BE FOLLOWED BY ONE AND ONLY ONE REQUIRED TDETL RECORD that holds the deal head information
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type to upload a new deal
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Partner Type	Char(6)	REQUIRED	Type of the partner the deal applies to. Valid values are 'S' for a supplier, 'S1' for supplier hierarchy level 1 (for example, the manufacturer), 'S2' for supplier hierarchy level 2 (for example, the distributor) and 'S3' for supplier hierarchy level 3 (that is, the wholesaler). Descriptions of these codes will be held on the codes table under a code_type of 'SUHL' Information pertaining to a single deal has to belong to the same supplier, since a deal may have only one supplier hierarchy associated with it. Only items with the same supplier hierarchy can be on the same deal. Supplier hierarchy is stored at an item / supplier / country / location level
	Partner Id	Char(10)	Blank (space character string)	Level of supplier hierarchy (for example, manufacturer, distributor or wholesaler), set up as a partner in the PARTNER table, used for assigning rebates by a level other than supplier. Rebates at this level will include all eligible supplier/item/country records assigned to this supplier hierarchy level This field is required if the Partner Type field was set to 'S1', 'S2' or 'S3'. This field must be blank if the Partner Type field was set to 'S'
	Supplier	Number (10)	Blank (space character string)	Deal supplier's number. This supplier can be at any level of supplier hierarchy This field is required if the Partner Type field was set to 'S'. This field must be blank if the Partner Type field was set to 'S1', 'S2' or 'S3'

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Type	Char(6)	REQUIRED	Type of the deal. Valid values are A for annual deal, P for promotional deal, O for PO-specific deal or M for vendor-funded markdown. Deal types will be held on the codes table under a code type of 'DLHT'
	Currency Code	Char(3)	Blank (space character string)	Currency code of the deal's currency. All costs on the deal will be held in this currency If Type is 'O', 'P' or 'A', then Currency Code may not be blank. Currency Code has to be blank if Type is 'M'
	Active Date	Char(14)	REQUIRED	Date the deal will become active. This date will determine when deal components begin to be factored into item costs. For a PO-specific deal, the active_date will be the order's written date
	Close Date	Char(14)	Blank (space character string)	Date the deal will/did end. This date determines when deal components are no longer factored into item costs. It is optional for annual deals, required for promotional deals. It will be left NULL for PO-specific deals Close Date must not be blank if Type is 'P' or 'M'. Close Date has to be blank if Type is 'O'
	External Reference Number	Char(30)	Blank (space character string)	Any given external reference number that is associated with the deal
	Order Number	Number (12)	Blank (space character string)	Order the deal applies to, if the deal is PO-specific
	Recalculate Approved Orders	Char(1)	REQUIRED	Indicates if approved orders should be recalculated based on this deal once the deal is approved. Valid values are Y for yes or N for no Valid values are 'Y' and 'N'
	Comments	Char (2000)	Blank (space character string)	Free-form comments entered with the deal
	Billing Type	Char(6)	REQUIRED	Billing type of the deal component. Valid values are 'OI' for off-invoice, 'BB' for bill-back, 'VFP' for vendor funded promotion and 'VFM' for vendor funded markdown. Billing types will be held on the codes table under a code type of 'DLBT'

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Bill Back Period	Char(6)	Blank (space character string)	Code that identifies the bill-back period for the deal component. This field will only be populated for billing types of 'BB' or 'VFP' or 'VFM'. Valid bill back period codes are 'W', 'M', 'Q', 'H', 'A'. If Billing Type is 'BB' then Bill Back Period must not be blank; if Billing Type is 'OI' (off invoice), then Bill back Period has to be blank
	Deal Application Timing	Char(6)	Blank (space character string)	Indicates when the deal component should be applied - at PO approval or time of receiving. Valid values are 'O' for PO approval, 'R' for receiving. These values will be held on the codes tables under a code type of 'AALC'. It must be NULL for an M-type deal (vendor funded markdown)
	Threshold Limit Type	Char(6)	Blank (space character string)	Identifies whether thresholds will be set up as qty values, currency amount values or percentages (growth rebates only). Valid values are 'Q' for qty, 'A' for currency amount. Threshold limit types will be held on the codes table under a code type of 'DLLT'. It must be NULL for an M-type deal (vendor funded markdown) or if the threshold value type is 'Q' (buy/get deals). If Growth Rebate Indicator is 'Y', then the Threshold Limit Type has to be 'Q', 'A' or NULL
	Threshold Limit Unit of Measure	Char(4)	Blank (space character string)	Unit of measure of the threshold limits, if the limit type is quantity. Only Unit of Measures with a UOM class of 'VOL' (volume), 'MASS' or 'QTY' (quantity) can be used in this field. Valid Unit of Measures can be found on the UOM_CLASS table If the Threshold Limit Type is 'A', then Threshold Limit Unit of Measure has to be blank. If the Threshold Limit Type is 'Q', Threshold Limit Unit of Measure must not be blank. If Threshold Limit Type is blank, Threshold Limit Unit of Measure must be blank
	Rebate Indicator	Char(1)	REQUIRED	Indicates if the deal component is a rebate. Deal components can only be rebates for bill-back billing types. Valid values are 'Y' for yes or 'N' for no. If Billing Type is 'OI', then Rebate Indicator must be 'N'

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Rebate Calculation Type	Char(6)	Blank (space character string)	Indicates if the rebate should be calculated using linear or scalar calculation methods. Valid values are 'L' for linear or 'S' for scalar. This field will be required if the rebate indicator is 'Y'. Rebate calculation types will be held on the codes table under a code type of 'DLCT' If Rebate Indicator is 'Y', then Rebate Calculation Type must not be blank. Otherwise it has to be blank
	Growth Rebate Indicator	Char(1)	REQUIRED	Indicates if the rebate is a growth rebate, meaning it is calculated and applied based on an increase in purchases or sales over a specified period of time. Valid values are 'Y' for yes or 'N' for no If Rebate Indicator is 'N', then Growth Rebate Indicator must be 'N'
	Historical Comparison Start Date	Char(14)	Blank (space character string)	The first date of the historical period against which growth will be measured in this growth rebate. Note performance and the rebate amount are not calculated - this field is for informational/reporting purposes only If Growth Rebate Indicator is 'Y', then Historical Comparison Start Date must not be blank. Otherwise it must be blank
	Historical Comparison End Date	Char(14)	Blank (space character string)	The last date of the historical period against which growth will be measured in this growth rebate. Note performance and the rebate amount are not calculated - this field is for informational/reporting purposes only If Growth Rebate Indicator is 'Y', then Historical Comparison End Date must not be blank. Otherwise it must be blank
	Rebate Purchases or Sales Application Indicator	Char(6)	Blank (space character string)	Indicates if the rebate should be applied to purchases or sales. Valid values are 'P' for purchases or 'S' for sales. It will be required if the rebate indicator is 'Y'. Rebate purchase/sales indicators will be held on the codes table under a code type of 'DLRP' If the Rebate Indicator is 'Y', then the Rebate Purchases or Sales Application Indicator must not be blank. Otherwise it has to be blank

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Security Indicator	Char	Y	Security Indicator
TTAIL	File Line Identifier	Char(5)	TTAIL	Identifies file record type (the end of the transaction detail)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Record Counter	Numeric ID(6)	Sequential number Created by program.	Number of records/transactions in current transaction set (only records between thead and ttail). For DHDTL TDETL records this will always be 1
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type to upload a new deal sub loop
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Detail Record Type	Char(5)	DCDTL	Identifies file record type of sub loop as Deal Component Detail
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type to upload deal components
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Deal Component Type	Char(6)	REQUIRED	Type of the deal component, user-defined and stored on the DEAL_COMP_TYPE table
	Application Order	Number (10)	Blank (space character string)	Number indicating the order in which the deal component should be applied with respect to any other deal components applicable to the item within the deal. This number will be unique across all deal components within the deal. It must be NULL for an M-type deal (vendor funded markdown)
	Collect Start Date	Char(14)	Blank (space character string)	Date that collection of the bill-back should begin If Billing Type is 'BB' then Collect Start Date must not be blank, otherwise it has to be blank

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Collect End Date	Char(14)	Blank (space character string)	Date that collection of the bill-back should end If Billing Type is 'BB' then Collect End Date must not be blank, otherwise it has to be blank
	Cost Application Level Indicator	Char(6)	Blank (space character string)	Indicates what cost bucket the deal component should affect. Valid values are 'N' for net cost, 'NN' for net cost and 'DNN' for dead net cost. These values will be held on the codes tables under a code type of 'DLCA'. It must be NULL for an M-type deal (vendor funded markdown)
	Pricing Cost Indicator	Char(1)	REQUIRED	Identifies deal components that should be included when calculating a pricing cost Valid values are 'Y'es and 'N'o
	Deal Class	Char(6)	Blank (space character string)	Identifies the calculation class of the deal component. Valid values are 'CU' for cumulative (discounts are added together and taken off as one lump sum), 'CS' for cascade (discounts are taken one at a time with subsequent discounts taken off the result of the previous discount) and 'EX' for exclusive (overrides all other discounts). 'EX' type deal components are only valid for promotional deals. Deal classes will be held on the codes table under a code type of 'DLCL'. It must be NULL for an M-type deal (vendor funded markdown)
	Threshold Value Type	Char(6)	Blank (space character string)	Identifies whether the discount values associated with the thresholds will be set up as qty values, currency amount values, percentages or fixed amounts. Valid values are 'Q' for qty, 'A' for currency amount, 'P' for percentage or 'F' for fixed amount. Qty threshold value (buy/get) deals are only allowed on off-invoice discounts. Deal threshold value types will be held on the codes table under a code type of 'DLL2'. It must be NULL for an M-type deal (vendor funded markdown). If Billing Type is 'BB', then the Threshold Value Type must be'A' or 'P'

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Buy Item	Char(25)	Blank (space character string)	Identifies the item that must be purchased for a quantity threshold-type discount. This value is required for quantity threshold value type discounts. Otherwise it has to be blank
	Get Type	Char(6)	Blank (space character string)	Identifies the type of the 'get' discount for a quantity threshold-type (buy/get) discount. Valid values include 'X' (free), 'P' (percent), 'A' (amount) and 'F' (fixed amount). They are held on the codes table under a code type of 'DQGT'. This value is required for quantity threshold value deals. Otherwise it has to be blank
	Get Value	Number(20,4)	All 0s.	Identifies the value of the 'get' discount for a quantity threshold-type (buy/get) discount that is not a 'free goods' deal. The Get Type above identifies the type of this value. This value is required for quantity threshold value type deals that are not a Get Type of free. Otherwise it has to be 0 If Get Type is 'P', 'A' or 'F', then Get Value must not be blank. If the Get Type is 'X' or blank, then Get Value has to be blank
	Buy Item Quantity	Number(12,4)	All 0s.	Identifies the quantity of the threshold 'buy' item that must be ordered to qualify for the 'free' item. This value is required for quantity threshold value type discounts. Otherwise it has to be 0
	Recursive Indicator	Char(1)	REQUIRED	For 'buy/get free' discounts, indicates if the quantity threshold discount is only for the first 'buy amt.' purchased (e.g. for the first 10 purchased, get 1 free), or if a free item will be given for every multiple of the 'buy amt' purchased on the order (e.g. for each 10 purchased, get 1 free). Valid values are 'Y' for yes or 'N' for no If the Get Type is blank, then Recursive Indicator has to be 'N'
	Buy Item Order Target Quantity	Number(12,4)	All 0s.	Indicates the targeted purchase level for all locations on a purchase order. This is the target level that will be used for future calculation of net cost. This value is required for quantity threshold value type deals. Otherwise it has to be 0

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Average Buy Item Order Target Quantity Per Location	Number(12,4)	All 0s.	Indicates the average targeted purchase level per location on the deal. This value will be used in future cost calculations. This value is required for quantity threshold value type deals. Otherwise it has to be 0
	Get Item	Char(25)	Blank (space character string)	Identifies the 'get' item for a quantity threshold-type (buy/get) discount. This value is required for quantity threshold value deals. Otherwise it has to be blank If Get Type is 'P', 'A', 'F' or 'X', then Get Item must not be blank. If the Get Type is blank, then Get Item has to be blank
	Get Quantity	Number(12,4)	All 0s.	Identifies the quantity of the identified 'get' item that will be given at the specified 'get' discount if the 'buy amt' of the buy item is purchased. This value is required for quantity threshold value type discounts. Otherwise it has to be 0 If Get Type is 'P', 'A', 'F' or 'X', then Get Quantity must not be 0. If the Get Type is blank, then Get Quantity has to be 0
	Free Item Unit Cost	Number(20,4)	All 0s.	For 'buy/get free' discounts, identifies the unit cost of the threshold 'free' item that will be used in calculating the prorated qty. discount. It will default to the item/supplier cost, but can be modified based on the agreement with the supplier. It must be greater than zero as this is the cost that would normally be charged for the goods if no deal applied If Get Type is 'P', 'A', 'F' or blank, then Free Item Unit Cost must be 0. If the Get Type is 'X', then Free Item Unit Cost must not be 0
	Transaction Level Discount Indicator	Char(1)	REQUIRED	Indicates if the discount is a transaction-level discount (e.g. 10% across an entire PO) Valid Values are 'Y' or 'N'. If set to 'Y', Deal Class has to be 'CU' and Billing Type has to be 'OI'. No DIDTL or PPDTL records may be present for a Transaction Level Discount DCDTL record

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Comments	Char(2000)	Blank (space character string)	Free-form comments entered with the deal component
TTAIL	File Line Identifier	Char(5)	TTAIL	Identifies file record type (the end of the transaction detail)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Record Counter	Numeric ID(6)	Sequential number Created by program.	Number of records/transactions in current transaction set (only records between thead and ttail)
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type to upload a new deal sub loop
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Detail Record Type	Char(5)	DIDTL	Identifies file record type of sub loop as Deal Component Item-location Detail
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type to upload deal item-location details
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Merchandise Level	Char(6)	REQUIRED	Indicates what level of the merchandise hierarchy the record is at. Valid values include '1' for company-wide (all items), '2' for division, '3' for group, '4' for dept, '5' for class, '6' for subclass, '7' for line, '8' for line/differentiator 1, '9' for line/differentiator 2' '10' for line/differentiator 3, '11' for line/differentiator 4 and '12' for . These level types will be held on the codes table under a code type of 'DIML'
	Company Indicator	Char(1)	REQUIRED	Indicates if the deal component is applied company-wide (that is, whether all items in the system will be included in the discount or rebate). Valid values are 'Y' for yes and 'N' for no

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Division	Number (4)	Blank (space character string).	ID of the division included in or excluded from the deal component. Valid values are on the DIVISION table If Group is not blank, then Division must not be blank. If Merchandise Level is 2, then Division must not be blank and Group, Department, Class and Subclass must be blank
	Group	Number (4)	Blank (space character string).	ID of the group included in or excluded from the deal component. Valid values are on the GROUPS table If Department is not blank, then Group must not be blank. If Merchandise Level is 3, then Group must not be blank and Department, Class and Subclass must be blank
	Department	Number (4)	Blank (space character string).	ID of the department included in or excluded from the deal component. Valid values are on the DEPS table If Class is not blank, then Department must not be blank. If Merchandise Level is 4, then Department must not be blank and Class and Subclass must be blank
	Class	Number (4)	Blank (space character string).	ID of the class included in or excluded from the deal component. Valid values are on the CLASS table If Subclass is not blank, then Class must not be blank. If Merchandise Level is 5, then Class must not be blank and Subclass must be blank
	Subclass	Number (4)	Blank (space character string).	ID of the subclass included in or excluded from the deal component. Valid values are on the SUBCLASS table If Merchandise Level is 6 or more than 6, then Subclass must not be blank
	Item Parent	Char(25)	Blank (space character string)	Alphanumeric value that uniquely identifies the item/group at the level above the item. This value must exist as an item in another row on the ITEM_MASTER table If Merchandise Level is 7, then Item Parent or Item Grandparent must not be blank (at least one of them has to be given)

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Item Grandparent	Char(25)	Blank (space character string)	Alphanumeric value that uniquely identifies the item/group two levels above the item. This value must exist as both an item and an item parent in another row on the ITEM_MASTER table If Merchandise Level is 7, then Item Parent or Item Grandparent must not be blank (at least one of them has to be given)
	Differentiator 1	Char(10)	Blank (space character string)	Diff_group or diff_id that differentiates the current item from its item_parent If Item Grandparent, Item Parent and Differentiator 2 are blank, then Differentiator 1 must be blank. If Merchandise Level is 8, then Differentiator 1 must not be blank
	Differentiator 2	Char(10)	Blank (space character string)	Diff_group or diff_id that differentiates the current item from its item_parent If Item Grandparent, Item Parent and Differentiator 1 are blank, then Differentiator 2 must be blank. If Merchandise Level is 9, then Differentiator 2 must not be blank
	Differentiator 3	Char(10)	Blank (space character string)	Diff_group or diff_id that differentiates the current item from its item_parent If Item Grandparent, Item Parent and Differentiator 1 and 2 are blank, then Differentiator 3 must be blank. If Merchandise Level is 10, then Differentiator 3 must not be blank
	Differentiator 4	Char(10)	Blank (space character string)	Diff_group or diff_id that differentiates the current item from its item_parent If Item Grandparent, Item Parent and Differentiator 1, 2 and 3 are blank, then Differentiator 4 must be blank. If Merchandise Level is 10, then Differentiator 4 must not be blank
	Organizational Level	Char(6)	Blank (space character string)	Indicates what level of the organizational hierarchy the record is at. Valid values include '1' for chain, '2' for area, '3' for region, '4' for district and '5' for location. These level types will be held on the codes table under a code type of 'DIOL' If company indicator is N, this must not be blank. If location type is warehouse or location list, this must be 5

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Chain	Number (10)	Blank (space character string).	ID of the chain included in or excluded from the deal component. Valid values are on the CHAIN table If org. level is 1, this field must not be blank
	Area	Number (10)	Blank (space character string).	ID of the area included in or excluded from the deal component. Valid values are on the AREA table If org. level is 2, this field and chain must not be blank
	Region	Number (10)	Blank (space character string).	ID of the region included in or excluded from the deal component. Valid values are on the REGION table If org. level is 3, this field, area, and chain must not be blank
	District	Number (10)	Blank (space character string).	ID of the district included in or excluded from the deal component. Valid values are on the DISTRICT table If org. level is 4, then this field, region, area, and chain must not be blank
	Location	Number (10)	Blank (space character string).	ID of the location included in or excluded from the deal component. Valid values are on the STORE, WH, or LOC_LIST_HEAD table If org. level is 5, this field must not be blank. Chain, area, region, and district should be blank if the loc_type is L or W. If the loc_type is S, then they all must not be blank If Location Type is not blank, then Location must not be blank. Otherwise it has to be blank
	Origin Country Identifier	Char(3)	Blank (space character string)	Origin country of the item that the deal component should apply to
	Location Type	Char(1)	Blank (space character string)	Type of the location referenced in the location field. Valid values are 'S' and 'W'. Location types will be held on the codes table under the code type 'LOC3' If location is blank then this field has to be blank also
	Item	Char(25)	Blank (space character string)	Unique alphanumeric value that identifies the item If Merchandise Level is 10, then Item must not be blank

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Exclusion Indicator	Char(1)	REQUIRED	Indicates if the deal component item/location line is included in the deal component or excluded from it. Valid values are 'Y' for yes or 'N' for no
	Reference Line	Number (10)	REQUIRED	This value determines which line in the input file this item-loc record belongs to
TTAIL	File Line Identifier	Char(5)	TTAIL	Identifies file record type (the end of the transaction detail)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Record Counter	Numeric ID(6)	Sequential number Created by program.	Number of records/transactions in current transaction set (only records between thead and ttail)
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type to upload a new deal sub loop
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Detail Record Type	Char(5)	PPDTL	Identifies file record type of sub loop as Proof of Performance Detail
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type to upload deal proof of performance details
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Deal Sub Item	Char(25)		Specific transaction level (or below) item that's proof of performance is being measured. This can be populated when the deal itself is on a case UPC but the proof of performance is on an individual selling unit
	Proof of Performance Type	Char(6)	REQUIRED	Code that identifies the proof of performance type (that is, the term is that the item must be displayed on an end cap for 28 days - the pop_type is code 'ECD' for end cap display). Valid values for this field are stored in the code_type = 'PPT'. This field is required by the database

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Proof of Performance Value	Number (20,4)	All 0s.	Value that describes the term of the proof of performance type (that is, the term is that the item must be displayed on an end cap for 28 days - the pop_value is 28). This field is required by the database if the record has a pop_value_type If Proof of Performance Value is not blank, then Proof of Performance Value Type must not be blank. If Proof of Performance Value is blank, then Proof of Performance Value Type must be blank
	Proof of Performance Value Type	Char(6)	Blank (space character string)	Value that describes the type of the pop_value (that is, the term is that the item must be displayed on an end cap for 28 days - the pop_value_type is the code 'DAYS' for days). Valid values for this field are stored in the code_type = 'PPVT'. This field is required by the database if the record has a pop_value If Proof of Performance Value is not blank, then Proof of Performance Value Type must not be blank. If Proof of Performance Value is blank, then Proof of Performance Value Type must be blank
	Vendor Recommended Start Date	Char(14)	Blank (space character string)	This column holds the date that the vendor recommends that the POP begin
	Vendor Recommended End Date	Char(14)	Blank (space character string)	This column holds the date that the vendor recommends that the POP end
	Planned Start Date	Char(14)	Blank (space character string)	This column holds the date that the merchandiser/category manager plans to begin the POP
	Planned End Date	Char(14)	Blank (space character string)	This column holds the date that the merchandiser/category manager plans to end the POP
	Comment	Char(255)	Blank (space character string)	Free-form comments
	Reference Line	Number (10)	REQUIRED	This value determines which line in the input file this Proof of Performance record belongs to
TTAIL	File Line Identifier	Char(5)	TTAIL	Identifies file record type (the end of the transaction detail)

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Record Counter	Numeric ID(6)	Sequential number Created by program.	Number of records/transactions in current transaction set (only records between thead and ttail)
THEAD	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type to upload a new deal sub loop
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Detail Record Type	Char(5)	DTDTL	Identifies file record type of sub loop as Deal Component Threshold Detail
TDETL	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type to upload deal threshold details
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Lower Limit	Number (20,4)	REQUIRED	Lower limit of the deal component. This is the minimum value that must be met in order to get the specified discount. This value will be either a currency amount or quantity value, depending on the value in the deal_detail.threshold_limit_type field of this deal component (Threshold Value Type field of the DCDTL record that this DTDTL record belongs to as specified in the reference line field)
	Upper Limit	Number (20,4)	REQUIRED	Upper limit of the deal component. This is the maximum value for which the specified discount will apply. This value will be either a currency amount or quantity value, depending on the value in the deal_detail.threshold_limit_type field of this deal component (Threshold Value Type field of the DCDTL record that this DTDTL record belongs to as specified in the reference line field)

Record Name	Field Name	Field Type	Default Value	Description/Constraints
	Value	Number (20,4)	REQUIRED	Value of the discount that will be given for meeting the specified thresholds for this deal component. This value will be either a currency amount or quantity value, depending on the value in the deal_detail.threshold_value_type field of this deal component (Threshold Value Type field of the DCDTL record that this DTDTL record belongs to as specified in the reference line field)
	Target Level Indicator	Char(1)	REQUIRED	Indicates if a threshold level is the targeted purchase or sales level for a deal component. This indicator will be used for cost calculations. Valid values are 'Y' for yes and 'N' for no
	Reference Line	Number (10)	REQUIRED	This value determines which line in the input file this Threshold record belongs to
TTAIL	File Line Identifier	Char(5)	TTAIL	Identifies file record type (the end of the transaction detail)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	Transaction Record Counter	Numeric ID(6)	Sequential number Created by program.	Number of records/transactions in current transaction set (only records between thead and ttail)
FTAIL	File Line Identifier	Char(5)	FTAIL	Identifies file record type (the end of the input file)
	File Line Identifier	Numeric ID(10)	Sequential number Created by program.	ID of current line being read from input file
	File Record Counter	Numeric ID(10)	Sequential number Created by program.	Number of records/transactions in current file (only records between head and tail)

batch_ditinsrt.ksh (Deal Calculation Queue Insert Multithreading)

Module Name	batch_ditinsrt.ksh
Description	Deal Calculation Queue Insert Multithreading
Functional Area	Deals
Module Type	Business Processing
Module Technology	Ksh
Catalog ID	RMS187
Runtime Parameters	

Design Overview

The purpose of this module is to multithread the ditinsrt batch program.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 1
Frequency	Daily
Scheduling Considerations	Run either batch_ditinsrt.ksh or ditinsrt.pc. See detailed program documents for more information
Pre-Processing	N/A
Post-Processing	orddscnt
Threading Scheme	Threaded by different suppliers

Restart/Recovery

The logical unit of work of this program is at the deal header level. A commit occurs when all details of a deal are processed. Inherent restart/recovery is achieved through deleting deals from the DEAL_QUEUE table when they are processed. Because DEAL_QUEUE is part of the driving cursor, processed deals will not be fetched again when the program restarts.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
DEAL_HEAD	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDLOC_DISCOUNT	Yes	No	No	No
DEAL_QUEUE	Yes	No	No	Yes
SUPS	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
DEAL_CALC_QUEUE	Yes	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

ditinsrt (Insert into Deal Calculation Queue)

Module Name	ditinsrt.pc
Description	Insert into Deal Calculation Queue
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS217
Runtime Parameters	

Design Overview

This batch program will populate the DEAL_CALC_QUEUE table with orders that may be affected by non vendor-funded, non PO-specific deals that are on the DEAL_QUEUE table (for future processing by orddscnt.pc).
Orders that had been applied to deals that no longer apply will also be inserted into the DEAL_CALC_QUEUE table. Processed records will then be deleted from the DEAL_QUEUE table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 1
Frequency	Daily
Scheduling Considerations	
Pre-Processing	N/A
Post-Processing	orddscnt
Threading Scheme	Handled by batch_ditinsrt.ksh

Restart/Recovery

The logical unit of work of this program is at the deal header level. A commit occurs when all details of a deal are processed. Inherent restart/recovery is achieved through deleting deals from the DEAL_QUEUE table when they are processed. Because DEAL_QUEUE is part of the driving cursor, processed deals will not be fetched again when the program restarts.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDLOC_DISCOUNT	Yes	No	No	No
DEAL_QUEUE	Yes	No	No	Yes
SUPS	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
DEAL_CALC_QUEUE	Yes	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

discotbapply (Update OTB After Deal Discounts)

Module Name	discotbapply.pc
Description	Update OTB After Deal Discounts
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS215
Runtime Parameters	

Design Overview

Deals processing can change the cost on purchase orders. When this occurs (in the batch program orddscnt.pc), Open To Buy (OTB) must also be updated to ensure that budgets reflect reality. This program updates these OTB buckets.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This module should be run after orddscnt.pc
Pre-Processing	orddscnt.pc
Post-Processing	N/A
Threading Scheme	Multithreaded on department

Restart/Recovery

This program has inherent restart ability, because records are deleted from DISC_OTB_APPLY as they are processed. Array processing is used. Based on the commit_max_ctr set on RESTART_CONTROL table for this batch program, records are array fetched from DISC_OTB_APPLY table, processed and committed to the database.

Key Tables Affected

Table	Select	Insert	Update	Delete
DISC_OTB_APPLY	Yes	No	No	Yes
ORDHEAD	Yes	No	No	No
OTB	No	No	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

dealact (Calculate Actual Impact of Billback Deals)

Module Name	dealact.pc
Description	Calculate Actual Impact of Billback Deals
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS206
Runtime Parameters	

Design Overview

This program will run on a daily basis and calculate actuals information to update the deal actuals table at the item/location level for bill back non rebate deals, bill back purchase order rebate deals and bill back sales and receipts deals.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Must be run daily after SALSTAGE.PC. Otherwise data will be lost and income cannot be calculated retrospectively
Pre-Processing	SALSTAGE.PC prepost dealact_nor pre prepost dealact_po_pre prepost dealact_sales pre
Post-Processing	N/A
Threading Scheme	Multithreaded on Deal ID

Restart/Recovery

The logical unit of work is combination of deal_id/deal_detail_id. The database commit will take place when the number of deal_id/deal_detail_id records processed is equal to commit max counter in the restart control table.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	No	No
DEAL_BB_NO_REBATE_TEMP	Yes	No	No	No
DEAL_BB_REBATE_PO_TEMP	Yes	No	No	No
DEAL_TRAN_DATA_TEMP	Yes	No	No	No
DEAL_ACTUALS_ITEM_LOC	No	Yes	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

dealinc (Calculate Weekly/Monthly Income Based on Turnover)

Module Name	dealinc.pc
Description	Calculate Weekly/Monthly Income Based on Turnover
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS211
Runtime Parameters	

Design Overview

This program generates income for each item/location for bill-back deals.

Dealinc.pc retrieves deal attributes and actuals data from the deals tables for complex deals. It then calculates the income and will update the actuals table with the calculated income value. Additionally the program will insert the income value into the TEMP_TRAN_DATA table using the tran types deal sales and deal purchases.

Subsequent programs will run to perform forecast processing for active deals and to roll up TEMP_TRAN_DATA rows inserted by the multiple instances of this module and insert/update DAILY_DATA with the summed values and then insert details from TEMP_TRAN_DATA into TRAN_DATA. Income is calculated by retrieving threshold details for each deal component and determining how to perform the calculation (that is, Linear/Scalar, Actuals Earned/Pro-Rate).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Monthly
Scheduling Considerations	Must be run before SALMTH.PC, after DEALACT.PC
Pre-Processing	prepost dealinc pre
Post-Processing	N/A
Threading Scheme	Threaded by deal ID

Restart/Recovery

The logical unit of work is a DEAL_ID, DEAL_DETAIL_ID combination. A commit will take place after the number of deals records processed is equal to the commit max counter from the RESTART_CONTROL table.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	No	No
DEAL_DETAIL	Yes	No	No	No
DEAL_ACTUALS_FORECAST	Yes	No	No	No
GTT_DEALINC_DEALS	Yes	Yes	No	Yes
DEAL_ACTUALS_ITEM_LOC	Yes	No	Yes	No
ITEM_MASTER	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
TEMP_TRAN_DATA	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

dealday (Daily Posting of Deal Income to Stock & General Ledgers)

Module Name	dealday.pc
Description	Daily Posting of Deal Income to Stock & General Ledgers
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS208
Runtime Parameters	

Design Overview

This batch module posts all the deal income records to the Stock Ledger and the Genera Ledger.

This program extracts data inserted by dealinc.pc. In order to simplify this program, a dealday pre function (in prepost.pc) will sum up the data into a temporary table. A dealday post function (in prepost.pc) will copy data to transaction table and then purge temporary tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Monthly
Scheduling Considerations	Should be run after DEALINC.PC and before SALMTH
Pre-Processing	Dealinc Prepost dealday pre
Post-Processing	Prepost dealday post salmth
Threading Scheme	Multithreaded on Location

Restart/Recovery

The logical unit of work is a transaction comprising the dept/class/subclass. A commit will take place after the number of dept/class/subclass records processed is greater than or equal to the max counter from the RESTART_CONTROL table.

Key Tables Affected

Table	Select	Insert	Update	Delete
TEMP_TRAN_DATA_SUM	Yes	No	No	No
DAILY_DATA	Yes	Yes	Yes	No
MV_LOC_SOB	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

dealfct (Calculates/Update Forecasted Values for Deals)

Module Name	dealfct.pc
Description	Calculates/Update Forecasted Values for Deals
Functional Area	Deals
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS209
Runtime Parameters	

Design Overview

This program aggregates income for each item/location and recalculates forecasted values. It maintains forecast periods, deal component totals and deal totals.

After determining which active deals need to have forecast periods updated with actuals, the program will then sum up all the actuals for the deal reporting period and update the table with the summed values and change the period from a forecast period to a fixed period. The program will also adjust either the deal component totals or the remaining forecast periods to ensure that the deal totals remain correct. For each deal, the program will also maintain values held at header level.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	After DEALINC.PC and before SALMTH.PC
Pre-Processing	prepost dealfct pre – build records in the DEALFCT_TEMP table
Post-Processing	N/A
Threading Scheme	Threaded by deal ID

Restart/Recovery

The logical unit of work is a Deal ID. A commit will take place after the number of deals records processed is equal to the commit max counter from the RESTART_CONTROL table.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEALFCT_TEMP	Yes	No	No	No
DEAL_ACTUALS_FORECAST	Yes	No	Yes	No
DEAL_HEAD	Yes	No	Yes	No
DEAL_DETAIL	Yes	No	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

vendinvc (Stage Complex Deal Invoice Information)

Module Name	vendinvc.pc
Description	Stage Complex Deal Invoice Information
Functional Area	Deals
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS122
Runtime Parameters	

Design Overview

The batch module creates records in invoice match staging tables dealing for complex type deals.

The invoicing logic will be driven from the billing period estimated next invoice date for complex deals. The amount to be invoiced will be the sum of the income accruals of the deal since the previous invoice date (or the deal start date for the first collection).

prepost vendinvc pre – truncates STAGE_COMPLEX_DEAL_HEAD and STAGE_COMPLEX_DEAL_DETAIL tables to remove previous days records.

prepost vendinvc post – calls the process_deal_head() function to update est_next_invoice_date of the deal to NULL.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Must be run before salmnth.pc, after dealact.pc and before the new programs, which perform forecast processing and DAILY_DATA roll up
Pre-Processing	prepost vendinvc pre
Post-Processing	prepost vendinvc post, salweek (at end of week), salmth (at end of month)
Threading Scheme	Threaded by deal id

Restart/Recovery

The Logical Unit of Work for the program is a transaction consisting of deal_id, deal_detail_id. When the max commit point is reached, the data is updated.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	Yes	No
DEAL_ACTUALS_ITEM_LOC	Yes	No	No	No
DEAL_ACTUALS_FORECAST	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
STAGE_COMPLEX_DEAL_HEAD	No	Yes	No	No
STAGE_COMPLEX_DEAL_DETAIL	No	Yes	No	No
VENDINVC_TEMP	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
SUPS_IMP_EXP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000009

Records are written to the stage_complex_deal_head and stage_complex_deal_detail tables.

vendinvf (Stage Fixed Deal Invoice Information)

Module Name	vendinvf.pc
Description	Stage Fixed Deal Invoice Information
Functional Area	Deals
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS123
Runtime Parameters	

Design Overview

The batch module creates records in staging tables dealing for fixed type deals.

The invoicing logic will be driven by the collection dates for fixed deals. The amount to be invoiced will be retrieved directly from fixed deal tables for a given deal date.

prepost vendinvf pre - truncates STAGE_FIXED_DEAL_HEAD and STAGE_FIXED_DEAL_DETAIL tables to remove previous days records.

prepost vendinvf post – calls the process_fixed_deal function to update the status of the fixed deal claim to 'I' (inactive)

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Must be run before salmnth.pc and before the new programs, which perform forecast processing and DAILY_DATA roll up
Pre-Processing	salstage, prepost vendinvf pre
Post-Processing	prepost vendinvf post , salweek (at end of week) salmth (at end of week)
Threading Scheme	Threaded by deal id

Restart/Recovery

The Logical Unit of Work for the program is a transaction consisting of deal_id and a collection date (date that the fixed deal should be claimed from the supplier). Data is committed to the database once the number of transactions processed reaches or exceeds the max_commit_ctr.

Key Tables Affected

Table	Select	Insert	Update	Delete
FIXED_DEAL	Yes	No	No	No
FIXED_DEAL_DATES	Yes	No	No	No
FIXED_DEAL_MERCH	Yes	No	No	No
FIXED_DEAL_MERCH_LOC	Yes	No	No	No
SUBCLASS	Yes	No	No	No
STAGE_FIXED_DEAL_HEAD	No	Yes	No	No
STAGE_FIXED_DEAL_DETAIL	No	Yes	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
WH	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000009

Records are written to the stage_fixed_deal_head and stage_fixed_deal_detail tables.

dealcls (Close Expired Deals)

Module Name	dealcls.pc
Description	Close Expired Deals
Functional Area	Deals
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS207
Runtime Parameters	

Design Overview

The purpose of this module is to close any active deals that have reached their close date. Closed deals are still available in the system for reference and audit purposes, but as the deals are expired, they will not be applied or processed.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	prepost dealcls post
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	Yes	No
DEAL_QUEUE	Yes	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

dealprg (Purge Closed Deals)

Module Name	dealprg.pc
Description	Purge Closed Deals
Functional Area	Deals
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS212
Runtime Parameters	

Design Overview

The purpose of this batch program is to purge deals after they have been held in the system for the specified number of history months after they are closed. The number of months of history is defined in the PURGE_CONFIG_OPTIONS table in the DEAL_HISTORY_MONTHS column.

The batch program will also delete deal performance tables based on the specified number of history months. This program will not cover PO-specific deals, which will be purged with the PO.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program has inherent restart/recovery since records that were processed are deleted from the table. As a result, the driving cursor will never fetch the same records again.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEAL_HEAD	Yes	No	No	Yes
PURGE_HISTORY_MONTHS	Yes	No	No	No
ORDHEAD_DISCOUNT	Yes	No	No	No
ORDLOC_DISCOUNT	Yes	No	No	No
FIXED_DEAL	Yes	No	No	Yes
DEAL_ACTUALS_ITEM_LOC	No	No	No	Yes
DEAL_ITEM_LOC_EXPLODE	No	No	No	Yes
FUTURE_COST	Yes	No	No	Yes
RECLASS_COST_CHG_QUEUE	No	No	No	Yes
DEAL ACTUALS_FORECAST	No	No	No	Yes
DEAL_PROM	No	No	No	Yes
DEAL_THRESHOLD_REV	No	No	No	Yes
DEAL_QUEUE	No	No	No	Yes
DEAL_ITEMLOC	No	No	No	Yes
POP_TERMS_FULFILLMENT	No	No	No	Yes
POP_TERMS_DEF	No	No	No	Yes
DEAL_DETAIL	No	No	No	Yes
FIXED_DEAL_MERCH_LOC	No	No	No	Yes
FIXED_DEAL_MERCH	No	No	No	Yes
FIXED_DEAL_DATES	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

8 Contracts

Overview

Contract batch modules create purchase orders from contracts and purge obsolete contracts. A purchase order created from a contract has two primary differences from all other purchase orders in RMS, they are:

- The only impact upon the order is a contract. Bracket costing and deals are not involved in a contract purchase order.
- The cost of an item on the order is predefined in the contract and is held at the item-supplier level.

There are four types of supplier contracts in RMS: A, B, C, and D.

- **Type A (Plan/Availability):** The contract contains a plan of manufacturing quantity by ready date. Supplier availability is matched to the ready date. Orders are raised against the plan as suggested by replenishment requirements, provided there is sufficient supplier availability. The user can also raise manual orders.
- **Type B (Plan/No Availability):** The contract contains a plan of manufacturing quantity by ready date and dispatch-to location or locations. There are one or more ready dates, which is the date that the items are due at the dispatch-to location. Supplier availability is not required. Orders are raised automatically from the contract based on ready dates.
- **Type C (No Plan/No Availability):** The contract is an open contract with no production schedule and no supplier availability declared. The contract lists the items that are used to satisfy a total commitment cost. Orders are raised against the contract based on replenishment requirements. The retailer can also raise manual orders.
- **Type D (No Plan/Availability):** The contract is an open contract with no production schedule. The supplier declares availability as stock is ready. The contract lists the items that are used to satisfy a total commitment cost. Orders are raised against the contract, based on replenishment requirements and supplier availability. The retailer can raise manual orders.

Batch Design Summary

The following batch designs are included in this functional area:

- edidlcon.pc (Download Contracts to Suppliers)
- ediupavl.pc (Upload Item Availability for Type A & D Contracts from Suppliers)
- cntrordb.pc (Create Replenishment Orders for Item/Locations on Type B Contracts)
- cntrprss (Apply Type A, C & D Contracts to Orders Created by Replenishment)
- cntrmain.pc (Contract Maintenance and Purging)

edidlcon (Download Contracts to Suppliers)

Module Name	edidlcon.pc
Description	Download Contracts to Suppliers
Functional Area	Contracts
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS45
Runtime Parameters	

Design Overview

Contacts are defined in an RMS UI that writes to series of contracts database tables. This program is used to send this contract information to vendors. Only approved contracts that are flagged as EDI contracts are processed by this batch program. The output file of this program contains all records for the supplier contract data which are in approved status.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work for this program is set at the contract number. This program processes one contract number at a time.

Key Tables Affected

Table	Select	Insert	Update	Delete
CONTRACT_HEADER	Yes	No	Yes	No
CONTRACT_COST	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
CONTRACT_DETAIL	Yes	No	No	No

Table	Select	Insert	Update	Delete
WH	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
DIFF_IDS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000011

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line Number	Number(10)	0000000001	Sequential file line number
	Gentran ID	Char(4)	'DNCN'	Identifies which translation Gentran uses
	Current date	Char(14)		Indicates the date that the file was created in YYYYMMDDHH24MISS format
THEAD	File head descriptor	Char(5)	THEAD	Describes file line type
	Line Number	Number(10)		Sequential file line number
	Transaction Number	Number(10)		Sequential transaction number
	Supplier	Number(10)		Indicates the supplier associated with the contract
	Contract Number	Number(6)		Indicates the RMS contract number
	Contract type	Char(1)		Type of contract. Valid types are A, B, C or D
	Department	Number(4)		Indicates the RMS department ID for which the contract applies
	Currency code	Char(3)		Indicates the currency code for the contract
	Total contract cost	Number(20)		Contains the total cost of the contract; includes 4 implied decimal places
TDETL	File record descriptor	Char(5)	TDETL	Describes file line type
	Line Number	Number(10)		Sequential file line number

Record Name	Field Name	Field Type	Default Value	Description
	Transaction number	Number(10)		Sequential transaction number
	Item Number Type	Char(6)		Indicates the type of item number is represented in the file. This corresponds to the item number type defined for items on ITEM_MASTER
	Item Number	Char(25)		Contains the unique ID for the item on the contract
	Ref Item Number Type	Char(6)		Indicates the item number type for the reference number corresponding to the item number
	Ref Item Number	Char(25)		Contains the unique ID for the reference number for the item
	Diff1	Char(120)		Contains the description of Diff1 for the item
	Diff2	Char(120)		Contains the description of Diff2 for the item
	Diff3	Char(120)		Contains the description of Diff3 for the item
	Diff4	Char(120)		Contains the description of Diff4 for the item
	VPN	Char(30)		Vendor Product Number for the item
	Unit cost	Number(20)		Contains the cost of the item on the contract with 4 implied decimal places
	Ready Date	Char(14)		Date on which the items are to be provided by supplier. This field contains only values for contract types of 'A' or 'B'
	Ready Quantity	Number(20)		Quantity contracted with supplier with 4 implied decimal points. This field contains only values for contract types of 'A' or 'B'
	Location Type	Char(2)		Indicates the type of location on the contract – either 'ST' (store) or 'WH' (warehouse). This field contains only values for contract types of 'A' or 'B'
	Location number	Number(10)		Contains a location on the contract. This field contains only values for contract types of 'A' or 'B'

Record Name	Field Name	Field Type	Default Value	Description
TTAIL	File Record descriptor	Char(5)	TTAIL	Descibes file line type
	Line Number	Number(10)		Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
FTAIL	File record descriptor	Char(5)	FTAIL	Marks the end of file
	Line number	Number(10)		Sequential file line number
	Number of lines	Number(10)		Number of lines in file not counting FHEAD and FTAIL

Design Assumptions

This module should only be run if contracting is turned on in the system.

ediupavl (Upload Item Availability for Type A & D Contracts from Suppliers)

Module Name	ediupavl.pc
Description	Upload Item Availability for Type A & D Contracts from Suppliers
Functional Area	EDI - Contracts
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS50
Runtime Parameters	

Design Overview

This module runs to upload supplier availability information, which is a list of the items that a supplier has available. This information is used by RMS for type A and D contracts which require supplier availability information. The data uploaded is written to the SUP_AVAIL table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 1
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A – file-based processing

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SUP_AVAIL	No	Yes	Yes	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000016

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	Describes file line type
	Line number	Number(10)	0000000001	Sequential file line number
	File type	Char(4)	SPAV	
	Create date	Char(14)		File create date in YYYYMMDDHH24 MISS format
FDETL	Record descriptor	Char(5)	FDETL	Describes file line type
	Line number	Number(10)		Sequential file line number
	Transaction number	Number(14)		Sequential transaction number
	Supplier	Number(10)		Indicates the supplier for whom the data applies
	Item type	Char(3)		Indicates the type of item contained in the file. Valid types are 'ITM', 'UPC', or 'VPN'

Record Name	Field Name	Field Type	Default Value	Description
	Item id	Char(25)		Unique ID for the item
	Item supplement	Char(5)		UPC supplement
	Available quantity	Number(12)		Available quantity including 4 implied decimal places
FTAIL	Record descriptor	Char(5)	FTAIL	Describes file line Type
	Line number	Number(10)		Sequential file line number (total # lines in file)
	Number of detail records	Number(10)		Number of FDETL lines in file

Design Assumptions

- This module will only be run if contracting is turned on in the system.

cntrordb (Create Replenishment Orders for Item/Locations on Type B Contracts)

Module Name	cntrordb.pc
Description	Create Replenishment Orders for Item/Locations on Type B Contracts
Functional Area	Contracts
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS201
Runtime Parameters	

Design Overview

This module automatically creates replenishment orders for items on an approved, orderable type ‘B’ contract based on production dates.

Type B (Plan/No Availability) contracts contain a plan of manufacturing quantity by ready date and dispatch-to location or locations. There are one or more ready dates, which is the date that the items are due at the dispatch-to location. Supplier availability is not required. This program automatically writes POs from the contract based on ready dates.

Prepost cntrordb post – updates the system level variable last_cont_order_date to the current vdate

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase
Frequency	Daily
Scheduling Considerations	This module only needs to be scheduled if the client uses contracting Must be run after repladj
Pre-Processing	repladj
Post-Processing	Prepost cntrordb post
Threading Scheme	This module is threaded by contract

Restart/Recovery

The logical unit of work is contract no. Records are committed to the database when no of records processed reaches commit_max_counter maintained in RESTART_CONTROL table.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_VARIABLES	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
CONTRACT_HEADER	Yes	No	No	No
CONTRACT_DETAIL	Yes	No	Yes	No
ORDHEAD	Yes	Yes	Yes	No
ORDSKU	Yes	Yes	Yes	No
ORDLOC	Yes	Yes	Yes	No
ORDLOC_EXP	Yes	No	Yes	No

Design Assumptions

- This module should only be run if contracting is turned on in the system.

cntrprss (Apply Type A, C and D Contracts to Orders Created by Replenishment)

Module Name	cntrprss.pc
Description	Apply Type A, C & D Contracts to Orders Created by Replenishment
Functional Area	Contracts
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS202
Runtime Parameters	

Design Overview

This module evaluates contracts of type A, C, and D to determine whether an order should be created from the contract. Contracts are ranked so that orders are created off the best contracts first, based on lead-time, cost, contract status (e.g. closed preferred over open), and contract type (e.g. type C are preferred over D). This updates the temporary orders created by the item replenishment extract (rplext) module with the contract and supplier information of the best available contract for each item and populates the repl_results table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Must be run after rplext and before rplbld
Pre-Processing	rplext
Post-Processing	rplbld
Threading Scheme	This module is threaded by department

Restart/Recovery

As the item requirements can span across different locations, the logical unit of work varies for each item requirement. For each item requirement, records are committed to the database.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORD_TEMP	Yes	Yes	Yes	Yes
REPL_RESULTS	Yes	No	Yes	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
CONTRACT_DETAIL	Yes	No	Yes	No
CONTRACT_HEADER	Yes	No	Yes	No
CONTRACT_COST	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
SUPS	Yes	No	No	No
ORD_MISSED	No	Yes	No	No
SUP_AVAIL	Yes	No	Yes	No

Design Assumptions

- This module should only be run if contracting is turned on in the system.

cntrmain (Contract Maintenance and Purging)

Module Name	cntrmain.pc
Description	Contract Maintenance and Purging
Functional Area	Contracts
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS200
Runtime Parameters	

Design Overview

This program is used to mark contracts that have reached their end date to completed (for types A and B) or review status (for types C and D). This module also purges contracts that have remained in cancelled, worksheet, submitted, or complete status for a user-defined number of months without any orders and contacts marked for deletion. The number of months is determined by the system parameter for order history months.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 0
Frequency	Daily
Scheduling Considerations	This module only needs to be scheduled if the client uses contracting
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This batch program has two processing functions, one for purging and another for updating contracts. The purge function (delete_contracts) deletes and commits records via arrays whose size is defined in commit max counter while the update function (reset_inactive) updates records in bulk based on the update criteria. The program as a whole is inherently restartable.

Key Tables Affected

Table	Select	Insert	Update	Delete
PURGE_CONFIG_OPTIONS	Yes	No	No	No
CONTRACT_HEADER	Yes	No	Yes	Yes
CONTRACT_DETAIL	No	No	No	Yes
CONTRACT_COST	No	No	No	Yes
ORDHEAD	Yes	No	No	No

Design Assumptions

- This module should only be run if contracting is turned on in the system.

Cost Changes

Overview

Suppliers often change the cost of items.

Cost is an important factor in individual transactions and many financial calculations in RMS. Changes in cost must be reflected in the information stored in RMS and pending transactions.

Batch Design Summary

The following batch designs are included in this functional area:

- sccext.pc (Supplier Cost Change Extract)
- ccprg.pc (Cost Change Purge)

sccext (Supplier Cost Change Extract)

Module Name	sccext.pc
Description	Apply Pending Cost Changes to Items
Functional Area	Cost Change
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS355
Runtime Parameters	

Design Overview

The sccext module selects supplier cost change records that are set to go into effect the next day and updates the RMS item/supplier/country tables with the new cost. The item/location tables are also updated with the new cost if the cost change impacts the primary supplier/country for an item/location, as this is considered a base cost change. The process also triggers a recalculation of cost and deal application for pending purchase orders.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A

Schedule Information	Description
Pre-Processing	N/A
Post-Processing	prepost sccext post
Threading Scheme	Threaded by cost change

Restart/Recovery

The logical unit of work for the program is a cost change. The program is also restartable from the last successfully processed cost change record.

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_SUSP_SUP_HEAD	Yes	No	No	No
DEAL_CALC_QUEUE_TEMP	Yes	No	No	No
DEAL_CALC_QUEUE	Yes	Yes	Yes	No
PERIOD	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	Yes	No
COST_SUSP_SUP_DETAIL	Yes	No	No	No
DEAL_SKU_TEMP	No	Yes	No	No
PRICE_HIST	No	Yes	No	No
ITEM_SUPPLIER	Yes	No	Yes	No
SUPS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
COST_SUSP_SUP_DETAIL_LOC	Tes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	Yes	No
ITEM_SUPP_COUNTRY_BRACKET_COST	Yes	Yes	Yes	No
ITEM_MASTER	Yes	No	No	No
PACKITEM	Yes	No	No	No

Design Assumptions

N/A

ccprg (Cost Change Purge)

Module Name	ccprg.pc
Description	Purge Aged Cost Changes
Functional Area	Cost Change
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS476
Runtime Parameters	

Design Overview

This program is responsible for removing old cost changes from the system. Cost changes are removed from the system using the following criteria:

- The status of the cost change is Delete, Canceled, or Extracted.
- The status of the price change is Rejected and the effective date of the cost change has met the requirement for the number of days that rejected cost changes are held.

The number of days that rejected cost changes are held is determined by the system parameter Retention of Rejected Cost Changes (RETENTION_OF_REJECTED_COST_CHG).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PURGE_CONFIG_OPTIONS	Yes	No	No	No
COST_SUSP_SUP_HEAD	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
COST_SUSP_SUP_DETAIL	Yes	No	No	Yes
COST_SUSP_SUP_DETAIL_LOC	Yes	No	No	Yes

Design Assumptions

N/A

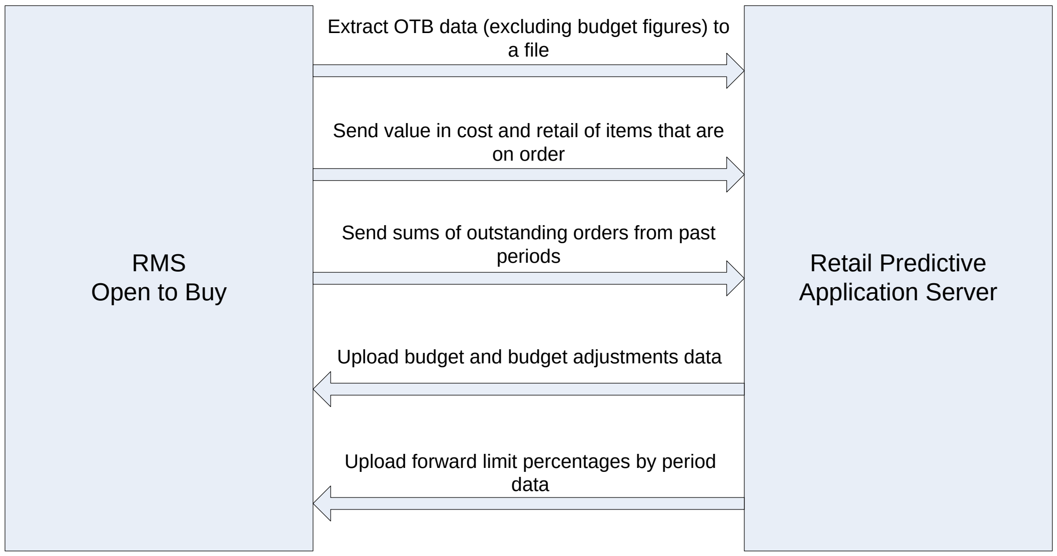
10 Open to Buy

Overview

Open to Buy (OTB) budgets can either be maintained through the RMS UI or imported from a planning application.

The programs in this chapter receive OTB data from planning processes and send order information to planning processes and maintain OTB data.

For more information about integration with RPAS and other planning systems, see *Integration with Oracle Retail Planning*.


RMS
Open to Buy
Extract OTB data (excluding budget figures) to a file
Send value in cost and retail of items that are on order
Send sums of outstanding orders from past periods
Upload budget and budget adjustments data
Upload forward limit percentages by period data
Retail Predictive Application Server

Batch Design Summary

The following batch designs are included in this functional area:

- otbdnld.pc (Download Current & Future OTB by Subclass)
- otbdlord.pc (Download Summary of Outstanding Orders on OTB by Subclass)
- otbupld.pc (Upload OTB Budget from Planning Systems)
- otbupfwd.pc (Upload OTB Forward Limit Percentages from Planning Systems)
- otbprg.pc (Purge Aged Open To Buy Data)

otbdnld (Download Current & Future OTB by Subclass)

Module Name	otbdnld.pc
Description	Download Current & Future OTB by Subclass
Functional Area	Open To Buy
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS130
Runtime Parameters	

Design Overview

This batch program will extract current and future Open to Buy data from the OTB table in RMS and export it to a flat file for use by an external planning system. All records with an end of week date greater than or equal to today will be sent.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Weekly
Scheduling Considerations	Phase 4 scheduling ensures appropriate stock ledger processing (saldly and salweek) is complete before this job runs
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work for the OTBDNLD module is department, class, subclass, and end-of-week date, with a recommended commit counter setting of 10,000. Each time the record counter equals the maximum recommended commit number, an application image array record will be written to the restart_start_array for restart/recovery if a fatal error occurs.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
OTB	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000031

Output file

Record Name	**Field Name**	**Field Type**	**Default Value**	**Description**
FHEAD	File Type Record Descriptor	Char (5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number (10)		Keeps track of the record's position in the file by line number
	File Type Definition	Char (4)	OTBE	Identifies file as 'OTB Export'
	File Create Date	Char(14)		Date the file was created in YYYYMMDD format. Remaining 6 characters are blank
FDETL	File record descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number (10)		Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number(14)		Used to force unique file check
	Department	Number(4)		The ID number of a department
	Class	Number(4)		The ID number of a class within the department given
	Subclass	Number(4)		The ID number of a subclass within the class given
	EOW Date	Date		The end of week date for the budgeted period. Format is 'YYYYMMDDHHMMSS'
	Week number	Number(2)		The week number in the month for the budgeted period
	Month number	Number(2)		The month number in the half for the budgeted period
	Half number	Number(5)		The half number for the budgeted period

Record Name	Field Name	Field Type	Default Value	Description
	Cancel Amount	Number(20)		The total amount cancelled from orders of all order type for the budgeted period; value includes 4 implied decimal places
	N Approved Amount	Number(20)		The amount of approved non-basic (order type N/B) orders for the budgeted period; value includes 4 implied decimal places
	N Receipts Amount	Number(20)		The amount of non-basic (order type N/B) orders due in the budgeted period that have been received; value includes 4 implied decimal places
	B Approved Amount	Number(20)		The amount of approved buyer-replenished basic (order type BRB) orders for the budgeted period; value includes 4 implied decimal places
	B Receipts Amount	Number(20)		The amount of buyer-replenished basic (order type BRB) orders due in the budgeted period that have been received; value includes 4 implied decimal places
	A Approved Amount	Number(20)		The amount of approved auto-replenished basic (order type ARB) orders for the budgeted period; value includes 4 implied decimal places
	A Receipts Amount	Number (20)		The amount of auto-replenished basic (order type ARB) orders due in the budgeted period that have been received; value includes 4 implied decimal places
FTAIL	File record descriptor	Char (5)	FTAIL	Identifies file record type
	File Line Sequence Number	Number (10)		Keeps track of the record's position in the file by line number
	Number of lines	Number (10)		Total number of all transaction lines, not including file header and trailer

Design Assumptions

N/A

otbdlord (Download Summary of Outstanding Orders on OTB by Subclass)

Module Name	otbdlord.pc
Description	Download Summary of Outstanding Orders on OTB by Subclass
Functional Area	Open To Buy
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS13
Runtime Parameters	

Design Overview

This batch program will sum outstanding orders from past periods for each subclass and export the data to a flat file. Outstanding order values are determined by subtracting the receipts from the approved order quantity on the OTB table for past periods (where end of week date is less than today). This figure is written to the output file for each order type by subclass.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	Phase 4 scheduling ensures appropriate stock ledger processing (saldly and salweek) is complete before this job runs
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work for the otbdlord module is department/class/subclass. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of the file I/O. The recommended commit counter setting is 10000 records. Each time the record counter equals the maximum recommended commit number, an application image array record will be written to the restart_start_array for restart/recovery if a fatal error occurs.

Key Tables Affected

Table	Select	Insert	Update	Delete
OTB	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000029

Output file

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number(10)		Keeps track of the record's position in the file by line number
	File Type Definition	Char(4)	OOEX	Identifies file as 'OTB Outstanding Order Export'
	File Create Date	Char(14)		Date the file was created in YYYYMMDD format. Remaining six characters are blank.
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number(10)		Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number(14)		Sequence number used to force unique detail record check
	Department	Number(4)		The number of the department which contains the outstanding order quantity value
	Class	Number(4)		The number of the class which contains the outstanding order quantity value.

Record Name	Field Name	Field Type	Default Value	Description
	Subclass	Number(4)		The number of the subclass which contains the outstanding order quantity value
	N Outstanding Amt	Number(20)		The amount of outstanding non-basic orders (order type N/B) for past periods; value includes 4 implied decimal places
	B Outstanding Amt	Number(20)		The amount of outstanding buyer-replenished basic (order type BRB) orders for past periods; value includes 4 implied decimal places
	A Outstanding Amt	Number(20)		The amount of outstanding auto-replenished basic (order type ARB) orders for past periods; value includes 4 implied decimal places
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence Number	Number(10)		Keeps track of the record's position in the file by line number
	Control Number File Line Count	Number(10)		Total number of all transaction lines, not including file header and trailer

Design Assumptions

N/A

otbupld (Upload OTB Budget from Planning Systems)

Module Name	otbupld.pc
Description	Upload OTB Budget from Planning Systems
Functional Area	Open To Buy
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS132
Runtime Parameters	

Design Overview

The purpose of this batch module is to accept new and updated open to buy (OTB) budget data from an external planning system. RMS supports three types of OTB budgets – those associated with Non-Basic (N/B), Buyer Replenished Basic (BRB) and Auto-Replenished Basic (ARB) orders, as defined by the Order type on RMS purchase orders. OTB budgets are created by subclass/end of week date in RMS.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Optional - this interface only needs to be scheduled if OTB is interfaced into RMS from RPAS or another 3rd party planning system
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is the discrete budget transaction identified by order type, department, class, subclass, and end-of-week date. Processing of each row is independent and thus if an erroneous record is found during processing; only that record needs to be corrected and reprocessed.

Error handling will also be based on this logical unit of work. If a record fails validation, it will be written to a rejected record file. This file will facilitate easy reprocessing once the error is fixed by writing the record exactly as it was in the source file.

The recommended commit counter setting is 10,000. If a fatal error occurs and restart is necessary, processing will restart at the last commit point.

Key Tables Affected

Table	Select	Insert	Update	Delete
OTB	No	Yes	Yes	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000033

Input File

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number(10)	0000000001	Sequential file line number
	File Type Definition	Char(4)	'OTBI'	Identifies file as 'OTB Import'
	File Create Date	Char(14)		The date on which the file was written by external system. The Date is in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	FDETL	Describes file line type
	Line ID	Number(10)		Sequential file line number
	Transaction Set Control Number	Number(14)		Sequence number used to force unique transaction check
	Order Type	Char(1)		Order type budgeted for: specified as A for ARB, B for BRB, and N for N/B
	Department	Number(4)		The ID number of a department
	Class	Number(4)		The ID number of a class within the department given
	Subclass	Number(4)		The ID number of a subclass within the class given
	Eow Date	Char(14)		The end of week date for the budgeted week in YYYYMMDDHH24MISS format
	Budget Amount	Number(20)		Budgeted amount for the specified order type/week; value includes 4 implied decimal places

Record Name	Field Name	Field Type	Default Value	Description
FTAIL	File record descriptor	Char(5)		Marks end of file
	Line ID	Number(10)	Line number in file	Sequential file line number
	Number of lines	Number(10)	Total detail lines	Number of lines in file not counting FHEAD and FTAIL

Design Assumptions

- POs with an Order Type of DSD and Customer Order do not impact open to buy.

otbupfwd (Upload OTB Forward Limit Percentages from Planning Systems)

Module Name	otbupfwd.pc
Description	Upload OTB Forward Limit Percentages from Planning Systems
Functional Area	Open To Buy
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS131
Runtime Parameters	

Design Overview

This batch module is used upload forward limit percentages by period from an external planning application. Forward limits are used to limit purchases for future periods as a percentage of the budget. For example, a forward limit may be set up such that 4 periods out, 50% of OTB budget can be spent, 3 periods out 70% of budget can be spent, 2 periods out 80% of budget can be spent and 1 period out 100% of budget can be spent. If this is defined, it impacts the calculation used for OTB limits on PO approval.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Optional – This interface only needs to be scheduled if forward budget limits will be used and are provided by a 3rd party OTB planning system
Pre-Processing	N/A

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is the discrete forward limit transaction. Each record is uniquely identified by department, class, subclass and period ahead. Processing of each row is independent and thus if an erroneous record is found during processing, just that record needs to be corrected and reprocessed.

Error handling will also be based on this logical unit of work. If a record fails validation, it will be written to a rejected record file. This file will facilitate easy reprocessing once the error is fixed by writing the record exactly as it was in the source file.

The recommended commit counter setting is 10,000. If a fatal error occurs and restart is necessary, processing will restart at the last commit point.

Key Tables Affected

Table	Select	Insert	Update	Delete
OTB_FWD_LIMIT	No	Yes	Yes	No
SUBCLASS	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000032

Output file

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number(10)	0000000001	Sequential file line number
	File Type Definition	Char(4)	FWDI	Identifies file as 'FWD Import'
	File Create Date	Char(14)		The Date on which the file was written by external system. The Date is in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	FDETL	Describes file line type
	Line ID	Number(10)		Sequential file line number

Record Name	Field Name	Field Type	Default Value	Description
	Transaction Set Control Number	Number(14)		Sequence number used to force unique transaction check
	Department	Number(4)		The ID number of a department
	Class	Number(4)		The ID number of a class within the department given
	Subclass	Number(4)		The ID number of a subclass within the class given
	Period Ahead	Number(2)		The period ahead (1-99) for the forward limit planning
	Forward Limit Percent	Number(12)		Percentage(0-100) of period's budget available to buyer at current time
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	Line id	Number(10)	Line number in file	Sequential file line number
	Number of lines	Number(10)		Number of lines in file not counting FHEAD and FTAIL

Design Assumptions

N/A/

otbprg (Purge Aged Open To Buy Data)

Module Name	otbprg.pc
Description	Purge Aged Open To Buy Data
Functional Area	Open To Buy
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS291
Runtime Parameters	

Design Overview

This batch program runs at the end of the half to delete rows from the OTB table that are at least one half old. The current and previous half's OTB data is retained. The number of days that OTB records are retained by RMS is not configurable via a system parameter.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

There is no restart/recovery in this module. Up to 10,000 records are deleted and committed at a time to avoid excessive rollback space in usage.

Key Tables Affected

Table	Select	Insert	Update	Delete
OTB	No	No	No	Yes

Design Assumptions

N/A

11 Future Cost

Overview

The Future Cost Engine calculates the expected cost of an item/supplier/origin country/location at a given point into the future. These values are used to help in many scenarios (for example, when trying to determine what a margin will be at a point in the future, or when doing investment buying).

The future cost engine can execute as either a synchronous, asynchronous or batch process. The focus of this chapter is the batch processes. To support the discussion of the batch processes, there is general discussion of the engine that is also applicable to the synchronous and asynchronous execution of the engine.

Future Cost Events

There are three basic events that drive recalculation of FUTURE_COST. They are supplier cost changes, deals, and estimated landed cost components. When these events are added or removed from RMS, they impact the calculated values on future cost. These transactions are known as primary events.

There are other events that determine if primary events still apply to a given item/supplier/origin country/location combination. They are reclassifications, merchandise hierarchy changes, organization hierarchy changes, cost zone locations moves, item/cost zones changes, and supplier hierarchy changes. These are secondary events.

There are also two special events that cause new time lines to be created in FUTURE_COST. They are new item loc (when item/locations are ranged) and new item/supplier/country/location relationships (add and remove). These are initialization events.

The ITEM_LOC.PRIMARY_COST_PACK column plays a special roll in costing. When a primary costing pack is defined for an item, that item's costing values are based on the primary_costing_pack not the item its self. When a primary costing pack is added, changed, or removed, this is a primary pack event.

Cost Event	**Cost Event Type**
Supplier Cost Change	Primary
Deal	Primary
ELC Component	Primary
Reclassification	Secondary
Merchandise hierarchy	Secondary
Organization hierarchy	Secondary
Cost zone location moves	Secondary
Item/cost zone changes	Secondary
Supplier hierarchy	Secondary

Cost Event	Cost Event Type
New Item Location	Initialization
Item/supplier/country/location relationships	Initialization
Primary cost pack	Primary Pack
WF Cost Template	
WF Cost Template Relationship	
Deal Pass through	

Future Cost Engine Run Type Configuration

The Future Cost Engine can be configured by cost event type in one of three ways:

- Synchronous
- Asynchronous
- Batch

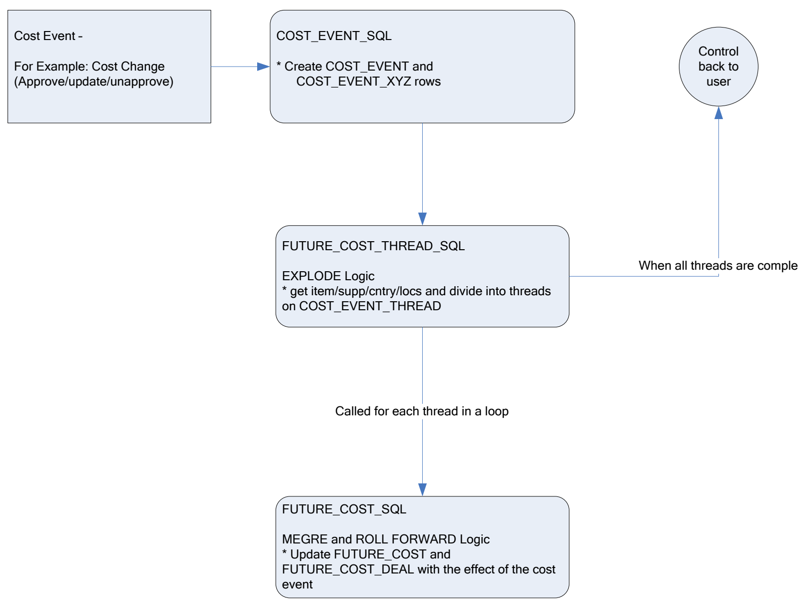
The method to be used by each cost event type is controlled by the configuration defined in the COST_EVENT_RUN_TYPE_CONFIG table.

Synchronous

When running in synchronous mode, the Future Cost Engine is run in the same transaction as the client that calls it. For example if the cost change event is configured to run in synchronous mode, the work done in the Future Cost Engine for the approval of a cost change runs in the same transaction as the flipping of the status of the cost change to 'A' status. That means the user in the form will have a busy cursor until the Future Cost Engine completes.

Cost event types with an EVENT_RUN_TYPE set to 'SYNC' on COST_EVENT_RUN_TYPE_CONFIG will run in synchronous mode.

Future Cost Engine - SYNC mode

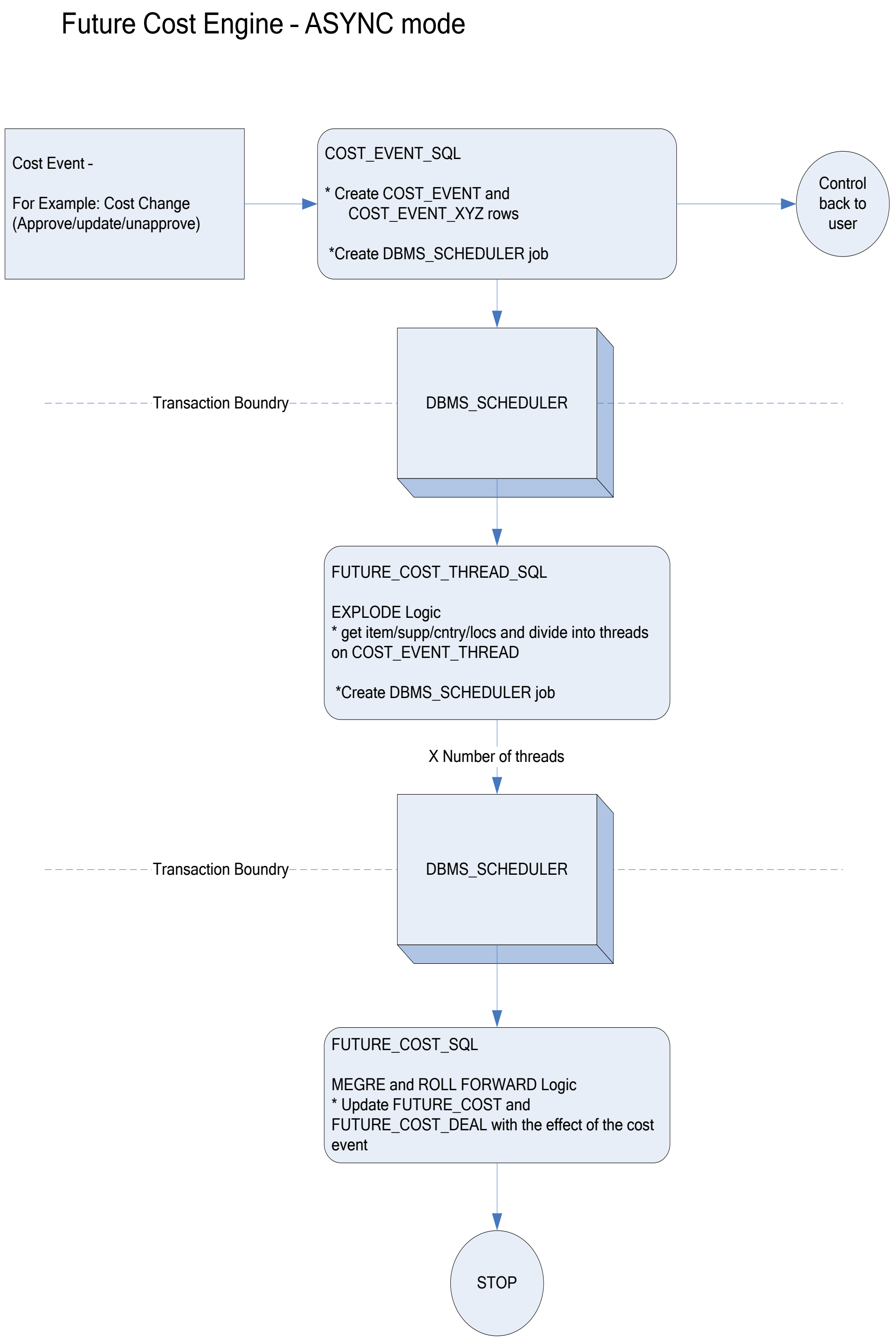

Cost Event -
For Example: Cost Change (Approve/update/unapprove)
COST_EVENT_SQL
* Create COST_EVENT and COST_EVENT_XYZ rows
Control back to user
FUTURE_COST_THREAD_SQL
EXPLODE Logic
* get item/supp/cntry/locs and divide into threads on COST_EVENT_THREAD
When all threads are comple
Called for each thread in a loop
FUTURE_COST_SQL
MEGRE and ROLL FORWARD Logic
* Update FUTURE_COST and FUTURE_COST_DEAL with the effect of the cost event

Asynchronous

When running in asynchronous mode, the Future Cost Engine is run in a separate transaction than the client that calls it. For example if the cost change event is configured to run in asynchronous mode, the work done in the Future Cost Engine for the approval of a cost change runs in a different transaction as the flipping of the status of the cost change to 'A' status. This means that control returns to the user in the form while the Future Cost Engine runs in the background.

This is accomplished by using Oracle Advanced Queuing.

Cost event types with an EVENT_RUN_TYPE set to 'ASYNC' on COST_EVENT_RUN_TYPE_CONFIG runs in asynchronous mode.

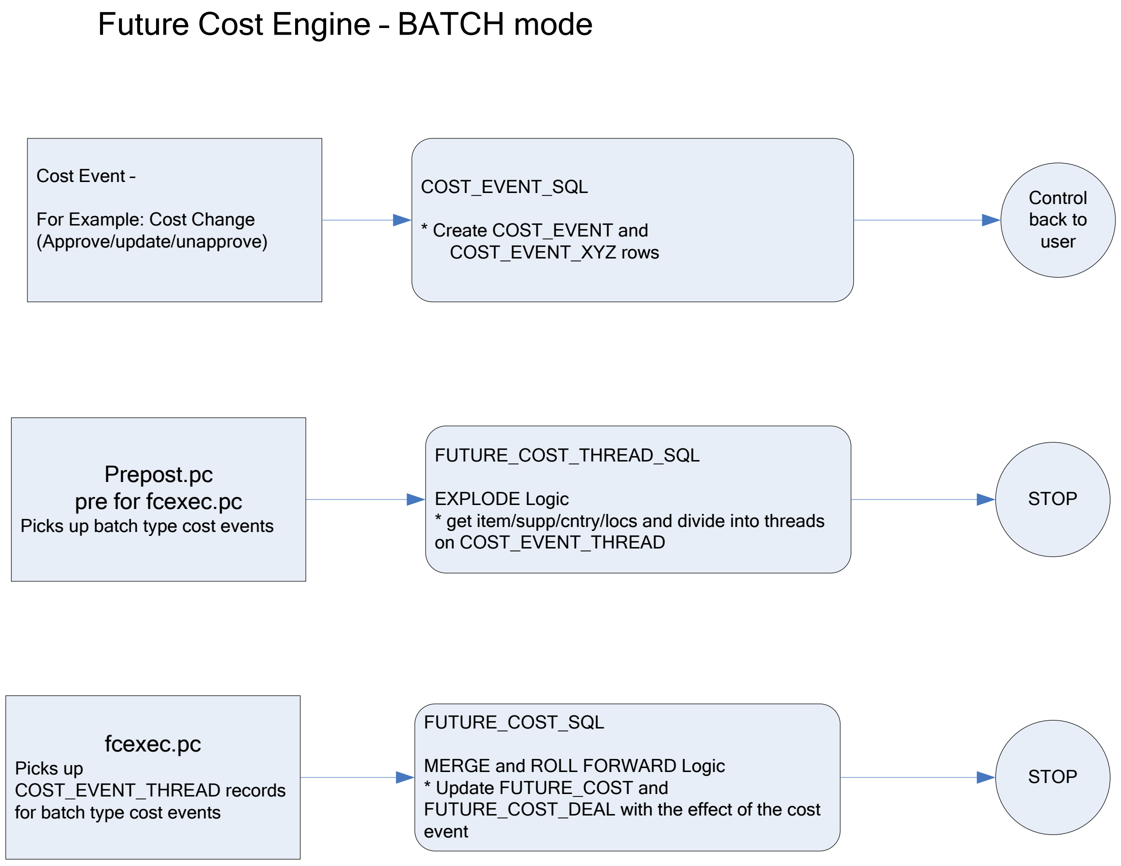

Future Cost Engine - ASYNC mode
Cost Event -
For Example: Cost Change (Approve/update/unapprove)
COST_EVENT_SQL
* Create COST_EVENT and COST_EVENT_XYZ rows
*Create DBMS_SCHEDULER job
Control back to user
Transaction Boundry
DBMS_SCHEDULER
FUTURE_COST_THREAD_SQL
EXPLODE Logic
* get item/supp/cntry/locs and divide into threads on COST_EVENT_THREAD
*Create DBMS_SCHEDULER job
X Number of threads
Transaction Boundry
DBMS_SCHEDULER
FUTURE_COST_SQL
MEGRE and ROLL FORWARD Logic
* Update FUTURE_COST and FUTURE_COST_DEAL with the effect of the cost event
STOP

Batch

When running in batch mode, the Future Cost Engine is run during the nightly batch run. For example if the cost change event is configured to run in batch mode, the work done in the Future Cost Engine for the approval of a cost change runs during the next batch schedule run after the approval of the cost change.

Cost event types with an EVENT_RUN_TYPE set to 'BATCH' on COST_EVENT_RUN_TYPE_CONFIG runs in batch mode.

The fcexec.pc batch program and its associated prepost pre job contain logic to run the Future Cost Engine in batch mode.


Future Cost Engine - BATCH mode
Cost Event -
For Example: Cost Change (Approve/update/unapprove)
COST_EVENT_SQL
* Create COST_EVENT and COST_EVENT_XYZ rows
Control back to user
Prepost.pc
pre for fcexec.pc
Picks up batch type cost events
FUTURE_COST_THREAD_SQL
EXPLODE Logic
* get item/supp/cntry/locs and divide into threads on COST_EVENT_THREAD
STOP
fcexec.pc
Picks up COST_EVENT_THREAD records for batch type cost events
FUTURE_COST_SQL
MERGE and ROLL FORWARD Logic
* Update FUTURE_COST and FUTURE_COST_DEAL with the effect of the cost event
STOP

Future Cost Engine Concurrency Control

Concurrency control is handled in the Future Cost Engine by locking the FUTURE_COST table. The sole job of the Future Cost Engine is maintaining the FUTURE_COST table and its helper DEAL_ITEM_LOC_EXPLODE. The first step in processing is to lock the item/supplier/origin country/location combinations that the cost event covers (after the identification of item/supplier/origin country/location combinations and chunking has been done). If a lock cannot be obtained, another cost event is already processing some of the data that is required. When this occurs the Future Cost Engine stops processing and records the results accordingly and the cost event can be retried at a later time.

Future Cost Engine Error Handling

The COST_EVENT_RESULT table is used to track all runs of the Future Cost Engine whether or not they succeeded. The table records a cost event ID and thread ID, the result code, and any error message that may exist. A special screen is used to search/access the results.

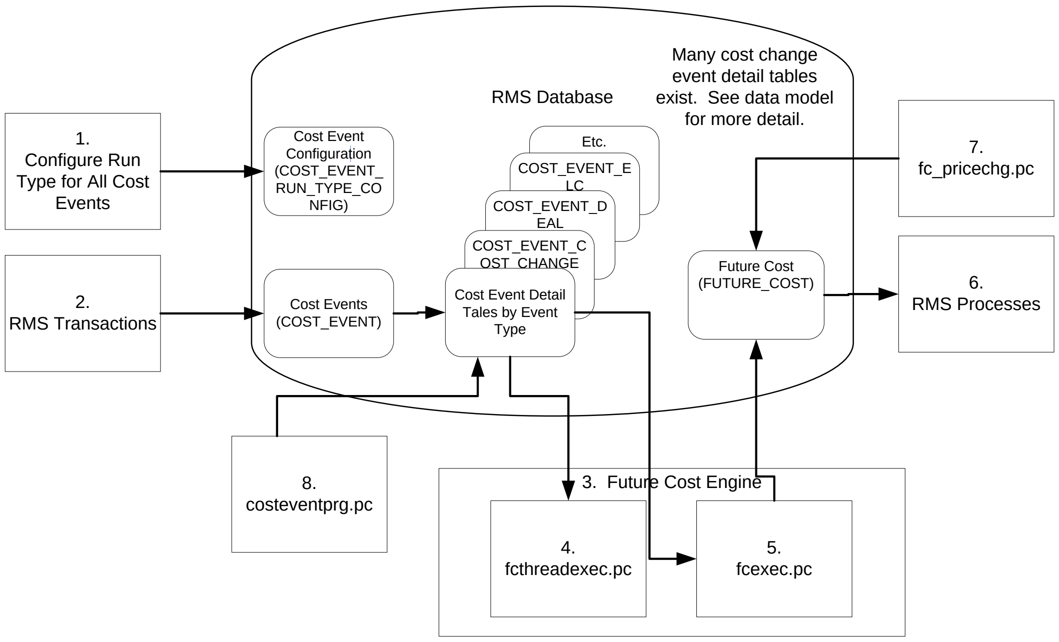
Future Cost Engine Threading/Chunking

The Future Cost Engine deals with large amounts of data. Its inputs can vary greatly in size. Its inputs can be one large driver or a group of smaller drivers. In order to deal with this volume and variation in input a configurable threading/chunking mechanism is built into the Future Cost Engine. The logical unit of work for the Future Cost Engine is unique item/supplier/origin country/location combinations. The number of item/supplier/origin country/location combinations per chunk is controlled by the MAX_TRAN_SIZE column on the COST_EVENT_RUN_TYPE_CONFIG.

When the transaction control is set to BATCH, the chunks are run in a threaded manner using the Pro*C batch program to coordinate execution.

Future Cost Process

Note: This process focuses on batch runs of the future cost engine.


RMS Database
Many cost change event detail tables exist. See data model for more detail.
1. Configure Run Type for All Cost Events
2. RMS Transactions
Cost Event Configuration (COST_EVENT_RUN_TYPE_CONFIG)
Cost Events (COST_EVENT)
Etc.
COST_EVENT_ELC
COST_EVENT_DEAL
COST_EVENT_COST_CHANGE
Cost Event Detail Tales by Event Type
Future Cost (FUTURE_COST)
7. fc_pricechg.pc
6. RMS Processes
8. costeventprg.pc
3. Future Cost Engine
4. fcthreadexec.pc
5. fcexec.pc

- Administrators configure the system (COST_EVENT_RUN_TYPE) to define which cost events types will be processed synchronously, asynchronously or in batch. Configuration by cost event type also determines some threading and chunking parameters.
- RMS transactions that should drive future cost recalculation write Cost Events (COST_EVENT and cost event type specific tables).
- Future Cost Engine recalculates future cost

Note: This process flow focuses on batch recalculations, but synchronous or asynchronous processes could easily be substituted in this step.

- fcthreadexec.pc prepares threads for processing
- fcexec.pc recalculates future cost and writes it the future cost table (FUTURE_COST)
- RMS processes use future cost information to determine investment buy, margin, etc.
- fc_pricechg.pc performs special calculation of pricing cost for franchise locations
- costeventprg.pc purges aged cost events from the working cost event tables.

Batch Design Summary

The following batch programs are included in this chapter:

- fcthreadexec.pc (Prepare Threads for Batch Calculation/Recalculation of Future Cost Values)
- fcexec.pc (Execute Batch Calculation/Recalculation of Future Cost Values)
- fc_pricechg.ksh (Use Pending Price Changes to Drive Recalculation of Pricing Cost for some Franchise Item/Locations)
- costeventprg.pc (Purge Aged Cost Events)

fcthreadexec (Prepare Threads for Batch Calculation/Recalculation of Future Cost Values)

Module Name	fcthreadexec.pc
Description	Prepare Threads for Batch Calculation/Recalculation of Future Cost Values
Functional Area	Costing
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS230
Runtime Parameters	

Design Overview

The fcthreadexec.pc batch program is responsible for threading the cost events based on the max_tran_size that is provided in the cost_event_run_type_config table.

This program must always be run before the fcexec batch.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	run before fcexec.pc
Pre-Processing	batch_itmcostcompupd.ksh
Post-Processing	fcexec.pc
Threading Scheme	Threaded by item, supplier, country and location

Restart/Recovery

The logical unit of work for this batch program is the cost_event_process_id on the COST_EVENT table.

Key Tables Affected

Table	Select	Insert	Update	Delete
COST_EVENT	Yes	No	No	No
COST_EVENT_RUN_TYPE_CONFIG	Yes	No	No	No
COST_EVENT_NIL	Yes	No	No	No
COST_EVENT_COST_CHG	Yes	No	No	No
COST_EVENT_RECLASS	Yes	No	No	No
COST_EVENT_MERCH_HIER	Yes	No	No	No
COST_EVENT_ORG_HIER	Yes	No	No	No
COST_EVENT_SUPP_HIER	Yes	No	No	No
COST_EVENT_ELC	Yes	No	No	No
COST_EVENT_COST_ZONE	Yes	No	No	No
COST_EVENT_ITEM_COST_ZONE	Yes	No	No	No
COST_EVENT_DEAL	Yes	No	No	No
COST_EVENT_PRIM_PACK	Yes	No	No	No
COST_EVENT_COST_TMPL	Yes	No	No	No
COST_EVENT_COST_RELATIONSHIP	Yes	No	No	No
COST_EVENT_DEAL_PASSTHRU	Yes	No	No	No
COST_EVENT_SUPP_COUNTRY	Yes	No	No	No
COST_EVENT_THREAD	Yes	Yes	No	Yes

Design Assumptions

N/A

fcexec (Execute Batch Calculation/Recalculation of Future Cost Values)

Module Name	fcexec.pc
Description	Execute Batch Calculation/Recalculation of Future Cost Values
Functional Area	Costing
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS223
Runtime Parameters	

Design Overview

The fcexec.pc batch program executes the future cost engine in batch mode. Cost events set up to run in batch mode are threaded in the fcthreadexec.pc batch process and passed to the future cost engine for processing by this program. This program should be always run after the fcthreadexec.pc batch.

This batch program only serves as a wrapper to call the cost engine, the Key Tables Affected section does not list the tables affected by the cost engine. The future cost engine is threaded by item/supplier/country/location.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	run after fcthreadexec.pc
Pre-Processing	prepost fcexec pre
Post-Processing	N/A
Threading Scheme	Threaded by item, supplier, country and location

Restart/Recovery

The logical unit of work for this batch program is the cost_event_process_id on the COST_EVENT table.

Key Tables Affected

Table	Select	Insert	Update	Delete
RESTART_CONTROL	Yes	No	No	No
COST_EVENT	Yes	No	No	No

Table	Select	Insert	Update	Delete
COST_EVENT_RUN_TYPE_CONFIG	Yes	No	No	No
COST_EVENT_THREAD	Yes	Yes	No	Yes
COST_EVENT_RESULT	Yes	Yes	No	No

Design Assumptions

N/A

fc_pricechg (Use Pending Price Changes to Drive Recalculation of Pricing Cost for some Franchise Item/Locations)

Module Name	fc_pricechg.ksh
Description	Use Pending Price Changes to Drive Recalculation of Pricing Cost for some Franchise Item/Locations
Functional Area	Future Cost
Module Type	Business Processing
Module Technology	ksh
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

This script calls the function FUTURE_COST_EVENT_SQL.CAPTURE_RETAIL_CHANGES which checks for any item/locations that have scheduled price changes for the next day (vdate+1). If there are corresponding item/location rows in the future cost table with the percent-off-retail type template associated then the pricing cost of those future cost records will be recalculated by this program.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3 (Daily)
Scheduling Considerations	After price change batch and before dtesys
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
price_hist	Y	N	N	N
item_master	Y	N	N	N
wf_cost_relationship	Y	N	N	N
wf_cost_buildup_tmpl_head	Y	N	N	N
cost_event_retail_change	Y	Y	N	N
Cost_event	Y	Y	N	N
Future_cost	Y	Y	Y	N

Design Assumptions

N/A

costeventprg (Purge Aged Cost Events)

Module Name	costeventprg.pc
Description	Purge Aged Cost Events
Functional Area	Future Cost
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS203
Runtime Parameters	

Design Overview

This batch program purges tables used by the Future Cost calculation engine. Records from the COST_EVENT and its related tables are purged from the system based on the Cost Event History Days (cost_event_hist_days) system parameter.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is the event type on the COST_EVENT_RUN_TYPE_CONFIG table. Records are deleted serially per event type. Restart recovery is based on deleted records. Restarting on a failed run will resume from records not yet deleted on the prior failed run.

Key Tables Affected

Table	Select	Insert	Update	Delete
FOUNDATION_UNIT_OPTIONS	Yes	No	No	No
COST_EVENT	No	No	No	Yes
COST_EVENT_RESULT	No	No	No	Yes
COST_EVENT_THREAD	No	No	No	Yes
COST_EVENT_SUPP_COUNTRY	No	No	No	Yes
COST_EVENT_NIL	No	No	No	Yes
COST_EVENT_PRIM_PACK	No	No	No	Yes
COST_EVENT_COST_CHG	No	No	No	Yes
COST_EVENT_RECLASS	No	No	No	Yes
COST_EVENT_DEAL	No	No	No	Yes
COST_EVENT_MERCH_HIER	No	No	No	Yes
COST_EVENT_ORG_HIER	No	No	No	Yes
COST_EVENT_COST_ZONE	No	No	No	Yes
COST_EVENT_ELC	No	No	No	Yes
COST_EVENT_SUPP_HIER	No	No	No	Yes
COST_EVENT_ITEM_COST_ZONE	No	No	No	Yes
COST_EVENT_RUN_TYPE_CONFIG	Yes	No	No	No
COST_EVENT_DEAL_PASSTHRU	No	No	No	Yes
COST_EVENT_COST RELATIONSHIP	No	N o	No	Yes
COST_EVENT_COST_TMPL	No	No	No	Yes

Design Assumptions

N/A

12 Invoice Matching

Overview

RMS stages invoice records to be integrated into the Oracle Retail Invoice Matching (ReIM) product. It stages invoice records for Return To Vendor (RTV), Consignment, Deals, Trade Management, Obligations, and Customs Entry.

Batch Design Summary

The following batch designs are included in this functional area:

- edidlinv (Download of Invoice For ReIM)
- invclshp (Close Aged Shipments to Prevent them from Matching Open Invoices)
- invprg (Purge Aged Invoices)

Note: The batch program, saexpim.pc, has a functional connection to this chapter. For the design, see the *Oracle Retail Sales Audit Operations Guide*.

edidlinv (Download of Invoice For ReIM)

Module Name	edidlinv.pc
Description	Download of Invoice For ReIM
Functional Area	Invoice Matching
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS127
Runtime Parameters	

Design Overview

The EDIDLINV program extracts invoice information from RMS invoice tables (INVC_HEAD, INVC_DETAIL) to a flat file. This flat file is used by ReIM to upload invoice data into tables such as IM_DOC_HEAD, IM_INVOICE_DETAIL and IM_DOC_NON_MERCH. This batch program is run daily, extracting invoice records whose invoice date falls on the current vdate.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by location

Restart/Recovery

Restart/recovery for this program is set up at the invoice ID and line sequence level. The program resumes writing to file starting on the next line where the previous process ended.

Key Tables Affected

Table	Select	Insert	Update	Delete
INVC_HEAD	Yes	No	Yes	No
INVC_DETAIL	Yes	No	No	No
INVC_XREF	Yes	No	No	No
INVC_MERCH_VAT	Yes	No	No	No
INVC_NON_MERCH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
SUPS	Yes	No	No	No
PARTNER	Yes	No	No	No
VAT_CODE_RATES	Yes	No	No	No
PERIOD	Yes	No	No	No
WH	Yes	No	No	No
STORE	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000024

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	Describes file record type. Valid value is FHEAD.k
	Line id	Number(10)	0000000001	Sequential file line number.
	Gentran ID	Char(5)	UPINV	The type of transaction this file represents. Valid value is UPINV.
	Current date	Char(14)		Vdate in YYYYMMDDHH24MISS format.
THEAD	Record descriptor	Char(5)		Describes file record type. Valid value is THEAD.
	Line id	Number (10)		Sequential file line number.
	Transaction number	Number(10)		Sequential transaction number. All records within this transaction will also have this transaction number.
	Document Type	Char(6)		Describes the type of document being uploaded. The document type will determine the types of detail information that are valid for the document upload. Invoice types are held on the codes table under a code type of 'IMIT'.
	Vendor Document Number	Char (50)		Vendor's document number.
	Group ID	Char(10)	NULL	The Group ID is an informational field, which can be used to identify groups of invoices that were transmitted to ReIM together. This is not populated by RMS.

Record Name	Field Name	Field Type	Default Value	Description
	Vendor Type	Char(6)		Type of vendor (either supplier or partner) for this document. Valid values include Bank 'BK', Agent 'AG', Freight Forwarder 'FF', Importer 'IM', Broker 'BR', Factory 'FA', Applicant 'AP', Consolidator 'CO', Consignee 'CN', Supplier Hierarchy Level 1 'S1', Supplier Hierarchy Level 2 'S2', and Supplier Hierarchy Level 3 'S3'. These partner types will be held on the codes table under the code_type 'PTAL'.
	Vendor ID	Char(10)		Vendor for this document.
	Vendor Document Date	Char(14)		Date document was issued by the vendor (in YYYYMMDDHH24MISS format).
	Order Number / RTV order number	Number(12)		Merchandising system order number for this document. Required for merchandise invoices and optional for others. This field can also contain the RTV order number if the RTV flag is 'Y'
	Location	Number(10)		Merchandising system location for this document.
	Location Type	Char(1)		Merchandising system location type (either 'S'tore or 'W'arehouse) for this document. Required for merchandise invoices and optional for others.
	Terms	Char(15)		Terms of this document. If terms are not provided, the vendor's default terms will be associated with this record.
	Due Date	Char(14)		Date the amount due is due to the vendor (YYYYMMDDHH24MISS format). If due date is not provided, default due date is calculated based on vendor and terms.
	Payment method	Char(6)		Method for paying this document.
	Currency code	Char(3)		Currency code for all monetary amounts on this document.
	Exchange rate	Number(12,4)		Exchange rate *10000 (implied 4 decimal places) for conversion of document currency to the primary currency.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) total cost amount.

Record Name	Field Name	Field Type	Default Value	Description
	Total Cost	Number(20,4)		Total document cost *10000 (implied 4 decimal places), including all items and costs on this document. This value is in the document currency.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) total vat amount.
	Total VAT Amount	Number(20,4)		Total VAT amount *10000 (implied 4 decimal places), including all items and costs on this document. This value is in the document currency.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) total quantity amount.
	Total Quantity	Number(12,4)		Total quantity of items *10000 (implied 4 decimal places) on this document. This value is in EACHES (no other units of measure are supported in ReIM).
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) total discount amount.
	Total Discount	Number(12,4)		Total discount *10000 (implied 4 decimal places) applied to this document. This value is in the document currency.
	Freight Type	Char(6)	NULL	The freight method for this document. Always blank.
	Paid Ind	Char(1)		Indicates if this document has been paid.
	Multi-Location	Char(1)	N	Indicates if this invoice goes to multiple locations.
	Merchandise Type	Char(1)		Indicates if this invoice is a consignment invoice.
	Deal Id	Number(10)	NULL	Deal Id from RMS if this invoice is a deal bill back invoice. Always blank.
	Deal Detail Id	Char(10)	NULL	Complex Deal Component Id. Always blank from RMS.
	Ref CNR Ext Doc Id	Char(50)	NULL	Reference to the External Id of Credit Note Request associated with this document. Always blank from RMS.
	Ref INV Ext Doc Id	Char(50)	NULL	Reference to the External Id of Invoice associated with this document. Always blank from RMS.

Record Name	Field Name	Field Type	Default Value	Description
	Deal Approval Indicator	Char(1)	NULL	Indicates if the document on IM_DOC_HEAD is to be created in Approved or Submitted status. Always blank from RMS.
	RTV indicator	Char(1)		Indicates if this invoice is a RTV invoice.
	Custom Document Reference 1	Char(30)	NULL	This optional field is included in the upload file for client customization. No validation will be performed on this field. Always blank from RMS.
	Custom Document Reference 2	Char(30)	NULL	This optional field is included in the upload file for client customization. No validation will be performed on this field. Always blank from RMS.
	Custom Document Reference 3	Char(30)	NULL	This optional field is included in the upload file for client customization. No validation will be performed on this field. Always blank from RMS.
	Custom Document Reference 4	Char(30)	NULL	This optional field is included in the upload file for client customization. No validation will be performed on this field. Always blank from RMS.
	Cross-reference document number	Number(10)		Document that a credit note is for. Blank for all document types other than merchandise invoices.
TDETL	Record descriptor	Char(5)		Describes file record type. Valid value is TDETL.
	Line id	Number(10)		Sequential file line number.
	Transaction number	Number(10)		Transaction number for this item detail record.
	UPC	Char(25)	NULL	UPC for this detail record. Valid item number will be retrieved for the UPC. Always blank from RMS.
	UPC Supplement	Number(5)	NULL	Supplement for the UPC. Always blank from RMS.
	Item	Char(25)		Item for this detail record.
	VPN	Char(30)	NULL	Vendor Product Number which can (optionally) be used instead of the Oracle Retail Item Number.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) Original Document Quantity amount.
	Original Document Quantity	Number(12,4)		Quantity *10000 (implied 4 decimal places), in EACHES, of the item on this detail record.

Record Name	Field Name	Field Type	Default Value	Description
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) Original Unit Cost amount.
	Original Unit cost	Number(20,4)		Unit cost *10000 (implied 4 decimal places), in document currency, of the item on this detail record.
	Original VAT Code	Char (6)		VAT code for item.
	Original VAT rate	Number (20,10)		VAT Rate for the VAT code/item.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) total allowance. Default is "+" if no allowances exist for this detail record.
	Total Allowance	Number(20,4)		Sum of allowance details for this item detail record *10000 (implied 4 decimal places). If no allowances exist for this item detail record, value will be 0.
TNMRC	Record descriptor	Char(5)		Describes file record type.
	Line id	Number (10)		Sequential file line number.
	Transaction number	Number(10)		Transaction number for this non-merchandise record.
	Non Merchandise Code	Char(6)		Non-Merchandise code that describes this cost.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) Non Merchandise Amt.
	Non Merchandise Amt	Number(20,4)		Cost *10000 (implied 4 decimal places) in the document currency.
	Non Merch VAT Code	Char (6)		VAT Code for Non-Merchandise.
	Non Merch Vat Rate at this VAT code	Number (20, 10)		VAT Rate corresponding to the VAT code.
	Service Performed Indicator	Char(1)		Indicates if a service has actually been performed.
	Store	Number(10)		Store at which the service was performed.
TVATS	File record descriptor	Char(5)		Marks costs at VAT rate line. Valid value is TVATS.
	Line id	Char(10)		Sequential file line number.

Record Name	Field Name	Field Type	Default Value	Description
	Transaction number	Number(10)		Transaction number for this vat detail record.
	VAT code	Char(6)		VAT code that applies to cost.
	VAT rate	Number (20,10)		VAT Rate corresponding to the VAT code.
	Sign Indicator	Char(1)		Indicates either a positive (+) or a negative (-) Original Document Quantity amount.
	Cost at this VAT code	Number (20,4)		Total amount *10000 (implied 4 decimal places) that must be taxed at the above VAT code.
TTAIL	Record descriptor	Char(5)		Describes file record type. Default value is TTAIL.
	Line id	Number(10)		Sequential file line number.
	Transaction number	Number(10)		Transaction number for the transaction that this record is closing.
	Transaction lines	Number(6)		Total number of detail lines within this transaction.
FTAIL	Record descriptor	Char(5)		Describes file record type.
	Line id	Number(10)		Sequential file line number.
	Number of lines	Number(10)		Total number of lines within this file excluding FHEAD and FTAIL.

Design Assumptions

N/A

invclshp (Close Aged Shipments to Prevent them from Matching Open Invoices)

Module Name	invclshp.pc
Description	Close Aged Shipments to Prevent them from Matching Open Invoices
Functional Area	Invoice Matching
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS252
Runtime Parameters	

Design Overview

This batch program will close all shipments that have remained open for a specified number of days as defined by the 'Close Open Ship Days' system parameter and are not associated with any open invoices. This will be accomplished by setting the invc_match_status on the SHIPMENT table to 'C'losed.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ORDHEAD	Yes	No	No	No
SHIPMENT	Yes	No	Yes	No
SHIPSKU	Yes	No	No	No

Table	Select	Insert	Update	Delete
INVC_HEAD	Yes	No	No	No
INVC_XREF	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

invprg (Purge Aged Invoices)

Module Name	Invprg.pc
Description	Purge Aged Invoices
Functional Area	Invoice Matching
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS253
Runtime Parameters	

Design Overview

This program will purge old posted invoices that have not already been purged by ordprg.pc (which purges invoices associated with an order). This includes all types of invoices—non-merchandise, credit notes, credit note requests, debit memos, and consignment invoices. Regular merchandise invoices will primarily be deleted through ordprg.pc but will be deleted by invprg.pc if they still exist in the system. The invoices considered are those older than the number of months defined in the purge_config_options.ORDER_HISTORY_MONTHS column. The age of the invoices will be determined from the match date; if there is no match date, the invoice date will be used.

Note: This program deletes only from the RMS invoice tables preceded with 'INVC'.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Monthly
Scheduling Considerations	The program should run after ordprg.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PURGE_CONFIG_OPTIONS	Yes	No	No	No
INVC_HEAD	Yes	No	No	Yes
SA_TRAN_HEAD	Yes	No	No	No
SHIPSKU	Yes	No	No	No
INVC_DETAIL	No	No	No	Yes
INVC_NON_MECH	No	No	No	Yes
INVC_MERCH_VAT	No	No	No	Yes
INVC_DETAIL_VAT	No	No	No	Yes
INVC_DISCOUNT	No	No	No	Yes
INVC_TOLERANCE	No	No	No	Yes
ORDLOC_INVC_COST	No	No	Yes	No
INVC_MATCH_QUEUE	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

13 Replenishment

Overview

Replenishment is a complex business process that monitors stock levels and creates transactions to ensure that stores and WHs have optimal stock levels.

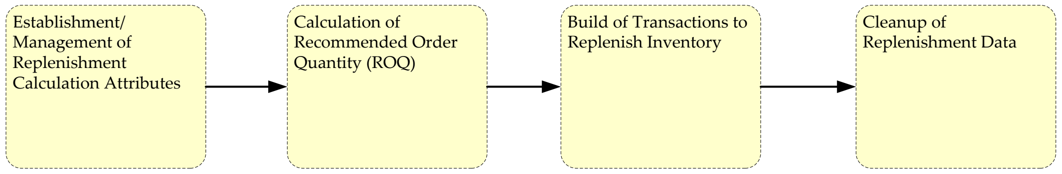
RMS supports a number of Replenishment Methods. A Replenishment Method is associated with each item/location being replenished. Each Replenishment Method uses an optimized calculation to determine the correct stock orders to create. Depending on the locations, inventory in the supply chain and other factors, these stock orders can be either Purchase Orders sent to a supplier, Transfers of inventory from WH to store or Allocations.

The main purpose of this chapter is to describe the batch processes involved in Replenishment. There is some discussion of user interfaces and database tables involved in the larger Replenishment business process to provide context for the batch processes, but please be aware that the discussion in this chapter of user interfaces and tables not exhaustive.

For additional information about Replenishment, see the Merchandising Functional Library (Doc ID: 1585843.1). Note that the White Papers in this library are intended only for reference and educational purposes and may not reflect the latest version of Oracle Retail software.

Replenishment Sub Processes

Replenishment can be divided into four major sub-processes:


Establishment/ Management of Replenishment Calculation Attributes
Calculation of Recommended Order Quantity (ROQ)
Build of Transactions to Replenish Inventory
Cleanup of Replenishment Data

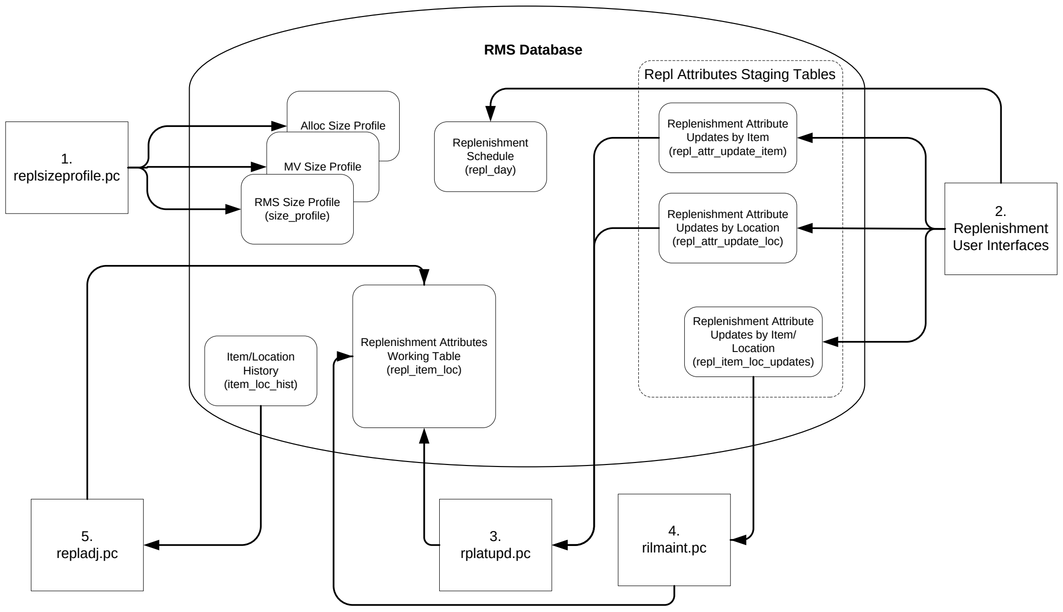
1. Establishment/Management of Replenishment Calculation Attributes
   a. Replenishment Calculation Attributes drive how quantities will be calculated. A number of UIs and batch processes maintain this data.
2. Calculation of Recommended Order Quantity (ROQ)
   a. Complex processing determines the Recommended Order Quantity (ROQ) to meet optimal stock level for item/locations based on current stock, forecasts, history, Replenishment Calculation Attributes and other calculation inputs (please note that the inputs and calculations vary depending on the replenishment method selected for each item/location).
   b. If a client uses Investment Buying, additional calculations are performed to determine where additional profitable opportunistic purchases can be made.
3. Build Transactions to Replenish Inventory
   a. Based on ROQ and Investment Buy, Purchase Orders, Allocations and Transfers are created.

   b. Additional processing optimizes these transactions.
4. Cleanup of Replenishment Data
   a. Cleanup processes purge aged data to ensure good performance.

Establishment/Management of Replenishment Calculation Attributes

Many user and batch processes combine to manage replenishment calculation attributes.

1. replsizeprofile.pc reconciles the size profiles in RMS and Allocations and refreshes the size profile materialized view used in replenishment processing.
2. Users create or update assorted replenishment calculation attributes. Data defined by end users includes the schedule the item/location should be reviewed and item/location level attributes. Item/location level attribute changes are written to a series of Replenishment Attribute Staging Tables.
3. rplatupd.pc moves information from the item and location level Replenishment Attribute Staging Tables (repl_attr_update_item and repl_attr_update_loc) to the Replenishment Attributes Working Table (repl_item_loc)
4. rilmaint.pc moves information from the item/loc level Replenishment Attribute Staging Table (repl_item_loc_updates) to the Replenishment Attributes Working Table (repl_item_loc)
5. repladj.pc updates the Replenishment Attributes Working Table (repl_item_loc) for item/locations using the Floating Point Replenishment Method based on history.

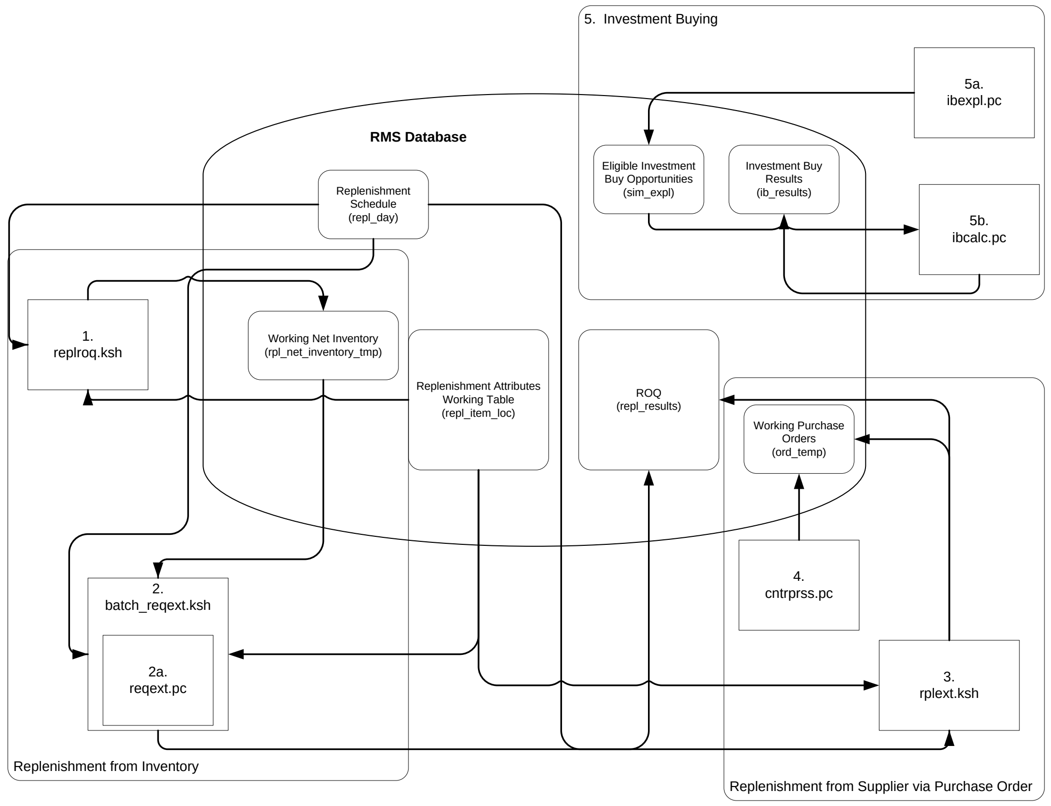

RMS Database
Repl Attributes Staging Tables
1. replsizeprofile.pc
Alloc Size Profile
MV Size Profile
RMS Size Profile (size_profile)
Replenishment Schedule (repl_day)
Replenishment Attribute Updates by Item (repl_attr_update_item)
Replenishment Attribute Updates by Location (repl_attr_update_loc)
Replenishment Attribute Updates by Item/ Location (repl_item_loc_updates)
2. Replenishment User Interfaces
Item/Location History (item_loc_hist)
Replenishment Attributes Working Table (repl_item_loc)
5. repladj.pc
3. rplatupd.pc
4. rilmaint.pc

Calculation of Recommended Order Quantity (ROQ)

Many user and batch processes combine to calculate ROQ. Item/Locations follow very different paths through the calculation of ROQ depending on whether they are replenished from inventory (WH to Store via transfer) or from suppliers (via Purchase Order).

1. replroq.ksh determines working net inventory
2. batch_reqext.ksh multithreads reqext.pc

    a. reqext.pc uses calculated ROQ in rpl_net_inventory_tmp, franchise order quantity on store_orders, and replenishment attributes to create transfer. Adjusted ROQ is written to repl_results.
        - Note that Transfers generated by Replenishment will follow the same integration, processing and admin described in the 'Transfers, Allocations and Receiving' described in this volume. Transactions will also be published as described in Volume 2 of the Operations Guide.
3. rplext.ksh uses replenishment attributes to determine ROQ for item/locs replenished from suppliers. ROQ is written to repl_results. Working POs are written to ord_temp.
4. If the customer uses Contracts, contracts are evaluated by cntrprss.pc. See the chapter 'Contracts' in this guide for more information.
5. If the customer uses Investment buying
    a. ibexpl.pc determines eligible investment buy opportunities
    b. ibcalc.pc calculates recommended investment buys that will meet the target return-on-investment


5. Investment Buying
5a. ibexpl.pc
RMS Database
Eligible Investment Buy Opportunities (sim_expl)
Investment Buy Results (ib_results)
5b. ibcalc.pc
Replenishment Schedule (repl_day)
1. replroq.ksh
Working Net Inventory (rpl_net_inventory_tmp)
Replenishment Attributes Working Table (repl_item_loc)
ROQ (repl_results)
Working Purchase Orders (ord_temp)
4. cntrprss.pc
2. batch_reqext.ksh
2a. reqext.pc
3. rplext.ksh
Replenishment from Inventory
Replenishment from Supplier via Purchase Order

Build Transactions to Replenish Inventory

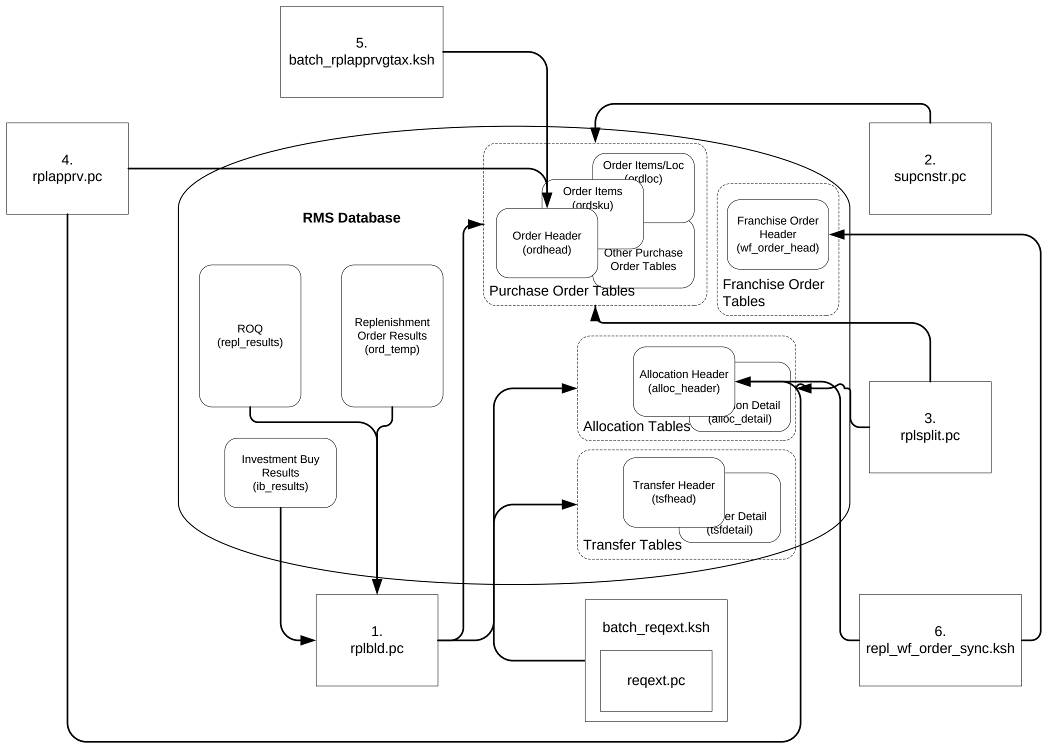
Transactions are built based on ROQ. Additional jobs optimize the resulting POs, Allocations and Transfers.

1. rplbld.pc uses ROQ and Investment Buy Results to build Orders
2. supcnstr.pc scales POs based on supplier constraints
3. rplsplit.pc splits POs and Allocations to optimize truck loads

4. rplapprv.pc approves Purchase Orders and Allocations

Note: Once approved, Purchase Orders and Allocations generated by Replenishment will follow the same integration, processing and Admin described in the 'Purchase Orders' and 'Transfers, Allocations and Receiving' described in this volume. Transactions will also be published as described in Volume 2 of the Operations Guide.

5. batch_rplapprvgtax.ksh updates tax information (only necessary for GTAX implementations
6. repl_wf_order_sync.ksh creates appropriate franchise orders for approved allocations created during replenishment

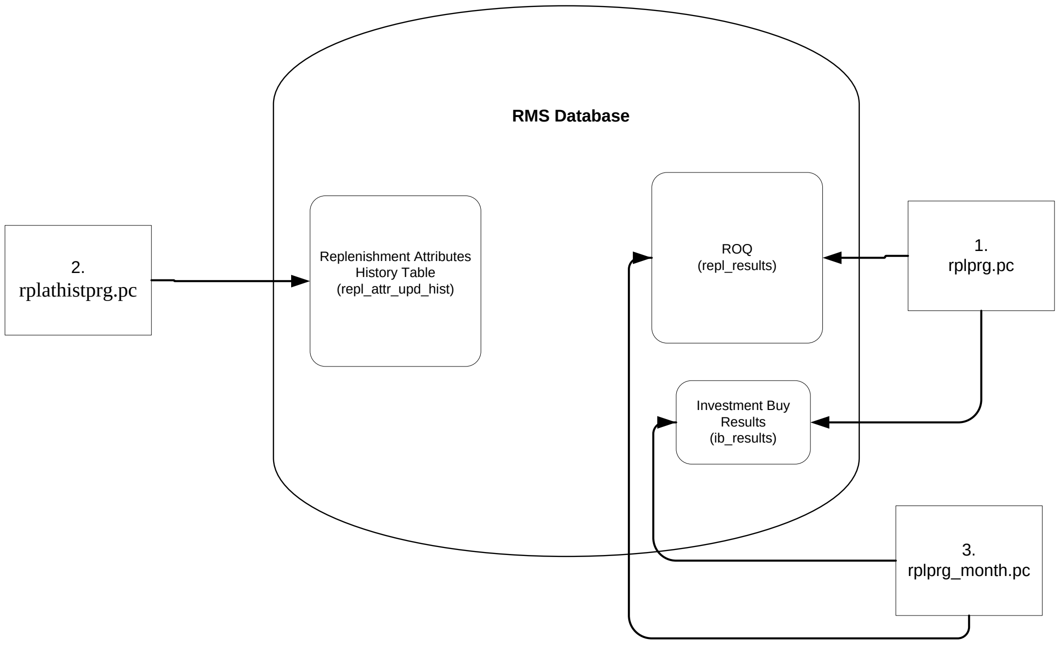

5. batch_rplapprvgtax.ksh
4. rplapprv.pc
2. supcnstr.pc
RMS Database
Order Items/Loc (ordloc)
Order Items (ordsku)
Order Header (ordhead)
Other Purchase Order Tables
Purchase Order Tables
Franchise Order Header (wf_order_head)
Franchise Order Tables
ROQ (repl_results)
Replenishment Order Results (ord_temp)
Allocation Header (alloc_header)
Allocation Detail (alloc_detail)
Allocation Tables
3. rplsplit.pc
Investment Buy Results (ib_results)
Transfer Header (tsfhead)
Transfer Detail (tsfdetail)
Transfer Tables
1. rplbld.pc
batch_reqext.ksh
reqext.pc
6. repl_wf_order_sync.ksh

Cleanup Replenishment Data

Replenishment creates large volumes of data. Several programs exist to purge aged replenishment information. Regular purging ensures good batch performance.

Note that all tables discussed in this chapter are not purged by replenishment cleanup jobs. Many replenishment processes clean up their own working tables. The POs, transfers and allocations created by replenishment are purged in their own batch processes.

1. rplprg.pc purges aged ROQ and investment buy results.
2. rplahistprg.pc purges aged replenishment attribute history.
3. rplprg_month.pc purges ROQ and investment buy results.


RMS Database
2.
rplathistprg.pc
Replenishment Attributes History Table (repl_attr_upd_hist)
ROQ (repl_results)
1.
rplprg.pc
Investment Buy Results (ib_results)
3.
rplprg_month.pc

Batch Design Summary

The following batch designs are included in this chapter:

- replsizeprofile.pc - Update Replenishment Size Profile
- rplatupd.pc - Update Replenishment Calculation Attributes
- rilmaint.pc - Update Replenishment Calculation Attributes by Item/Loc
- repladj.pc - Recalculate Maximum Levels for Floating Point Replenishment
- replroq.ksh - Calculate Net Inventory
- batch_reqext.ksh - Multithreading Wrapper for reqext
- reqext.pc - ROQ Calculation and Distribution for Item/Locs Replenished from WH
- rplext.ksh - ROQ Calculation for Item/Locs Replenished from Supplier
- ibexpl.pc - Determines Eligible Investment Buy Opportunities
- ibcalc.pc - Calculate ROQ for Profitable Investment Buys
- rplbld.pc - Build Replenishment Orders
- supsplit.pc - Split Replenishment Orders Among Suppliers
- rplsplit.pc - Truck Splitting Optimization for Replenishment
- rplapprv.pc - Approve Replenishment Orders
- batch_rplapprvgtax.ksh - Update Replenishment Order Taxes
- repl_wf_order_sync.ksh - Sync Replenishment Franchise Orders
- rplprg.pc - Purge Aged Replenishment Results
- rplathistprg.pc - Purge Replenishment Attribute History
- rplprg_month.pc - Purge Replenishment Results History by Month

The following batch designs are not included in this chapter, but are related to replenishment as they impact the purchase orders generated by replenishment

- vrplbld.pc – See Purchase Order chapter of this document
- supcnstr.pc - See Purchase Order chapter of this document

- cntrprss.pc – See Contracts chapter of this document

replsizeprofile (Update Replenishment Size Profile)

Module Name	replsizeprofile.pc
Description	Update Replenishment Size Profile
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	RMS309
Runtime Parameters	

Design Overview

The batch module will do a total synchronization update of the RMS_SIZE_PROFILE table with data from the ALC_SIZE_PROFILE table if the Allocation product is installed. It will also do a complete refresh of the MV_SIZE_PROFILE materialized view used by the RPLATUPD batch and REPLATTR form when size curves are applied to the items being replenished.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	This program should be run before the rplatupd batch to update the size curve definitions before being applied to the items replenished
Pre-Processing	Prepost replsizeprofile pre – truncate records in the RMS_SIZE_PROFILE table
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
ALC_SIZE_PROFILE	Yes	No	No	No
RMS_SIZE_PROFILE	No	Yes	No	No

Table	Select	Insert	Update	Delete
MV_SIZE_PROFILE	No	No	Yes	No

Design Assumptions

N/A

rplatupd (Update Replenishment Calculation Attributes)

Module Name	rplatupd.pc
Description	Update Replenishment Calculation Attributes
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS313
Runtime Parameters	

Design Overview

The batch module reads replenishment attributes from the REPL_ATTR_UPDATE_ITEM and REPL_ATTR_UPDATE_LOC tables and processes the item location relationships to determine what replenishment attributes for what locations have to be updated. Replenishment attributes for each item/location are recorded in REPL_ITEM_LOC table. Review cycle information is kept on the REPL_DAY table. The rejected records are written to the MC_REJECTIONS table for later reporting.

Prepost rplatupd pre – truncate records in the MC_REJECTIONS table.

Prepost rplatupd post – lock and delete records from REPL_ATTR_UPDATE_ITEM, REPL_ATTR_UPDATE_LOC, REPL_ATTR_UPDATE_EXCLUDE, and REPL_ATTR_UPDATE_HEAD tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program should be run before the replenishment batch programs, rpladj.pc, replroq.ksh, reqext.pc, and rplext.ksh. Run after replsizeprofile if size curves are used for replenishment
Pre-Processing	prepost rplatupd pre, replsizeprofile (if size profiles are used in replenishment)

Schedule Information	Description
Post-Processing	prepost rplatupd post repladj rplext reqext
Threading Scheme	This program is threaded by location (store and warehouse)

Restart/Recovery

The logical unit of work is replenishment attribute id, item, and location. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
REPL_ATTR_UPDATE_ITEM	Yes	No	No	No
REPL_ATTR_UPDATE_HEAD	Yes	No	No	No
REPL_ATTR_UPDATE_LOC	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
REPL_ITEM_LOC	Yes	Yes	Yes	Yes
REPL_DAY	No	Yes	No	Yes
ITEM_SEASONS	Yes	Yes	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
PACKITEM	Yes	No	No	No
DEPS	Yes	No	No	No
REPL_ITEM_LOC_UPDATES	No	Yes	No	Yes
SUB_ITEMS_DETAIL	Yes	No	No	No
MASTER_REPL_ATTR	Yes	Yes	Yes	Yes
REPL_ATTR_UPDATE_EXCLUDE	Yes	No	No	No
REPL_DAY_UPDATE	Yes	Yes	Yes	Yes
STORE_ORDERS	No	No	No	Yes
PARTNER_ORG_UNIT	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
SUPS	Yes	No	No	No
MV_SIZE_PROFILE	Yes	No	No	No
REPL_ATTR_UPD_HIST	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rilmaint (Update Replenishment Calculation Attributes by Item/Loc)

Module Name	rilmaint.pc
Description	Update Replenishment Calculation Attributes by Item/Loc
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

This module transfers the replenishment attributes from the REPL_ITEM_LOC_UPDATES table to the REPL_ITEM_LOC table. REPL_ITEM_LOC_UPDATES is populated when certain attributes impacting replenishment are modified. These attributes are located across the entire system and are monitored for changes by a series of triggers and modules. Once a change is logged in the REPL_ITEM_LOC_UPDATES table, this program will note the type of change and update REPL_ITEM_LOC appropriately.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3 (daily)
Scheduling Considerations	Run after sccext.pc and rplatupd.pc but before repladj.pc
Pre-Processing	N/A
Post-Processing	prepost rilmaint post- truncate records on REPL_ITEM_LOC_UPDATES table
Threading Scheme	Threaded by location (store and warehouse)

Restart/Recovery

The logical unit of work for RILMAINT is item, change type and location. Records are committed to the database once commit_max_counter defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
REPL_ITEM_LOC_UPDATES	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	Yes	Yes
REPL_DAY	Yes	No	No	Yes
STORE_ORDERS	No	No	No	Yes
ITEM_MASTER	Yes	No	No	No
PACKITEM	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
MASTER_REPL_ATTR	No	No	No	Yes

Design Assumptions

N/A

repladj (Recalculate Maximum Levels for Floating Point Replenishment)

Module Name	repladj.pc
Description	Recalculate Maximum Levels for Floating Point Replenishment
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS307
Runtime Parameters	

Design Overview

This batch module recalculates the maximum stock levels for all item-location combinations with replenishment method of 'F' (floating point). The floating model stock method will dynamically calculate an order-up-to-level. The calculated order-up-to-level is used to update the REPL_ITEM_LOC table.

The maximum model stock (used for calculating order-up-to-level) is derived using the sales history of various periods of time in order to accommodate seasonality as well as trend. The sales history is obtained from the ITEM_LOC_HIST table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Run before rplext/reqext and after rplatupd
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by dept

Restart/Recovery

The module has restart/recovery based on item/ location. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
REPL_ITEM_LOC	Yes	No	Yes	No
SUB_ITEMS_HEAD	Yes	No	No	No

Table	Select	Insert	Update	Delete
SUB_ITEMS_DETAIL	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
REPL_DAY	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
SUPS	Yes	No	No	No

Design Assumptions

N/A

replroq.ksh (Calculate Net Inventory)

Module Name	replroq.ksh
Description	Calculate Net Inventory
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS308
Runtime Parameters	

Design Overview

This module performs the bulk of the logic to process and persist the replenishment data into RPL_NET_INVENTORY_TMP table. (The information on this table is extracted by reqext batch program.)

The wrapper script does the following things:

- Call the CORESVC_REPL_ROQ_SQL.SETUP_DATA function. This function will insert records into the SVC_REPL_ROQ table and determines the thread id of each record.
- Retrieves the max concurrent thread from RMS_PLSQL_CONFIG table to determine the maximum number of concurrent process the wrapper should run at a time.
- For each thread, call CORESVC_REPL_ROQ_SQL.CONSUME – this function will move the records from SVC_REPL_ROQ to SVC_REPL_ROQ_GTT table and will calculate the net inventory position and determine the ROQ of items which are on replenishment.

Prepost replroq pre – truncate records in RPL_NET_INVENTORY_TMP tables and build RPL_DISTRO_TMP and RPL_ALLOC_IN_TMP tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	rplatupd, rilmaint, and repladj need to run before replroq.ksh so that all replenishment calculation attributes are up to date
Pre-Processing	Prepost replroq pre
Post-Processing	N/A
Threading Scheme	The number of threads running in parallel is based on value in the column RMS_PLSQL_BATCH_CONFIG.MAX_CONCURRENT_THREADS with the program name "CORESVC_REPL_ROQ_SQL". Threading is based on chunks. Each chunk would have a defined size. This is defined in RMS_PLSQL_BATCH_CONFIG.MAX_CHUNK_SIZE

Restart/Recovery

The program processes all items on REPL_DAY for the current day. If the program fails, the program can be restarted and it will process the remaining records on SVC_REPL_ROQ table.

Key Tables Affected

Table	Select	Insert	Update	Delete
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No
REPL_DAY	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	No	No
SVC_REPL_ROQ	Yes	Yes	Yes	Yes
SVC_REPL_ROQ_GTT	Yes	Yes	Yes	Yes
RPL_NET_INVENTORY_TMP	No	Yes	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
STORE_ORDERS	Yes	No	Yes	No
SUPS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

batch_reqext.ksh (Multithreading Wrapper for reqext)

Module Name	batch_reqext.ksh
Description	Multithreading Wrapper for reqext
Functional Area	Replenishment
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS192
Runtime Parameters	

Design Overview

The purpose of this module is to run the reqext.pc batch program multithreaded.
prepost reqext pre - create the TSFHEAD records for unique combination of Warehouse and Store, stock category, and department.
prepost reqext post – update transfer status to 'A'pproved.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Sales Posting, rplatupd, rilmaint, repladj, prepost replroq and replroq need to run before reqext rplext.ksh should run after reqext
Pre-Processing	prepost reqext pre
Post-Processing	prepost reqext post, rplext.ksh
Threading Scheme	Threaded by different partitions of RPL_NET_INVENTORY_TMP

Restart/Recovery

N/A – this script only serves as a wrapper for the batch process reqext.pc.

Key Tables Affected

Table	Select	Insert	Update	Delete
ALL_TAB_PARTITIONS	Yes	No	No	No
RESTART_CONTROL	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

reqext (ROQ Calculation and Distribution for Item/Locs Replenished from WH)

Module Name	reqext.pc
Description	ROQ Calculation and Distribution for Item/Locs Replenished from WH
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS310
Runtime Parameters	

Design Overview

This module performs the automatic replenishment of items from warehouses to stores. It runs through every item-store combination set to be reviewed on the current day, and calculates the quantity of the item, known as the recommended order quantity (ROQ) that needs to be transferred to the store (if any). In addition, it distributes this ROQ over any applicable alternate items associated with the item.

Once the transfer quantity of an item has been calculated, transfers are created and records are written to the replenishment results table (REPL_RESULTS) based on the replenishment order control indicator. For franchise stores, separate transfers are created based on the need date and will be linked back to a Franchise Order through the wf_order_no field.

This batch will also insert records into the respective tables for supporting the localization feature. This will be applicable only if localizations are enabled.

prepost reqext pre - Create the TSFHEAD records for unique combination of Warehouse and Store, stock category and department.

prepost reqext post – update transfer status to approved.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Sales Posting, rplatupd and repladj need to run before reqext rplext should run after reqext
Pre-Processing	prepost reqext pre rplatupd and repladj
Post-Processing	prepost reqext post, rplext
Threading Scheme	Multiple processes of this program can be run at the same time, each running against a different partition of rpl_net_inventory_tmp

Restart/Recovery

The logical unit of work is an item/source warehouse. Restart/recovery is achieved implicitly because repl_item_loc records that have been processed are updated with a last review date and only records that have not been reviewed today will be picked up by the driving cursor again. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached. During the night run the batch processed only those store order records with delivery slot. The review dates are not updated during day run. During night all the records are processed irrespective of the delivery slots.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	No	No	Yes	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
PACKHEAD	Yes	No	No	No
PACKITEM	Yes	No	No	No
PACKSTORE_HIST	Yes	No	No	No
PERIOD	Yes	No	No	No
RAG_SKUS_ST_HIST	Yes	No	No	No

Table	Select	Insert	Update	Delete
REPL_DAY	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	Yes	No
REPL_RESULTS	No	Yes	No	No
RPL_NET_INVENTORY_TMP	Yes	No	No	No
STORE	Yes	No	No	No
SUB_ITEMS_DETAIL	Yes	No	No	No
SUB_ITEMS_HEAD	Yes	No	No	No
SUPS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
TSFDETAIL	Yes	Yes	Yes	No
TSFHEAD	Yes	Yes	No	No
WH	Yes	No	No	No
STORE_ORDERS	Yes	No	Yes	No
WF_ORDER_HEAD	No	Yes	No	No
WF_ORDER_DETAIL	Yes	Yes	No	No
DELIVERY_SLOT	Yes	No	No	No
ADDR	Yes	No	No	No
COMPHEAD	Yes	No	No	No
OUTLOC	Yes	No	No	No
L10N_DOC_DETAILS_GTT	Yes	Yes	No	No
MV_L10N_ENTITY	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No
L10N_PKG_CONFIG	Yes	No	No	No
ORDHEAD_L10N_EXT	No	Yes	No	No
TSFHEAD_L10N_EXT	No	Yes	No	No
MRT_L10N_EXT	No	Yes	No	No

Design Assumptions

N/A

rplext.ksh (ROQ Calculation and Distribution for Item/Locs Replenished from Supplier)

Module Name	rplext.ksh
Description	ROQ Calculation and Distribution for Item/Locs Replenished from Supplier
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	KSH
Catalog ID	RMS315
Runtime Parameters	

Design Overview

RPLEXT (Vendor Replenishment Extraction), which is in bulk processing logic, is the driving program for the replenishment process. It cycles through every item-location combination that is ready to be reviewed on the current day, and calculates the quantity of the item that needs to be ordered to the location. The program then writes these temporary order line items to ORD_TEMP and REPL_RESULTS. ORD_TEMP is later reviewed by the module CNTPRSS.PC in its evaluation of orders against contract types A, C, D, whereas REPL_RESULTS is processed by RPLBLD.

The wrapper script does the following things:

- Call the CORESVC_REPL_EXT_SQL.SETUP_DATA function. This function will insert records into the SVC_REPL_ROQ table and determines the thread id of each record.
- Retrieves the max concurrent thread from RMS_PLSQL_CONFIG table to determine the maximum number of concurrent processes the wrapper should run at a time.
- For each thread, call CORESVC_REPL_EXT_SQL.CONSUME – this function will move the records from SVC_REPL_ROQ to SVC_REPL_ROQ_GTT table and the processed records will be inserted to ORD_TEMP and REPL_RESULTS tables.

- prepost rpl pre – truncate records in ORD_TEMP and ORD_MISSED tables.

prepost rplext post – truncate records in RPL_DISTRO_TMP and RPL_ALLOC_IN_TMP table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	rplatupd.pc, rilmaint.pc, rpladj.pc, reqext.pc and cntrordb.pc need to run before rplext If contracting is being used, cntrprss.pc should run after rplext.pc; otherwise, run ibexpl.pc, ibcalc.pc rplbld.pc
Pre-Processing	rplatupd.pc, rilmaint.pc, rpladj.pc, reqext.pc and cntrordb.pc prepost rpl pre
Post-Processing	prepost rplext post ibexpl.pc, ibcalc.pc rplbld.pc
Threading Scheme	Multiple processes of this program can be run at the same time against different departments

Restart/Recovery

If the program fails, the program can be restarted and it will process the remaining records on SVC_REPL_ROQ table.

Locking Strategy

STORE_ORDER table records are locked while calculating ROQ.

Security Considerations

N/A

Performance Considerations

- The values on RMS_PLSQL_BATCH_CONFIG can be change to alter the behavior of the chunking and threading process.
- MAX_CHUNK_SIZE – determines the maximum number of rows that should be processed for a given thread. Currently, this is set to 10000.
- MAX_CONCURRENT_THREAD – determines the maximum number of parallel threads for a given run. Currently, this is set to 32.

Key Tables Affected

Table	Select	Insert	Update	Delete
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
PERIOD	Yes	No	No	No
REPL_DAY	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	Yes	No
STORE	Yes	No	No	No

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
WH	Yes	No	No	No
SUPS	Yes	No	No	No
SUP_INV_MGMT	Yes	No	No	No
ORD_TEMP	No	Yes	No	No
REPL_RESULTS	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ibexpl (Determines Eligible Investment Buy Opportunities)

Module Name	ibexpl.pc
Description	Determines Eligible Investment Buy Opportunities
Functional Area	Investment Buy
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS250
Runtime Parameters	

Design Overview

The ibexpl batch program pre-qualifies investment buy (IB) eligible wh/dept and IB eligible supp/dept/locs.

The WH_DEPT table holds IB parameters at the WH or at the wh/dept level. If there are IB parameters defined at the wh/dept level, they are used. If there are no IB parameters defined at the wh/dept level, the IB parameters at the WH level are used. If IB parameters are not defined at either level, then system level IB parameters are used. The first part of this program sends IB parameters to the wh/dept level no matter what level they are held at in the database. The results are written to the WH_DEPT_EXPL table.

Next the WH_DEPT_EXPL table is combined with supplier inventory management data to get the final list of all eligible sup/dept/locs. The supplier inventory management data determines whether or not a given sup/dept/loc combo is IB eligible. The main problem is that this table can store information at different levels depending upon the supplier's inventory management level. Valid options for this level are:

- Sup (S)
- Sup/dept (D)
- Sup/loc (L)
- Sup/dept/loc (A)

If the record is not found at the defined level, it needs to look up the hierarchy as shown below, up to the highest level (sup). If no record exists as the sup level, it is not IB eligible.

- Sup
- Sup/dept -> sup
- Sup/loc -> sup
- Sup/dept/loc -> sup/dept -> sup

The second part of this program explodes the supplier inventory management data down to the sup/dept/loc level by filling in the implied rows. The exploded sup_inv_mgmt information is only done for IB eligible wh/dept combinations from the wh_dept_expl table. The results are placed on the sim_expl table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	After rplext.pc and before ibcalc.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
WH	Yes	No	No	No
DEPS	Yes	No	No	No
WH_DEPT	Yes	No	No	No
SUP_INV_MGMT	Yes	No	No	No
SUPS	Yes	No	No	No
WH_DEPT_EXPL	Yes	Yes	No	Yes
TERMS	Yes	No	No	No
SIM_EXPL	No	Yes	No	Yes

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

ibcalc (Calculate ROQ for Profitable Investment Buys)

Module Name	ibcalc.pc
Description	Calculate ROQ for Profitable Investment Buys
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS249
Runtime Parameters	

Design Overview

The ibcalc.pc batch program is the calculation engine for investment buy processing. It identifies investment buy (IB) opportunities and calculates recommended order quantities (ROQs) that will meet the target return-on-investment (ROI)

This module will calculate forward buy opportunities using:

- Carrying costs
- Ordering parameters
- Deals – future and expiring
- Cost changes – future
- Forecasts
- Inventory levels
- Target ROI (return on investment)

The deals and cost change components will be contained on a FUTURE_COST table. This table will hold a record for each future date that has a costing event (for example, a cost change, deal activation/deactivation). This process utilizes the default costing bracket and default deal thresholds in the calculations.

Prepost ibcalc pre – set ib_results.status from 'W' (worksheet) to 'U' (unprocessed).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	After rplext. pc and ibexpl. pc Before rplbld.pc
Pre-Processing	rplext. pc and ibexpl. pc Prepost ibcalc pre
Post-Processing	rplbld.pc
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is item and location combination.

Key Tables Affected

Table	Select	Insert	Update	Delete
FUTURE_COST	Yes	No	No	No
SIM_EXPL	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_TRAITS	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
PACKITEM	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	No
SUPS	Yes	No	No	No
SUB_ITEMS_DETAIL	Yes	No	No	No
SUB_ITEMS_HEAD	Yes	No	No	No
UOM_CONVERSION	Yes	No	No	No
WH	Yes	No	No	No
IB_RESULTS	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplbld (Build Replenishment Orders)

Module Name	rplbld.pc
Description	Build Replenishment Orders
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS314
Runtime Parameters	

Design Overview

RPLBLD builds RMS orders from recommended order quantities (ROQ) generated by the RPLEXT.PC and IBCALC.PC processes. CNTRPRSS.PC associates contracts with the ROQs created by RPLEXT.PC. These ROQs are placed on a temporary table (ORD_TEMP or IB_RESULTS) by RPLEXT.PC and IBCALC.PC. All records on ORD_TEMP/IB_RESULTS are processed by RPLBLD each night. These ORD_TEMP/IB_RESULTS records are placed into logical groups, and a RMS order is created for each logical group.

In order to be placed in the same order group, the item/location ROQs from ORD_TEMP/IB_RESULTS must share a common supplier, have the same order_status ('W'orksheet or 'A'pproved), and be on the same contract (or not be associated with a contract). Depending on flags on the ORD_INV_MGMT table, two other criteria can be used for splitting order groups. First, if the INV_MGMT_LVL is set to 'D'ept, only items in a single department are allowed in an ordering group. Secondly, the SINGLE_LOC_IND can be set to 'Y'es. If this is the case, only one location is allowed per ordering group. Finally, a SKU may only exist in an ordering group with a single origin country. When an item/loc ROQ ORD_TEMP/IB_RESULTS record is encountered with a different origin country than the one it exists with in the current ordering group, it is placed in a different ordering group.

To assist the recalculation and order scaling processes of replenishment ROQs, the REPL_RESULTS record, associated with the ORD_TEMP being processed, is updated with the ORDER_NO and ALLOC_NO that the ORD_TEMP record was placed with. IB_RESULTS is also updated with the ORDER_NO.

If the location to be replenished is a Franchise location and the replenishment Order Control is Semi-Automatic or Automatic, Franchise POs will be created per Costing Location/Location. Associated Franchise Orders will also be created.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Runs after rplext.pc, cntrprss.pc (if contracting is being used). Runs after vrplbld and ibcalc. Runs before supcnstr
Pre-Processing	None.
Post-Processing	None.
Threading Scheme	This program is threaded by supplier

Restart/Recovery

The logical unit of work is supplier, contract number, and order status. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached

Key Tables Affected

Table	Select	Insert	Update	Delete
ORD_TEMP	Yes	No	No	No
REPL_RESULTS	Yes	No	Yes	No
WH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
IB_RESULTS	Yes	No	Yes	No
CONTRACT_HEADER	Yes	No	Yes	No
CONTRACT_DETAIL	Yes	No	Yes	No
ORDSKU	Yes	Yes	No	No
ORDLOC	Yes	Yes	No	No
ALLOC_HEADER	No	Yes	No	No
ALLOC_DETAIL	No	Yes	No	No
ITEM_LOC	Yes	No	No	No
ORDHEAD	Yes	Yes	Yes	No
ORD_INV_MGMT	Yes	Yes	Yes	No
ORDLC	No	Yes	No	No
ITEM_SUPP_COUNTRY_LOC	No	No	No	No
ITEM_SUPP_COUNTRY	No	No	Yes	No

Table	Select	Insert	Update	Delete
BUYER_WKSHT_MANUAL	No	No	Yes	No
L10N_DOC_DETAILS_GTT	Yes	Yes	No	No
MV_L10N_ENTITY	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No
L10N_PKG_CONFIG	Yes	No	No	No
TSFHEAD	Yes	No	No	No
ORDHEAD_L10N_EXT	No	Yes	No	No
TSFHEAD_L10N_EXT	No	Yes	No	No
MRT_L10N_EXT	No	Yes	No	No
FM_SYSTEM_OPTIONS	Yes	No	No	No
WF_ORDER_HEAD	No	Yes	No	No
WF_ORDER_DETAIL	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

supsplit (Split Replenishment Orders Among Suppliers)

Module Name	supsplit.pc
Description	Split Replenishment Orders Among Suppliers
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS370
Runtime Parameters	

Design Overview

This program splits replenishment orders among different suppliers based on the supplier distribution ratio setup for an item/location on replenishment. It only applies to Direct to Store and Crossdock replenishments where a purchase order will be created from a supplier.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program will run nightly after the vendor replenishment extraction program (rplext.pc) and before the contract replenishment program (cntrprss.pc)
Pre-Processing	rplext.pc prepost supsplit pre
Post-Processing	cntrprss.pc
Threading Scheme	Thread by department

Restart/Recovery

The logical unit of work for this program is set at item level. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
REPL_ITEM_LOC_SUPP_DIST	Yes	No	No	No
ORD_TEMP	Yes	Yes	No	Yes

Table	Select	Insert	Update	Delete
REPL_RESULTS	Yes	Yes	No	Yes
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplsplit (Truck Splitting Optimization for Replenishment)

Module Name	rplsplit.pc
Description	Truck Splitting Optimization for Replenishment
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS318
Runtime Parameters	

Design Overview

The purpose of this program is to select all the orders eligible for truck splitting, which are created by the replenishment programs. The orders that are eligible will be sent into the truck splitting logic and the resulting orders will be created.

The orders, which will be eligible for splitting, are as follows:

- The order must have been created today by replenishment with ord_inv_mgmt.ord_approve_ind = 'Y'.
- The order must not have been already split.
- The order must be a single location order and the location must be a warehouse.
- The order must not have any allocations associated.

Orders will only be split if they meet criteria for splitting as defined in the supplier inventory management parameters.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program will run nightly after the replenishment-scaling program (supcnstr.pc) and before the replenishment approval program (rplapprv.pc)
Pre-Processing	supcnstr.pc
Post-Processing	rplapprv.pc
Threading Scheme	Thread by supplier

Restart/Recovery

The logical unit of work for this program is set at order level. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	Yes	Yes	No
ORDSKU	Yes	Yes	No	Yes
ORDLOC	Yes	Yes	No	Yes
ORD_INV_MGMT	Yes	Yes	Yes	Yes
ITEM_MASTER	Yes	No	No	No
WH	Yes	No	No	No
V_RESTART_SUPPLIER	Yes	No	No	No
ALLOC_HEADER	Yes	Yes	No	Yes
ALLOC_DETAIL	Yes	Yes	No	Yes
ALLOC_CHRG	No	No	No	Yes
ORDHEAD_REV	No	No	No	Yes
ORDSKU_REV	No	No	No	Yes
ORDLOC_REV	No	No	No	Yes
ORDLOC_WKSHT	No	No	No	Yes
ORDLOC_DISCOUNT	No	No	No	Yes
ORDCUST	No	No	No	Yes
ORDLC	No	No	No	Yes
DEAL_COMP_PROM	No	No	No	Yes
DEAL_ITEMLOC	No	No	No	Yes
DEAL_THRESHOLD	No	No	No	Yes

Table	Select	Insert	Update	Delete
DEAL_DETAIL	No	No	No	Yes
DEAL_QUEUE	No	No	No	Yes
DEAL_CALC_QUEUE	No	No	No	Yes
DEAL_HEAD	No	No	No	Yes
REPL_RESULTS	No	No	No	Yes
REV_ORDERS	No	No	No	Yes
ITEM_LOC	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
CONTRACT_DETAIL	No	No	Yes	No
CONTRACT_HEAD	No	No	Yes	No
BUYER_WKSHT_MANUAL	No	No	Yes	No
IB_RESULTS	No	No	Yes	No
L10N_DOC_DETAILS_GTT	Yes	No	No	Yes
MV_L10N_ENTITY	Yes	No	No	No
COUNTRY_ATTRIB	Yes	No	No	No
L10N_PKG_CONFIG	Yes	No	No	No
TSFHEAD	Yes	No	No	No
ORDHEAD_L10N_EXT	No	Yes	No	No
TSFHEAD_L10N_EXT	No	Yes	No	No
MRT_L10N_EXT	No	Yes	No	No
FM_SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplapprv (Approve Replenishment Orders)

Module Name	rplapprv.pc
Description	Approve Replenishment Orders
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS300
Runtime Parameters	

Design Overview

This program looks at all replenishment, vendor and contract orders created during the nightly batch run to determine if they can be approved. These orders are compared with any vendor minimums that may exist. Orders that do not meet the vendor minimums are either deleted or placed in worksheet status. A flag, held at the supplier inventory management level (ORD_INV_MGMT.ORD_PURGE_IND), determines what action is taken on orders that fail minimums. Vendor generated orders are not subject to these minimum checks.

Vendor minimums can be held at the order, item, or location level. Order and location level minimums are held on the SUP_INV_MGMT table. There is a flag that determines if they are applied at the order level or at the location level. Vendor minimums at the SKU level are held on the ITEM_SUPP_COUNTRY table.

When the ORD_INV_MGMT.ORD_PURGE_IND is 'N', a failure at any level causes the order to be placed in worksheet status. When the ORD_INV_MGMT.ORD_PURGE_IND is 'Y', a failure at the location level causes the offending location to be deleted; a failure at the SKU level causes the problematic SKU to be deleted; and a failure at the order level caused the entire order to be deleted.

For any orders that fail vendor minimums when the ORD_INV_MGMT.ORD_PURGE_IND is 'Y', a record is written to the SUPS_MIN_FAIL table for reporting purposes. This table is purged during the pre-processing of this batch program.

After order records are updated, any applicable deals, brackets and allowances are applied to the orders by subsequent processes. Open to buy is then updated for any orders built in approved status. If any orders are contract orders, the contract amounts are updated as well to reflect any order record deletions.

If any orders are Franchise POs, the associated Franchise Orders are also approved if they pass the credit check. If they fail the credit check, both Franchise POs and orders will remain in Worksheet.

An order may not pass vendor minimum checks assuming that the vendor minimum checks are performed for a physical WH. If the vendor minimum is not met for a physical location, all the virtual WHs on the order within the physical WH will need to be removed along with associated allocations.

Prepost rplapprv pre – truncates sups_min_fail table

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program should run directly after the replenishment supcnstr.pc program. It is important that this program runs before any other process affects the generated orders The script batch_rplapprvgtax.ksh should also run immediately after this program to ensure that taxes are computed for the approved replenishment orders in a global tax configuration
Pre-Processing	Prepost rplapprv pre
Post-Processing	batch_rplapprvgtax.ksh (when GTAX)
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is order number. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD_LOCK	No	No	No	Yes
ORDHEAD	Yes	No	Yes	Yes
ORDLOC	Yes	No	No	Yes
ORDSKU	Yes	No	No	Yes
ORD_INV_MGMT	Yes	No	Yes	Yes
DEAL_CALC_QUEUE	No	Yes	Yes	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
SUPS_MIN_FAIL	No	Yes	No	Yes
ALLOC_HEADER	Yes	No	Yes	Yes
ALLOC_DETAIL	No	No	No	Yes
CONTRACT_HEADER	Yes	No	Yes	No
OTB	No	No	Yes	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
WH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
SUPS	Yes	No	No	No
REPL_APPRV_GTAX_QUEUE	No	Yes	No	No

Table	Select	Insert	Update	Delete
ORDHEAD_CFA_EXT	No	No	No	Yes
WF_ORDER_HEAD	Yes	No	Yes	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

batch_rplapprvgtax.ksh (Update Replenishment Order Taxes)

Module Name	batch_rplapprvgtax.ksh
Description	Update Replenishment Order Taxes
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS194
Runtime Parameters	

Design Overview

This script calls the TAX_THREAD_SQL.LOAD_REPL_ORDER_TAX_BREAKUP to enable parallel execution via multiple thread calls to the L10N_BR_INT_SQL.LOAD_ORDER_TAX_OBJECT function to compute taxes for approved replenishment orders. Computed taxes are inserted/updated into the ORD_TAX_BREAKUP table.
This batch should be run only for Global Tax (GTAX) configuration.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	This batch should be run only for Global Tax (GTAX) configuration This program should run directly after the replenishment rplapprv program. It is important that this program runs before any other process affects the generated orders
Pre-Processing	rplapprv
Post-Processing	N/A
Threading Scheme	Threaded by purchase order number

Restart/Recovery

The logical unit of work is a set of purchase orders. Purchase order numbers in the REPL_APPRV_GTAX_QUEUE table are assigned a thread number given the number of slots.

The same table drives the restart and recovery as well. Purchase orders in a thread that successfully complete execution are deleted from REPL_APPRV_GTAX_QUEUE. Any restart after a fatal error will include the failed purchase order numbers when assigning new threads.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORD_TAX_BREAKUP	Yes	Yes	Yes	No
REPL_APPRV_GTAX_QUEUE	Yes	No	No	Yes
ORDLOC	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
MV_CURRENCY_CONVERSION_RATES	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
ADDR	Yes	No	No	No
STATE	Yes	No	No	No
COUNTRY	Yes	No	No	No
COUNTRY_TAX_JURISDICTION	Yes	No	No	No
V_BR_COUNTRY_ATTRIB	Yes	No	No	No
V_BR_SUPS	Yes	No	No	No
V_BR_STORE_FISCAL_CLASS	Yes	No	No	No
V_BR_STORE_REG_NUM	Yes	No	No	No
V_BR_WH_REG_NUM	Yes	No	No	No
V_BR_ITEM_FISCAL_ATTRIB	Yes	No	No	No
ORDLOC_EXP	Yes	No	No	No

Table	Select	Insert	Update	Delete
ELC_COMP	Yes	No	No	No
ORDLOC_DISCOUNT	Yes	No	No	No
VAT_CODES	Yes	No	No	No
FM_FISCAL_UTILIZATION	Yes	No	No	No
V_BR_ORD_UTIL_CODE	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

- This program should only be run in Global Tax (GTAX) installations.

repl_wf_order_sync.ksh (Sync Replenishment Franchise Orders)

Module Name	repl_wh_order_sync.ksh
Description	Sync Replenishment Franchise Orders
Functional Area	Replenishment
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS306
Runtime Parameters	

Design Overview

This module will serve as the wrapper for the package function WF_ALLOC_SQL.REPL_SYNC_F_ORDER which will check the crossdock orders created during replenishment and create franchise order records for any allocations where the destination location is a franchise store.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	End of replenishment batch cycle
Pre-Processing	rplapprv
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ALLOC_HEADER	Yes	No	Yes	No
ALLOC_DETAIL	Yes	No	Yes	No
STORE	Yes	No	No	No
WF_CUSTOMER	Yes	No	No	No
WF_ORDER_HEAD	Yes	Yes	Yes	No
WF_ORDER_DETAIL	Yes	Yes	Yes	Yes
ITEM_MASTER	Yes	No	No	No
STORE	Yes	No	No	No
WF_ORDER_AUDIT	Yes	No	No	Yes
WF_COST_RELATIONSHIP	Yes	No	No	No
FUTURE_COST	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPP_COUNTRY_DIM	Yes	No	No	No
WF_ORDER_EXP	Yes	Yes	No	Yes
WF_COST_BUILDUP_TMPL_HEAD	Yes	No	No	No
WF_COST_BUILDUP_TMPL_DETAIL	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_SUPP_UOM	Yes	No	No	No
V_ITEM_MASTER	Yes	No	No	No
V_STORE	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplprg (Purge Aged Replenishment Results)

Module Name	rplprg.pc
Description	Purge Aged Replenishment Results
Functional Area	Replenishment
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS316
Runtime Parameters	

Design Overview

The replenishment extraction programs (RPLEXT, REQEXT) write a number of records to REPL_RESULTS. Store orders populate the STORE_ORDERS table. The investment buy process writes records to IB_RESULTS and the Buyer Worksheet Form populates BUYER_WKSHT_MANUAL. These tables hold information that is relevant to replenishment processes. Over time, records on these tables become unneeded and must be cleared out. The replenishment purge program goes through these tables and clears out those records that are older than a predetermined number of days. The purging cycles (number of days) are maintained as a system parameter.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Because this program performs only deletes, there is no need for restart/recovery or multithreading, and there is no driving cursor. However, this program still needs an entry on RESTART_CONTROL to determine the number of records to be deleted between commits.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
ALL_TAB_PARTITIONS	Yes	No	No	No
REPL_RESULTS	No	No	No	Yes
BUYER_WKSHT_MANUAL	No	No	No	Yes
STORE_ORDERS	No	No	No	Yes
IB_RESULTS	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplathistprg (Purge Replenishment Attribute History)

Module Name	rplathistprg.pc
Description	Purge Replenishment Attribute History
Functional Area	Replenishment
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS312
Runtime Parameters	

Design Overview

The batch will purge data from the REPL_ATTR_UPD_HIST table if it's older than the defined number of retention weeks as specified in the system parameters.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Weekly
Scheduling Considerations	This program should run at the end of the week
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
REPL_ATTR_UPD_HIST	No	No	No	Yes
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
ALL_TAB_PARTITIONS	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

rplprg_month (Purge Replenishment Results History by Month)

Module Name	rplprg_month.pc
Description	Purge Replenishment Results History by Month
Functional Area	Replenishment
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS317
Runtime Parameters	

Design Overview

The replenishment extraction programs (RPLEXT, REQEXT) write a number of records to REPL_RESULTS. The investment buy process writes records to IB_RESULTS and the Buyer Worksheet Form populates BUYER_WKSHT_MANUAL. These tables hold information that is relevant to replenishment processes. Over time, records on these tables become unneeded and should be cleared out. The monthly replenishment purge program goes through these tables and clears out those records that are older than a predetermined number of days (maintained in SYSTEM_OPTIONS). The eways ewInvAdjustToRMS, ewReceiptToRMS need to be shutdown when RPLPRG_MONTH.PC is run.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A

Restart/Recovery

Because this program performs only deletes, there is no need for restart/recovery or multithreading, and there is no driving cursor. However, this program still needs an entry on RESTART_CONTROL to determine the number of records to be deleted between commits.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
ALL_TAB_PARTITIONS	Yes	No	No	No
REPL_RESULTS	No	No	No	Yes
BUYER_WKSHT_MANUAL	No	No	No	Yes
STORE_ORDERS	No	No	No	Yes
IB_RESULTS	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Design Assumptions

N/A

14 Inventory

Overview

Most inventory process is in RMS are performed via the UI and near real time RIB integrations. However, some inventory related batch processes exist to manage inventory data.

Batch Design Summary

The following batch designs are included in this chapter:

- edidlprd.pc (Download Sales and Stock On Hand From RMS to Suppliers)
- ordinvupld.pc (Upload and Process Inventory Reservations from ReSA)
- wasteadj.pc (Adjust Inventory for Wastage Items)
- refeodinventory.ksh (Refresh End of Day Inventory Snapshot)
- invaprg.pc (Purge Aged Inventory Adjustments)
- customer_order_purge.ksh (Purge Aged Customer Orders)

edidlprd (Download Sales and Stock On Hand From RMS to Suppliers)

Module Name	edidlprd.pc
Description	Download Sales and Stock On Hand From RMS to Suppliers
Functional Area	Inventory
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS47
Runtime Parameters	

Design Overview

This program is used to transmit item level sales and stock on hand information to vendors. The report is a summary that will be sent to specified suppliers via EDI giving sales details, as well as current stock on hand and in transit for all locations for each of the items supplied by that supplier. Only those suppliers which have an EDI sales reporting frequency of either daily or weekly will have files generated by this program. The system parameter EDI Daily Report Lag is used for suppliers receiving daily updates to determine the day lag for sales data sent, to account for late posting sales.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Daily
Scheduling Considerations	refeodinventory.ksh must run successfully prior to execution to ensure that ITEM_LOC_SOH_EOD is up-to-date
Pre-Processing	refeodinventory.ksh, prepost pre
Post-Processing	prepost post
Threading Scheme	Multi-threaded by supplier through the locking of EDI_SUPS_TEMP table for each supplier fetched

Restart/Recovery

Restart/recovery in this program is achieved through utilizing the global temporary table EDI_SUPS_TEMP. Once a supplier is processed, it is deleted from the EDI_SUPS_TEMP table to prevent the same supplier from being processed again during recovery.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUPS	Yes	No	No	No
EDI_SUPS_TEMP	Yes	No	No	Yes
EDI_DAILY_SALES	Yes	Yes	Yes	No
PERIOD	Yes	No	No	No
COMPHEAD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
ITEM_LOC_SOH_EOD	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No

I/O Specification

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000013

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File record descriptor	Char(5)	FHEAD	Describes record type
	Line number	Number(10)	0000000001	Sequential file line number
	File source	Char(5)	DLPRD	File Type
	File create date	Char(8)		Date that the file was created in YYYYMMDD format
THEAD	File record descriptor	Char(5)	THEAD	Identifies record type
	Line number	Number(10)		Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	Report date	Char(8)		For weekly reporting, this will contain the current date. For daily reporting, it will be the date represented by the sales, current date – lag days. Both will be in the YYYYMMDD format
	Supplier	Number(10)		RMS Supplier Number
TITEM	File record descriptor	Char(5)	TITEM	Identifies file record type
	Line number	Number(10)		Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	Item	Char(25)		Transaction level item to which with the data is related
	Item_Num_Type	Char(6)		Contains the item number type for the item on ITEM_MASTER
	Ref_Item	Char(25)		Contains the primary reference item for the item in the file, if defined

Record Name	Field Name	Field Type	Default Value	Description
	Ref_Item_Num_Type	Char(6)		Contains the item number type for the reference item from ITEM_MASTER
	Vendor catalog number	Char(30)		Contains the VPN (Vendor Product Number), if defined for the item/supplier
	Item description	Char(250)		Contains the transaction level item description from ITEM_MASTER
TQUTY	File record descriptor	Char(5)	TQUTY	Identifies record type
	Line number	Number(10)		Sequential file line number
	Transaction number	Number(10)		Sequential transaction number
	Quantity descriptor	Char(15)		Indicates what the quantity represents, either 'On-hand' (stock), 'Sold'(sales), or 'In transit'
	Location type	Char(2)		Indicates the type of location represented in the file: 'ST' for store or 'WH' warehouse
	Location	Number(10)		Contains the store or warehouse number for which the information applies
	Unit cost	Number(20)		Contains the current unit cost for the item/location with 4 implied decimal places. This value will be in the supplier's currency
	Quantity	Number(12)		Indicates the quantity of the item sold, on hand or in transit to the location; the quantity is represented with 4 implied decimal places
TTAIL	File record descriptor	Char(5)	TTAIL	Identifies record type
	Line number	Number(10)		Sequential file line number
	Transaction lines	Number(6)		Number of lines for this transaction
FTAIL	File record descriptor	Char(5)		Identifies record type
	Line number	Number(10)		Total number of lines in file
	Number of transaction lines	Number(10)		Number of transaction lines in file

Design Assumptions

- A data translator will be used to convert the flat file produced by RMS to the required EDI data format.
- Only data for items where the supplier is indicated as the primary supplier/origin country for the item will be included in the report.

ordinvupld (Upload and Process Inventory Reservations from ReSA)

Module Name	ordinvupld.pc
Description	Upload and Process Inventory Reservations from ReSA
Functional Area	RMS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS113
Runtime Parameters	

Design Overview

This batch program processes the input file generated by Sales Audit Inventory Export (saordinvexp), which is generated to reserve and un-reserve inventory based on in-store customer orders and layaway. An in-store customer order is one where the customer is purchasing inventory present in the store, but will not take it home immediately. For example, with a large item like a sofa, the customer may pickup at a later time with a larger vehicle. Layaway is when a customer pays for an item over time and only takes the item home once it has been fully paid for. In processing this file, RMS updates the quantity of the item/location sent to either add or subtract from the quantity in the Customer Order inventory status type.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	Run after saordinvexp.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multithreading based on the thread number padded with input file name

Restart/Recovery

The logical unit of work for ordinvupld.pc is a valid item status transaction at a given store/location. The logical unit of work is defined as a group of these transaction records. The Oracle Retail standard file-based restart/recovery logic is used. Records are committed to the database when the maximum commit counter is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC_SOH	No	No	Yes	No
TRAN_DATA	No	Yes	No	No
ITEM_STATUS_QTY	Yes	Yes	Yes	No
ITEM_MASTER	Yes	No	No	No
STORE	Yes	No	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000049

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	Identifies the file record type
	File Line Id	Char(10)	0000000001	Sequential file line number
	File type Definition	Char(4)	ORIN	Identifies the file type
	File Create Date	Char(14)		File Create Date in YYYYMMDDHHMMSS format
	Location	Number(10)		Store location number
THEAD	Record descriptor	Char(5)	THEAD	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Transaction Date & Time	Char(14)	Transaction Date	Date and time of the order processed
	Transaction Type	Char(6)	'SALE'	Transaction type code specifies whether the transaction is sale or Return
TDETL	Record descriptor	Char(5)	TDETL	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Item Type	Char(3)	REF or ITM	Can be REF or ITM

Record Name	Field Name	Field Type	Default Value	Description
	Item	Char(25)		Id number of the ITM or REF
	Item Status	Char(6)	LIN - Layaway Initiate LCA – Layaway Cancel LCO – Layaway Complete PVLCO – Post void of Layaway complete ORI – Pickup/delivery Initiate ORC - Pickup/delivery Cancel ORD - Pickup/delivery Complete PVORD – Post void of Pick-up/delivery complete	Type of transaction
	Dept	Number(4)		Department of item sold or returned
	Class	Number(4)		Class of item sold or returned.
	Sub class	Number(4)		Subclass of item sold or returned
	Pack Ind	Char(1)		Pack indicator of item sold or returned
	Quantity Sign	Chanr(1)	'P' or 'N'	Sign of the quantity.
	Quantity	Number(12)		Quantity * 10000 (4 implied decimal places), number of units for the given order (item) status
	Selling UOM	Char(4)		UOM at which this item was sold
	Catchweight Ind	Char(1)		Indicates if the item is a catchweight item. Valid values are Y or NULL
	Customer Order number	Char(48)		Customer Order number
TTAIL	File Type Record Descriptor	Char(5)	TTAIL	Identifies file record type
	File Line Identifier	Number(10)	Specified by ReSA	ID of current line being processed by input file.
	Transaction count	Number(6)	Specified by ReSA	Number of TDETL records in this transaction set
FTAIL	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file

Record Name	Field Name	Field Type	Default Value	Description
	File Record Counter	Number(10)		Number of records/transactions processed in current file (only records between FHEAD & FTAIL)

Design Assumptions

N/A

wasteadj (Adjust Inventory for Wastage Items)

Module Name	wasteadj.pc
Description	Adjust Inventory for Wastage Items
Functional Area	Inventory
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS388
Runtime Parameters	

Design Overview

This program reduces inventory of spoilage type wastage items to account for natural wastage that occurs over the shelf life of the product. This program affects only items with spoilage type wastage identified on ITEM_MASTER with a waste_type of 'SP' (spoilage). Sales type wastage is accounted for at the time of sale.
This program should be scheduled to run prior to the stock count and stock ledger batch to ensure that the stock adjustment taken during the current day is credited to the appropriate day.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Daily
Scheduling Considerations	This program should be scheduled to run prior to the stock count and stock ledger batch to ensure that the stock adjustment taken during the current day is credited to the appropriate day
Pre-Processing	N/A
Post-Processing	refeodinventory.ksh

Schedule Information	Description
Threading Scheme	Threaded by store

Restart/Recovery

The logical unit of work is an item/location. This batch program commits when the number of records processed has reached commit_max_ctr. If the program aborts, it restarts from the last successfully processed item /location.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
CLASS	Yes	No	No	No
INV_ADJ_REASON	Yes	No	No	No
INV_ADJ	No	Yes	No	No
TRAN_DATA	No	Yes	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
VAT_ITEM	Yes	No	No	No

Design Assumptions

N/A

refeodinventory (Refresh End of Day Inventory Snapshot)

Module Name	refeodinventory.ksh
Description	Refresh End of Day Inventory Snapshot
Functional Area	Inventory Tracking
Module Type	Business Processing
Module Technology	Ksh
Catalog ID	RMS303
Runtime Parameters	

Design Overview

This script refreshes the ITEM_LOC_SOH_EOD. This end of day snapshot is used for assorted history build programs. The script does the following:

- Truncates the ITEM_LOC_SOH_EOD table
- Inserts all records from ITEM_LOC_SOH into ITEM_LOC_SOH_EOD

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Daily
Scheduling Considerations	Must run prior to any batch programs that use data from ITEM_LOC_SOH_EOD to ensure that the table is up-to-date
Pre-Processing	wasteadj.pc
Post-Processing	Prepost edidlprd pre
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC_SOH_EOD	No	Yes	No	Yes
SYSTEM_OPTIONS	Yes	No	No	No

Design Assumptions

- All of the daily updates pertaining to stock on hand have been performed during prior batch phases.
- The executing schema has DROP ANY TABLE privileges. This is needed to perform the truncate on ITEM_LOC_SOH_EOD.
- The ITEM_LOC_SOH_EOD table is owned by the schema name specified in the TABLE_OWNER column of the SYSTEM_OPTIONS view.

invaprg (Purge Aged Inventory Adjustments)

Module Name	invaprg.pc
Description	Purge Aged Inventory Adjustments
Functional Area	Inventory
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS251
Runtime Parameters	

Design Overview

This batch program all inventory adjustment records whose adjustment date has elapsed a pre-determined number of months. The number of months that inventory adjustment records are kept before they are purged by this batch is defined by the system parameter Inventory Adjustment Months.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PURGE_CONFIG_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
INV_ADJ	No	No	No	Yes

Design Assumptions

N/A

customer_order_purge.ksh (Purge Aged Customer Orders)

Module Name	customer_order_purge.ksh
Description	Purge Aged Customer Orders
Functional Area	Purchase Orders
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS205

Design Overview

This module will serve as the wrapper for the package function CUSTOMER_RESERVE_SQL.PURGE_CUSTOMER_ORDER which will purge the store fulfillment customer order records from ORDCUST and ORDCUST_DETAIL tables based on the CUST_ORDER_HISTORY_MONTHS from PURGE_CONFIG_OPTIONS table. This will also purge the obsolete records having status 'X' where the customer order could not be created.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Monthly
Scheduling Considerations	Run after tsfprg.pc and ordprg.pc
Pre-Processing	tsfprg.pc, ordprg.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDCUST	Yes	No	No	Yes
ORDCUST_DETAIL	Yes	No	No	Yes
PURGE_CONFIG_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No

Security Considerations

N/A

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Transfers, Allocation, and RTV

Overview

Transfers, Allocations and Return to Vendor (RTV) transactions move inventory among locations. The majority of processing associated with these transactions occurs through the user interface and near real time RIB integration with Oracle Retail Store Inventory Management (SIM) and Oracle Retail Warehouse Management System (RWMS). However, RMS does use a variety of batch programs to maintain the data related to these transactions.

Batch Design Summary

The following batch designs are included in this chapter:

- docclose.pc - Close Transactions with no Expected Appointments, Shipments or Receipts
- dummyctn.pc - Reconcile Received Dummy Carton IDs with Expected Cartons
- tamperctn.pc - Detail Receive Damaged or Tampered with Cartons
- distropcpub.pc - Stage Regular Price Changes on Open Allocations/Transfers so Publishing Sends New Retail to Subscribing Applications
- mrt.pc - Create Transfers for Mass Return Transfer
- mrtrtv.pc - Create Return To Vendor for Mass Return Transfer
- mrtupd.pc - Close Mass Return Transfers
- mrtprg.pc - Purge Aged Mass Return Transfers and RTVs
- rtvprg.pc - Purge Aged Returns to Vendors
- tsfclose.pc - Close Overdue Transfers
- tsfprg.pc - Purge Aged Transfers
- allocbt.ksh - Create Book Transfers for Allocations Between Warehouses in the Same Physical Warehouse.

docclose (Close Transactions with no Expected Appointments, Shipments or Receipts)

Module Name	docclose.pc
Description	Close Transactions with no Expected Appointments, Shipments or Receipts
Functional Area	Transfers, Allocation, and RTVs
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS219
Runtime Parameters	

Design Overview

This program will be used to attempt to close POs, transfers, and allocations that do not have any outstanding appointments, shipments or receipts expected. Receipts without appointments are recorded on the DOC_CLOSE_QUEUE table. Allocations souced from an inbound receipt of another document (e.g. POs, Transfers, Allocations, ASNs and BOL) can only be closed if the sourcing document is closed. This batch program will retrieve unique documents from the table and use existing functions to attempt closure for each.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	Run after tsfclose, before wfordcls, wfretcls, tsfprg and ordprg
Pre-Processing	tsfclose, prepost docclose pre
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is a unique doc and doc_type combination. The program is restartable on the doc number.

Key Tables Affected

Table	Select	Insert	Update	Delete
DOC_CLOSE_QUEUE	Yes	No	No	Yes
ORDHEAD	No	No	Yes	No
DEAL_CALC_QUEUE	No	No	No	Yes
ITEM_LOC_SOH	No	No	Yes	No
TSFHEAD	No	No	Yes	No
ALLOC_HEADER	No	No	Yes	No

Design Assumptions

N/A

dummyctn (Reconcile Received Dummy Carton IDs with Expected Cartons)

Module Name	dummyctn.pc
Description	Reconcile Received Dummy Carton IDs with Expected Cartons
Functional Area	Transfers, Allocations and RTVs
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS221
Runtime Parameters	

Design Overview

When stock orders are received, if a carton number or barcode cannot be read due to damage to the box or other factors, a dummy ID is assigned to it and it is detail received at the store or warehouse. The dummy ID and the details of the carton received are then written to a staging table during the receiving process. This batch process scans stock orders to find transfers or allocations that contain cartons that were not received to see if any shipments contain un-received cartons that match the dummy carton receipt (both item and quantity). If a match is found, then the dummy carton is received against the matching carton. If a match is not found, an error is written to an error file and the record remains on the staging table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program deletes from the DUMMY_CARTON_STAGE table. The program will restart by processing the records that remain on the DUMMY_CARTON_STAGE table.

Key Tables Affected

Table	Select	Insert	Update	Delete
SHIPSKU_TEMP	Yes	Yes	No	Yes
SHIPMENT	Yes	No	Yes	No
SHIPSKU	Yes	No	Yes	No
PACKITEM	Yes	No	No	No
DUMMY_CARTON_STAGE	Yes	Yes	Yes	Yes
TSFHEAD	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
IF_ERRORS	No	Yes	No	No
ALLOC_DETAIL	No	No	Yes	No
SHIPITEM_INV_FLOW	Yes	No	Yes	No
APPT_DETAIL	No	No	Yes	No
DOC_CLOSE_QUEUE	No	Yes	No	No
TRAN_DATA	No	Yes	No	No
ITEM_LOC_SOH	No	Yes	Yes	No
EDI_DAILY_SALES	No	No	Yes	No
STAKE_SKU_LOC	No	Yes	Yes	No
STAKE_PROD_LOC	No	No	Yes	No
MRT_ITEM_LOC	No	No	Yes	No
TSFDETAIL	No	Yes	Yes	No
NWP	No	Yes	Yes	No
INV_ADJ	No	Yes	No	No
TSFDETAIL_CHRG	No	Yes	No	No

Table	Select	Insert	Update	Delete
ITEM_LOC	No	Yes	No	No
POS_MODS	No	Yes	No	No
PRICE_HIST	No	Yes	No	No
ITEM_SUPP_COUNTRY_LOC	No	Yes	Yes	No
ITEM_SUPP_COUNTRY_BRACKET_COST	No	Yes	Yes	No
INV_STATUS_QTY	No	Yes	Yes	Yes

Design Assumptions

N/A

tamperctn (Detail Receive Damaged or Tampered with Cartons)

Module Name	tamperctn.pc
Description	Detail Receive Damaged or Tampered with Cartons
Functional Area	Transfers, Allocations and RTVs
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS371
Runtime Parameters	

Design Overview

This program looks for items that were intended to be received as a pack and attempts to match based on component quantity. It reads records from the staging table for the carton ID for pack items not received and attempts to match on the components of the pack and quantity. If a match is found, then the dummy carton is received against the matching carton. If a match is not found, an error is written to an error file and the record remains on the staging table.
This program is only run if the Receive Pack Component (STORE_PACK_COMP_RCV) system parameter is 'Y'.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	This batch program should only run when the store_pack_comp_rcv_ind system parameter is 'Y'
Pre-Processing	N/A

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
DUMMY_CARTON_STAGE	Yes	No	No	Yes
PERIOD	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
SHIPMENT	Yes	No	No	No
SHIPSKU	Yes	No	No	No
SHIPSKU_TEMP	Yes	Yes	No	Yes
PACKITEM	Yes	No	No	No

Design Assumptions

N/A

distropcpub (Stage Regular Price Changes on Open Allocations/Transfers so Publishing Sends New Retail to Subscribing Applications)

Module Name	distropcpub.pc
Description	Stage Regular Price Changes on Open Allocations/Transfers so Publishing Sends New Retail to Subscribing Applications
Functional Area	Transfers, Allocations, and RTV
Module Type	Integration
Module Technology	ProC
Integration Catalog ID	RMS216
Runtime Parameters	

Design Overview

This program will look for any regular price change (tran type 4 or 11 from PRICE_HIST) that is due to go into effect tomorrow. Then, for any open allocations or transfers where the 'to' location and items that have price changes going into effect, it places a record on the allocation or transfer publishing queue tables, such that they can be picked up by the RIB and sent to the subscribing systems.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program should run after RPM price event execution batch process.
Pre-Processing	RPM - PriceEventExecutionBatch
Post-Processing	N/A
Threading Scheme	Multithreaded based on store

Restart/Recovery

The logical unit of work is store. The driving cursor retrieves all item/locations that have price changes in effect from the next day. It also gets all of the component items of the non-sellable packs that have price changes.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PRICE_HIST	Yes	No	No	No
V_RESTART_STORE	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
TSFHEAD	Yes	No	No	No
TSFDETAIL	Yes	No	No	No
ORDHEAD_REV	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ALLOC_MFQUEUE	No	Yes	No	No
TSF_MFQUEUE	No	Yes	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000196 ALLOC_MFQUEUE table

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000197 TSF_MFQUEUE table

Design Assumptions

N/A

mrt (Create Transfers for Mass Return Transfer)

Module Name	mrt.pc
Description	Create Transfers for Mass Return Transfer
Functional Area	Transfers, Allocations and RTVs
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS273
Runtime Parameters	

Design Overview

This batch program creates individual transfers for each 'from' location on an approved Mass Return Transfer. Transfers will be created in approved status, however for MRTs with a Quantity Type of 'Manual', meaning the MRT was created for a specific quantity rather than 'All Inventory', if the SOH at the sending location is lower than the requested quantity the status will be created in Input status. In addition, if the Transfer Not After Date specified on the MRT is earlier than or equal to the current date, the status of the associated transfers will also be set to Input.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	This batch should be scheduled to run before mrtupd.pc and mrtrtv.pc, and before any other transfer-related batches
Pre-Processing	N/A
Post-Processing	mrtrtv
Threading Scheme	Threaded by warehouse

Restart/Recovery

The logical unit of work is a from/to location combination. This may represent a transfer of multiple items from a location (store or warehouse) to a warehouse, depending on how the MRT was created. Restart/recovery is based on from/to location as well. The batch program uses the v_restart_all_locations view to thread processing by warehouse (to location).

Key Tables Affected

Table	Select	Insert	Update	Delete
MRT	Yes	No	Yes	No
MRT_ITEM	Yes	No	No	No
MRT_ITEM_LOC	Yes	No	Yes	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
TSFDETAIL	Yes	Yes	Yes	No
TSFHEAD	No	Yes	Yes	No
TSF_ITEM_COST	No	Yes	No	No
TRAN_DATA	No	Yes	No	No
INV_STATUS_QTY	Yes	Yes	Yes	Yes
PERIOD	Yes	No	No	No

Design Assumptions

N/A

mrtrtv (Create Return to Vendor for Mass Return Transfer)

Module Name	mrtrtv.pc
Description	Create Return To Vendor for Mass Return Transfer
Functional Area	Transfers, Allocations and RTVs
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS275
Runtime Parameters	

Design Overview

This batch program creates RTVs for approved mass return transfers that require an RTV to be created automatically and have an RTV create date earlier than or equal to the current date. RTVs are created in either Input or Approved status, depending on how the MRT was created. The program will then set the status of all processed MRTs to 'R' in the MRT table, which indicates that the RTVs have been created.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	Before mrtupd and after mrt
Pre-Processing	mrt.pc
Post-Processing	mrtupd.pc
Threading Scheme	Threaded by warehouse

Restart/Recovery

The logical unit of work for this program is set at the warehouse level. Threading is done by store using the v_restart_all_locations view.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
MRT	Yes	No	Yes	No
MRT_ITEM	Yes	No	No	No
MRT_ITEM_LOC	Yes	No	No	No
SUPS	Yes	No	No	No
RTV_HEAD	No	Yes	Yes	No
RTV_DETAIL	No	Yes	No	No
ADDR	Yes	No	No	No

Design Assumptions

N/A

mrtupd (Close Mass Return Transfers)

Module Name	mrtupd.pc
Description	Close Mass Return Transfers
Functional Area	Transfers, Allocations and RTVs
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS276
Runtime Parameters	

Design Overview

This program updates the status of MRTs and their associated transfers to closed status, for MRTs or transfers associated with an MRT that remain open after the transfer and/or RTV not after dates have passed. MRTs that have transfers in progress (shipped but not received) will not be closed by this program.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	Run after mrtrtv.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by warehouse

Restart/Recovery

The logical unit of work for this program is warehouse. This program is multi-threaded using the v_restart_all_locations view.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
MRT	Yes	No	Yes	No
TSFHEAD	Yes	No	Yes	No
SHIPSKU	Yes	No	No	No
TSFDETAIL	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
V_PACKSKU_QTY	Yes	No	No	No

Design Assumptions

N/A

mrtprg (Purge Aged Mass Return Transfers and RTV)

Module Name	mrtprg.pc
Description	Purge Aged Mass Return Transfers and RTVs
Functional Area	Transfers, Allocations and RTVs
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS274
Runtime Parameters	

Design Overview

The purpose of this module is to purge mass return transfer (MRT) records, and their associated transfers and RTVs. Only MRTs with a status of closed in which all transfers associated with the MRT are also closed and where the time elapsed between the current date and the close date is at least equal to the system parameter value for MRT Transfer Retention days.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	This program should run daily
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by warehouse

Restart/Recovery

The logical unit of work for this batch program is a warehouse location. The program is multithreaded using v_restart_all_locations view.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
TSFHEAD	Yes	No	No	Yes
TSFDETAIL	No	No	No	Yes
SHIPMENT	No	No	No	Yes
SHIPSKU	Yes	No	No	Yes
SHIPITEM_INV_FLOW	No	No	No	Yes
CARTON	No	No	No	Yes
APPT_HEAD	Yes	No	No	Yes
APPT_DETAIL	Yes	No	No	Yes
DOC_CLOSE_QUEUE	No	No	No	Yes
INVC_HEAD	Yes	No	No	Yes
INVC_DETAIL	Yes	No	No	Yes
MRT	Yes	No	No	Yes
MRT_ITEM	Yes	No	No	Yes
MRT_ITEM_LOC	Yes	No	No	Yes
RTV_HEAD	Yes	No	No	Yes
RTV_DETAIL	No	No	No	Yes
TSFDETAIL_CHRG	No	No	No	Yes

Design Assumptions

N/A

rtvprg (Purge Aged Returns to Vendors)

Module Name	rtvprg.pc
Description	Purge Aged Returns to Vendors
Functional Area	Transfers, Allocations and RTVs
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS320
Runtime Parameters	

Design Overview

This batch program purges outdated RTV transactions from RMS. RTVs are considered outdated if they number of months between their completion date and the current date exceeds the system parameter RTV Order History Months and where all debit memos associated with the RTV have been posted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
RTV_HEAD	No	No	No	Yes
RTV_DETAIL	No	No	No	Yes
INVC_HEAD	Yes	No	No	Yes
INVC_DETAIL	No	No	No	Yes
INVC_NON_MERCH	Yes	No	No	Yes
INVC_MERCH_VAT	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
INVC_DETAIL_VAT	Yes	No	No	Yes
INVC_MATCH_QUEUE	Yes	No	No	Yes
INVC_DISCOUNT	Yes	No	No	Yes
INVC_TOLERANCE	Yes	No	No	Yes
ORDLOC_INVC_COST	Yes	No	Yes	No
INVC_MATCH_WKSHT	Yes	No	No	Yes
INVC_XREF	Yes	No	No	Yes
RTVITEM_INV_FLOW	No	No	No	Yes
RTV_HEAD_CFA_EXT	No	No	No	Yes

Design Assumptions

N/A

tsfclose (Close Overdue Transfers)

Module Name	tsfclose.pc
Description	Close Overdue Transfers
Functional Area	Transfers, Allocations and RTVs
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS379
Runtime Parameters	

Design Overview

This batch program processes unshipped and partially shipped transfers that are considered 'overdue', based on system parameter settings. If this functionality is enabled (by setting the system parameter TSF_CLOSE_OVERDUE = 'Y'), then this program will evaluate transfers to determine if they are overdue. The way that a transfer is considered overdue depends on the source and destination locations. There are separate system parameters for each of store to store, store to warehouse, warehouse to store, and warehouse to warehouse types of transfers.

For unshipped transfers, the transfer status is updated to delete and transfer reserved and expected inventory is backed out on ITEM_LOC_SOH for the sending and receiving locations respectively. For transfers that are shipped but not fully received, an entry is made into doc_close_queue table. These transfers are picked up by docclose batch and closed after reconciliation.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	After tsfclose, run docclose and tsfprg
Pre-Processing	N/A
Post-Processing	Docclose, tsfprg
Threading Scheme	Multi-threaded based on Transfer number

Restart/Recovery

The logical unit of work for this module is defined as a unique tsf_no. The v_restart_transfer view is used for threading. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
INV_MOVE_UNIT_OPTIONS	Yes	No	No	No
TSFHEAD	Yes	No	Yes	No
ALLOC_HEADER	Yes	No	Yes	No
ITEM_MASTER	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
DOC_CLOSE_QUEUE	No	Yes	No	No

Design Assumptions

N/A

tsfprg (Purge Aged Transfers)

Module Name	tsfprg.pc
Description	Purge Aged Transfers
Functional Area	Transfers, Allocations and RTVs
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS380
Runtime Parameters	

Design Overview

This module purges closed or deleted transfers and their associated records after a set number of days, based on the Transfer History Months system parameter.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Run after docclose, before wfrtnprg
Pre-Processing	Prepost tsfprg pre
Post-Processing	Prepost tsfprg post
Threading Scheme	Threaded by transfer number

Restart/Recovery

This batch program is multithreaded using the v_restart_transfer view. The logical unit of work is a transfer number. This batch program commits to the database for every commit_max_ctr number of transfers processed.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
TSFHEAD	Yes	No	No	Yes
TSFDETAIL	No	No	No	Yes

Design Assumptions

This batch program does not process Mass Return Transfers (MRT) and Franchise transfers (FO and FR). Purging of MRT and Franchise Order and Return records are done by mrtprg, wfordprg, wfrtnprg respectively.

allocbt (Create Book Transfers for Allocations Between Warehouses in the Same Physical Warehouse)

Module Name	allocbt.ksh
Description	Create Book Transfers for Allocations Between Warehouses in the Same Physical Warehouse
Functional Area	Inventory Movement
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS175
Runtime Parameters	

Design Overview

In RMS, when an allocation is received that involves a movement of stock between two warehouses, it should be determined if the source and any of the destination warehouses belong to the same physical warehouse. If so, that portion of the allocation should be treated as a book transfer and not sent down to RWMS for processing. This batch job identifies such allocations and creates book transfers once the allocation source is received and/or the release date for the allocation is reached.

Allocations can be sourced either from a warehouse's available inventory or from an inbound receipt. These allocations are integrated into RMS's ALLOC_HEADER and ALLOC_DETAIL tables and can be identified as the following:

1. Warehouse Sourced Allocations:
   - Alloc_header.order_no is NULL and alloc_header.doc is NULL.
2. Purchase Ordered Sourced Allocations (Cross Doc POs):
   - Alloc_header.order_no holds the PO number and alloc_header.doc_type = 'PO'.
   - Linked shipments are identified through shipment.order_no = alloc_header.order_no.
3. Transfer Sourced Allocations:
   - Alloc_header.order_no holds the transfer number and alloc_header.doc_type = 'TSF'.
   - Linked shipments are identified through shipsku.distro_no = alloc_header.order_no.

4. Allocation Sourced from an Inbound Allocation:
   - Alloc_header.doc holds the allocation number and alloc_header.doc_type = 'ALLOC'.
   - Linked shipments are identified through shipsku.distro_no = alloc_header.doc.
5. ASN Sourced Allocations:
   - Alloc_header.doc holds the asn number and alloc_header.doc_type = 'ASN'.
   - Linked shipments are identified through shipment.asn = alloc_header.doc.
6. BOL Sourced Allocations:
   - Alloc_header.doc holds the bol_no and alloc_header.doc_type = 'BOL'.
   - Linked shipments are identified through shipment.bol_no = alloc_header.doc.

This batch job supports all above allocation scenarios and calls the core package function ALLOC_BOOK_TSF_SQL to create book transfers.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	None
Pre-Processing	None
Post-Processing	None
Threading Scheme	Threaded by alloc_header.wh

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ALLOC_HEADER	Yes	No	Yes	No
ALLOC_DETAIL	Yes	No	Yes	No
ITEM_LOC_SOH	Yes	No	Yes	No
WH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
TSFHEAD	Yes	No	No	No
TSFDETAIL	Yes	No	Yes	No
SHIPMENT	Yes	No	No	No
SHIPSKU	Yes	No	No	No

Design Assumptions

N/A

16 Sales Posting

Overview

Oracle Retail Merchandising System (RMS) includes a convenient interface with your point-of-sale system (POS) that allows you to efficiently upload sales transaction data. Once the data enters RMS, other modules take over the posting of that data to sales transaction, sales history, and stock-on-hand tables. This overview describes the upload and validation of sales transaction data from your POS to RMS and the relevant processes.

Creating a POSU File

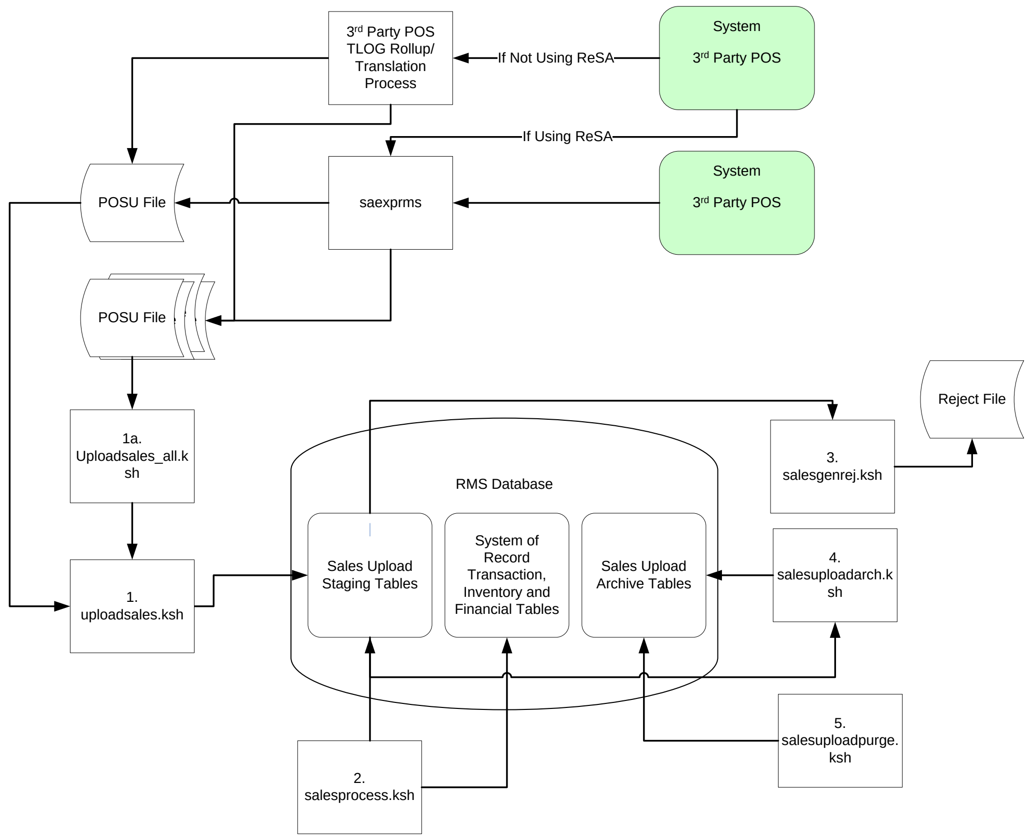
The RMS Sales Posting module, uploadsales.ksh requires a POSU file that is rolled up to the item/store/price point level. There are a variety of ways to create this file:

- If you use Oracle Retail Point of Sale (ORPOS), the integration via Oracle Retail Sales Audit (ReSA) will create appropriate POSU files.
- If you integrate your POS and Oracle Retail Sales Audit (ReSA), out of the box integration between ReSA and RMS will produce POSU files.
- If you integrate your OMS (Order Management System) and Oracle Retail Sales Audit (ReSA), out of the box integration between ReSA and RMS will produce POSU files.
- If you use a 3rd party POS or Order Management System (OMS) and do not use ReSA, you must use a custom process to roll up data to an item/store/price point level
    - Additional information about the structure of the POSU file is available in the detailed discussion of the uploadsales.ksh process.

Sales Posting Business Process

The Sales Posting Process consists of a number of related programs.

1. uploadsales.ksh reads the POSU file and writes it's contents to a series of staging tables.
    a. uploadsales_all.ksh wraps uploadsales.ksh to simplify the process of running uploadsales.ksh for groups of POSU files.
2. salesprocess.ksh reads the staged data and performs major validation, financial and inventory processing. Details of this processing are below in the detailed discussion of salesprocess.ksh.
3. salesgenrej.ksh creates a reject file for transactions that fail salesprocess.ksh validation.
4. salesuploadarch.ksh archives successfully processed transactions and clears them out of the staging tables.
5. salesuploadpurge.ksh purges transactions from the archive tables after the transactions age out of the system.



Batch Design Summary

The following batch designs are included in this chapter

- uploadsales.ksh (Upload POSU File for Processing)
- uploadsales_all.ksh (Process Multiple POSU Files)
- salesprocess.ksh (Main Processing of Staged Sale/Return Transactions)
- salesgenrej.ksh (Reject POSU Transactions)
- salesuploadarch.ksh (Archive Successfully Posted Transactions)
- salesuploadpurge.ksh (Purge Aged Archived POSU Transactions)

uploadsales.ksh (Upload POSU File for Processing)

Module Name	uploadsales.ksh
Description	Upload POSU File for Processing
Functional Area	Sales Posting
Module Type	Integration
Module Technology	Ksh
Integration Catalog ID	RMS112
Runtime Parameters	

Design Overview

The purpose of this module is to upload the contents of the POSU file from ReSA or 3rd Party POS to the staging table for further processing.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 2 (minimum) Ad Hoc (can also be run ad hoc throughout the day to trickle in sales)
Frequency	Daily
Scheduling Considerations	This program runs in the background. When a POSU file comes in and is detected, this module initiates the sales posting process
Pre-Processing	saexprms.pc (if the client uses ReSA to produce POSU files)
Post-Processing	salesprocess.ksh
Threading Scheme	N/A

Restart/Recovery

N/A

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

The number of threads, the amount of waiting time, number for retries, and average volume of data should be considered. RETRY_WAIT_TIME shouldn't be increased significantly.
The rows, bindsize and readsize parameter of the sqlldr command can be configured for better performance. This gives more control over how many times the inserts are committed/executed.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_POSUPLD_LOAD	No	Yes	No	No
SVC_POSUPLD_STATUS	No	Yes	No	No
SVC_POSUPLD_STAGING	No	Yes	No	No
V_SVC_POSUPLD_LOAD	Yes	No	No	No

Security Considerations

N/A

Integration Contract

Integration Type	Upload to RMS
File Name	POSU_<store>_<tran_date>_<sysdate>.<thread_val>
Integration Contract	IntCon000044

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file
	File Type Definition	Char(4)	POSU	Identifies file as 'POS Upload'
	File Create Date	Char(14)		Date file was written by external system
	Location Number	Number(10)		Store identifier
	Vat include indicator	Char(1)		Determines whether or not the store stores values including vat. Not required but populated by Oracle Retail sales audit

Record Name	Field Name	Field Type	Default Value	Description
	Vat region	Number(4)		Vat region the given location is in. Not required but populated by Oracle Retail Sales Audit
	Currency code	Char(3)		Currency of the given location. Not required but populated by Oracle Retail sales audit
	Currency retail decimals	Number(1)		Number of decimals supported by given currency for retails. Not required but populated by Oracle Retail sales audit
Transaction Header	File Type Record Descriptor	Char(5)	THEAD	Identifies transaction record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file
	Transaction Date	Char(14)	Transaction date	Date sale/return transaction was processed at the POS
	Item Type	Char(3)	REF or ITM	Item type will be represented as a REF or ITM
	Item Value	Char(25)		The ID number of an ITM or REF
	Dept	Number(4)		Dept of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Class	Number(4)		Class of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Subclass	Number(4)		Subclass of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Pack Indicator	Char(1)		Pack indicator of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Item level	Number(1)		Item level of item sold or returned. Not required but populated by Oracle Retail Sales Audit

Record Name	Field Name	Field Type	Default Value	Description
	Tran level	Number(1)		Tran level of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Wastage Type	Char(6)		Wastage type of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Wastage Percent	Number(12)		Wastage Percent*10000 (4 implied decimal places.), wastage percent of item sold or returned. Not required but populated by Oracle Retail Sales Audit
	Transaction Type	Char(1)	'S' – sales 'R' - return	Transaction type code to specify whether transaction is a sale or a return
	Drop Shipment Indicator	Char(1)	'Y' 'N'	Indicates whether the transaction is a drop shipment or not. If it is a drop shipment, indicator will be 'Y'. This field is not required, but will be defaulted to 'N' if blank
	Total Sales Quantity	Number(12)		Total sales quantity * 10000 (4 implied decimal places), number of units sold at a particular location
	Selling UOM	Char(4)		UOM at which this item was sold
	Sales Sign	Char(1)	'P' - positive 'N' - negative	Determines if the Total Sales Quantity and Total Sales Value are positive or negative
	Total Sales Value	Number(20)		Total Sales Value * 10000 (4 implied decimal places), sales value, net sales value of goods sold
	Last Modified Date	Char(14)		For VBO future use
	Catchweight Indicator	Char(1)	NULL	Indicates if the item is a catch weight item. Valid values are 'Y' or NULL
	Actual Weight Quantity	Number(12)	NULL	Actual Weight Quantity*10000 (4 implied decimal places), the actual weight of the item, only populated if catchweight_ind = 'Y'

Record Name	Field Name	Field Type	Default Value	Description
	Sub Trantype Indicator	Char(1)	NULL	Tran type for ReSA Valid values are ‘A’, ‘D’, NULL
	Total Igtax Value	Number(20)		Total Igtax Value * 10000 (4 implied decimal places), goods sold or returned
	Sales Type	Char(1)		Indicates whether the line item is a Regular Sale, a customer order serviced by OMS (External CO) or a customer order serviced by a store (In Store CO). Valid values are ‘R’,’E’, or ’I’
	No Inventory Return Indicator	Char(1)		Contains an indicator that identifies a return without inventory. This is generally a non-required column, but in case of Returns, this is required. Valid values are ‘Y’ or ’N’
	Return Disposition	Char(10)		Contains the disposition code published by RWMS as part of the returns upload to OMS
	Return Warehouse	Number(10)		Contains the physical warehouse ID for the warehouse identifier where the item was returned
Transaction Tax	File Type Record Descriptor	Char(5)	TTAX	Identifies the file record type
	File Line Identifier	Number(10)	Specified by external system	Sequential file line number
	Tax Code	Char(6)		Holds the tax code associated to the item
	Tax Rate	Number(20)		Tax rate*10000000000(10 implied decimal places), holds the tax rate for the tax code associated to the item
	Total Tax Value	Number(20)		Total Tax value*10000(4 implied decimal places), total tax amount for the line item
Transaction Detail	File Type Record Descriptor	Char(5)	TDETL	Identifies transaction record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file

Record Name	Field Name	Field Type	Default Value	Description
	Promotional Tran Type	Char(6)		Code for promotional type from code_detail, code_type = 'PRMT'
	Promotion Number	Number(10)		Promotion number from the RMS
	Sales Quantity	Number(12)		Sales quantity*10000 (4 implied decimal places.), number of units sold in this prom type
	Sales Value	Number(20)		Sales value*10000 (4 implied decimal places.), value of units sold in this prom type
	Discount Value	Number(20)		Discount quantity*10000 (4 implied decimal places.), value of discount given in this prom type
	Promotion Component	Number(10)		Links the promotion to additional pricing attributes
Transaction Trailer	File Type Record Descriptor	Char(5)	TTAIL	Identifies file record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file
	Transaction Count	Number(6)	Specified by external system	Number of TDETL records in this transaction set
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Identifier	Number(10)	Specified by external system	ID of current line being processed by input file
	File Record Counter	Number(10)		Number of records/transactions processed in current file (only records between fhead & ftail)

Design Assumptions

Multiple taxes for an item if sent from POS to ReSA, will be summed to a single tax in RMS and assigned one of the applicable tax codes.

Rolling up transactions to the item/store/price point

The program uploadsales.ksh requires that transactions be rolled up the item/store/price point level. The tables below give a hypothetical (though not particularly realistic) example of the type of rollup required by uploadsales.ksh.

Sales for Item Number 1234 (at one store during one period of the day)

Transaction Number	Number of Items Sold	Amount (in specified currency unit)	Price point (price reason)
167	1	9.99	Regular
395	2	18.00	Promotional
843	1	7.99	Clearance
987	3	27.00	Promotional
1041	1	9.99	Regular
1265	4	31.96	Clearance

Note: The variation of the price per item in different transactions. This is the result of the price applied at the time of sale—the price point. Now look at the next table that shows the same transactions rolled up by item and price point.

Number of Items Sold	Price Reason (price point)	Total Amount for Item-Price point (in currency)
2	Regular price	19.98
5	Promotional price	45.00
5	Clearance price	39.95

uploadsales.ksh takes the totals and looks for any discounts for transactions in the POSU file. It applies the discounts to an expected total dollar amount using the price listed for that item from the pricing table (PRICE_HIST). It next compares this expected total against the reported total. If the program finds a discrepancy between the two amounts, it is reported. If the two totals match, the rollup is considered valid. If value-added tax (VAT) is included in any sales transaction amounts, it is removed from those transactions prior to the validation process.

uploadsales_all.ksh (Process Multiple POSU Files)

Module Name	uploadsales_all.ksh
Description	Process Multiple POSU Files
Functional Area	Sales Posting
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS157
Runtime Parameters	

Design Overview

The purpose of this script is to execute the uploadsales.ksh module for all POSU files that are for upload. This wrapper will simplify the sales upload process for multiple POSU files, removing the need to call the uploadsales.ksh individually for each file.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 2 (minimum) Ad Hoc (can also be run ad hoc throughout the day to trickle in sales)
Frequency	Daily
Scheduling Considerations	This program runs in the background. When a POSU file comes in and is detected, this module initiates the sales posting process.
Pre-Processing	saexprms.pc (if the client uses ReSA to produce POSU files)
Post-Processing	salesprocess.ksh
Threading Scheme	N/A

Restart/Recovery

N/A

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

The number of threads, the amount of waiting time, number for retries, and average volume of data should be considered. RETRY_WAIT_TIME shouldn't be increased significantly.
The rows, bindsize and readsize parameter of the sqlldr command can be configured for better performance. This gives more control over how many times the inserts are committed/executed.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_POSUPLD_LOAD	No	Yes	No	No
SVC_POSUPLD_STATUS	No	Yes	No	No
SVC_POSUPLD_STAGING	No	Yes	No	No
V_SVC_POSUPLD_LOAD	Yes	No	No	No

Security Considerations

N/A

Integration Contract

Integration Type	Upload to RMS
File Name	POSU_<store>_<tran_date>_<sysdate>.<thread_val>
Integration Contract	IntCon000044

Input File Layout

Refer to the Input File Layout section in uploadsales.doc.

salesprocess.ksh (Main Processing of Staged Sale/Return Transactions)

Module Name	salesprocess.ksh
Description	Main Processing of Staged Sale/Return Transactions
Functional Area	Sales Posting
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS151

Design Overview

The purpose of the SALESPROCESS.KSH module is to process sales and return details from an external point of sale system (either POS or OMS). The sales/return transactions will be validated against Oracle Retail item/store relations to ensure the sale is valid, but this validation process can be eliminated if the sales that are being passed in, has been screened by sales auditing (ReSA). The following common functions will be performed on each sales/return record read from the input file:

- Read sales/return transaction record
- Lock associated record in RMS
- Validate item sale
- Check whether TAX maintenance is required, and if so determine the TAX amount for the sale.
- Write all financial transactions for the sale and any relevant markdowns to the stock ledger.
- Post item/location/week sales to the relevant sales history tables
- Perform last sales processing to maintain accurate sales information in the system

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2 (minimum) Can also be run Ad Hoc
Frequency	Daily
Scheduling Considerations	This program is trickle polled batch cycle as point-of-sales data, in the form of the POSU file, becomes available. It can be run multiple times a day in a trickle-polling environment It should be run in at least phase 2. Can also be run ad hoc to trickle poll sales
Pre-Processing	uploadsales.ksh
Post-Processing	salesgenrej.ksh salesuploadarch.ksh
Threading Scheme	The number of threads running in parallel is based on value in the column RMS_PLSQL_BATCH_CONFIG.MAX_CONCURRENT_THREADS with the program name "CORESVC_SALES_UPLOAD_SQL". Threading is based on chunks Each chunk would have a defined size. This is defined in RMS_PLSQL_BATCH_CONFIG.MAX_CHUNK_SIZE. Chunks could be made up of a single or multiple THEAD/Items. Because multithreading logic based on chunks is applied, it is possible that a record is locked by another thread. Without a mechanism to perform waiting/retrying, record locking errors would happen more frequently In the table RMS_PLSQL_BATCH_CONFIG, RETRY_LOCK_ATTEMPTS contains the number of times the thread will try to acquire the lock for a table and RETRY_WAIT_TIME is the number of seconds the thread will wait before it retries

POSU Chunking

MAX_CONCURRENT_THREADS	MAX_CHUNK_SIZE
2	3

Number of THEAD: 11			
Thread 1	Chunk 1	THEAD 1	Item 1
Thread 1	Chunk 1	THEAD 2	Item 1
Thread 1	Chunk 1	THEAD 3	Item 2
Thread 1	Chunk 1	THEAD 4	Item 2
Thread 1	Chunk 1	THEAD 5	Item 3
Thread 2	Chunk 2	THEAD 6	Item 5
Thread 2	Chunk 2	THEAD 7	Item 6
Thread 2	Chunk 2	THEAD 8	Item 7
Thread 3	Chunk 3	THEAD 9	Item 8
Thread 3	Chunk 3	THEAD 10	Item 9
Thread 3	Chunk 3	THEAD 11	Item 10

In this run, threads would be allocated first to chunks 1 and 2. The other threads would only be picked up once either thread 1 or 2 has finished its processing.

Restart/Recovery

The logical unit of work for salesprocess.ksh is a set of a single or multiple valid item sales transactions at a given store location. This set is defined as a chunk. Based on the example above, if for some reason, chunk 2 raised an error, THEAD 4, 5, and 6 wouldn't be posted in RMS. Other chunks, if there are no errors, would be processed. User has to correct the transaction details and upload the updated POSU file that includes the affected THEAD lines for reprocessing.

Locking Strategy

Since the sales upload processes are run multiple times a day in a trickle-polling system, a locking mechanism is put in place to allow on-line transactions and the salesprocess.ksh module to run at the same time. The following tables would be locked for update:

- ITEM_LOC_SOH
- ITEM_LOC_HIST
- ITEM_LOC_HIST_MTH
- VAT_HISTORY
- EDI_DAILY_SALES
- DEAL_ACTUALS_ITEM_LOC
- DAILY_SALES_DISCOUNT
- INVC_MERCH_VAT
- RTV_HEAD

Because multithreading logic based on chunks is applied, it is possible that a record is locked by another thread. Without a mechanism to perform waiting/retrying, record locking errors would happen more frequently.

In the table RMS_PLSQL_BATCH_CONFIG, RETRY_LOCK_ATTEMPTS is the number of times the thread will try to acquire the lock for a table and RETRY_WAIT_TIME is the number of seconds the thread will wait before it retries. Once the number of retries is equal to the limit defined, the whole chunk wouldn't be processed. This would create a reject file with which the user can use to upload again to the staging table.

Security Considerations

N/A

Performance Considerations

The number of threads, the amount of waiting time, number for retries, and average volume of data should be considered.

Be careful when increasing the number of threads. When the number exceeds the capacity of the server, new jobs wouldn't be able to start when this program is running and would impact other users of the system.

Because this is multithreaded and can be executed during the store day, it is prone to locking errors. Record locking errors would happen if the thread reached the maximum number of retries (RETRY_LOCK_ATTEMPT) to fetch the lock. To prevent this, increase the value of the retries and let the value of RETRY_WAIT_TIME remain at 1. This means that it would retry every second until the maximum number of retries have been reached.

It is also important to know the average volume of data. It is a determinant of what would be the chunk size. If the chunk is too small, it couldn't utilize processing the records in bulk. If the chunk size is too large, in such that, all records would be in one chunk, it wouldn't utilize the multithreaded approach and thus, be inefficient.

Key Tables Affected

Table	Select	Insert	Update	Delete
VAT_HISTORY	No	Yes	Yes	No
DAILY_SALES_DISCOUNT	No	Yes	Yes	No
LOAD_ERR	No	Yes	No	No
STORE	Yes	No	No	No
CURRENCIES	Yes	No	No	No
CLASS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
DEPS	Yes	No	No	No
RPM_PROMO	Yes	No	No	No
RPM_PROMO_COMP	Yes	No	No	No
DEAL_HEAD	Yes	No	No	No
DEAL_COMP_PROM	Yes	No	No	No
DEAL_ACTUALS_FORECAST	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
VAT_ITEM	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
SUPS	Yes	No	No	No
TERMS	Yes	No	No	No
PRICE_HIST	Yes	No	No	No
TEMP_TRAN_DATA	No	Yes	No	No
ITEM_LOC_HIST	Yes	Yes	Yes	No
ITEM_LOC_HIST_MTH	Yes	Yes	Yes	No
EDI_DAILY_SALES	Yes	Yes	Yes	No
ORDHEAD	Yes	Yes	No	No
INVC_HEAD	Yes	Yes	No	No
INVC_MERCH_VAT	Yes	Yes	Yes	No
INVC_XREF	No	Yes	No	No
INVC_DETAIL_TEMP2	No	Yes	No	No
INVC_DETAIL	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
UOM_CLASS	Yes	Yes	No	No
ITEM_XFORM_HEAD	Yes	No	No	No
ITEM_XFORM_DETAIL	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
TRAN_DATA	No	Yes	No	No
INVC_DETAIL_TEMP	No	Yes	No	No
INVC_HEAD_TEMP	No	Yes	No	No
CONCESSION_DATA	No	Yes	No	No
DEAL_ACTUALS_ITEM_LOC	Yes	Yes	Yes	No
V_PACKSKU_QTY	Yes	No	No	No
IF_ERRORS	No	Yes	No	No
RTV_HEAD	Yes	No	No	No
SVC_POSUPLD_LOAD	Yes	Yes	Yes	No
SVC_POSUPLD_STATUS	Yes	No	No	No
SVC_POSUPLD_STAGING	Yes	No	No	Yes
RMS_PLSQL_BATCH_CONFIG	Yes	No	No	No
V_SVC_POSUPLD_LOAD	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	N/A; at this point, the POSU data has already been uploaded to the staging tables
Integration Contract	IntCon000103

The module will have the ability to re-process a POSU reject file directly. The file format will therefore be identical to the input file layout for the uploadsales.ksh process. A reject line counter will be kept in the program and is required to ensure that the file line count in the trailer record matches the number of rejected records. If no errors occur, no reject files would be generated.

Design Assumptions

Tax Handling:

POS can send either transactional level tax details in TTAX lines or item-level tax details in IGTAX lines through the RTLOG file to ReSA. These tax details will be passed on to RMS in the TTAX lines of the POSU file. Even though POS can pass multiple IGTAX/TTAX lines to ReSA and from ReSA to RMS, RMS only supports one tax code per item. If multiple taxes for an item are sent from POS to ReSA, they will be summed to a single tax in RMS sales upload process and assigned one of the applicable tax codes when writing tran_data 88.

Financial Transactions

The salesprocess.ksh writes transaction records to the TRAN_DATA table primarily through its write_tran_data function. From the entire list of valid transaction codes (For the full list of transaction codes, see the chapter "General ledger batch" in this volume of the RMS Operations Guide), for the column TRAN_CODE, salesupload.ksh writes the following:

Transaction Code	Description
01	Net Sales (retail & cost)
02	Net sales (retail & cost) where - retail is always VAT exclusive, written only if system_options.stkldgr_vat_incl_retl_ind = Y
03	Non-inventory Items Sales/Returns
04	Customer Returns (retail & cost)
05	Non-inventory VAT Exclusive Sales
06	Deal Income (sales)
11	Markup (retail only)
12	Markup cancel (retail only)
13	Permanent Markdown (retail only)
14	Markdown cancel (retail only)
15	Promotional Markdown (retail only), including 'in-store' markdown
20	Purchases (retail & cost)

Transaction Code	Description
24	Return to Vendor (RTV) from inventory (retail & cost)
60	Employee discount (retail only)

Note: Where value-added-tax is enabled (system_options table, stkldgr_vat_incl_retl_ind column shows 'Y') and the retail accounting method is also enabled, salesupload.ksh writes an additional transaction record for code 02.

Any items sold on consignment—where the department's items are stocked as consignment, rather than normal (see the DEPS table, profit_calc_type column)—are written as a code 20 (Purchases) as well as a 01 (Net Sales) along with all other applicable transactions, like returns. The 20 reflects the fact that the item is purchased at the time it is sold, in other words, a consignment sale.

salesgenrej.ksh (Reject POSU Transactions)

Module Name	salesgenrej.ksh
Description	Reject POSU Transactions
Functional Area	Sales Posting
Module Type	Business Processing
Module Technology	KSH
Catalog ID	RMS338

Design Overview

The purpose of this module is to archive the rejected transactions and create a reject file based on the recently processed POSU file which is still in the staging table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	2
Frequency	Daily
Scheduling Considerations	This program is executed after salesprocess.ksh It will be run in at least phase 2. Can also be run ad hoc to trickle poll sales
Pre-Processing	salesprocess.ksh
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A

Restart/Recovery

N/A

Performance Considerations

The number of threads, the amount of waiting time, number for retries, and average volume of data should be considered. RETRY_WAIT_TIME shouldn't be increased significantly.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_POSUPLD_LOAD	Yes	No	No	No
SVC_POSUPLD_STAGING	Yes	Yes	No	Yes
SVC_POSUPLD_REJ_RECS	No	Yes	No	No
V_SVC_POSUPLD_LOAD	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

Reject File:
The module will have the ability to re-process the reject file directly. The file format will therefore be identical to the input file layout. A reject line counter will be kept in the program and is required to ensure that the file line count in the trailer record matches the number of rejected records. If no errors occur, no reject files would be generated.

salesuploadarch.ksh (Archive Successfully Posted Transactions)

Module Name	salesuploadarch.ksh
Description	Archive Successfully Posted Transactions
Functional Area	Sales Processing
Module Type	Admin
Module Technology	Ksh
Catalog ID	RMS340

Design Overview

The purpose of this module is to archive the successfully posted transactions, and clear the staging table.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	It should be run in at least phase 2. Can also be run ad hoc to trickle poll sales
Pre-Processing	salesprocess.ksh
Post-Processing	N/A
Threading Scheme	N/A

Performance Considerations

Since the archive tables would be handling a large volume of data. Administrators should consider enlarging the tablespace to accommodate the average volume of data.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
SVC_POSUPLD_LOAD	Yes	No	No	Yes
SVC_POSUPLD_STAGING	Yes	Yes	No	Yes
V_SVC_POSUPLD_LOAD	Yes	No	No	No
SVC_POSUPLD_LOAD_ARCH	No	Yes	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

salesuploadpurge.ksh (Purge Aged Archived POSU Transactions)

Module Name	salesuploadpurge.ksh
Description	Purge Aged Archived POSU Transactions
Functional Area	Sales Processing
Module Type	Admin
Module Technology	Ksh
Catalog ID	RMS341

Design Overview

The purpose of this module is delete the archive tables for the rejects and the posted transaction based on the given retention period.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	This data administration program does not have any interdependencies with other sales upload processing programs and can be run ad hoc with other purge programs
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Performance Considerations

The retention period for the archived data should be carefully considered. Disregarding this would result in the tablespace size reaching its limit and would not be able to accommodate additional archive records.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_POSUPLD_REJ_RECS	No	No	No	Yes
SVC_POSUPLD_LOAD_ARCH	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

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Sales History

Overview

RMS maintains sales history at a variety of levels. Item level sales history drives RMS replenishment, ratio build and is exported to planning applications (see chapter Integration – Planning in this document). RMS also maintains a smoothed average history for RPM. Sales history rolled up to levels of the merchandise hierarchy is used by Oracle Retail Allocation. Many clients also find sales history data useful for custom reporting.

Batch Design Summary

The following batch designs are included in this chapter:

- rpmmovavg.pc (Maintain Smoothed, Moving Average Sales History for RPM)
- hstbld.pc (Weekly Sales History Rollup by Department, Class, and Subclass)
- hstbld_diff.pc (Weekly Sales History Rollup by Diff)
- hstbldmth.pc (Monthly Sales History Rollup by Department, Class, and Subclass)
- hstbldmth_diff.pc (Monthly Sales History Rollup by Diffs)
- hstmthupd.pc (Monthly Stock on Hand, Retail and Average Cost Values Update)
- hstwkupd.pc (Weekly Stock on Hand and Retail Value Update for Item/Location)
- hstprg.pc (Purge Aged Sales History)
- hstprg_diff.pc (Purge Aged Sales History by Diff)

rpmmovavg (Maintain Smoothed, Moving Average Sales History for RPM)

Module Name	rpmmovavg.pc
Description	Maintain Smoothed, Moving Average Sales History for RPM
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS319
Runtime Parameters	

Design Overview

This batch module will take the number of units sold from IF_TRAN_DATA table for all items designated for a particular store within a specified store/day, and maintain a smoothed average in the IF_RPM_SMOOTHED_AVG table.

Only the sales, which have a sales type of regular, are included. If the item is on promotion or clearance, then no updating is required. The units under normal sales will be considered as unadjusted units and will be taken for smoothed average. The threshold percent will be maintained at the department level. This percent will be compared to the existing smoothed average value and used to limit the upper and lower boundaries for regular sales received. If the unadjusted units amount is outside of the boundaries, then the appropriate boundary amount will be substituted and become the adjusted units amount. If no threshold percent is defined for the department, it will be defaulted to 50%.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase
Frequency	Daily
Scheduling Considerations	The program picks the daily sales data from IF_TRAN_DATA table. It should run after salstage.pc
Pre-Processing	Salstage.pc
Post-Processing	N/A
Threading Scheme	Threaded By STORE number

Restart/Recovery

The logical unit of work for this program is set at store/item level.

Restartability is implied based on item and store combination. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
LOCATION_CLOSED	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
DEPS	Yes	No	No	No
IF_RPM_SMOOTHED_AVG	Yes	Yes	Yes	No

Input/Out Specification

N/A

hstbld (Weekly Sales History Rollup by Department, Class, and Subclass)

Module Name	hstbld.pc
Description	Weekly Sales History Rollup by Department, Class, and Subclass
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS239
Runtime Parameters	

Design Overview

The sales history rollup routine will extract sales history information for each item from the ITEM_MASTER, and ITEM_LOC_HIST (item location history) tables. The history information will be rolled up to the subclass, class, and dept level to be written to: dept_sales_hist (department/location/week/sales type), class_sales_hist (class/location/week/sales type), and subclass_sales_hist (subclass/location/week/sales type).

The rebuild program can be run in one of two ways:

First, if the program is run with a run-time parameter of 'rebuild', the program will read data (dept, class, and subclass) off the manually input HIST_REBUILD_MASK table, which will determine what to rebuild.

Secondly, if the program is run with a run-time parameter of 'weekly', the program will build sales information for all dept/class/subclass combinations only for the current end of week date.

Scheduling Constraints – Rebuild

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	As Needed
Scheduling Considerations	Must run after complete weekly sales have been updated by the Sales Upload Program. Also should be re-run on demand when a sales rollup request has been given for a given dept, class or subclass
Pre-processing	Prepost hstbld pre, if rebuild all
Post-Processing	Prepost hstbld post, to truncate the HIST_REBUILD_MASK table

Scheduling Constraints – Normal Weekly Processing

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Weekly
Scheduling Considerations	Must run after complete weekly sales have been updated by the Sales Upload Program
Pre-processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

The logical unit of work for this program is set at the store/dept/class level. Threading is done by store using the v_restart_store view. The commit_max_ctr field on the RESTART_CONTROL table will determine the number of transactions that equal a logical unit of work.

Key Tables Affected

Table	Select	Insert	Update	Delete
DEPT_SALES_HIST	No	Yes	Yes	No
CLASS_SALES_HIST	No	Yes	Yes	No
SUBCLASS_SALES_HIST	Yes	Yes	Yes	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
HIST_REBUILD_MASK	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

hstbld_diff (Weekly Sales History Rollup by Diff)

Module Name	hstbld_diff.pc
Description	Weekly Sales History Rollup by Diff
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS240

Design Overview

The sales history rollup routine will extract sales history information for each item_parent from the ITEM_LOC_HIST table. The history information will be rolled up to the item differentiator level to be written to: item_diff_loc_hist and item_parent_loc_hist.

For each item, data to be retrieved includes sales qty and stock. This data must be collected from several tables including ITEM_LOC_HIST, ITEM_LOC, and ITEM_MASTER.

Scheduling Constraints – Normal Weekly Processing

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Weekly
Scheduling Considerations	Must run after complete weekly sales have been updated by salesprocess.ksh
Pre-processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Scheduling Constraints – Upon Request

Schedule Information	Description
Processing Cycle	Phase 8 (Weekly)
Frequency	As Needed
Scheduling Diagram	Should be re-run on demand when a sales rollup request has been given for a given style/color
Pre-processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_PARENT_LOC_HIST	No	Yes	Yes	No
ITEM_DIFF_LOC_HIST	No	Yes	Yes	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

hstbldmth (Monthly Sales History Rollup By Department, Class And Subclass)

Module Name	hstbldmth.pc
Description	Monthly Sales History Rollup by Department, Class, and Subclass
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS241

Design Overview

The monthly sales history roll up routine will extract sales history information for each item from the ITEM_MASTER and ITEM_LOC_HIST_MTH (item location history by month) tables. The history information will be rolled up to the subclass, class and dept level to be written to: subclass_sales_hist_mth (subclass/location/month/sales type), class_sales_hist_mth (class/location/month/sales type) and dept_sales_hist_mth (department/location/month/sales type).

This program may be run in parallel with hstbld since they both read from HIST_REBUILD_MASK. The table HIST_REBUILD_MASK table must not be truncated before both programs finish running.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Monthly
Scheduling Considerations	Must run after complete monthly sales have been updated by Sales Upload program Also, should be re-run on demand when a sales rollup request has been given for a given dept, class and subclass This program may be run in parallel with hstbld since they both read from HIST_REBUILD_MASK. The table HIST_REBUILD_MASK table must not be truncated by associated prepost post jobs before both programs finish running
Pre-Processing	N/A
Post-Processing	prepost hstbldmth post
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work for the hstbldmth module is department, location, sales type and end of month date with a recommended commit counter setting of 1,000. Processed records are committed each time the record counter equals the maximum recommended commit number.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_HIST_MTH	Yes	No	No	No
SUBCLASS_SALES_HIST_MTH	Yes	Yes	No	Yes
CLASS_SALES_HIST_MTH	Yes	Yes	No	Yes
DEPT_SALES_HIST_MTH	No	Yes	No	Yes
HIST_REBUILD_MASK	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

hstbldmth_diff (Monthly Sales History Rollup By Diffs)

Module Name	hstbldmth_diff.pc
Description	Monthly Sales History Rollup by Diffs
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS242

Design Overview

The sales history rollup routine will extract sales history information for each ITEM_PARENT from the ITEM_LOC_HIST_MTH table and rolls the data to month level. The history information will be rolled up to the item differentiator level to be written to: item_diff_loc_hist_mth and item_parentloc_hist_mth. For each item, data to be retrieved includes sales quantity and stock. This data must be collected from several tables including ITEM_LOC_HIST_MTH, ITEM_LOC, and ITEM_MASTER.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Monthly
Scheduling Considerations	Must be run only at EOM date
Pre-Processing	N/A
Post-Processing	hstmthupd.pc
Threading Scheme	N/A

Restart/Recovery

N/A

Locking Strategy

The package HSTBLD_DIFF_PROCESS locks the following tables for update:

ITEM_DIFF_LOC_HIST_MTH

ITEM_PARENTLOC_HIST_MTH

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_HIST_MTH	Yes	No	No	No
ITEM_DIFF_LOC_HIST_MTH	No	Yes	Yes	No
ITEM_PARENTLOC_HIST_MTH	No	Yes	Yes	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

N/A

hstmthupd (Monthly Stock on Hand, Retail and Average Cost Values Update)

Module Name	hstmthupd.pc
Description	Monthly Stock on Hand, Retail and Average Cost Values Update
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS158
Runtime Parameters	

Design Overview

This batch program runs monthly to update the stock on hand, retail values and average cost for each item/location on the ITEM_LOC_HIST_MTH (item location history by month) table. If the item/location does not exist on the ITEM_LOC_HIST_MTH table, then the new record is written to a comma delimited file which is later uploaded to ITEM_LOC_HIST_MTH table using SQL*Loader (hstmthupd.ctl).

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 8 (Monthly)
Frequency	Monthly
Scheduling Considerations	The program should be run on the last day of the month refeodinventory.ksh must run successfully prior to execution to ensure that ITEM_LOC_SOH_EOD is up-to-date
Pre-Processing	refeodinventory.ksh
Post-Processing	Run SQL*Loader using the control file hstmthupd.ctl to load data from the output file written by hstmthupd.pc for non-existent records on ITEM_LOC_HIST_MTH
Threading Scheme	Threaded by location (store)

Restart/Recovery

The logical unit of work for this program is the item/location record. Threading is done by store using the v_restart_store_wh view. The commit_max_ctr field on the RESTART_CONTROL table will determine the number of transactions that equal a logical unit of work. Table-based restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH_EOD	Yes	No	No	No
ITEM_LOC_HIST_MTH	Yes	No	Yes	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000175 hstmthupd.ctl

hstwkupd (Weekly Stock on Hand and Retail Value Update for Item/Location)

Module Name	hstwkupd.pc
Description	Weekly Stock on Hand and Retail Value Update for Item/Location
Functional Area	Sales History
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS159
Runtime Parameters	

Design Overview

This program runs weekly to update the current stock on hand, retail values and average cost for each item/location on ITEM_LOC_HIST is using SQL*Loader (hstwkupd.ctl). The program must be run on the last day of the week as scheduled.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Weekly
Scheduling Considerations	refeodinventory.ksh must run successfully prior to execution to ensure that ITEM_LOC_SOH_EOD is up-to-date
Pre-Processing	N/A
Post-Processing	Run SQL*Loader using the control file hstwkupd.ctl to load data from the output file written by hstwkupd.pc for non-existent records on ITEM_LOC_HIST
Threading Scheme	Thread by location

Restart/Recovery

The logical unit of work for HSTWKUPD is item/location. The program is threaded by location using the v_restart_store_wh view.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH_EOD	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	Yes	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000176 hstwkupd.ctl

hstprg (Purge Aged Sales History)

Module Name	hstprg.pc
Description	Purge Aged Sales History
Functional Area	Sales Posting
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS244
Runtime Parameters	

Design Overview

Deletes records from ITEM_LOC_HIST, SUBCLASS_SALES_HIST, CLASS_SALES_HIST, DEPT_SALES_HIST and DAILY_SALES_DISCOUNT tables, where data is older than the specified number of months. Number of months for retention of fashion style history is specified by system_options.ITEM_HISTORY_MONTHS.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase Ad-hoc
Frequency	Monthly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PURGE_CONFIG_OPTIONS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ITEM_LOC_HIST	No	No	No	Yes
SUBCLASS_SALES_HIST	No	No	No	Yes
CLASS_SALES_HIST	No	No	No	Yes

Table	Select	Insert	Update	Delete
DEPT_SALES_HIST	No	No	No	Yes
DAILY_SALES_DISCOUNT	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

hstprg_diff (Purge Aged Sales History by Diff)

Module Name	hstprg_diff.pc
Description	Purge Aged Sales History by Diff
Functional Area	Sales History
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS245
Runtime Parameters	

Design Overview

The tables, ITEM_DIFF_LOC_HIST and ITEM_PARENT_LOC_HIST are purged of sales history differentiator data, which is older than a specified system set date. This date is stored in the purge_config_options.ITEM_HISTORY_MONTHS column.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase Ad-hoc
Frequency	Monthly
Scheduling Considerations	Should be run after hstbld_diff.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PURGE_CONFIG_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
ITEM_DIFF_LOC_HIST	No	No	No	Yes
ITEM_PARENT_LOC_HIST	No	No	No	Yes

Integration Contract

Integration Type	N/A
File Name	N/A
Integration Contract	N/A

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Stock Count

Overview

A stock count is a comparison of an inventory snapshot at a point in time to an actual inventory count received from a location. Stock count batch processes can be divided into two rough categories, processes that prepare future stock counts and processes that process results for today's stock counts. The programs stkschedxpld.pc and stkxpld.pc prepare future stock counts. All other programs process results from today's stock counts.

For more information about Stock Counts, including the interaction of UI and batch processes and data flow, see the Oracle Retail Merchandising Functional Library (Doc ID: 1585843.1).

Note: The White Papers in this library are intended only for reference and educational purposes and may not reflect the latest version of Oracle Retail software.

Batch Design Summary

The following batch designs are included in this functional area:

- stkschedxpld.pc (Create Stock Count Requests Based on Schedules)
- stkxpld.pc (Explode Stock Count Requests to Item Level)
- lifstkup.pc (Conversion of RWMS Stock Count Results File to RMS Integration Contract)
- stockcountupload.ksh (Upload Stock Count Results from Stores/Warehouses)
- stockcountprocess.ksh (Process Stock Count Results)
- stkupd.pc (Stock Count Snapshot Update)
- stkvar.pc (Update Stock On Hand Based on Stock Count Results)
- stkdly.pc (Calculate Actual Current Shrinkage and Budgeted Shrink to Apply to Stock Ledger)
- stkprg.pc (Purge Aged Stock Count)

lifstkup (Conversion of RWMS Stock Count Results File to RMS Integration Contract)

Module Name	lifstkup.pc
Description	Conversion of RWMS Stock Count Results File to RMS Integration Contract
Functional Area	Stock Counts
Module Type	Integration
Module Technology	ProC
Integration Catalog ID	RMS150
Runtime Parameters	

Design Overview

The Stock Upload Conversion batch is used when RWMS sends count information to RMS. This batch converts the inventory balance upload file into the format supported by the Stock Count Upload process.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	PHASE 1 (daily)
Scheduling Considerations	This program should run before stockcountupload.ksh and after the warehouse management's inv_bal_upload.sh program.
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A – File-based processing

Restart/Recovery

Oracle Retail standard file-based restart/recovery is used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
WH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
STAKE_HEAD	Yes	No	No	No
STAKE_LOCATION	Yes	No	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000172 (input from RWMS) IntCon000102 (output for RMS stockcountupload)

Input File Layout

Field Name	Default Value	Description
DC_DEST_ID	11 – Number (10) + 1 for trailing space	Unique identifier for the warehouse
TRANSACTION_DATE	15 – Date (14) + 1 for trailing space	Date on which the transaction occurred
ITEM_ID	26 - Varchar2 (25) + 1 for trailing space	Uniquely identifies the item on the count
AVAILABLE_QTY	15 – Number (12) + 1 for leading sign and + 1 for decimal and + 1 for trailing space	Units available for distribution
DISTRIBUTED_QTY	14 – Number (12) + 1 for decimal and + 1 for trailing space	Units distributed include: Units distributed but not yet picked, units picked but not yet manifested, units manifested but not yet shipped
RECEIVED_QTY	15 - Number (12) + 1 for leading sign and + 1 for decimal and + 1 for trailing space	Units received but not put away
TOTAL_QTY	14 – Number (12,4) + 1 for decimal and + 1 for trailing space	Sum of all units that physically exist: container status of: I, D, M, R, T, X
AVAILABLE_WEIGHT	15 – Number (12,4) + 1 for leading sign + 1 for decimal + 1 for trailing space	Weight available for distribution of catch weight items
RECEIVED_WEIGHT	14 – Number (12,4) + 1 for decimal + 1 for trailing space	Weight received but not put away for catch weight items
DISTRIBUTED_WEIGHT	14 – Number (12,4) + 1 for decimal + 1 for trailing space	Weight distributed includes: weight distributed but not yet picked, weight picked but not yet manifested, weight manifested but not yet shipped (value only catch weight items)

TOTAL_WEIGHT	13 – Number (12,4) + 1 for decimal	Sum of all weight that physically exist: container status of: I, D, M, R, T, X. For catch weight items

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	file type record descriptor	Char (5)	FHEAD	Describes the file line type
	file line identifier	Number (10)	0000000001	ID of current line being processed
	file type	Char (4)	'STKU'	Identifies the file type
	stocktake_date	Date (14)		The date on which the count occurred, formatted as YYYYMMDDHH24MISS
	file create date	Date (14)		Date on which the file was created, formatted as YYYYMMDDHH24MISS
	cycle count	Number (8)		stake_head.cycle_count
	Location type	Char (1)	'W'	Will always be 'W', as this process is only executed for warehouse locations
	location	Number(10)		Indicates the number of the physical warehouse where the count occurred
FDETL	file type record descriptor	Char(5)	FDETL	Identifies the file line type
	file line identifier	Number(10)		ID of current line being processed, internally incremented
	Item type	Char(3)	'ITM'	Indicates the type of item that was counted. This will always be 'ITM', indicating a transaction level item
	item value	Char(25)		The ID of the item that was counted
	inventory quantity	Number(12)		The total quantity or weight of product counted; includes four implied decimal places
	location description	Char(150)		Used by RMS to determine the location where the item was counted. This program will always leave as NULL
FTAIL	file type record descriptor	Char(5)	FTAIL	Identifies the file line type
	file line identifier	Number(10)		ID of current line being processed, internally incremented

Record Name	Field Name	Field Type	Default Value	Description
	file record count	Number(10)		Indicates the number of detail records

Design Assumptions

N/A

stockcountupload.ksh (Upload Stock Count Results from Stores/Warehouses)

Module Name	stockcountupload.ksh
Description	Upload Stock Count Results from Stores/Warehouses
Functional Area	Stock Count
Module Type	Integration
Module Technology	ksh
Integration Catalog ID	RMS153
Runtime Parameters	

Design Overview

The purpose of this module is to upload the contents of the stock count file, which contains the results of a count that occurred in a store or warehouse, to staging tables for further processing.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 1 (Daily)
Scheduling Considerations	Run after lifstkup.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_STKUPLD_FHEAD	Yes	Yes	Yes	Yes
SVC_STKUPLD_FDETL	Yes	Yes	Yes	Yes

Table	Select	Insert	Update	Delete
SVC_STKUPLD_STATUS	Yes	Yes	Yes	Yes

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000102

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File head descriptor	Char(5)	FHEAD	Describes file line type
	file line identifier	Number(10)	0000000001	ID of current line being processed
	File Type	Char(4)	STKU	Identifies the file type
	File create date	Char(14)		Indicates the date the file was created in YYYYMMDDHH24MISS format
	Stock take date	Char(14)		Date on which stock count will take place in YYYYMMDDHHMISS format
	Cycle count	Number (8)		Unique number to identify the stock count
	Location Type	Char(1)		Indicates the type of location where the count occurred. Valid values are 'S','W','E'.
	Location	Number(10)		The location where the stock count occurred
Transaction Record	File record descriptor	Char(5)	FDETL	Describes file line type
	Line Number	Number(10)		Sequential file line number
	Item type	Char(3)		Indicates the type of item counted – either transaction level (ITM) or reference item (REF)
	Item value	Char(25)		Unique identifier for item that was counted
	Inventory quantity	Number(12)		Total quantity counted for the item at the location formatted with 4 implied decimal places

Record Name	Field Name	Field Type	Default Value	Description
	Location description	Char(150)		Description of inventory location (e.g. sales floor, backroom)
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	File line identifier	Number(10)		ID of current line being processed, internally incremented
	File record count	Number(10)		Number of detail records

Output Files

Reject File: The module will have the ability to re-process the reject file directly. The file format will therefore be identical to the input file layout. A reject line counter will be kept in the program and is required to ensure that the file line count in the trailer record matches the number of rejected records. If no errors occur, no reject files would be generated.

Design Assumptions

- This program uses grep to search log files for errors. The GREP function should point to the /usr/xpg4/bin/ directory instead of /usr/bin directory to utilize the "-E" option. Otherwise, it will fail with an "illegal option" error message.

stkdly (Calculate Actual Current Shrinkage and Budgeted Shrink to Apply to Stock Ledger)

Module Name	stkdly.pc
Description	Calculate Actual Current Shrinkage and Budgeted Shrink to Apply to Stock Ledger
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

The Stock Count Shrinkage Update batch calculates the 'value' variances for Unit & Value stock counts. The main functions are to calculate actual shrinkage amount that is used to correct the book stock value on the stock ledger and to calculate a budgeted shrinkage rate that will be applicable until the next count. The month end stock ledger batch process (saldly) then uses these values when calculating ending inventory for the month.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	PHASE 3 (daily)
Scheduling Considerations	Run before salweek.pc and salmth.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by department

Restart/Recovery

This batch program is multithreaded using the v_restart_dept view. The logical unit of work for this program is dept/class/location.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No

Table	Select	Insert	Update	Delete
STAKE_PROD_LOC	Yes	No	Yes	No
STAKE_HEAD	Yes	No	No	No
DEPS	Yes	No	No	No
HALF_DATA_BUDGET	Yes	No	No	No
DAILY_DATA	Yes	No	No	No
WEEK_DATA	No	No	Yes	No
MONTH_DATA	Yes	No	Yes	No
HALF_DATA	No	No	Yes	No
DAILY_DATA_TEMP	No	Yes	No	No

Design Assumptions

N/A

stkprg (Purge Aged Stock Count)

Module Name	stkprg.pc
Description	Purge Stock Count
Functional Area	Stock Counts
Module Type	Admin
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

Purge Stock Counts is a data cleanup process to remove old counts from RMS. This batch process deletes records from the stock count tables with a stock take date earlier than the last EOM start date (SYSTEM_VARIABLES.LAST_EOM_START_MONTH) or those that have been otherwise flagged for delete. This process deletes records from STAKE_HEAD and all corresponding child tables, including STAKE_SKU_LOC and STAKE_PROD_LOC.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	AD HOC
Scheduling Considerations	N/A

Schedule Information	Description
Pre-Processing	N/A
Post-Processing	prepost stkptg post
Threading Scheme	Threaded by location

Restart/Recovery

This program is multi-threaded based on location and the logic of restart and recovery is based on cycle count and location. The deletion of STAKE_HEAD and STAKE_PRODUCT is performed in prepost as a post action. This is done because stkprg is multi-threaded and each thread may have only deleted part of cycle count detail records; hence the records from STAKE_HEAD and STAKE_PRODUCT can only be deleted in the post program when all the details have been deleted.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_VARIABLES	Yes	No	No	No
STAKE_LOCATION	Yes	No	No	Yes
STAKE_QTY	No	No	No	Yes
STAKE_CONT	No	No	No	Yes
STAKE_SKU_LOC	No	No	No	Yes
STAKE_PROD_LOC	No	No	No	Yes
STAKE_PRODUCT	No	No	No	Yes
STAKE_HEAD	Yes	No	No	Yes

Design Assumptions

N/A

stkschedxpld (Create Stock Count Requests Based on Schedules)

Module Name	stkschedxpld.pc
Description	Create Stock Count Requests Based on Schedules
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

This batch process is used to create stock count requests based on pre-defined schedules for a location. It evaluates all scheduled counts, that are planned for x days from the current day. The number of days prior to the planned count date by which the count requests are created is determined by the system parameter Stock Count Review Days (STAKE_REVIEW_DAYS).

For Unit counts, the item list specified is exploded out to the transaction-level and written to the count/item/location (STAKE_SKU_LOC) table. For Unit & Value counts, the transaction-level items contained in the specified department/class/subclass will be written to the count/item/location (STAKE_SKU_LOC) and count/product/location (STAKE_PROD_LOC) tables. If the schedule was created using a location list, then this process also explodes that down to the store or virtual warehouse level.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	PHASE 0 - Daily
Scheduling Considerations	Run before stkxpld.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by location (store and warehouse)

Restart/Recovery

The logical unit of work for this module is schedule, location. The changes will be posted when the commit_max_ctr value is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
STAKE_SCHEDULE	Yes	No	Yes	No
V_RESTART_STORE_WH	Yes	No	No	No
PERIOD	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
STAKE_HEAD	No	Yes	No	No
STAKE_LOCATION	No	Yes	No	No
STAKE_PRODUCT	No	Yes	No	No
STAKE_PROD_LOC	No	Yes	No	No
STAKE_SKU_LOC	Yes	Yes	No	No
ITEM_MASTER	Yes	No	No	No
DEPS	Yes	No	No	No
SUBCLASS	Yes	No	No	No
PACKITEM	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
SKULIST_DETAIL	Yes	No	No	No
LOC_LIST_DETAIL	Yes	No	No	No
LOCATION_CLOSED	Yes	No	No	No
COMPANY_CLOSED	Yes	No	No	No
INV_TRACK_UNIT_OPTIONS	Yes	No	No	No

Design Assumptions

N/A

stkupd (Stock Count Snapshot Update)

Module Name	stkupd.pc
Description	Stock Count Snapshot Update
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

The Stock Count Snapshot Update is a nightly batch program used to take a 'snapshot' of inventory, cost and retail values prior to the count commencing. This will be used to calculate the book value of the count. The stock count snapshot includes stock on hand, in-transit-qty, cost (either WAC or standard cost, based on system settings) and retail for each item-location record. The snapshot is taken on the day that the count is scheduled.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	PHASE 8(daily)
Scheduling Considerations	stkxpld should run prior to this program
Pre-Processing	prepost stkupd pre
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

This program is multithread using the v_restart_all_locations view. The logical unit of work is an item/location.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
STAKE_SKU_LOC	Yes	No	Yes	No
STAKE_HEAD	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No

Design Assumptions

N/A

stkvar (Update Stock On Hand Based on Stock Count Results)

Module Name	stkvar.pc
Description	Update Stock On Hand Based on Stock Count Results
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

The Stock Count Stock on Hand Updates batch process updates stock on hand based on the unit count results. For Unit counts, it also writes TRAN_DATA records for any variances to tran code 22. For Unit & Value counts, it also computes the total cost and total retail value of the count and updates STAKE_PROD_LOC with this information.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 1(Daily)
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

The logical unit of work for this program is item, loc_type and location. This program is multithread using the v_restart_all_locations view. After the commit_max_ctr number of rows is processed, intermittent commits are done to the database and the item/location information is written to restart tables for restart/recovery.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
ITEM_XFORM_HEAD	Yes	No	No	No
ITEM_XFORM_DETAIL	Yes	No	No	No
STAKE_SKU_LOC	Yes	No	Yes	No
STAKE_CONT	Yes	No	No	Yes
STAKE_HEAD	Yes	No	No	No
STAKE_CONT_TEMP	Yes	Yes	No	Yes
STAKE_PROD_LOC	Yes	No	Yes	No
WH	Yes	No	No	No
CLASS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
EDI_DAILY_SALES	No	No	Yes	No
TRAN_DATA	No	Yes	No	No
NWP	No	Yes	Yes	No
NWP_FREEZE_DATE	Yes	No	No	No
STAKE_QTY	Yes	No	No	No
STAKE_LOCATION	Yes	No	No	No
STAKE_PRODUCT	Yes	No	No	No
STORE	Yes	No	No	No
VAT_ITEM	Yes	No	No	No

Design Assumptions

N/A

stkxpld (Explode Stock Count Requests to Item Level)

Module Name	stkxpld.pc
Description	Explode Stock Count Requests to Item Level
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ProC
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

The Stock Count Explode batch is a nightly batch is used to explode stock count requests created at the department, class or subclass level to the item level. This process must run before the stock count snapshot is taken and is run for counts x days prior to the count based on the system parameter setting, Stock Count Lockout Days (STAKE_LOCKOUT_DAYS).

The batch process picks up product groups (departments, classes or subclasses) from STAKE_PRODUCT and inserts records into STAKE_SKU_LOC and STAKE_PROD_LOC (for Unit & Value counts) for all items in the product group that exist for the locations on the count. Only approved inventoried items are added to stock counts.

For transformable items, both the non-inventoried sellable items and inventoried orderable items that are contained in a product group will also be added to the count. For deposit items, only the content, crate and packs can be counted.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 8 (Daily)
Scheduling Considerations	This batch should run prior to prepost stkupd pre
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

This batch program is multithreaded using the v_restart_all_locations view. The logical unit of work for this program is a cycle count/location.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
STAKE_LOCATION	Yes	No	No	No
STAKE_HEAD	Yes	No	No	No
STAKE_SKU_LOC	Yes	Yes	No	No
STAKE_PROD_LOC	Yes	Yes	No	No
STAKE_PRODUCT	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_XFORM_HEAD	Yes	No	No	No
ITEM_XFORM_DETAIL	Yes	No	No	No
SUBCLASS	Yes	No	No	No

Design Assumptions

N/A

stockcountprocess.ksh (Process Stock Count Results)

Module Name	stockcountprocess.ksh
Description	Process Stock Count Results
Functional Area	Stock Counts
Module Type	Business Processing
Module Technology	ksh
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

The Stock Count Process batch processes actual count data from the selected store or physical warehouse to STAKE_SKU_LOC from the data staged by STOCKCOUNTUPLOAD.KSH. For a physical warehouse, this process also calls the RMS distribution library to apportion quantities to the virtual warehouses in RMS.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 1 (Daily)
Scheduling Considerations	Run after stockcountupload.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	The number of threads running in parallel is based on value in the column RMS_PLSQL_BATCH_CONFIG.MAX_CONCURRENT_THREADS with the program name “CORESVC_SALES_UPLOAD_SQL”. Threading is based on chunks. Each chunk would have a defined size. This is defined in RMS_PLSQL_BATCH_CONFIG.MAX_CHUNK_SIZE. Chunks could be made up of a single or multiple THEAD/Items. Because multithreading logic based on chunks is applied, it is possible that a record is locked by another thread. Without a mechanism to perform waiting/retrying, record locking errors would happen more frequently In the table RMS_PLSQL_BATCH_CONFIG, RETRY_LOCK_ATTEMPTS contains the number of times the thread will try to acquire the lock for a table and RETRY_WAIT_TIME is the number of seconds the thread will wait before it retries

Restart/Recovery

The logical unit of work for stockcountprocess.ksh is a set of a single or multiple valid items at a given location. This set is defined as a chunk. Based on the example above, if for some reason, chunk 2 raised an error, INPUT FILE 6, 7, and 8 wouldn't be processed by this program. Other chunks, if there are no errors, would be processed. User has to correct the transaction details and upload the input file again that includes the affected CHUNKS for reprocessing.

Key Tables Affected

Table	Select	Insert	Update	Delete
STK_FILE_STG	Yes	Yes	No	No
STAKE_SKU_LOC	Yes	Yes	Yes	No
STK_SSL_TEMP	Yes	Yes	No	No
STAKE_QTY	Yes	Yes	Yes	Yes
WH	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
STK_SSL_TEMP	Yes	Yes	No	No
STK_XFORM_TEMP	Yes	Yes	No	No
STAKE_PROD_LOC	Yes	No	No	No
STAKE_PRODUCT	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
STAKE_PROD_LOC	Yes	No	No	No
ITEM_XFORM_DETAIL	Yes	No	No	No
ITEM_XFORM_HEAD	Yes	No	No	No
STK_XFORM_ORD_TEMP	Yes	Yes	No	No
STAKE_LOCATION	Yes	Yes	No	No
PARTNER	Yes	No	No	No
STAKE_HEAD	Yes	No	No	No
STK_DUP_SQT_TEMP	Yes	Yes	No	No
WORK_STKUPLD_STAKE_QTY_GTT	Yes	Yes	Yes	Yes
WORK_STKUPLD_ITEM_LOC_GTT	Yes	Yes	Yes	Yes

Design Assumptions

N/A

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Oracle Retail Trade Management

Overview

Oracle Retail Trade Management (RTM) automates international import transaction data. There are six components of RTM:

- Customs entry
- Harmonized tariff schedule
- Letter of credit
- Transportation
- Actual landed costs
- Obligations

Four of these components—customs entry, Harmonized Tariff Schedule, letter of credit, and transportation—have batch-processing modules that facilitate the flow of data between RTM and external applications and files. This chapter describes these batch modules, along with Perl scripts, and the kinds of data that they process.
For additional information about RTM, including detailed flow diagrams, see the Oracle Retail Merchandising Functional Library (Doc ID: 1585843.1).

Note: The White Papers in this library are intended only for reference and educational purposes and may not reflect the latest version of Oracle Retail software.

Simplified RTM Configuration

Simplified RTM is a simplified version of the Oracle Retail product suite targeted at mid-tier retailers. The Simplified Oracle Retail Merchandising Operations Management applications support basic retail processes needed by a mid-tier retailer. Advanced features are turned-off through system parameters, with the goal to reduce implementation complexity and enabling faster implementation and lower total cost of ownership.

The Simplified RTM Indicator is set in the system_options table during the installation of RMS. If the system_option parameter is enabled, then the following RTM functionality is not available in the application:

- Setting up RTM specific Freight Type, Freight Size and Standard Carrier Alpha Codes (SCAC)
- Letter of Credit functionality
- Transportation functionality
- Customs Entry functionality
- Obligation Maintenance
- Actual Landed Costs

If both the Simplified RTM indicator and the Import indicator are enabled, then some import related functionality is available in RMS. With this setup, the retailer has the option to setup HTS data for classification of merchandise and for the calculation of duties, fee and taxes. The retailer can also choose Letter of Credit as a payment option at the Purchase Order header level, but all other related LC functionality is not available. It is assumed that the retailer is using some other external system for LC processing.

If the import indicator is not enabled then no RTM functionality is available in the application. See the RMS Installation Guide for additional information on setting the value of the system_options table.

Simplified RTM Batch Program Notes

When Simplified RTM is enabled (RTM Simplified Indicator is enabled) then the following batch programs need to be turned off from the integrated batch schedule.

- lcadnld
- lcupld
- lcup798
- lcmdnld
- cednld
- tranupld

The following Perl scripts should also be turned off from the integrated batch schedule

- lcmt700
- lcmt707
- lcmt730
- lcmt798

When both the RTM simplified indicator and import indicator is enabled then the following batch program needs to be turned on in the integrated batch schedule.

- htsupld

Batch Design Summary

The following batch designs are included in this functional area:

- cednld.pc (Download of Customs Entry Transactions to Brokers)
- htsupld.pc (Harmonized Tariff Schedule Upload)
- tranupld.pc (Transportation Upload)
- lcadnld.pc (Letter of Credit Application Download)
- lcmt700 Perl (SWIFT File Conversion – Letter of Credit Application)
- lcupld.pc (Letter of Credit Confirmation Upload)
- lcmt730 (SWIFT File Conversion – Letter of Credit Confirmation)
- lcmdnld.pc (Letter of Credit Amendment Download)
- lcmt707 Perl (SWIFT File Conversion – Letter of Credit Amendment)
- lcup798.pc (Letter of Credit Drawdowns and Charges)
- lcmt798 (SWIFT File Conversion – Letter of Credit Charges and Drawdowns)

cednld (Download of Customs Entry Transactions to Brokers)

Module Name	cednld.pc
Description	Download of Customs Entry Transactions to Brokers
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS53
Runtime Parameters	

Design Overview

This program is used to download custom entry information from the RMS database to brokers. Each night, this program reads all custom entry (CE) transactions that are in "S" Sent status for a broker ID. These transactions are written to a flat file and the status is changed to "D"ownloaded. One flat file is written per broker.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	This batch is not scheduled to run when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Single Threaded, however multiple processes can be run at the same time, each downloading customer entry information for a different broker

Restart/Recovery

The Logical Unit of Work for the program is a single row from the CE_HEAD table. Restart/Recovery will be used for init and commit.

Table based restart/recovery must be used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
CE_HEAD	Yes	No	Yes	No
CE_SHIPMENT	Yes	No	No	No
CE_ORD_ITEM	Yes	No	No	No
ORDHEAD	Yes	No	No	No
SUP_IMPORT_ATTR	Yes	No	No	No
TRANSPORTATION	Yes	No	No	No
CE_LIC_VISA	Yes	No	No	No
CE_CHARGES	Yes	No	No	No
MISSING_DOC	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000050

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Identifier	Number(10)	Nine leading zeroes: 0000000001	ID of current line being processed by input file
	File Type Definition	Char(4)	CEDN	Identifies file as 'Customs Entry download'
	File Create Date	Date	Create date	Vdate in YYYYMMDDHH24MISS format
THEAD	File Type Descriptor	Char(5)	THEAD	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	CE ID	Number(10)	ce_head.ce_id	
	Entry No	Char (15)	ce_head.entry_no	
	Entry Date	Char(14)	ce_head.entry_date	YYYYMMDDHH24MISS format
	Entry Status	Char(6)	ce_head.entry_status	

Record Name	Field Name	Field Type	Default Value	Description
	Entry Type	Char(6)	ce_head.entry_type	
	Entry Port	Char(5)	ce_head.entry_port	
	Summary Date	Char(14)	ce_head.summary date	YYYYMMDDHH24MISS format
	Broker ID	Char(10)	ce_head.broker_id	
	Broker Ref. ID	Char(18)	ce_head.broker_ref_id	
	File Number	Char(18)	ce_head.file_no	
	Importer ID	Char(10)	ce_head.importer_id	
	Import Country	Char(3)	ce_head.import_country_id	
	Currency Code	Char(3)	ce_head.currency_code	
	Exchange Rate	Number(20,10)	ce_head.exchange_rate*10000000000 (with 10 implied decimal places)	
	Bond Number	Char(18)	ce_head.bond_no	
	Bond Type	Char(6)	ce_head.bond_type	
	Surety Code	Char(6)	ce_head.surety_code	
	Consignee ID	Char(10)	ce_head.consignee_id	
	Live Indicator	Char(1)	ce_head.live_ind	
	Batch Number	Char(20)	ce_head.batch_no	
	Entry Team	Char(3)	ce_head.entry_team	
	Liquidation Amount	Number(20,4)	ce_head.liquidation_amt*10000 (4 implied decimal places)	
	Liquidation Date	Date	ce_head.liquidation_date	YYYYMMDDHH24MISS format

Record Name	Field Name	Field Type	Default Value	Description
	Reliquidation Amount	Number(20,4)	ce_head.reliquidation_amt*10000 (4 implied decimal places)	
	Reliquidation Date	Date	ce_head.reliquidation_date	YYYYMMDDHH24MISS format
	Merchandise Loc	Char(40)	ce_head.merchandise_loc	
	Location Code	Char(4)	ce_head.location_code	
TSHIP	File Type Descriptor	Char(5)	TSHIP	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	Vessel ID	Char(20)	ce_shipment.vessel_id	
	Voyage Flt ID	Char(10)	ce_shipment.voyage_flt_id	
	Estimated Departure Date	Date	ce_shipment.estimated_depart_date	YYYYMMDDHH24MISS format
	Vessel SCAC Code	Char(6)	ce_shipment.vessel_scac_code	
	Lading Port	Char(5)	ce_shipment.lading_port	
	Discharge Port	Char(5)	ce_shipment.discharge_port	
	Tran Mode ID	Char(6)	ce_shipment.tran_mode_id	
	Export Date	Date	ce_shipment.export_date	YYYYMMDDHH24MISS
	Import Date	Date	ce_shipment.import_date	YYYYMMDDHH24MISS
	Arrival Date	Date	ce_shipment.arrival_date	YYYYMMDDHH24MISS
	Export Country	Char(3)	ce_shipment.export_country_id	
	Shipment Number	Number(10)	ce_shipment.shipment_no	
TORDI	File Type Descriptor	Char(5)	TORDI	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file

Record Name	Field Name	Field Type	Default Value	Description
	Order Number	Number(8)	ce_ord_item.order_no	
	Item	Char (25)	ce_ord_item.item	
	BL AWB ID	Char(30)	ce_ord_item.bl_awb_id	'MULTI' – means multiple airway bills (otherwise a single airway bill will be retrieved)
	Invoice ID	Char(30)	ce_ord_item.invoice_id	
	Invoice Date	Date	ce_ord_item.invoice_date	YYYYMMDDHH24MISS format
	Invoice Amount	Number(20,4)	ce_ord_item.invoice_amt*10000 (4 implied decimal places)	
	Currency Code	Char(3)	ce_ord_item.currency_code	
	Exchange Rate	Number(20,10)	ce_ord_item.exchange_rate*10000000000 (10 implied decimal places)	
	Manifest Item Quantity	Number(12,4)	ce_ord_item.manifest_item_qty*10000 (4 implied decimal places)	
	Manifest Item Quantity UOM	Char(4)	ce_ord_item.manifest_item_qty_uom	
	Carton Quantity	Number (12,4)	ce_ord_item.carton_qty*10000 (4 implied decimal places)	
	Carton Quantity UOM	Char(4)	ce_ord_item.carton_qty_uom	
	Gross Weight	Number(12,4)	ce_ord_item.gross_wt*10000 (4 implied decimal places)	
	Gross Weight UOM	Char(4)	ce_ord_item.gross_wt_uom	

Record Name	Field Name	Field Type	Default Value	Description
	Net Weight	Number(12,4)	ce_ord_item.net_wt*10000 (4 implied decimal places)	
	Net Weight UOM	Char(4)	ce_ord_item.net_wt_uom	
	Cubic	Number(12,4)	ce_ord_item.cubic*10000 (4 implied decimal places)	
	Cubic UOM	Char(4)	ce_ord_item.cubic_uom	
	Cleared Quantity	Number(12,4)	ce_ord_item.cleared_qty*10000 (4 implied decimal places)	
	Cleared Quantity UOM	Char(4)	ce_ord_item.cleared_qty_uom	
	In Transit Number	Char(15)	ce_ord_item.in_transit_no	
	In Transit Date	Date	ce_ord_item.in_transit_date	YYYYMMDDHH24MISS format
	Rush Indicator	Char(1)	ce_ord_item.rush_ind	
	Related Indicator	Char(1)	ce_ord_item.related_ind	
	Tariff Treatment	Char(10)	ce_ord_item.tariff_treatment	
	Ruling Number	Char(10)	ce_ord_item.ruling_no	
	Do Number	Char(10)	ce_ord_item.do_no	
	Do Date	Date	ce_ord_item.do_date	YYYYMMDDHH24MISS format
	Manufacture ID	Char(18)	sup_import_attr.mfg_id	
TBLAW	File Type Descriptor	Char(5)	TBLAW	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	BL AWB ID	Char(30)	Transportation.bl_awb_id	
TCONT	File Type Descriptor	Char(5)	TCONT	Identifies file record type

Record Name	Field Name	Field Type	Default Value	Description
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	Container ID	Char(20)	Transportation.container_id	
	Container SCAC Code	Char(6)	Transportation.container_scac_code	
TLICV	File Type Descriptor	Char(5)	TLICV	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	License/Visa Type	Char(6)	ce_lic_visa.license_visa_type	
	License/Visa ID	Char(30)	ce_lic_visa.license_visa_id	
	License/Visa Quantity	Number(12,4)	ce_lic_visa.license_visa_qty*10000 (4 implied decimal places)	
	License/Visa Quantity UOM	Char(4)	ce_lic_visa.license_visa_qty_uom	
	Quota Category	Char (6)	ce_lic_visa.quota_category	
	Net Weight	Number(12,4)	ce_lic_visa.net_weight*10000 (4 implied decimal places)	
	Net Weight UOM	Char(4)	ce_lic_visa.net_weight_uom	
	Holder ID	Char(18)	ce_lic_visa.holder_id	
TCHRG	File Type Descriptor	Char(5)	TCHRG	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	Sequence Number	Number(6)	ce_charges.seq_no	
	Pack Item	char(25)	ce_charges.pack_item	
	HTS	Char(10)	ce_charges.hts	
	Effect From Date	Date	ce_charges.effect_from	YYYYMMDDHH24MISS format

Record Name	Field Name	Field Type	Default Value	Description
	Effect To Date	Char(14)	ce_charges.effect_to	YYYYMMDDHH24MISS format
	Component ID	Date	ce_charges.comp_id	
	Component Rate	Number(20,4)	ce_charges.comp_rate*10000 (4 implied decimal places)	
	Per Count UOM	Char(3)	ce_charges.per_count_uom	
	Component Value	Number(20,4)	ce_charges.comp_value * 10000 (4 implied decimal places)	
TMDOC	File Type Descriptor	Char(5)	TMDOC	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file
	Doc_id	Number(6)	Missing_doc.doc_id	
	Received_date	Date	Missing_doc.received_date	YYYYMMDDHH24MISS format
FTAIL	File Type Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Identifier	Number(10)	Incremented internally	ID of current line being processed by input file.
	File Record Counter	Number(10)	Determined Internally	Number of records/transactions processed in current file (only records between head & tail)

htsupld (Harmonized Tariff Schedule Upload)

Module Name	htsupld.pc
Description	Harmonized Tariff Schedule Upload
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS41
Runtime Parameters	

Design Overview

The harmonized tariff schedule module processes a file containing the most recent United States Customs tariff schedule to RMS tables. The module uploads both the initial entry of the schedule and all the updates, as they become available.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase Ad-hoc
Frequency	Daily
Scheduling Considerations	When import_ind from SYSTEM_OPTIONS table is 'Y', then this batch program need to be turned on in integrated batch schedule
Pre-Processing	Hts240_to_2400 (perl script to convert the original US government HTS file of 240-char lines to 2400-char lines) Ushts2rms (perl script to convert the HTS file of 2400- char lines to standard Oracle Retail file format) prepost.pc with HTSUPLD_PRE() function
Post-Processing	N/A
Threading Scheme	The number of threads will be based on the number of input files

Restart/Recovery

Recommended commit counter is 2000. Input file names must end in a ".1" for the restart mechanism to properly parse the file name. Because there is only 1 input file to be uploaded, only 1 thread is used.

A reject file is used to hold records that have failed processing. The user can fix the rejected records and process the reject file again.

Key Tables Affected

Table	Select	Insert	Update	Delete
HTS	Yes	Yes	Yes	Yes
HTS_TARIFF_TREATMENT	Yes	Yes	Yes	Yes
ITEM_HTS	Yes	Yes	Yes	Yes
MOD_ORDER_ITEM_HTS	No	Yes	No	No
HTS_OGA	No	Yes	Yes	Yes
ORDSKU_HTS	Yes	Yes	Yes	Yes
HTS_TT_EXCLUSIONS	No	Yes	Yes	Yes
HTS_TAX	No	Yes	Yes	Yes
HTS_FEE	No	Yes	Yes	Yes
CE_CHARGES	Yes	Yes	Yes	Yes
HTS_CHAPTER	Yes	Yes	No	No
QUOTA_CATEGORY	Yes	Yes	No	No
ITEM_HTS_ASSESS	No	Yes	Yes	Yes
HTS_AD	No	No	Yes	No
HTS_CVD	No	No	Yes	No
HTS_REFERENCE	No	No	Yes	No
ORDHEAD	Yes	No	Yes	No
ITEM_EXP_DETAIL	No	No	Yes	No
ORDLOC_EXP	No	No	Yes	No
ORDSKU_HTS_ASSESS	No	No	Yes	Yes
ORDSKU_TEMP	Yes	No	No	Yes
ORDLOC_TEMP	No	No	No	Yes
ALLOC_CHRG_TEMP	No	No	No	Yes
ALLOC_DETAIL_TEMP	No	No	No	Yes
ALLOC_HEADER_TEMP	No	No	No	Yes
ORDLOC_EXP_TEMP	No	No	No	Yes
ORDSKU_HTS_ASSESS_TEMP	No	No	No	Yes
ORDSKU_HTS_TEMP	No	No	No	Yes
ORDLOC_DISCOUNT_TEMP	No	No	No	Yes
TIMELINE_TEMP	No	No	No	Yes
REQ_DOC_TEMP	No	No	No	Yes
WO_DETAIL_TEMP	No	No	No	Yes
WO_HEAD_TEMP	No	No	No	Yes
REPL_RESULTS_TEMP	No	No	No	Yes

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000051

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record Descriptor	Char(5)	FHEAD	Describes file line type
	Line number	Number(10)	0000000001	Sequential file line number
	Retek file ID	Char(5)	HTSUP	Describes file type
THEAD	Record Descriptor	Char(5)	THEAD	Describes file line type
	Line number	Number(10)		Sequential file line number
	Transaction id	Number(14)		Unique transaction id
	HTS Line	Char(358)		V1 through V4 records from the customs HTS file concatenated together
TDETL	Record Descriptor	Char(5)	TDETL	Describes file line type
	Line number	Number(10)		Sequential file line number
	Transaction id	Number(10)		Unique transaction id
	Tax/fee line	Char(80)		V5 through VC records from the customs HTS file, each on a separate TDETL line
TTAIL	Record Descriptor	Char(5)	TTAIL	Describes file line type
	Line number	Number(10)		Sequential file line number
	Detail lines	Number(6)		Number of lines between THEAD and TTAIL
FTAIL	Record Descriptor	Char(5)	FTAIL	Describes file line type
	Line number	Number(10)		Sequential file line number
	Transaction Lines	Number(10)		Number of lines between FHEAD and FTAIL

Original input file:

Note: The input file contains lines of 2400 characters (that is, the newline character occurs only after every 2400 characters). Each 2400-character line consists of thirty 80-character records. Each 80-character record starts with 'V1' or 'V2' … or 'VD' or blank if the record is completely empty. For each tariff, records V1 and V2 are mandatory; records V3 through VD are optional, which means they can be all blank. Record V4 is not currently used in RMS/RTM. Records V5 through VC contain the tax/fee information for the tariff, and all have the same structure. The lower-case letters in the record name block are as a convenience to cross-reference with the US Customs file description.

Record Name	Field Name	Field Type	Default Value	Description
V1 a	Control identifier	Char(1)	V	Identifies start of record
b	Record type	Char(1)	1	Identifies record type
c	Tariff number	Number(10)		A code located in the *Harmonized Tariff Schedule of the United States Annotated* (HTS) representing the tariff number. If this number is less than 10 positions, it is left justified

d	Transaction code	Char(1)	A, D, R	A code representing the type of transaction. Valid Transaction Codes are:
				A = Add
				D = Delete
				R = Replace

e	Begin effective date	char(6)		A numeric date in MMDDYY (month, day, year) format representing the record begin effective date. This date indicates when the record becomes effective
f	End effective date	char(6)		A numeric date in MMDDYY (month, day, year) format representing the record end effective date. This date indicates the last date the record is effective
g	number of reporting units	number(1)	0,1,or 2 or 3	The number of reporting units required by the Bureau of the Census. In a few instances, units not required by Census may be required to compute duty. In these cases, the Census reporting units are always first, followed by any additional units required to compute the duty

Record Name		Field Name	Field Type	Default Value	Description
h		1st reporting unit of measure	char(4)		A code representing the first unit of measure. If the reporting unit is *X*, no unit of measure is required except for certain tariff numbers in Chapter 99. Valid unit of measure codes are listed in Appendix C
I		2nd reporting unit of measure	char(4)		A code representing the second unit of measure. Valid unit of measure codes are listed in Appendix C
j		3rd reporting unit of measure	char(4)		A code representing the third unit of measure. Valid unit of measure codes are listed in Appendix C
k		duty computation code	char(1)		A code indicating the formula to be used to compute the duty. Valid Duty Computation Codes are listed in Appendix F
l		commodity description	char(30)		A condensed version of the commodity description that appears in the HTS
m		column 1 specific rate of duty	Number(12)		The rate of duty that appears in the General column of the HTS. Eight decimal places are implied
n		base rate indicator	char(1)	'B' or blank	A code indicating if the rate contains a base rate. If the base rate indicator is *B*, the duty rate is a base rate; otherwise, space fill. Not Used in RMS
o		space fill	char(1)	blank	Space fill. Not used in RMS
V2	a	Control identifier	char(1)	V	Identifies start of record
b		Record type	char(1)	2	Identifies record type
c		tariff number	Number (10)		A code located in the Harmonized Tariff Schedule of the United States Annotated (HTS) representing the tariff number. If this number is less than 10 positions, it is left justified. This number is the same as that in Record Identifier V1
d		general column 1 ad valorem percentage	Number (12)		The ad valorem rate of duty that appears in the General column of the HTS. Eight decimal places are implied
e		column 1 other	Number (12)		The rate of duty that appears in the General column of the HTS that is not an ad valorem rate. Eight decimal places are implied
f		Column 2 specific rate	Num(12)		The specific rate of duty that appears in Column 2 of the HTS. Eight decimal places are implied

Record Name		Field Name	Field Type	Default Value	Description
g		Column 2 ad valorem percentage	Num(12)		The ad valorem rate of duty that appears in Column 2 of the HTS. Eight decimal places are implied
h		Column 2 other rate	Num(12)		The rate of duty that appears in Column 2 of the HTS that is not an ad valorem rate or a specific rate. Eight decimal places are implied
i		countervailing duty flag	char(1)	blank or 1	A code of 1 indicating the tariff number is subject to countervailing duty; otherwise, space fill
j		additional tariff indicator	char(1)	blank or 'R'	A code indicating if an additional tariff number may be required with this tariff number. Refer to the Harmonized Tariff Schedule of the United States Annotated (HTS) for more specific information on which HTS numbers require additional HTS numbers to be reported. This indicator is *R* when an additional tariff number may be required; otherwise, space fill
k		Miscellaneous Permit/ License Indicator	char(2)		A code indicating if a tariff number may be subject to a miscellaneous permit/license number
l		space fill	char(4)	blanks	Not used in RMS
V3	a	Control identifier	char(1)	V	identifies start of record
b		Record type	char(1)	3	identifies record type
c		tariff number	Number(10)		A code located in the Harmonized Tariff Schedule of the United States Annotated (HTS) representing the tariff number. If this number is less than 10 positions, it is left justified. This number is the same as the number in Record Identifier V1
d		GSP excluded countries	char(20)		The International Organization for Standardization (ISO) country code that indicates countries not eligible for preferential treatment under GSP. Upto ten 2-position country codes can be reported. If countries are excluded from GSP, the Special Programs Indicator (SPI) Code contained in this record (positions 53-64) is *A**. Valid ISO country codes are listed in Appendix B
e		OGA codes	char(15)		Codes that indicate special requirements by other Federal Government agencies must or may apply. Upto five 3-position OGA codes can be provided

Record Name	Field Name	Field Type	Default Value	Description
f	anti-dumping flag	char(1)	1 or blank	A code of 1 indicating the tariff number is subject to an antidumping duty; otherwise, space fill
g	quota indicator	char(1)	1 or blank	A code of *1* indicating the tariff number may be subject to quota. If the tariff number is not subject to quota, space fill
h	category number	char(6)		A code located in the HTS indicating the textile category assigned to the tariff number. If there is no textile category number, space fill
I	special program indicators	char(28)		A code indicating if a tariff number is subject to a special program. Up to fourteen 2-position codes can be reported. Left justify. The SPI codes are not reported in any particular sequence. If more than fourteen 2-position codes are required, they are reported on the VD record
NEWLINE			\n	
V4 a	Control identifier	char(1)	V	identifies start of record. Entire V4 record not used in RMS
b	Record type	char(1)	4	identifies record type
c	tariff number	Number (10)		A code located in the Harmonized Tariff Schedule of the United States Annotated (HTS) representing the tariff number. If this number is less than 10 positions, it is left justified. This number is the same as the number reported in Record Identifier V1
d	value edit code	char(3)		A code representing the value edit
e	value low bounds	Number (10)		A value representing the minimum value edit. Five decimal places are implied. If this record contains date edits (positions 36-53), space fill
f	value high bounds	Number (10)		A value representing the maximum value edit. Five decimal places are implied. If this record contains date edits (positions 36-53), space fill
g	entry date restriction	Number (1)	0,1, or 2	A code representing the first entry date restriction code
h	beginning restriction date	char(4)		A numeric date in MMDD (month and day) format representing the first begin restriction date used in the edit. If this record contains a value edit (positions 13-35), space fill

Record Name		Field Name	Field Type	Default Value	Description
I		end restriction date	char(4)		A numeric date in MMDD (month and day) format representing the first end restriction date used in the edit. If this record contains a value edit (positions 13-35), space fill
j		entry date restriction 2	number(1)	0,1, or 2	A code representing the second entry date restriction code
k		beginning restriction date 2	char(4)		A numeric date in MMDD (month and day) format representing the second begin restriction date used in the edit. If this record contains a value edit (positions 13-35), space fill
l		end restriction date 2	char(4)		A code located in the Harmonized Tariff Schedule of the United States Annotated (HTS) representing the tariff number. If this number is less than 10 positions, it is left justified. This number is the same as the number reported in Record Identifier V1
m		country of origin	char(2)		A code representing the value edit
n		space filler	char(2)	blanks	A value representing the minimum value edit. Five decimal places are implied. If this record contains date edits (positions 36-53), space fill
o		quantity edit code	char(3)		A value representing the maximum value edit. Five decimal places are implied. If this record contains date edits (positions 36-53), space fill
p		low quantity	Number (10)		A code representing the first entry date restriction code
q		high quantity	Number (10)		A numeric date in MMDD (month and day) format representing the first begin restriction date used in the edit. If this record contains a value edit (positions 13-35), space fill
V5	a	Control identifier	char(1)	V	Identifies start of record
b		Record type	char(1)	5,6,7,8,9,A, B,C	Identifies record type
c		tariff number	Number (10)		A code located in the Harmonized Tariff Schedule of the United States Annotated (HTS) representing the tariff number. If this number contains less than 10 positions, it is left justified. This number is the same as the number reported in Record Identifier V1

Record Name	Field Name	Field Type	Default Value	Description
d	Country code	char(2)		A code representing the country. Valid ISO country codes are listed in Appendix B. *E* followed by a space (Caribbean Basin Initiative), and *J* followed by a space (Andian Trade Preference Act), and *R* followed by a space (Caribbean Trade Partnership Act), are also valid codes for special rates. Countries eligible for E and J are indicated in the ACS country code file and the Harmonized Tariff Schedule of the United States - Annotated (HTS)
e	specific rate	Number (12)		The specific rate of duty listed in the Special column of the HTS. Eight decimal places are implied
f	ad valorem rate	Number (12)		The ad valorem rate of duty listed in the Special column of the HTS. Eight decimal places are implied
g	Other rate	Number (12)		The rate of duty listed in the Special column of the HTS that is not a specific or ad valorem rate. Eight decimal places are implied
h	tax/fee class code	char(3)		A code representing the tax/fee class. Valid tax/fee class codes are listed in Appendix B
I	tax/fee comp code	char(1)		A code indicating the first tax/fee computation formula. Computation formulas are presented in Appendix F
j	tax/fee flag	number(1)		A code indicating a tax/fee is required. Valid Tax/Fee Flag Codes are: 1 = Tax/fee required 2 = Tax/fee may be required. Not used in RMS
k	tax/fee specific rate	Number (12)	blank if no value	The specific rate of duty required to compute taxes and/or fees. Eight decimal places are implied
l	tax/fee ad valorem	Number (12)	blank if no value	The ad valorem rate of duty required to compute taxes and/or fees. Eight decimal places are implied
m	space fill	char(1)	blank	Space fill

Note: V6 through VC records have the same fields as the V5 record.

Record Name	Field Name	Field Type	Default Value	Description
VD a	Control identifier	char(1)	V	identifies start of record
b	Record type	char(1)	D	identifies record type
c	tariff number	Number (10)		unique tariff number

Record Name	Field Name	Field Type	Default Value	Description
d	Special Program Indicator (SPI) Code	char(32)		A code indicating if a tariff number is subject to a special program. Up to sixteen additional 2-position codes can be reported. Left justify. The SPI codes are not reported in any particular sequence
e	Filler	char(36)		Space fill

tranupld (Transportation Upload)

Module Name	tranupld.pc
Description	Transportation Upload
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS140
Runtime Parameters	

Design Overview

This program uploads data from trading partners about the transportation of merchandise from the manufacturing site through customs clearance.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	This batch does not need to be scheduled when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The logical unit of work is a valid DTRAN record. The program reads each DTRAN record from the upload file, validates it and processes it. The recommended commit max counter value for this program is 1000 (this value depends on the implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
TRANSPORTATION	Yes	Yes	Yes	Yes
IF_ERRORS	No	Yes	No	No
PARTNER	Yes	No	No	No
FREIGHT_TYPE	Yes	No	No	No
FREIGHT_SIZE	Yes	No	No	No
CURRENCIES	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDSKU	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
OUTLOC	Yes	No	No	No
SCAC	Yes	No	No	No
COUNTRY	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000177

Record Name	Field Name	Field Type	Default Value	Description
FTRAN	Record descriptor	Char(5)	FTRAN	File head marker
	Line id	Number(10)	0000000001	Unique line id
	File type definition	Char(4)	TRUP	Identifies program as tranupld
	File create date	Char(14)	Current date	YYYYMMDDHHMISS format
DTRAN	Record descriptor	Char(5)	DTRAN	Vessel, Voyage, ETD, Container, BL, Invoice File head
	Line id	Number(10)		Unique line id
	Partner Type	Char(6)		Identifies the partner type
	Partner ID	Char(10)		Identifies the partner id
	Vessel ID	Char(20)		Identifies the Vessel

Record Name	Field Name	Field Type	Default Value	Description
	Voyage ID	Char(10)		Identifies the Voyage or Flight ID
	Estimated Depart Date	Char(8)		YYYYMMDD format
	Shipment Number	Char (20)		Identifies an outside Shipment number
	Actual Arrival Date	Char(8)		YYYYMMDD format
	Trans Mode	Char(6)		Identifies the type of transportation being used. Valid values are found in the TRMO Code Type on the CODE_DETAIL table
	Vessel SCAC Code	Char(6)		Customs defined ID for the Vessel. Validated against SCAC table
	Estimated Arrival Date	Char(8)		YYYYMMDD format
	Lading Port	Char(5)		Identifies the Lading Port. Validated against OUTLOC with type = 'LP'
	Discharge Port	Char(5)		Identifies the Discharge Port. Validated against OUTLOC with type = 'DP'
	Service Contract Number	Char(15)		Identifies the outside Service Contract Number
	Container id	Char(20)		Identifies the Container
	Container SCAC code	Char(6)		Customs defined id for the container. Validated against SCAC table
	Delivery Date	Char(8)		YYYYMMDD format
	Seal id	Char(15)		Customs defined id for the container's seal
	Freight Type	Char(6)		Code that identifies the container type. Validated against the FREIGHT_TYPE table
	Freight Size	Char(6)		Code that identifies the container size. Validated against the FREIGHT_SIZE table
	In Transit No.	Char(15)		External transit number
	In Transit Date	Char(8)		YYYYMMDD format
	BL/AWB id	Char(30)		Identifies the Bill of Lading or Air Way Bill
	Candidate Ind	Char(1)	Defaulted to 'N'	Identifies a complete Transportation record. Valid values are 'Y' and 'N'

Record Name	Field Name	Field Type	Default Value	Description
DPOIT	Record descriptor	Char(5)	DPOIT	Order/Item detail info
	Line id	Number(10)		Unique file line id
	ACD_Code	Char(1)		Determines which process to perform 'A'dd, 'C'hange, 'D'elete.
	Rush Ind	Char(1)	Defaulted to 'N'	Identifies whether or not the item should be on a 'Rush' delivery. Valid values are 'Y' and 'N'
	Order number	Number(8)		RMS order no
	Item	Char(25)		RMS Item
	Invoice id	Char(30)		Identifies the Commercial Invoice
	Invoice date	Char(8)		YYYYMMDD format
	Currency Code	Char(3)		Currency that the Currency Amount is reported in. Validated against CURRENCIES table.
	Exchange Rate	Char (20)		The exchange rate back to the primary currency (10 implied decimals)
	Invoice amt	Char 20)		Invoice amt*10000 (with 4 implied decimal places), amount charged by supplier for the PO/Item
	Origin Country id	Char(3)		Identifies where the PO/Item was made
	Consolidation Country id	Char(3)		Identifies where the PO/Items were consolidated
	Export Country id	Char(3)		Identifies where the PO/Items where shipped from
	Status	Char(6)		Identifies the PO/Item status. Valid values are found in the TRCO Code Type on CODE_DETAIL
	Receipt ID	Char(30)		Identifies the external receipt number
	FCR id	Char(15)		Identifies the Freight Cargo Receipt id
	FCR date	Char(8)		YYYYMMDD format
	Packing Method	Char(6)		Identifies the Packing Type (Hanging or Flat). Valid values are 'HANG' or 'FLAT'
	Lot Number	Char(15)		Identifies the Lot Number of the PO/Item
	Item Qty	Number(12)		Item Qty*10000(with 4 implied decimals), qty of Items

Record Name	Field Name	Field Type	Default Value	Description
	Item QTY UOM	Char(4)		Identifies the UOM associated with the item quantity
	Carton QTY	Number(12)		Carton QTY*10000 (with 4 implied decimals), qty of Cartons
	Carton QTY UOM	Char(4)		Identifies the UOM associated with the carton quantity
	Gross WT	Number(12)		Gross WT*10000 (with 4 implied decimals), Gross weight
	Gross WT UOM	Char(4)		Identifies the UOM associated with the gross weight
	Net WT	Number(12)		Net WT*10000 (with 4 implied decimals), Net Weight
	Net WT UOM	Char(4)		Identifies the UOM associated with the net weight
	Cubic	Number(12)		Cubic*10000 (with 4 implied decimals), cubic size
	Cubic UOM	Char(4)		Identifies the UOM associated with the cubic size
	Comments	Char(256)		User Comments
FTAIL	Record type	Char(5)	FTAIL	
	Line id	Number(10)		Unique file line id
	No. of lines	Number(10)		Total number of transaction lines in file (not including FHEAD and FTAIL)

lcadnld (Letter of Credit Application Download)

Module Name	Lcadnld.pc
Description	Letter of Credit Application Download
Functional Area	Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS57
Runtime Parameters	

Design Overview

Lcadnld sends letter of credit (LC) applications to partner banks. Online user actions flag LCs for download by writing to the LC_DOWNLOAD table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	Run lcadnld before the lcmt700 Perl script. This batch is not scheduled to run when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-processing	N/A
Post-Processing	LCMT700 Perl script
Threading Scheme	No threading due to low volume

Restart/Recovery

Restart/recovery for this program is set up at the lc_ref_id level. The recommended commit counter setting is 10000 records (subject to change based on experimentation).

Key Tables Affected

Table	Select	Insert	Update	Delete
LC_HEAD	Yes	No	Yes	No
LC_DETAIL	Yes	No	No	No
LC_DOWNLOAD	Yes	No	No	Yes
OUTLOC	Yes	No	No	No
ADDR	Yes	No	No	No

Table	Select	Insert	Update	Delete
SUP_IMPORT_ATTR	Yes	No	No	No
SUPS	Yes	No	No	No
PARTNER	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
DOC	Yes	No	No	No
REQ_DOC	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000052

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Identifier	Number(10)	line number in file	ID of current line being created for output file
	File Type Definition	Char(4)	LCAP	Identifies file as 'Letter of Credit Application'
	File Create Date	Char(14)	create date	Current date, formatted to 'YYYYMMDDHH24MISS'
File Detail	File Type Record Descriptor	Char(5)	THEAD	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file.
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Issuing Bank	Char(10)	lc_head.issuing_bank	Used to sort the LCs into individualized bank SWIFT formatted files (using another program) – bank where LC application is headed

Record Name	Field Name	Field Type	Default Value	Description
	Issuing Bank Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = issuing_bank and partner_type = 'BK'
	Issuing Bank Address 1	Char(240)	addr.add_1	Mandatory line of address
	Issuing Bank Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Issuing Bank Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Issuing Bank City	Char(120)	addr.city	City bank located in
	Issuing Bank State	Char(3)	addr.state	State, if applicable, where bank located in
	Issuing Bank Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Issuing Bank Country	Char(3)	addr.country_id	Country bank located in
	Advising Bank	Char(10)	lc_head.advising_bank	Used to sort the LCs into individualized bank SWIFT formatted files (using another program) – bank where LC application is headed
	Advising Bank Name	Char(240)	Partner.partner_desc	The description from the partner table where partner_id = advising_bank and partner_type = 'BK'
	Advising Bank Address 1	Char(240)	Addr.add_1	Mandatory line of address
	Advising Bank Address 2	Char(240)	Addr.add_2	Non-mandatory line of address (can be null)
	Advising Bank Address 3	Char(240)	Addr.add_3	Non-mandatory line of address (can be null)
	Advising Bank City	Char(120)	Addr.city	City bank located in
	Advising Bank State	Char(3)	Addr.state	State, if applicable, where bank located in
	Advising Bank Post Code	Char(30)	Addr.post	Post code, if applicable, where bank located in
	Advising Bank Country	Char(3)	Addr.country_id	Country bank located in

Record Name	Field Name	Field Type	Default Value	Description
	Letter of Credit	Number(8)	lc_head.lc_ref_id	The LC_REF_ID off the LC_HEAD table
	Form Type	Char(6)	lc_head.form_type	The level of detail that the LC will send to the issuing bank
	Form Type Description	Char(40)	code_detail.code_desc	Describes the form type: Long or Short
	Letter of Credit Type	Char(6)	lc_head.lc_type	The type of LC that is being applied for
	Letter of Credit Type Description	Char(40)	code_detail.code_desc	Describes the LC type: Master, Normal, Revolving
	Form of Letter of Credit – I	Char(1)	sup_import_attr.revocable_ind	The REVOCABLE_IND from the SUP_IMPORT_ATTR table
	Form of Letter of Credit – II	Char(1)	lc_head.transferable_ind	Indicates if LC transferable
	Application Date	Char(14)	lc_head.application_date	Date the LC is created within RTM/RMS, formatted to 'YYYYMMDD HH24MISS'
	Expiration Date	Char(14)	lc_head.expiration_date	The date the LC expires, formatted to 'YYYYMMDD HH24MISS'
	Place of Expiry	Char(6)	lc_head.place_of_expiry	Code for the place the LC will expire
	Place of Expiry Description	Char(40)	desc is retrieved through a decode	The description of the place the LC will expire
	Applicant	Char(10)	lc_head.applicant	Party on whose behalf the LC is being issued
	Applicant Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = applicant and partner_type = 'AP'
	Applicant Address 1	Char(240)	addr.add_1	Mandatory line of address
	Applicant Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Applicant Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Applicant City	Char(120)	addr.city	City applicant located in
	Applicant State	Char(3)	addr.state	State, if applicable, where applicant located in

Record Name	Field Name	Field Type	Default Value	Description
	Applicant Post Code	Char(10)	addr.post	Post code, if applicable, where applicant located in
	Applicant Country	Char(3)	addr.country_id	Country applicant located in
	Beneficiary	Number(10)	lc.head.beneficiary	Party in favor of which the LC is being issued
	Beneficiary Name	Char(240)	sups.sup_name	Beneficiary (supplier) name from the SUPS table
	Beneficiary Address 1	Char(240)	addr.add_1	Mandatory line of address
	Beneficiary Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Beneficiary Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Beneficiary City	Char(120)	addr.city	City beneficiary located in
	Beneficiary State	Char(3)	addr.state	State, if applicable, where beneficiary located in
	Beneficiary Post Code	Char(30)	addr.post	Post code, if applicable, where beneficiary located in
	Beneficiary Country	Char(3)	addr.country_id	Country beneficiary located in
	Currency Code	Char(3)	lc_head.currency_code	The country of origin for the orders on the LC
	Exchange Rate	Number (20,10)	lc_head.exchange_rate	Exchange_rate to convert LC currency to RMS currency
	Origin Country ID	Char(3)	lc_head.origin_country_id	Origin country of the orders associated with the LC
	Presentation Terms	Char(6)	lc_head.presentation_terms	Code for the terms of presentation
	Presentation Terms Description	Char(40)	desc is retrieved through a decode	Description of the terms of presentation
	Purchase Type	Char(6)	lc_head.purchase_type	Code for the purchase type
	Purchase Type Description	Char(40)	desc is retrieved through a decode	Description of the purchase type
	Advice Method	Char(6)	lc_head.advice_method	Code for the advice method

Record Name	Field Name	Field Type	Default Value	Description
	Advice Method Description	Char(40)	desc is retrieved through a decode	Description of the advice method (eg. Full Wire, Mail, etc)
	Issuance	Char(6)	lc_head.issuance	Code for the issuance
	Issuance Description	Char(40)	desc is retrieved through a decode	Description of the issuance (eg. Cable, Telex, etc)
	Amount Type	Char(6)	lc_head.amount_type	If 'E'xact, then amount must be exat, if 'A'pproximate then amount can be within variance percent
	Amount Type Description	Char(40)	desc is retrieved through a decode	Description of amount_type
	Amount	Number (20,4)	lc_head.amount	The total amt of the Letter of Credit
	Variance Percent	Number (12,4)	lc_head.variance_pct	Allowed currency variance percent for the LC
	Specification	Char(6)	lc_head.specification	Code for any condition for the credit, e.g. "maximum", etc
	Specification Description	Char(40)	desc is retrieved through a decode	Description of condition for the credit, e.g. "maximum", etc
	Credit Available With	Char(10)	lc_head.credit_avail_with	Code for bank with which credit is available
	Credit With Bank Name	Char(40)	partner.partner_desc	The description from the partner table where partner_id = credit_avail_with and partner_type = 'BK'
	Credit With Address 1	Char(240)	addr.add_1	Mandatory line of address
	Credit With Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Credit With Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Credit With City	Char(120)	addr.city	City creditor located in
	Credit With State	Char(3)	addr.state	State, if applicable, where creditor located in

Record Name	Field Name	Field Type	Default Value	Description
	Credit With Post Code	Char(30)	addr.post	Post code, if applicable, where creditor located in
	Credit With Country	Char(3)	addr.country_id	Country creditor located in
	Drafts At	Char(6)	lc_head.drafts_at	Specifies the terms of the drafts to be drawn under the LC
	Drafts At Description	Char(40)	desc is retrieved through a decode	Description of the terms of the drafts to be drawn under the LC
	Drawee	Char(10)	lc_head.paying_bank	Identifies drawee of drafts to be drawn under LC (paying bank)
	Drawee Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = paying_bank and partner_type = 'BK'
	Drawee Address 1	Char(240)	addr.add_1	Mandatory line of address
	Drawee Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Drawee Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Drawee City	Char(120)	addr.city	City bank located in
	Drawee State	Char(3)	addr.state	State, if applicable, where bank located in
	Drawee Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Drawee Country	Char(3)	addr.country_id	Country bank located in
	Negotiating Bank	Char(10)	lc_head.negotiating_bank	Identifies the negotiating bank
	Negotiating Bank Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = negotiating_bank and partner_type = 'BK'
	Negotiating Bank Address 1	Char(240)	addr.add_1	Mandatory line of address
	Negotiating Bank Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)

Record Name	Field Name	Field Type	Default Value	Description
	Negotiating Bank Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Negotiating Bank City	Char(120)	addr.city	City bank located in
	Negotiating Bank State	Char(3)	addr.state	State, if applicable, where bank located in
	Negotiating Bank Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Negotiating Bank Country	Char(3)	addr.country_id	Country bank located in
	Confirming Bank	Char(10)	lc_head.confirming_bank	Identifies the confirming bank
	Confirming Bank Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = confirming_bank and partner_type = 'BK'
	Confirming Bank Address 1	Char(240)	addr.add_1	Mandatory line of address
	Confirming Bank Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Confirming Bank Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Confirming Bank City	Char(120)	addr.city	City bank located in
	Confirming Bank State	Char(3)	addr.state	State, if applicable, where bank located in
	Confirming Bank Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Confirming Bank Country	Char(3)	addr.country_id	Country bank located in
	Transferring Bank	Char(10)	lc_head.transferring_bank	Identifies the transferring bank
	Transferring Bank Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = transferring_bank and partner_type = 'BK'

Record Name	Field Name	Field Type	Default Value	Description
	Transferring Bank Address 1	Char(240)	addr.add_1	Mandatory line of address
	Transferring Bank Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Transferring Bank Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Transferring Bank City	Char(120)	addr.city	City bank located in
	Transferring Bank State	Char(3)	addr.state	State, if applicable, where bank located in
	Transferring Bank Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Transferring Bank Country	Char(3)	addr.country_id	Country bank located in
	Partial Shipment Indicator	Char(1)	lc_head.partial_ship_ind	Indicates whether goods covered by LC can be partially shipped or not
	Transshipment Indicator	Char(1)	lc_head.transshipment_ind	Indicates whether goods can be transferred to another vessel midway through the voyage
	Fob Title Pass	Char(6)	lc_head.fob_title_pass	Indicates where the title for goods is passed from the vendor to the purchaser
	Fob Title Pass Decode	Char(40)	desc is retrieved through a decode	Decode of where the title for goods is passed from the vendor to the purchaser
	Fob Title Pass Description	Char(250)	lc_head.ob_title_pass_desc	Describes the FOB_TITLE_PASS – could be city name etc
	Transportation to	Char(5)	lc_head.transportation_to	Transportation to location
	transportation to description	Char(150)	outloc.outloc_desc	Description of transportation to location
	With Recourse Indicator	Char(1)	lc_head.with_recourse_ind	Indicates conditional payment on the part of the bank as instructed by the buyer
	Latest Shipment Date	Char(14)	lc_head.latest_ship_date	Latest ship date for all Pos included in the LC, formatted to 'YYYYMMDD HH24MISS'

Record Name	Field Name	Field Type	Default Value	Description
	Earliest Shipment Date	Char(14)	lc_head.earliest_ship_date	Earliest ship date for all Pos included in the LC, formatted to 'YYYYMMDD HH24MISS'
	Letter of Credit Negotiation Days	Number(3) replaces x in the string "DOCUMENTS TO BE PRESENTED WITHIN x DAYS AFTER ISSUANCE OF THE SHIPPING DOCUMENTS BUT WITHIN THE VALIDITY OF THIS CREDIT"	lc.head.lc_neg_days	The number of days to negotiate documents
	Bank's LC reference id	Number(8)	lc_head.bank_lc_id	Bank's LC ref id
	File Type Record Descriptor	Char(5)	THDCM	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Header Level Comments	Char(2000)	lc_head.comments	Holds any comments that the user has added to the Letter of Credit.
	File Type Record Descriptor	Char(5)	TDOCS	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Swift Tag	Char(6)	doc.swift_tag	Identifies individual document types that can be associated with an LC

Record Name	Field Name	Field Type	Default Value	Description
	Document ID	Number(6)	req_doc.doc_id	Uniquely identifies the individual documents associated with an LC
	Body Text	Char(2000)	req_doc.doc_text	Documents associated with a given LC Description of Goods and Services OR Documents Required OR Additional Conditions OR Narrative
	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Order Number	Number(8)	lc_detail.order_no	PO associated with the LC
	Item	Char(25)	lc_detail.item	Item on the PO – item is rolled up to the item_level of 1, if possible
	Cost	Number (20,4)	lc_detail.cost	If form_type = 'S'hort then cost is the total cost of the order; if the form_type = 'L'ong then the cost is the unit cost of the item
	Quantity	Number (12,4)	lc_detail.qty	Total qty of the item for the order on the LC
	Standard UOM	Char(4)	Item_master.standard_uom	Standard unit of measure of the quantity of the item for the order on the LC
	Earliest Ship Date	Char(14)	lc_detail.earliest_ship_date	The earliest date an order on the LC can be shipped, formatted to 'YYYYMMDDHH24MISS'
	Latest Ship Date	Char(14)	lc_detail.latest_ship_date	The latest date an order on the LC can be shipped, formatted to 'YYYYMMDD HH24MISS'
	item description	Char(250)	Item_master.desc_up	Item's description
	File Type Record Descriptor	Char(5)	TMERC	Identifies file record type

Record Name	Field Name	Field Type	Default Value	Description
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Merchandise Description	Char(2000)	lc_detail.merch_desc	Contains the merchandise description of the field.
	File Type Record Descriptor	Char(5)	TDTCM	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Detail Level Comments	Char(2000)	lc_detail.comments	Holds any comments that the user has added to the Letter of Credit detail record.
File Trailer	File Type Record Descriptor	Char(5)	TTAIL	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	ID of current line being created for output file
	Transaction Set Control Number	Number(10)	sequence number	Used to force unique file check
	Transaction detail line count	Number(10)	ID of current line being created for output file	Sum of the detail lines within a transaction
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Identifier	Number(10)	Sequential number Created by program.	ID of current line being created for output file.
	File Record Counter	Number(10)		Number of records/transactions processed in current file (only records between head & tail)

lcmt700 (SWIFT File Conversion – Letter of Credit Application)

Module Name	lcmt700
Description	SWIFT File Conversion – Letter of Credit Application
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	Perl
Catalog ID	RMS136
Runtime Parameters	

Design Overview

This Perl script will convert the standard RMS flat file into the bank specific S.W.I.F.T. MT 700 output files. The input file for this Perl script is the output of the lcadnld.pc RMS batch. One output file will be created for each issuing bank in the lcadnld.pc output file.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	4
Frequency	Daily
Scheduling Considerations	lcmt700 should run after Letter of Credit application download program (LCADNLD.PC) This script does not need to be scheduled to run when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
N/A				

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000052 (input) IntCon000137 (output)

Output

All files layouts input and output the SWIFT MT 700. The output file should be in the following format:

- Most output fields are contained in their own line (or 3-4 line for addresses).
- Each application consists of four parts, one MT 700 and three MT 701s, which are ordered through the Sequence of Total field: for example, ':27:1/4 MT 700' is the first (MT 700) part of the application.
- MT 700 and MT 701s will be mingled in the same file.
- Each record starts with a colon and a SWIFT field identifier, followed by another colon: for example, ':40A:'-
- Each application is separated by a line with only the ASCII 3 symbol (a heart) on it.

Examples of how individual lines of the MT 700 or MT 701 should look:

```
:27:1/4
:40A:IRREVOCABLE
:20:29893098
:23:NOREF
:31C:910906
:31D:911022DALLAS
:51D:NORTHERN TRUST INT'L BANKING CORP.
       ONE WORLD TRADE CENTER
SUITE 3941
NY, NY 10048 USA
```

The layout of the S.W.I.F.T MT 700 (Issue of a Documentary Credit) file is as follows: SWIFT I.D. DATA TYPE CODES (refer to SWIFT User Handbook – Standards general Information – October 1998 release for formatting information):

Note:

There is always a new line (nl) after every individual SWIFT ID (and there may be more than one line within an individual field [for example, 59 – Beneficiary, four lines to hold address information]).

In some situations, certain fields will be blank. These fields should be skipped over. In other words, no blank line or tag should be printed indicating the field is blank. Simply ignore it.

lcupld (Letter of Credit Confirmation Upload)

Module Name	lcupld.pc
Description	Letter of Credit Confirmation Upload
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS55
Runtime Parameters	

Design Overview

The LCUPLD program is used to upload LC (Letter of Credit) confirmations from bank partners.

After this program has processed a confirmation, the appropriate tables will be updated; a confirmation will update the LC to confirm status and it will write the appropriate records to the LC_ACTIVITY table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	This batch does not need to be scheduled when rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	LCMT 730 Perl script
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Restart/recovery for this program is set up at the individual FDETL record. Although there may be more than one FDETL record for a given LC, they will each be processed as a separate entity.

File based restart/recovery must be used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 10000 records.

Key Tables Affected

Table	Select	Insert	Update	Delete
LC_HEAD	Yes	No	Yes	No
LC_ACTIVITY	No	Yes	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000054

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number(10)	0000000001	Line number of the current file
	File Type Definition	Char(4)	LCUP	Identifies file as 'Letter of Credit Upload'
	File Create Date	Char (14)	vdate	Date file was written by external system 'YYYYMMDDHH24MISS' format
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number(10)		Line number of the current file
	Sender's Reference	Char(16)	lc_head.bank_lc_id	The LC number that the bank assigns to a Letter of Credit
	Receiver's Reference	Number(8)	lc_activity.lc_ref_id	The LC number that Retek assigned to the Letter of Credit
	Date of Message Being Acknowledged	Char(14)	lc_activity.activity_date	YYYYMMDDHH24MISS format
	Comments	Char(2000)	lc_activity.comments	This field is a concatenation of the following SWIFT fields: 71B – Charges, 72 – Sender information

Record Name	Field Name	Field Type	Default Value	Description
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	Total number lines	Number(10)		Total number of lines in file not including FHEAD and FTAIL

lcmt730 (SWIFT File Conversion - Letter of Credit Confirmation)

Module Name	lcmt730
Description	SWIFT File Conversion – Letter of Credit Confirmation
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	Perl
Catalog ID	RMS138
Runtime Parameters	

Design Overview

The lcmt730 Perl script converts letter of credit confirmations from a S.W.I.F.T. format (MT730) to a RMS flat file format. The output file from this script will be the input file for the lcupld.pc.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	LCMT730 should run prior to Letter of Credit upload program (lcupld.pc) This script does not need to be scheduled when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	lcupld.pc
Threading Scheme	N/A

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000054 (output) IntCon000139 (input)

Input File Layout

SWIFT I.D. and Description	Data type	Description	How MT 730 fields are put into the RMS standard file format and what should be the size of RMS to be dealt with	Comments
20 – Sender's Reference	16x	LC number. The one assigned by the Sender (issuing bank)	FDETL - Sender's reference, Char(16)	This field maps to RTM's Bank LC Ref ID.
21 – Receiver's Reference	16x	LC number assigned by the Receiver (retailer)	FDETL - Receiver's reference, Number(8) (NOREF used if unknown)	This field maps to RTM's LC Ref ID. If this field has 'NOREF', the record must be rejected since this field is used to indicate the LC within RTM to which this record applies.
25 – Account Identification	35x	Identifies the number of the account, which has been used for the settlement of charges, on the books of the Sender.		RTM currently does not have fields that map directly to this. Current position – will be included in the input file. However, it will be ignored during the upload process.

30 – Date of Message Being Acknowledged	6!n	When a message is acknowledging a MT700, this field specifies the date of issue. In all other cases, this field specifies the date on which the message being acknowledged was sent.	FDETL - Date of message Being Acknowledged, Date	This field maps to the LC activity date. As well, if this in confirming an LC application, it will be mapped to the LC's confirmation date. Year interpretation: If YY>79 then YYMMDD = 19YYMMDD Else YYMMDD = 20YYMMDD.
32a – Amount of Charges	Option B – 3!a15d Option D – 6!n3!a15d	Contains the currency code and total amount of charges claimed by the sender of the message. When charges have been debited, D is used (:32D) and when reimbursement for charges is needed, B is used (:32B).	FDETL -Upload_type = 'C'onfirmation	Current position – Because the 730 will only be used for confirmations, this field will not contain any values. The upload type should be set equal to 'C'onfirmation.
57a – Account With Bank	Option A – [/1!a][/34x] 4!a2!a2!c[3!c] Option D – [/1!a][/34x] 4*35x	This field specifies the bank to which the amount of charges is to be remitted in favor of the Sender.	FDETL - Account With Bank, Char(10)	Current position – will be added to the input file however will be ignored in the upload process. Because RTM has no facilities to maintain BICs or party identifiers, option D will always be used for this field (that is, 57D) without [/1!a][/34x] party identifier.
71B – Charges	6*35x	Specification of the charges claimed.	FDETL - Comments, Char(2000)	This field maps to RTM's activity comments field. Sender to Receiver information (72) will be concatenated to this.

72 – Sender to Receiver Information	6*35x	Text explanation if wanted.	FDETL - Comments, Char(2000)	This field maps to RTM's activity comments field. Charges (71B) will be concatenated to this.

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number(10)	specified by external system	Line number of the current file
	File Type Definition	Char(4)	LCUP	Identifies file as 'Letter of Credit Upload'
	File Create Date	Char (14)	vdate	date file was written by external system 'YYYYMMDD HH24MISS' format
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number(10)	specified by external system	Line number of the current file
	Sender's Reference	Char(16)	lc_head.bank_ld_id	The LC number that the bank assigns to a Letter of Credit
	Receiver's Reference	Number(8)	lc_activity.lc_ref_id	The LC number that RMS assigned to the Letter of Credit
	Date of Message Being Acknowledged	Date (char 8)	lc_activity.activity_date	If the upload type is 'L' then this date will match the date MT 700 date of issue (which we have not resolved between being the vdate or the lc_head.application_date) 'YYYYMMDD' format
	Comments	Char(2000)	lc_activity.comments	Need to truncate? This field will probably be a concatenation of the following SWIFT fields: 71B – Charges, 72 – Sender information

Record Name	Field Name	Field Type	Default Value	Description
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence	Number(10)	Specified by external system	Line number of the current file
	Total number of lines	Number(10)	Specified by external system	Total number lines in file

lcmdnld (Letter of Credit Amendment Download)

Module Name	lcmdnld.pc
Description	Letter of Credit Amendment Download
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS56
Runtime Parameters	

Design Overview

lcmdnld.pc downloads amended letter of credit information to a bank, in the S.W.I.F.T. format.

Online user actions flag LCs for download by writing to the LC_DOWNLOAD table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This batch does not need to be scheduled when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	lcmt707 perl script
Threading Scheme	No threading due to low volume

Restart/Recovery

Restart/recovery for this program is set up at the lc_ref_id level. The recommended commit counter setting is 1000 records (subject to change based on experimentation).

Key Tables Affected

Table	Select	Insert	Update	Delete
LC_AMENDMENTS	Yes	No	Yes	No
LC_HEAD	Yes	No	No	No
LC_DOWNLOAD	Yes	No	No	Yes
ADDR	Yes	No	No	No
PARTNER	Yes	No	No	No
SUPS	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
DOC	Yes	No	No	No
REQ_DOC	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000053

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number(10)	Line number in file	Keeps track of the record's position in the file by line number
	File Type Definition	Char(4)	LCAM	Identifies file as 'Letter of Credit Amendment'
	File Create Date	Char(14)	Create date	Current date, formatted to 'YYYYMMDDHH24MISS'
Transaction Header	Filetype Record descriptor	Char(5)	THEAD	Identifies file record type
	File Line Sequence Number	Number (10)	Line number in file	Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number (10)	Sequence number	Used to force unique file check

Record Name	Field Name	Field Type	Default Value	Description
	Issuing Bank	Char(10)	lc_head.issuing_bank	Used to sort the LCs into individualized bank SWIFT formatted files (using another program) – bank where LC application is headed
	Issuing Bank Name	Char(240)	partner.partner_desc	The description from the partner table where partner_id = issuing_bank and partner_type = ‘BK’
	Issuing Bank Address 1	Char(240)	addr.add_1	Mandatory line of address
	Issuing Bank Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Issuing Bank Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Issuing Bank City	Char(120)	addr.city	City bank located in
	Issuing Bank State	Char(3)	addr.state	State, if applicable, where bank located in
	Issuing Bank Post Code	Char(30)	addr.post	Post code, if applicable, where bank located in
	Issuing Bank Country	Char(3)	addr.country_id	Country bank located in
	Letter of Credit	Number (8)	lc_detail.lc_ref_id	The LC_REF_ID off the LC_DETAIL table
	Bank Letter of Credit ID	Char(16)	lc_head.bank_lc_id	The BANK_LC_ID off the LC_HEAD table
	Currency Code	Char(3)	lc_head.currency_code	The CURRENCY_CODE off the LC_HEAD table
	Date of Issue/ Transfer of the Credit	Char(14)	lc_head.confirmed_date	Date the Issuing Bank thinks is the date of issue–when it was officially confirmed, formatted to ‘YYYYMMDDHH24MISS’
	Current Amount of LC	Number (20,4)		This amount will be calculated in the get_current_amount() function and will be the net amount of the LC calculated only using amendments that have been downloaded. Normally, the net amount is calculated using amendments in the ‘D’ownloaded status
	Beneficiary	Number (10)	lc.head.beneficiary	Party in favor of which the LC is being issued
	Beneficiary Name	Char(240)	sups.sup_name	Beneficiary (supplier) name from the SUPS table

Record Name	Field Name	Field Type	Default Value	Description
	Beneficiary Address 1	Char(240)	addr.add_1	Mandatory line of address
	Beneficiary Address 2	Char(240)	addr.add_2	Non-mandatory line of address (can be null)
	Beneficiary Address 3	Char(240)	addr.add_3	Non-mandatory line of address (can be null)
	Beneficiary City	Char(120)	addr.city	City beneficiary located in
	Beneficiary State	Char(3)	addr.state	State, if applicable, where beneficiary located in
	Beneficiary Post Code	Char(30)	addr.post	Post code, if applicable, where beneficiary located in
	Beneficiary Country	Char(3)	addr.country_id	Country beneficiary located in
Transaction Detail	File Type Record Descriptor	Char(5)	TDETL	Identifies file record type
	File Line Sequence Number	Number (10)	line number in file	Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number (10)	sequence number	Used to force unique file check
	Amendment Number	Number (8)	lc_amendments.amend_no	Holds the amendment number for the amendment
	Order_no	Number (8)	lc_amendments.order_no	Order_no, if applicable, that is attached to the LC that is being amended
	Item	Char(25)	lc_amendments.item	Item being amended, either a Style or Staple sku

Record Name	Field Name	Field Type	Default Value	Description
	Value Being Amended	Char(6)	lc_amendments.amended_value	LC Field being amended. Can be any of the following code_types: CODE CODE_DESC ------ -------------------- AI Add Item AO Add PO ARQD Add Reqd Doc. C Cost ED Expiration Date ESD Earliest Ship Date LSD Latest Ship Date NA Net Amount ND Negotiation Days OC Origin Country OQ Order Quantity PE Place of Expiry PRT Presentation Terms PSF Partial Ship Flag RI Remove Item RO Remove PO RRQD Remove Reqd Doc TFF Transferable Flag TSF Transshipment Flag
	Value Being Amended Description	Char(40)	code_detail.code_desc	The Value Being Amended decoded (see the above list). Will possibly be used when printing to the SWIFT file MT 707 for clarity
	Original Value of Amended Field	Char(45)	lc_amendments.original_value	Current value of field that is being amended
	New Value of Amended Field	Char (2000)	lc_amendments.new_value	New value of the field that is being amended
	Description of New Value	Char(40)	code_detail.code_desc	The new value decoded (or fetched from a table, as in the origin_country case)– only applicable to the following amended values: place of expiry, title_pass_location, origin_country, presentation terms, purchase type
	Sign	Char(1)		If the effect is negative it will be "-" if the effect is positive it will be " "
	Effect	Number (20,4)	lc.amendments.effect	Effect that amendment will have on LC if amendment to change qty or cost of a PO or amount of LC itself

Record Name	Field Name	Field Type	Default Value	Description
	Date of Amendment	Char(14)	Lc_amendments.accept_date	Date on which Issuing Bank (or issuing party, in this case the retailer) considers the credit as being amended, formatted to 'YYYYMMDD HH24MISS'
Transaction Text	File Type Record Descriptor	Char(5)	TTEXT	Identifies file record type
	File Line Sequence Number	Number (10)	line number in file	Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number (10)	sequence number	Used to force unique file check
	Amendment Text	Char (2000)	text description	A text description of the individual amendment (for each TDETL line of the output file) built by the package LC_AMEND_SQL. AMEND_TEXT.
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence Number	Number (10)	line number in file	Keeps track of the record's position in the file by line number
	Control Number File Line Count	Number (10)	total detail lines	Sum of all transaction lines, not including the file header and trailer

lcmt707 (SWIFT File Conversion – Letter of Credit Amendment)

Module Name	lcmt707
Description	SWIFT File Conversion – Letter of Credit Amendment
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	Perl
Catalog ID	RMS137
Runtime Parameters	

Design Overview

This Perl script converts the Oracle retail standard interface file format for Amendments to Letters of Credit download to the corresponding S.W.I.F.T file format (MT 707). The input file for this Perl script is the output of the lcmdnld.pc RMS batch.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	LCMT707 should run after Letter of Credit amendment download program (lcmdnld.pc) This script is not scheduled to run when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	lcmdnld.pc
Post-Processing	N/A
Threading Scheme	N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
N/A				

.Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000053 (input) IntCon000138 (output)

Output

The SWIFT MT 707 output file should be in the following format:

- Most output fields are contained in their own line (or 3-4 line for addresses).
- Each amendment consists of only one part, the MT 707. There may be several MT 707s at any given time associated to an LC because they are grouped by amendment number at the time of creation. All TDETL records with the same amend_no will be grouped together in one MT 707.
- Each record starts with a colon and a SWIFT field identifier, followed by another colon: for example, ':40A:'-
- Each amendment is separated by a line with only the ASCII 3 symbol (a heart) on it.

Logic Setup:

The input file will be in standard RMS file format. It will potentially have numerous TDETL lines per each THEAD line. There may be numerous TDETL records for one amendment. MT 707 will write one record for each amendment, so if there are multiple TDETL records they need to be combined. There is one TTEXT for each TDETL.

There are three values that need to be calculated. 32B, 33B, 34B. 32B is the total increment or the sum of the positive effect values for each amendment. 33B is the total decrement or the sum of all the negative effect values for each amendment. 32B and 33B are separate totals for each amendment. 34B is the total difference, so it is the sum of the total increment and total decrement. 34B is not just for one amendment though; it is for all amendments of a THEAD record, so this total will run through each TDETL in a THEAD.

For example: if the input file contains:

```
    THEAD….
    TDETL amendment 1, effect +1000
    TTEXT
    TDETL amendment 1, effect +500
    TTEXT
    TDETL amendment 2, effect -2500
    TTEXT
    TDETL amendment 3, effect +4000
    TTEXT
    TDETL amendment 3, effect -1000
    TTEXT
    TDETL amendment 3, effect +500
    TTEXT
    TDETL amendment 4, effect -1000
    TTEXT
    TDETL amendment 4 , effect –2500
    TTEXT
    TTAIL

32B for amendment 1 = 1500
33B for amendment 1 = 0
34B for amendemnt 1 = 1500

32B for amendment 2 = 0
33B for amendment 2 = 2500
34B for amendemnt 2 = -1000

32B for amendment 3 = 4500
33B for amendment 3 = 1000
34B for amendemnt 3 = 4500

32B for amendment 4 = 0
33B for amendment 4 = 3500
34B for amendemnt 4 = 1000
```

Examples of how individual lines of the MT 707 should look:

```
APPLICANT:
OPERATOR:
OPERATION DATE:
OPERATION TIME:
TEST KEY:
BATCH TOTAL:
SEGMENT TOTAL:
MT/PRIORITY:707 02
:27:1/1
:20:10001981
:21:1981
:52D:Bank One
100 Bank One Way
Columbus        ,OH  41984      US
:31C:990204
:30:990204
:26E:1
:59:David Fashion Creations P/L Pack
Wholesale Division
109 Ackland St.
St. Kilda      ,VA  30280-1234 US
:32B:USD500,0
```

```
:33B:USD0,0
:34B:USD500,0
:79:Letter of Credit:  has been changed from 25 to 30
for Style 10049369, resulting in an effect of 500
(USD).
```

The layout of the S.W.I.F.T MT 707 (Amendment to a Documentary Credit) file is as follows:

SWIFT I.D. DATA TYPE CODES (refer to SWIFT User Handbook – Standards General Information – October 1998 release for formatting information):

Note:

The field lengths and types in the Oracle retail Standard Download Format of the MT 707 are important because sometimes they are different from the information that is being placed in them and the fields may have to be truncated, rounded, and so on.

There is always a new line (nl) after every individual SWIFT ID (and there may be more than one line within an individual field (example 59 – Beneficiary, four lines to hold address information).

In some situations, certain fields will be blank. These fields should be skipped over. In other words, no blank line or tag should be printed indicating the field is blank. Simply ignore it.

lcup798 (Letter of Credit Drawdowns and Charges)

Module Name	lcup798.pc
Description	Letter of Credit Drawdowns and Charges
Functional Area	Oracle Retail Trade Management
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS54
Runtime Parameters	

Design Overview

This program reads data from an input file containing letter of credit charges and drawings (in standard Oracle Retail format, modified from the SWIFT 798 format by the lcmt798 Perl script), validates it, and inserts it into the LC_ACTIVITY table. If a record fails validation, it will be written to a reject file. These rejected records can be reprocessed by lcup798 after errors have been corrected.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	Should be run after the lcmt798 Perl script This batch does not need to be scheduled when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	lcmt798
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This program will be restartable but not threadable.

Restart/recovery logic for file-based processing is used. Records will be committed to the database when commit_max_ctr defined in the RESTART_CONTROL table is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
LC_HEAD	Yes	No	No	No
LC_DETAIL	Yes	No	No	No
LC_ACTIVITY	No	Yes	No	No
LC_AMENDMENTS	Yes	No	No	No
CURRENCIES	Yes	No	No	No
CURRENCY_RATES	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000055

The input file for this batch program is the output from the lcmt798 Perl script.

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File head descriptor	Char(5)	FHEAD	Describes file line type
	Line id	Number (10)	0000000001	Sequential file line number
	File Type Definition	Char(4)	'LCCH'	Identifies as an LC 798 file-Letter of Credit Charges
	Current date	Date		File date in YYYYMMDDHH24MISS format
FDETL	File record descriptor	Char(5)	FDETL	Describes file line type
	Line id	Number (10)		Sequential file line number
	Bank letter of credit reference ID	Char (16)	SWIFT tag 20	Bank's LC ref ID
	Order number	Number(8)	SWIFT tag 21	Order number attached to LC.May be blank
	Invoice number	Number (15)	SWIFT tag 23	NOT a RMS invoice number, just a reference invoice number from the issuing bank. May be blank
	Transaction number	Number (10)		Amendment number or transaction number assigned by bank.May be null
	Transaction code	Char(6)	B or D	'B'ank charge or'D'rawdown
	Amount	Number(21)	SWIFT tag 33A,71A	(This is a 20-digit number with a leading – sign or blank and 4 implied decimal places.) Amount of charge or drawdown
	Currency code	Char(3)	SWIFT 33A,71A	Currency that the amount is in
	Activity date	Date	SWIFT 33A,32C,32D	Activity date(formatted as 'YYYYMMDD')
	Comments	Char(2000)	SWIFT tag 72	Any comments associated with activity.May be null
FTAIL	File record descriptor	Char(5)	FTAIL	Marks end of file
	Line id	Char(10)		Sequential file line number
	Number of lines	Number(10)		Number of lines in file not counting FHEAD and FTAIL

lcmt798 (SWIFT File Conversion – Letter of Credit Charges and Drawdowns)

Module Name	lcmt798
Description	SWIFT File Conversion – Letter of Credit Drawdowns and Charges
Functional Area	Retail Trade Management – Letter of Credit Interfaces
Module Type	Integration
Module Technology	Perl
Catalog ID	RMS139
Runtime Parameters	

Design Overview

This Perl script converts letter of credit (L/C) activity data for charges and drawdowns from a S.W.I.F.T. format input file to a RMS format file.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 2
Frequency	Daily
Scheduling Considerations	LCMT798 should be run prior to the Letter of Credit charges and drawings upload program (LCUP798.PC) This script does not need to be scheduled when the rtm_simplified_ind in SYSTEM_OPTIONS table is set to Y
Pre-Processing	N/A
Post-Processing	lcup798.pc
Threading Scheme	N/A

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000139 (input)

Input File Layout

Swift Tag	Description	Reqd?	Datatype	RMS Field
20 – Transaction Reference Number	The sender's unambiguous identification of the transaction. Its detailed form and content are at the discretion of the sender.	Yes	16x – Transaction Reference Number	Bank L/C ID Lc_head.bank_lc_id Varchar2(16)
12 – Type of Financial Instrument	This field classifies the financial instrument by a description or proprietary code.	Yes	Option A- :4!c/[8c]/30x :4!c – Qualifier / - Delimiter [8c] – Issuer Code / - Delimiter 30x - Type	This field will contain a constant identifier – '798'
77E – Proprietary Message	This field contains the proprietary message in a format agreed to by the Sender and the Receiver.	Yes	Option E- 73x [n*78x]	This field will contain the information below (fields 21, 23, 32C, 32D, 71A, 33A, 72) Carriage return, Line feed, Colon 'CrLf:' will be used to separate fields included in this 77E **For example:** :77E:'CrLf' :21:10004321:CrLf' :32C:990121USD1045 etc… There may be multiple 77Es in one file

Swift Tag	Description	Reqd?	Datatype	RMS Field
21 – Related Reference	This field specifies, in an unambiguous way, a message or transaction identifier which is normally included as part of the information supplied with the message or transaction itself, and can subsequently be used to distinguish the message or transaction identified from other messages or transactions.	No	16x	P/O Number Lc_activity.order_no Number(8)
23 – Further identification	This field specifies the type of transaction being confirmed, as well as the settlement method used.	No	16x	Invoice Number Lc_activity.invoice_no Varchar2(15)
32C – Date and Amount	This field specifies the currency code and amount in a transaction and a corresponding date.	No	Option C- 6!n3!a15d 6!n – Date 3!a – Currency 15d – Amount	Charges Credited (this is interpreted as a positive amount) Date will be in format YYMMDD The integer part of the Amount must contain at least one digit. A decimal comma ‘,’ is mandatory and is included in the maximum length Lc_activity.amount Number(20,4) Lc_activity.currency_code Varchar2(3) Lc_activity.activity_date Date

Swift Tag	Description	Reqd?	Datatype	RMS Field
32D – Date and Amount	This field specifies the currency code and amount in a transaction and a corresponding date.	No	Option D- 6!n3!a15d 6!n – Date 3!a – Currency 15d – Amount	Charges Debited (this is interpreted as a negative amount) Date will be in format YYMMDD The integer part of the Amount must contain at least one digit. A decimal comma ',' is mandatory and is included in the maximum length Lc_activity.amount Number(20,4) Lc_activity.currency_code Varchar2(3) Lc_activity.activity_date Date
33A – Date and Amount	This field specifies the currency code and amount in a transaction and a corresponding date.	No	Option A- 6!n3!a15d 6!n – Date 3!a – Currency 15d – Amount	Date, currency, amount of drawing (this is interpreted as a positive amount) Date will be in format YYMMDD The integer part of the Amount must contain at least one digit. A decimal comma ',' is mandatory and is included in the maximum length Lc_activity.amount Number(20,4) Lc_activity.currency_code Varchar2(3) Lc_activity.activity_date Date

Swift Tag	Description	Reqd?	Datatype	RMS Field
33C – Date and Amount	This field specifies the currency code and amount in a transaction and a corresponding date.	No	Option A- 6!n3!a15d 6!n – Date 3!a – Currency 15d – Amount	Date, currency, amount of drawing (this is interpreted as a negative amount) Date will be in format YYMMDD The integer part of the Amount must contain at least one digit. A decimal comma ',' is mandatory and is included in the maximum length. Lc_activity.amount Number(20,4) Lc_activity.currency_code Varchar2(3) Lc_activity.activity_date Date
72 – Sender to Receiver Information	This field specifies instructions or additional information for the Receiver, Intermediary, Account with Institution or Beneficiary Institution.	No	6*35x	Comments Lc_activity.comment Varchar2(2000)
18A – Number of Repetitive Parts	This field specifies the number of times the repetitive part(s)/sequence(s)directly before or after this field appears in the message.	No	Option A- 5n – Number of Repetitive Parts.	Number of 77E's contained within the file.

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000055 (input)

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Identifier	Number (10)	Line number in file	ID of current line being created for output file
	File Type Definition	Char(4)	LCCH	Identifies file as 'Letter of Credit Changes'
	File Create Date	Char(14)	Create date	Current date, formatted to 'YYYYMMDDHH24MISS'
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number (10)	Line number in file	ID of current line being created for output file
	Bank Letter of Credit Reference ID	Char(16)	SWIFT tag 20	Bank L/C ID
	Order Number	Number (8)	SWIFT tag 21	Contains the order number that is attached to the letter of credit
	Invoice Number	Char (15)	SWIFT tag 23	Identifies the Issuing Bank's invoice number to which the drawdown refers. This field does not correspond to a RMS invoice number
	Transaction Number	Char (10)	Null	Identifies the amendment number or actual transaction number assigned by the bank
	Transaction Code	Char (6)	If the transaction is a Bank Charge – 'B' If the transaction is a Drawdown – 'D'	Identifies the type of transaction that occurred The type is determined by what detail fields are received for the record. If the record contains a 33A this field will get a 'D'. If the record contains either a 32C or 32D this field will get a 'B'
	Amount Sign	Char (1)	SWIFT 33A, 33C SWIFT 32C, 32D	If the record contains a 33A field leave a blank space in this field If the record contains a 33C filed this field should contain a '-' If the record contains a 32C field leave a blank space in this field If the record contains a 32D field this field should contain a '-'

Record Name	Field Name	Field Type	Default Value	Description
	Amount	Number (20)	SWIFT 33A, 33C SWIFT 32C, 32D	Holds the amount of the activity. This field will have 4 implied decimal places If SWIFT 32C or 32D (Bank Charge) contains a value, use the amount from this field If SWIFT 33A or 33C (Drawdown) contains a value, use the amount from this field
	Currency Code	Char (3)	SWIFT 33A, SWIFT 32C, 32D	Contains the activity's currency code If SWIFT 32C or 32D (Bank Charge) contains a value, use the currency from this field If SWIFT 33A (Drawdown) contains a value, use the currency from this field
	Activity Date	Char (8)	SWIFT 33A, SWIFT 32C, 32D	Holds the date that the activity took place. Formatted to 'YYYYMMDD' If SWIFT 32C or 32D (Bank Charge) contains a value, use the date from this field If SWIFT 33A (Drawdown) contains a value, use the date from this field
	Comments	Char (2000)	SWIFT tag 72	Holds any comments for the activity
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Identifier	Number (10)	Sequential number Created by program.	ID of current line being created for output file
	File Record Counter	Number (10)		This will contain the number of FDETL lines processed

20 Stock Ledger

Overview

The stock ledger holds financial data that allows you to monitor your company's performance. It incorporates financial transactions related to merchandising activities, including sales, purchases, transfers, and markdowns; and is calculated weekly or monthly. The stock ledger accounts for inventory in buckets (how much inventory was returned, how much damaged, and so on). This overview describes how the stock ledger is set up, the accounting methods that impact stock ledger calculations, the primary stock ledger tables, and the batch programs and PL/SQL packages that process data held on the tables.

> **Note:** For additional information about stock ledger transaction posting, see Sales Posting.
>
> For additional information about integration of data (including month level stock ledger data) to the General Ledger, see Integration with General Ledger.

Stock Ledger Set Up and Accounting Methods

The operation of the stock ledger is dependent upon a number of options that you choose for your implementation of RMS. To understand how your company uses the stock ledger, you can examine the settings that are described here.

The stock ledger is implemented at the subclass level and supports both the retail and cost methods of accounting. The method of accounting may vary by department and is set on the department (DEPS) table in the profit_calc_type column. The '1' setting indicates that profit is calculated by direct cost. The '2' setting indicates that profit is calculated by retail inventory.

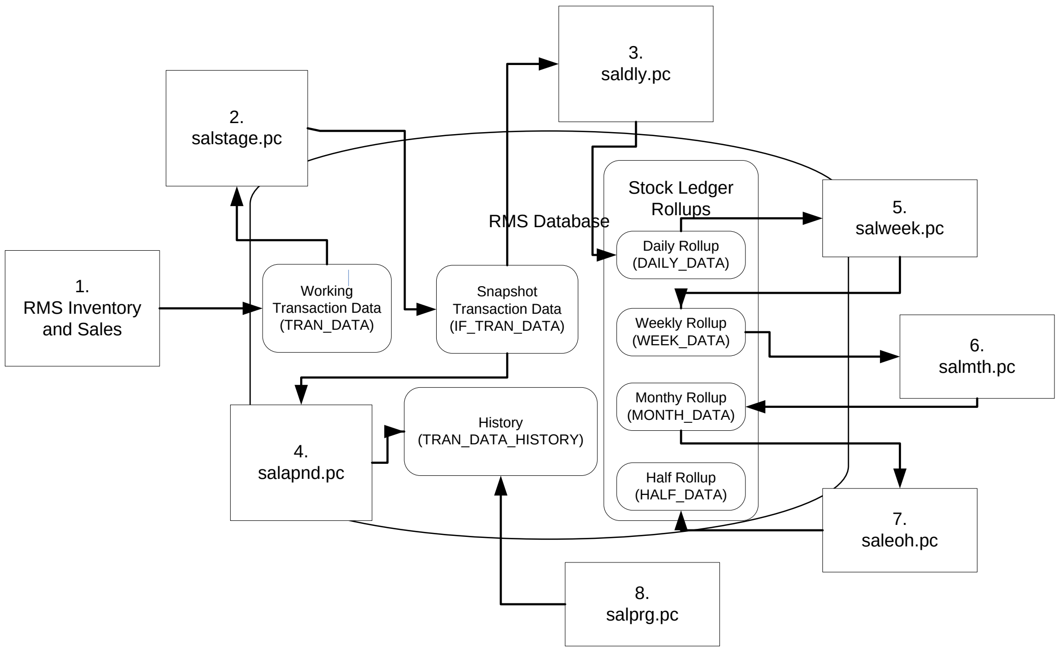
If you select the cost method of accounting, two options are available: average cost or standard cost. The chosen option is represented on the SYSTEM_OPTIONS table in the std_av_ind column, where the standard cost option is indicated by the 'S' setting, and the average cost option is indicated by the 'A' setting. The selected option then applies to all departments that use the cost method stock ledger option.

If you select the retail method of accounting, you can choose to implement the retail components of all transactions either to include value-added tax (VAT) or to exclude VAT. You accomplish through a system-level option vat_ind on the SYSTEM_OPTIONS table.

> **Note:** If the value-added tax (VAT) system option is enabled in RMS, rolled-up stock ledger data values for the retail accounting method include value-added tax.

For sales history purposes, history is maintained based on the calendar that you choose. If your company uses the 4-5-4 calendar, sales history is tracked weekly. If you use the Gregorian (or 'normal') calendar, sales history is tracked monthly. The calendar setting is held on the SYSTEM_OPTIONS table in the calendar_454_ind column.

Process Flow


3. saldly.pc
2. salstage.pc
RMS Database
Stock Ledger Rollups
5. salweek.pc
1. RMS Inventory and Sales
Working Transaction Data (TRAN_DATA)
Snapshot Transaction Data (IF_TRAN_DATA)
Daily Rollup (DAILY_DATA)
Weekly Rollup (WEEK_DATA)
6. salmth.pc
Monthy Rollup (MONTH_DATA)
History (TRAN_DATA_HISTORY)
4. salapnd.pc
Half Rollup (HALF_DATA)
7. saleoh.pc
8. salprg.pc

1. Assorted RMS Inventory and Sales Transactions write to the working transaction data table (TRAN_DATA).
2. Salstage.pc moves transaction data from the working table to the snapshot transaction data table (IF_TRAN_DATA) for additional processing.
3. Saldly.pc rolls up the snapshot transaction data (IF_TRAN_DATA) and persists it to the daily rollup table (DAILY_DATA).
4. Salapnd.pc moves data from the snapshot transaction data table (IF_TRAN_DATA) to the history table (TRAN_DATA_HISTORY).
5. Salweek.pc rolls up daily stock ledger data (DAILY_DATA) to weekly stock ledger data (WEEK_DATA).
6. Salmth.pc rolls up weekly stock ledger data (WEEK_DATA) to monthly stock ledger data (MONTH_DATA).
7. Saleoh.pc rolls up monthly stock ledger data (MONTH_DATA) to half level stock ledger data (HALF_DATA).
8. Salprg.pc deletes aged transaction history (TRAN_DATA_HISTORY).

Batch Design Summary

The following batch designs are included in this functional area:

- salstage.pc (Stage Stock Ledger Transactions for Additional Processing)
- salapnd.pc (Append Stock Ledger Information to History Tables)
- saldly.pc (Daily Rollup of Transaction Data for Stock Ledger)
- salweek.pc (Weekly Rollup of Data/Calculations for Stock Ledger)
- salmth.pc (Monthly Rollup of Data/Calculations for Stock Ledger)
- salmaint.pc (Stock Ledger Table Maintenance)
- saleoh.pc (End Of Half Rollup of Data/Calculations for Stock Ledger)
- salprg.pc (Purge Stock Ledger History)
- nwppurge.pc (Optional End of Year Inventory Position Purge)
- nwpyearend.pc (Optional End of Year Inventory Position Snapshot)

- stlgdnld (Daily or Weekly Download of Stock Ledger Data)
- Otbdlsal (Open To Buy Download Stock Ledger)
- trandataload.ksh (External Transaction Data Upload)
- trandataprocess.ksh (External Transaction Data Process)

salstage (Stage Stock Ledger Transactions for Additional Processing)

Module Name	salstage.pc
Description	Stage Stock Ledger Transactions for Additional Processing
Functional Area	Stock Ledger
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS345
Runtime Parameters	

Design Overview

In order to make the rollup and extraction of the stock ledger transaction data flexible, this program moves the data on the TRAN_DATA to the IF_TRAN_DATA staging table. This will enable the processes that are writing records to TRAN_DATA to continue in a seamless manner, whereas the processes that rolls the data up to a different level or extract the data to external systems can work without affecting batch timetables.

This process will be achieved by locking the TRAN_DATA table and moving all of the data to the staging table. The original TRAN_DATA table will be emptied and the lock on the table will be released. Before this processing occurs, the staging table will first be emptied to ensure that data is not processed twice. Because the data on the TRAN_DATA and IF_TRAN_DATA tables is very transitional, these tables will fill up and be truncated at least once a day if not several times per day.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This module should run after Sales Process (uploadsales.ksh and salesprocess.ksh) but before saldly.pc, salweek.pc and salapnd.pc, rpmmovavg.pc. Within the deal cycle, it should run before dealact.pc
Pre-Processing	salesprocess.ksh

Schedule Information	Description
Post-Processing	saldly salapnd salweek dealact rpmmovavg fifgldn1 fifgldn2
Threading Scheme	Threading is implicit via the use of the Oracle Parallel Query Option. The insert/select query should be tuned for each specific environment to achieve the best throughput

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
IF_TRAN_DATA	No	Yes	No	Yes
TRAN_DATA_A	Yes	Yes	No	Yes
TRAN_DATA_B	Yes	Yes	No	Yes
DEAL_PERF_TRAN_DATA	No	Yes	No	Yes
PERIOD	Yes	No	No	No
DEAL_PERF_DATA_TEMP	Yes	No	No	No

Design Assumptions

N/A

salapnd (Append Stock Ledger Information to History Tables)

Module Name	salapnd.pc
Description	Append Stock Ledger Information to History Tables
Functional Area	Stock Ledger
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS335
Runtime Parameters	

Design Overview

The purpose of this program is to move data from the staging table for transaction data (IF_TRAN_DATA) into the historical transaction data table (TRAN_DATA_HISTORY). This requires placing a lock on the staging table to ensure that no new data will be added to it while the movement is occurring (to handle trickling or real-time processing), moving the data to the historical table, and finally truncating the data from the staging table.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	After fifgldnld1.pc After fifgldnld2.pc After fifgldnld3.pc
Pre-Processing	salstage.pc, all extraction, and all processing
Post-Processing	N/A
Threading Scheme	Threading will be implicit through the use of the Oracle Parallel Query Option. The insert/select query should be tuned for each specific environment to achieve the best throughput

Restart/Recovery

N/A

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
PERIOD	Yes	No	No	No

Table	Select	Insert	Update	Delete
SYSTEM_VARIABLES	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
TRAN_DATA_HISTORY	No	Yes	No	No

Design Assumptions

N/A

saldly (Daily Rollup of Transaction Data for Stock Ledger)

Module Name	saldly.pc
Description	Daily Rollup of Transaction Data for Stock Ledger
Functional Area	Stock Ledger
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS336
Runtime Parameters	

Design Overview

This program is responsible for performing the daily summarization processing in the stock ledger in which transaction-level records are fetched from the transaction-level staging table and summed to the subclass/location/day/currency level. Once the records are summarized, they are written to the DAILY_DATA table.

To call this program the end of day process for the stock ledger would not be completely correct, however, because a day does not really 'close' in the stock ledger until the month closes. Each time that the Daily Stock Ledger Processing program runs, all transaction-level data is processed, whether it is for the current date, a date since the last month closing or even a date prior to the last month closing. For transactions occurring on the current date or since the last month close, they are processed by simply summarizing the date and updating the current information on DAILY_DATA for the date of the transaction. However, if a transaction occurred prior to the last month that was closed (i.e. the transaction was dated 3/15 and the last end of month date was 3/20), then that transaction will be dated with the current date and summarized with the current date's records. Also, in this last case, a warning message will be written to the batch log that alerts the user to the problem. The message the users will receive is "*ALERT* Transactions have been found for previous months."

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	PHASE 3
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	Run salstage to move records from TRAN_DATA to IF_TRAN_DATA
Post-Processing	Salweek (on end of week day)
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work is department/class/subclass. This batch program is multithreaded using the v_restart_dept view.

Key Tables Affected

Table	Select	Insert	Update	Delete
SA_STORE_DAY	Yes	No	No	No
SA_VOUCHER	Yes	No	Yes	No
STORE	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
DAILY_DATA	Yes	Yes	Yes	No
DAILY_DATA_TEMP	No	Yes	No	No
DAILY_DATA_BACKPOST	No	Yes	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
MV_LOC_SOB	Yes	No	No	No

Design Assumptions

N/A

salweek (Weekly Rollup of Data/Calculations for Stock Ledger)

Module Name	salweek.pc
Description	Weekly Rollup of Data/Calculations for Stock Ledger
Functional Area	Stock Ledger
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS346
Runtime Parameters	

Design Overview

This program is responsible for performing the weekly summarization processing in the stock ledger. This program processes all weeks that are in the month for which month-end process has not been run, up to the current week. It rolls up data on DAILY_DATA, DAILY_DATA_TEMP and WEEK_DATA_TEMP to the corresponding dept/class/subclass/location/half-month/week/currency level and updates the WEEK_DATA table.

This program processes all weeks that are in the month for which month-end process has not been run, up to the current week. This program can be run at any time during the week – not necessarily just at week-end, as it must be run before the Monthly Stock Ledger Processing, which can be run at any time after the closing of a month.

In addition to the summarization processes done by this program, there are several week ending calculations done as well. The closing stock value, half to date goods available for sale (HTD GAFS), shrinkage and gross margin are calculated by calling a package function, based on the accounting method designated for the department – cost or retail. Additionally, the closing stock value for a processed week becomes opening stock value for the next week. Also, if this program is run at the end of the week, it will write a 'shell' record for the next week, populating the key fields on the table (subclass, location, etc.), the opening stock values at cost and retail and the HTD GAFS at cost and retail.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase
Frequency	Weekly
Scheduling Considerations	This program should run after saldly.pc, stkdly.pc, salapnd.pc and immediately before salmth.pc (in weeks that are at end of month)
Pre-Processing	prepost salweek pre
Post-Processing	prepost salweek post

Schedule Information	Description
Threading Scheme	Multithreaded on department

Restart/Recovery

The logical unit of work is dept/class/subclass combination. A commit will take place when number of dept/class/subclass combination records processed is equal to commit max counter in restart control table.

Key Tables Affected

Table	Select	Insert	Update	Delete
SALWEEK_RESTART_DEPT	Yes	No	No	No
SALWEEK_C_WEEK	Yes	No	No	No
SALWEEK_C_DAILY	Yes	No	No	No
DAILY_DATA	Yes	No	No	No
WEEK_DATA	Yes	Yes	Yes	No
PARTNER	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
DEPS	Yes	No	No	No
HALF_DATA_BUDGET	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No

Design Assumptions

N/A

salmth (Monthly Rollup of Data/Calculations for Stock Ledger)

Module Name	salmth.pc
Description	Monthly Rollup of Data/Calculations for Stock Ledger
Functional Area	Stock Ledger
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS343
Runtime Parameters	

Design Overview

The Monthly Stock Ledger Processing program is responsible for performing the monthly summarization processing in the stock ledger in which day-level records are fetched from the transaction-level staging table and summed to the subclass/location/month level. Once the records are summarized, they are written to the MONTH_DATA table. This program processes one month for each program run – starting the latest month to be closed. For example, if it is currently June and both April and May are open, when the program runs, then only April will be closed.

In addition to the summarization processes done by this program, there are several month ending calculations done as well. The closing stock value, half to date goods available for sale (HTD GAFS), shrinkage and gross margin are calculated by calling a package function, based on the accounting method designated for the department – cost or retail. Additionally, the closing stock value for a processed month becomes opening stock value for the next month. Also, when this program is run, it will write a 'shell' record for the next month, populating the key fields on the table (subclass, location, etc.), the opening stock values at cost and retail, the inter-stock take sales and shrinkage amounts and the HTD GAFS at cost and retail.

This program can be run at any time during the month – not necessarily just at month-end. Open stock counts from the month may exist based on the system parameter (CLOSE_MTH_WITH_OPN_CNT_IND). If this indicator is 'Y', then retailers are able to keep a count open across a single month closing in the stock ledger and still close the month financially. A Unit & Value stock count is considered as open until all variances (both unit and value) have been reviewed and applied. Special processing exists if it is allowed and there are open stock counts from the current month. Open stock counts from previous months however cannot exist regardless of the setting.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	PHASE 3
Frequency	Monthly (end of month)

Schedule Information	Description
Scheduling Considerations	Can run any time after end-of-month date Salweek.pc must run prior to salmth.pc
Pre-Processing	N/A
Post-Processing	Prepost salmth_post
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work (LUW) for this batch program is a dept/class/subclass/loc_type/location/currency_ind record. This batch program is threaded by department using the v_restart_dept view. Processed records are committed to the database after the LUW count has reached the commit_max_ctr.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
STAKE_HEAD	Yes	No	No	No
STAKE_PROD_LOC	Yes	No	No	No
PARTNER	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
MONTH_DATA	Yes	Yes	Yes	No
DAILY_DATA	Yes	No	No	No
DEPS	Yes	No	No	No
WEEK_DATA	Yes	No	No	No
HALF_DATA_BUDGET	Yes	No	No	No

Design Assumptions

N/A

salmaint (Stock Ledger Table Maintenance)

Module Name	salmaint.pc
Description	Stock Ledger Table Maintenance
Functional Area	Stock Ledger
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS342
Runtime Parameters	

Design Overview

This module is run as either salmaint pre or salmaint post. The salmaint pre functionality adds partitions to the HALF_DATA, DAILY_DATA, WEEK_DATA and MONTH_DATA tables. The salmaint post functionality drops partitions or purges the above tables (if the table is not partitioned) for an old half.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-Hoc
Frequency	Half yearly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
HALF_DATA	No	No	No	Yes
DAILY_DATA	No	No	No	Yes
WEEK_DATA	No	No	No	Yes
MONTH_DATA	No	No	No	Yes

I/O Specification

N/A

saleoh (End Of Half Rollup of Data/Calculations for Stock Ledger)

Module Name	saloeh.pc
Description	End Of Half Rollup of Data/Calculations for Stock Ledger
Functional Area	Stock Ledger
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS337
Runtime Parameters	

Design Overview

The End of Half Stock Ledger Processing is different from many of the other ‘End of’ processes in that it is also the program that controls how many months of stock ledger data remain on the tables, in addition to the updates to the Half Data table. This program should be run after the end-of-month processing for month 6 has run and before the end-of-month processing for month 1 has run.

The first step for this program is to delete records from stock ledger tables that are 18 months or older. Specifically, the tables that are deleted from are DAILY_DATA, WEEK_DATA, MONTH_DATA, HALF_DATA, MONTH_DATA_BUDGET and HALF_DATA_BUDGET. The 18-month limit is not a system parameter – it is hard-coded into the program.

The next step in this program is for new records to be written for HALF_DATA, MONTH_DATA_BUDGET and HALF_DATA_BUDGET for the next half. It inserts one row into HALF_DATA for each subclass/location combination for the next half, six rows (one for every month of the half) into MONTH_DATA_BUDGET for each department/location for next year's half and one row into HALF_DATA_BUDGET for each department/location for next year's half.

This program also rolls up the inter-stock take shrink amount and inter-stock take sales amount from the HALF_DATA table at the department/location level for this half and calculates the shrinkage percent to insert into HALF_DATA_BUDGET for the next year's half.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Half yearly
Scheduling Considerations	Run at the end of the half, after the monthly process has been completed for month six (6) of the current half, and before the salmth process for the first month of the next half
Pre-Processing	Salmth, prepost saleoh pre
Post-Processing	N/A
Threading Scheme	Threaded by department

Restart/Recovery

There is no main driving cursor for this program. The different functions of this batch program have their own driving cursors. All the driving cursors are threaded by department using the v_restart_dept view. The logical unit of work (LUW) for the delete functions is a half number while the different insert functions have the following LUWs

- half_data() – dept/class/subclass/location
- month_data_budget() – dept/location
- half_data_budget() – dept/location

Data is committed every time the number of rows processed exceeds commit_max_ctr.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
MONTH_DATA_BUDGET	Yes	Yes	No	Yes
HALF_DATA	Yes	Yes	No	No
HALF_DATA_BUDGET	Yes	Yes	No	Yes

Design Assumptions

N/A

salprg (Purge Stock Ledger History)

Module Name	salprg.pc
Description	Purge Stock Ledger History
Functional Area	Stock Ledger
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS344
Runtime Parameters	

Design Overview

This program is used to purge old transaction-level stock ledger records from the Transaction Data History table (TRAN_DATA_HISTORY). The Retain Transaction Data (TRAN_DATA_RETAINED_DAYS_NO) system parameter is used to define how many days the Transaction Data History records should be kept in the system. This program will be run nightly to remove any records older than the current date – the "Retain Transaction Data" days.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
TRAN_DATA_HISTORY	No	No	No	Yes
KEY_MAP_GL	No	No	No	Yes

Design Assumptions

N/A

nwppurge (Purge of Aged End of Year Inventory Positions)

Module Name	nwppurge.pc
Description	Purge of Aged End of Year Inventory Positions
Functional Area	Stock Ledger
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS277
Runtime Parameters	

Design Overview

This program purges the records from the table NWP after a certain amount of years have passed. The number of years is held in the configurable system level parameter NWP_RETENTION_PERIOD.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase Ad-Hoc
Frequency	Yearly
Scheduling Considerations	This program only needs to be scheduled for clients who use NWP processing. See Design Assumptions for more details
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Restart/recovery is not applicable, but the records will be committed based on the commit max counter setup in the restart control table.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Table	Select	Insert	Update	Delete
NWP	Yes	No	No	Yes

Design Assumptions

- NWP refers to 'Niederstwertprinzip' and is a legal German accounting financial inventory reporting requirement for calculating year-end inventory position based on the last receipt cost.
- The NWP Indicator system parameter supports this German specific inventory reporting requirement. For German customers, this needs to be 'Y' to allow for the annual NWP calculations & processes.
- This is not relevant for customers outside Germany.

nwpyearend (End of Year Inventory Position Snapshot)

Module Name	nwpyearend.pc
Description	End of Year Inventory Position Snapshot
Functional Area	Stock Count
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS278
Runtime Parameters	

Design Overview

This program takes a snapshot of the item's stock position and cost at the end of the year. When the end of year NWP snapshot process runs, it takes a snapshot of stock and weighted average cost (WAC) for every item/location combination currently holding stock. If there is not a record already on the NWP table for an item/location/year combination in the snapshot, a new record is added for that item/location/year combination.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Annually (last day of year)
Scheduling Considerations	Only needed in specific markets. See design considerations for more information
Pre-Processing	refeodinventory.ksh must run successfully prior to execution to ensure that ITEM_LOC_SOH_EOD is up-to-date

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	Multithreaded by store_wh

Restart/Recovery

The logical unit of work for this program is set at the location/item level. Threading is done by supplier using the v_restart_store_wh view to thread properly. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The changes will be posted when the commit_max_ctr value is reached and the value of the counter is subject to change based on implementation.

Key Tables Affected

Table	Select	Insert	Update	Delete
NWP_FREEZE_DATE	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
NWP	Yes	Yes	Yes	No
ITEM_LOC_SOH_EOD	Yes	No	No	No

Design Assumptions

- NWP refers to 'Niederstwertprinzip' and is a legal German accounting financial inventory reporting requirement for calculating year-end inventory position based on the last receipt cost.
- The NWP Indicator system parameter supports this German specific inventory reporting requirement. For German customers, this needs to be 'Y' to allow for the annual NWP calculations & processes.
- This is not relevant for customers outside Germany.

stlgdnld (Daily or Weekly Download of Stock Ledger Data)

Module Name	stlgdnld.pc
Description	Weekly or Historical Download of Stock Ledger Data
Functional Area	Stock Ledger
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS17
Runtime Parameters	

Design Overview

This program extracts stock ledger data at the item level. The program can extract data for a historic period or for the most current complete week. The program accepts an input file that determines whether the extract is a historic extract or a weekly extract.

This program is often used in integration with RPAS applications.

Scheduling Constraints

Scheduling constraints vary depending on whether the program is run for normal weekly data or historical data.

Normal Weekly Data

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Weekly
Scheduling Considerations	
Pre-Processing	
Post-Processing	N/A
Threading Scheme	Multi-threaded by dept

Historical Data

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by dept

Restart/Recovery

The logical unit of work for this program is set at item, location type, location and date. Threading is done by dept using the v_restart_dept view to thread properly.

The changes will be posted when the commit_max_ctr value is reached. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The value of the counter is subject to change based on implementation.

Key Tables Affected

Table	Select	Insert	Update	Delete
TRAN_DATA_HISTORY	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Table	Select	Insert	Update	Delete
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	The input filename is a runtime parameter. The output filename is hardcoded to stkldgr%d.dat where %d is substituted with the domain id. Each run of the program can produce multiple output files, one for each department. Additional input parameters are defined in the input file
Integration Contract	IntCon000034 (output file)

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
	Task Indicator	Char(1)		Task Indicator. Valid values are 'H' - historical, 'W' - weekly
	From Date	Char(8)		From Date in 'YYYYMMDD' format
	To Date	Char(8)		To Date in 'YYYYMMDD' format

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
	Item	Char(25)		Item number
	Location Type	Char(1)		Location Type Valid values are 'S','W'
	Location	Number(20)		Location Number
	Eow_date	Char(8)		End of Week date in 'YYYYMMDD' format
	Update_Ind	Char(1)		Update Indicator Valid values are 'I ' and 'U'
	Regular_sales_retail	Number(25,4)		Regular sales value (retail)

Record Name	Field Name	Field Type	Default Value	Description
	Regular_sales_cost	Number(25,4)		Regular sales value (cost)
	Regular_sales_units	Number(17,4)		Regular sales value (units)
	Promo_sales_retail	Number(25,4)		Promo sales value (retail)
	Promo_sales_cost	Number(25,4)		Promo sales value (cost)
	Promo_sales_units	Number(17,4)		Promo sales value (units)
	Clear_sales_retail	Number(25,4)		Clearance sales value (retail)
	Clear_sales_cost	Number(25,4)		Clearance sales value (cost)
	Clear_sales_units	Number(17,4)		Clearance sales value (units)
	Sales_retail_excluding_vat	Number(25,4)		Sales value excluding vat (retail)
	Custom_returns_retail	Number(25,4)		Custom returns value (retail)
	Custom_returns_cost	Number(25,4)		Custom returns value (cost)
	Custom_returns_units	Number(17,4)		Custom returns value (units)
	Rtv_retail	Number(25,4)		Return to Vendor value (retail)
	Rtv_cost	Number(25,4)		Return to Vendor value (cost)
	Rtv_units	Number(17,4)		Return to Vendor value (units)
	Reclass_in_retail	Number(25,4)		Reclass In value (retail)
	Reclass_in_cost	Number(25,4)		Reclass In value (cost)
	Reclass_in_units	Number(17,4)		Reclass In value (units)
	Reclass_out_retail	Number(25,4)		Reclass Out value (retail)
	Reclass_out_cost	Number(25,4)		Reclass Out value (cost)
	Reclass_out_units	Number(17,4)		Reclass Out value (units)
	Perm_markdown_value	Number(25,4)		Permanent markdown value (retail)
	Prom_markdown_value	Number(25,4)		Promotion markdown value (retail)
	Clear_markdown_value	Number(25,4)		Clearance markdown value (retail)
	Markdown_cancel_value	Number(25,4)		Markdown cancel value
	Markup_value	Number(25,4)		Markup value
	Markup_cancel_value	Number(25,4)		Markup cancel value
	Stock_adj_retail	Number(25,4)		Stock adjustment value (retail)
	Stock_adj_cost	Number(25,4)		Stock adjustment value (cost)

Record Name	Field Name	Field Type	Default Value	Description
	Stock_adj_units	Number(17,4)		Stock adjustment value (units)
	Received_retail	Number(25,4)		Received value (retail)
	Received_cost	Number(25,4)		Received value (cost)
	Received_units	Number(17,4)		Received value (units)
	Tsf_in_retail	Number(25,4)		Transfer In value (retail)
	Tsf_in_cost	Number(25,4)		Transfer In value (cost)
	Tsf_in_units	Number(17,4)		Transfer In value (units)
	Tsf_out_retail	Number(25,4)		Transfer Out value (retail)
	Tsf_out_cost	Number(25,4)		Transfer Out value (cost)
	Tsf_out_units	Number(17,4)		Transfer Out value (units)
	Freight_cost	Number(25,4)		Freight cost
	Employee_disc_retail	Number(25,4)		Employee disc (retail)
	Cost_variance	Number(25,4)		Cost variance
	Wkroom_other_cost_sales	Number(25,4)		Wkroom other sales (cost)
	Cash_disc_retail	Number(25,4)		Cash disc (retail)
	Freight_claim_retail	Number(25,4)		Freight Claim (retail)
	Freight_claim_cost	Number(25,4)		Freight Claim (cost)
	Freight_claim_units	Number(25,4)		Freight Claim (Units)
	Stock_adj_cogs_retail	Number(25,4)		Stock Adjust COGS (retail)
	Stock_adj_cogs_cost	Number(25,4)		Stock Adjust COGS (cost)
	Stock_adj_cogs_units	Number(25,4)		Stock Adjust COGS (Units)
	Intercompany_in_retail	Number(25,4)		Intercompany In value (retail)
	Intercompany_in_cost	Number(25,4)		Intercompany In value (cost)
	Intercompany_in_units	Number(25,4)		Intercompany In value (units)
	Intercompany_out_retail	Number(25,4)		Intercompany Out value (retail)
	Intercompany_out_cost	Number(25,4)		Intercompany Out value (cost)
	Intercompany_out_units	Number(25,4)		Intercompany Out value (units)
	Intercompany_markup	Number(25,4)		Intercompany Markup
	Intercompany_markup_units	Number(25,4)		Intercompany Markup (units)
	Intercompany_markdown	Number(25,4)		Intercompany Markdown
	Intercompany_markdown_units	Number(25,4)		Intercompany Markdown (units)

Record Name	Field Name	Field Type	Default Value	Description
	Wo_activity_upd_inv	Number(25,4)		Work Order Activity – Update Inventory (cost)
	Wo_activity_upd_inv_units	Number(25,4)		Work Order Activity – Update Inventory (units)
	Wo_activity_post_fin	Number(25,4)		Work Order Activity – Post to Financials (retail)
	Wo_activity_post_fin_units	Number(25,4)		Work Order Activity – Post to Financials (units)

Design Assumptions

N/A

otbdlsal (Open To Buy Download Stock Ledger)

Module Name	otbdlsal.pc
Description	Open To Buy Download Stock Ledger
Functional Area	OTB – Stock Ledger to Planning System Interface
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS16

Design Overview

This module will sum stock ledger data from the DAILY_DATA table and opening stock information from the WEEK_DATA table across the current week, grouping by department, class, subclass, location and date, and export the data to a flat file for use by an outside planning system.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Weekly
Scheduling Considerations	This program must be run after ORDUPD (order upload.) It also must be run after SALWEEK for the week just ended. This program and OTBDNLD can run anytime after SALWEEK, but SALDLY cannot run between OTBDNLD, OTBDLSAL and OTBDLORD
Pre-Processing	Ordupd.pc, salweek.pc
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A. Table-based array processing is used to speed up performance

Restart/Recovery

The logical unit of work for the OTBDLSAL module is department, class, subclass and location. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of the file I/O. The recommended commit counter setting is 10000 records. Each time the record counter equals the maximum recommended commit number, an application image array record will be written to the restart_start_array for restart/recovery if a fatal error occurs.

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
DAILY_DATA	Yes	No	No	No
WEEK_DATA	Yes	No	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000030

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence Number	Number(10)	0000000001	Keeps track of the record's position in the file by line number

Record Name	Field Name	Field Type	Default Value	Description
	File Type Definition	Char(4)	STKE	Identifies file as Stock Ledger Export
	File Create Date	Char(14)	vdate	Date file was written by batch program in YYYYMMDD format. Remaining six characters are blank.
FDETL	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type
	File Line Sequence Number	Number(10)	line number in file	Keeps track of the record's position in the file by line number
	Transaction Set Control Number	Number(14)	sequence number	Used to force unique file check
	Department	Number(4)		The ID number of a department
	Class	Number(4)		The ID number of a class within the department given
	Subclass	Number(4)		The ID number of a subclass within the class given
	Loc_type	Char(1)		The type of the location from which stock ledger data was collected
	Location	Number(10)		The location from which stock ledger data was collected
	Half No.	Number(5)		The half number for this stock ledger data
	Month No.	Number(2)		The month number in the half for this stock ledger data
	Week No.	Number(2)		The week number in the month for this stock ledger data
	Open Stock Retail	Number(20,4)		The retail opening stock from the week_data table *10000 (implied 4 decimal places) for this stock ledger period
	Open Stock Cost	Number(20,4)		The cost opening stock from the week_data table *10000 (implied 4 decimal places) for this stock ledger period
	Stock Adjustments Retail	Number(20,4)		The retail stock adjustments summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Stock Adjustments Cost	Number(20,4)		The cost stock adjustments summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period

Record Name	Field Name	Field Type	Default Value	Description
	Purchases Retail	Number(20,4)		The retail purchases summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Purchases Cost	Number(20,4)		The cost purchases summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	RTV Retail	Number(20,4)		The retail return to vendor amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	RTV Cost	Number(20,4)		The cost return to vendor amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Freight Cost	Number(20,4)		The freight cost summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Net Sales Retail	Number(20,4)		The retail net sales summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Net Sales Cost	Number(20,4)		The cost net sales summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Returns Retail	Number(20,4)		The retail returns amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Returns Cost	Number(20,4)		The cost returns amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Promotional Markdowns Retail	Number(20,4)		The retail promotional markdowns summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Markdown Cancellations Retail	Number(20,4)		The retail markdown cancellations summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Employee Discount Retail	Number(20,4)		The retail employee discounts amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period

Record Name	Field Name	Field Type	Default Value	Description
	Workroom Amount	Number(20,4)		The workroom amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Cash Discount Amount	Number(20,4)		The cash discounts amount summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Sales Units	Number(12,4)		The sales units summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Markups Retail	Number(20,4)		The retail markups summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Markup Cancellations Retail	Number(20,4)		The retail markup cancellations summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Clearance Markdowns Retail	Number(20,4)		The retail clearance markdowns summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Permanent Markdowns Retail	Number(20,4)		The retail permanent markdowns summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Freight Claim Retail	Number(20,4)		The retail freight claim summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Freight Claim Cost	Number(20,4)		The cost freight claim summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Stock Adjust Cost of Goods Sold (COGS) Retail	Number(20,4)		The retail stock adjust COGS summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Stock Adjust Cost of Goods Sold (COGS) Cost	Number(20,4)		The cost stock adjust COGS summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Inter-company In Retail	Number(20,4)		The Inter-company In retail summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period

Record Name	Field Name	Field Type	Default Value	Description
	Inter-company In Cost	Number(20,4)		The Inter-company In cost summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Inter-company Out Retail	Number(20,4)		The Inter-company Out Retail summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Inter-company Out Cost	Number(20,4)		The Inter-company Out Cost summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Inter-company Markup	Number(20,4)		The Inter-company Markup summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Inter-company Markdown	Number(20,4)		The Inter-company Markdown summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Work Order Activity Update Inventory	Number(20,4)		The Work Order Activity Update Inventory summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
	Work Order Activity Post Finishing	Number(20,4)		The Work Order Activity Post Finishing summed from the DAILY_DATA table *10000 (implied 4 decimal places) for this stock ledger period
FTAIL	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence Number	Number(10)		Keeps track of the record’s position in the file by line number
	Control Number File Line Count	Number(10)		Total number of all transaction lines, not including file header and trailer

trandataload.ksh (External Transaction Data Upload)

Module Name	trandataload.ksh
Description	External Transaction Data Upload
Functional Area	Finance
Module Type	Integration
Module Technology	KSH
Catalog ID	RMS 376
Runtime Parameters	

Design Overview

This process, along with trandataprocess.ksh, provides a mechanism to write records directly into the TRAN_DATA tables based on a file from an external system. The primary purpose of this functionality is to allow additional costs to be included in stock ledger valuation that cannot be included based on existing Merchandise functionality. Records written to the TRAN_DATA tables do not necessarily have a connection to any RMS transaction, and are based on a determination made outside of RMS. The records written through this mechanism function exactly the same as records written by normal RMS processes. For cost based transactions, the information must be passed at an item/location level. For retail-based transactions, it can be at either an item/location or subclass/location level. Note: there is no support for recalculating or impacting unit inventory in RMS based on the transactions passed in, and only cost or retail value in the stock ledger is impacted – although the weighted average cost (WAC) may also be impacted if that method of accounting is used in RMS.
The trandataload script loads the staging table STAGE_EXT_TRAN_DATA table from a flat file using SQL Loader and divides the data into chunks to be processed in parallel threads based on the commit_max_counter and num_threads value on RESTART_CONTROL table.

This script accepts the following input parameters -

- Database Connect string
- File load indicator – This indicator is passed as Y if a flat file has to be loaded into the table STAGE_EXT_TRAN_DATA else its N
- Input file – This is the path of the input file. This is mandatory when File load indicator is Y.

The SQL loading from a flat file is optional in the script. If File load indicator is Y the program validates if the input file exists and logs an error in case the input file does not exist. The SQL Load (sqlldr) process loads the input file using control file - trandataload.ctl into the STAGE_EXT_TRAN_DATA table.

- A fatal error from sqlldr will halt the process.
- Rejected records are a non-fatal error and loader will continue processing and create bad file and discard files in case the input file does not match the expected format.

If the user has chosen not to load data into the staging table (File load indicator 'N') then the batch assumes that data has been loaded on the staging table from a different source. After the loading process is complete, the batch divides the data into chunks. If the staging table is empty or all the records are in 'P'rocessed status then the batch logs an appropriate error.

Chunking Logic

- Dense rank the staged records over Subclass, item and location.
- Divide the rank value by the commit max counter.
- Rounding the divided value gives the Chunk ID to which the particular value belongs to.
- Item can be NULL on the staging table, when NULL consider item to be '-999'.
- This will make sure the records with same subclass value and having item as NULL and NOT NULL are not grouped together in a chunk.

Since records with item have to be processed differently, (WAC recalculation and Variance postings) the batch makes sure that they fall in a different chunk to those records which do not have item value.

The Chunk data is inserted into STAGE_EXT_TRAN_DATA_CHUNK table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program only needs to be scheduled if data from external systems should be included in the stock ledger. If this functionality is used, this should be the first stock ledger process.
Pre-Processing	N/A
Post-Processing	trandataprocess.ksh
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STAGE_EXT_TRAN_DATA	Yes	Yes	No	Yes
STAGE_EXT_TRAN_DATA_CHUNK	No	Yes	No	Yes

I/O Specification

Input File Specification

This batch uses SQL Loader to populate the staging table. The input file should be in pipe delimited format. Sample record structure would look like –

<item> | <dept>l<class> | <subclass> | <location> | <loc_type> | <tran_date> | <tran_code> | <adj_code> | <units> | <total_cost> | <total_retail> | <ref_no_1> | <ref_no_2> | <GL_ref_no> | <Old_unit_retail> | <New_unit_retail> | <Sales_type> | <VAT_rate> | <av_cost> | <ref_pack_no> | <total_cost_excl_elc> | <WAC_reclculate_ind> | <status> | <create_timestamp> |

Below table specifies the details of each field in the record.

Field Name	Field Type	Default Value	Description / Constraints
Item	VARCHAR2(25)		Item is an optional field. Transactions can be uploaded at the Subclass level also.
Dept	NUMBER(4)		Mandatory Field
Class	NUMBER(4)		Mandatory Field
Subclass	NUMBER(4)		Mandatory Field
Location	NUMBER(10)		Mandatory Field
Loc_type	VARCHAR2(1)		Valid values - 'S', 'W', 'E'
Tran_data	DATE		Mandatory Field
Tran_code	NUMBER(2)		Mandatory Field
Adj_code	VARCHAR2(1)		Valid values – 'C', 'U', 'A'
Units	NUMBER(12, 4)		Mandatory Field
Total_cost	NUMBER(20, 4)		
Total_retail	NUMBER(20, 4)		
Ref_no_1	NUMBER(10)		
Ref_no_2	NUMBER(10)		
Gl_ref_no	NUMBER(10)		
Old_unit_retail	NUMBER(20, 4)		
New_unit_retail	NUMBER(20, 4)		
Pgm_name	VARCHAR(100)		
Sales_type	VARCHAR2(1)		Valid values – 'C', 'R', 'P'
Vat_rate	NUMBER(12, 4)		
Av_cost	NUMBER(20, 4)		
Ref_pack_no	VARCHAR2(25)		
Total_cost_excl_elc	NUMBER(20, 4)		
Wac_recalculate_ind	VARCHAR2(1)		If Weighted Average Cost of the Item-Location should be recalculated after uploading this transaction then this value should be passed as 'Y'.

Field Name	Field Type	Default Value	Description / Constraints
Status	VARCHAR2(1)	'N'	This value will be defaulted to 'N' by this program. It will be updated to 'P' once it has been processed else to 'E' in case of Error.
Create_timestamp	DATE	Sysdate	

Design Assumptions

N/A

trandataprocess.ksh (External Transaction Data Process)

Module Name	trandataprocess.ksh
Description	External Transaction Data Process
Functional Area	Finance
Module Type	Business Processing
Module Technology	KSH
Catalog ID	RMS377
Runtime Parameters	

Design Overview

This process, along with trandataload.ksh, provides a mechanism to write records directly into the TRAN_DATA tables based on a file from an external system. The primary purpose of this functionality is to allow additional costs to be included in stock ledger valuation that cannot be included based on existing Merchandise functionality. Records written to the TRAN_DATA tables do not necessarily have a connection to any RMS transaction, and are based on a determination made outside of RMS. The records written through this mechanism function exactly the same as records written by normal RMS processes. For cost based transactions, the information must be passed at an item/location level. For retail-based transactions, it can be at either an item/location or subclass/location level. Note: there is no support for recalculating or impacting unit inventory in RMS based on the transactions passed in, and only cost or retail value in the stock ledger is impacted – although the weighted average cost (WAC) may also be impacted if that method of accounting is used in RMS.

Trandataprocess batch processes the data on STAGE_EXT_TRAN_DATA and inserts into the TRAN_DATA table. This batch should be run after trandataload.ksh.

This batch validates the records on the staging table. The status records that fail validation are updated to 'E'rror on the staging table with error message.

The records which pass the validations are inserted into TRAN_DATA table and Weighted Average Cost is recalculated in case the WAC_recalc_ind is 'Y' for the record.

This script accepts the following input parameters -

- Database Connect string.
- Number of parallel threads – optional parameter. This is to override the value set on RESTART_CONTROL table.

This script calls the TRAN_DATA_IMPORT_SQL to import the transaction records on STAGE_EXT_TRAN_DATA table that haven't been processed yet. Each thread of the program processes a single chunk of data. After processing the Chunk, the status of the chunk is updated to 'P'rocessed.

The batch program performs the below validations on the staged records before inserting to TRAN_DATA. Status of the records which fail validations will be updated to 'E'rror on STAGE_EXT_TRAN_DATA along with the reasons for validation failure.

- Validates Dept, Class, and Subclass against SUBCLASS table.
- Validates location and loc_type against STORE and WH tables.
- Validates tran_code against TRAN_DATA_CODES table.
- If Item is not NULL validate if the item exists and is a transaction level item.
- If Item is not NULL validate if the item belongs to the dept/class/subclass.
- If Item not NULL validate if it is ranged to the location.
- Validate that item is not a pack.
- Item can be NULL only if it belongs to a Retail accounting department.
- When RECAL_WAC_IND = 'Y', ITEM and TOTAL_COST should not be NULL.
- Both total_cost and total_retail cannot be null.
- The loc_type should be 'W' or 'S' or 'E'.
- For TRAN_CODES - 37, 38, 63 and 64, GL_REF_NO should not be NULL
- For TRAN_CODES – 22 and 23 total cost should not be NULL
- For TRAN_CODES - 11, 12, 13, 14, 15, 16, 60, 80, and 81, total retail should not be NULL or total cost should be NULL.
- For TRAN_CODES - 1, 4, 20, 24, 27, 30, 31, 37 and 38, total cost should not be NULL OR (total_retail should not be NULL and sellable_ind is 'Y')

Once records are validated, the batch program calculates the Weighted Average Cost (WAC) for the records with WAC_RECALC_IND = 'Y'. In case the calculated WAC <= 0 and if there is inventory present the location then a cost variance record (TRAN_CODE – 70) is inserted into TRAN_DATA. Cost variance transaction is also posted for those item locations which have no or negative inventory.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	This program only needs to be scheduled if data from external systems should be included in the stock ledger.
Pre-Processing	trandataload.ksh
Post-Processing	salstage
Threading Scheme	Trandataload.ksh divides the data into Chunks based on commit max counter. Each Data chunk will be processed by a single thread.

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STAGE_EXT_TRAN_DATA	Yes	No	Yes	No
STAGE_EXT_TRAN_DATA_CHUNK	Yes	No	Yes	Yes
GTG_STG_EXT_TRAN_DATA	Yes	Yes	Yes	Yes
SUBCLASS	Yes	No	No	No
WH	Yes	No	No	No
STORE	Yes	No	No	No
TRAN_DATA_CODES	Yes	No	No	No
TRAN_DATA	Yes	Yes	No	No
ITEM_LOC_SOH	Yes	No	Yes	No
SYSTEM_OPTIONS	Yes	No	No	No
PERIOD	Yes	No	No	No
GTT_STAGE_EXT_TRAN_DATA_CALC	Yes	Yes	No	Yes
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	Yes	No	Yes
DEPS	Yes	No	No	No

Design Assumptions

N/A

21 Franchise Management

Overview

To scale up business operations and market presence, particularly in new markets, retailers may choose to utilize business partners to manage branded or co-branded stores while retaining the retailer's business processes and value proposition. Businesses who partner with a retailer to expand the retailer's presence are known as franchisees. Franchisees may operate one or more stores under the retailer's banner. RMS supports two types of franchise management:

1. Franchise inventory is managed by the retailer

   For this scenario, the retailer owns/manages the retail experience through planning, ordering, selling and tracking of inventory at franchise stores. In RMS, it is assumed that franchise customer locations will be set up as stockholding stores, with a store type of "Franchise".
2. Franchise inventory is not managed by the retailer

   For this case, the retailer does not own or manage inventory, but mandatorily requires a franchise customer to adhere to business processes across franchise stores. This may also include retailers with smaller scale wholesale operations constitute a small fraction of the retailers business. For both these scenarios, it is assumed that non-stockholding stores will be setup in RMS to represent these franchise (or wholesale) customer locations.

The batch processes that are used for Franchise Management in RMS fall primarily into the following areas:

Customers

RMS maintains customer groups and customers pertaining to franchise operations as a hierarchy above customer locations. Customer groups and customers can be entered in RMS or uploaded from an external system. Customer locations are set up as franchise stores in RMS and can be designated as either stockholding or non-stockholding.

Costing

For all items that are 'sold' to franchise customer locations from a retailer, a selling price must be determined. The default selling price for franchise stores is calculated and held on FUTURE_COST as the pricing cost. To calculate the cost, RMS uses the concept of templates and it is a template's association with a franchise store and merchandise hierarchy that determines the value on FUTURE_COST. Cost templates and their relationships with franchise locations/merchandise hierarchies can be entered into RMS or uploaded via a batch process.

Franchise Orders

Franchise orders need to be raised in order to fulfill demand from a franchise customer. A franchise order is considered a sales order between the retailer and the franchise customer. A franchise order contains the item requisition to be sourced from a certain location (vendor, company warehouse or store) and fulfilled at one or more franchise stores by one or more required need dates. A franchise order also contains the price at which the items on the order will be sold to the franchise customer. Franchise Orders can be entered into RMS via one of the following methods:

1. Manually via the Franchise Sales Order screen.
2. From an external application using the WF Order Upload (wfordupld) batch.
3. Automatically through replenishment, store orders, item requests, AIP generated POs/Transfers and Allocations for stockholding franchise stores.

Once a franchise order is created and approved, a transfer (for warehouse or store sourced orders) or purchase order (for supplier sourced orders) will be created to manage the inventory movement. All franchise orders must be for a single customer.

Franchise Returns

Franchise returns are used whenever inventory moves from a franchise store back to a company owned location. Franchise returns cannot be created directly back to a supplier, it is assumed they will always first come back to a company owned location. Unlike franchise orders, which can be created for multiple franchise stores, franchise returns are always from a single franchise store. A franchise return contains the items being returned and the return price. If known, the original franchise order is referenced with the return and the price from the original order is used as a default. Like franchise orders, franchise returns can be created in three different ways:

1. Manually via the Franchise Returns screen.
2. From an external application using the WF Return Upload (wfretupld) batch.
3. Automatically through store-initiated transfers or transfers sent from an external system for stockholding franchise stores.

Batch Design Summary

The following batch designs are included in this functional area:

- fcosttmplupld.ksh (Upload Cost Buildup Template)
- fcosttmplprocess.ksh (Process Cost Buildup Template Upload)
- fcosttmplpurge.ksh (Purge Staged Cost Template Data)
- fcustomerupload.ksh (Franchise Customer Upload)
- fcustomerprocess.ksh (Process Uploaded Franchise Customers and Customer Groups)
- fcustupldpurge.ksh (Franchise Customer Staging Purge)
- wfordupld.ksh (Franchise Order Upload)
- wf_apply_supp_cc.ksh (Apply Supplier Cost Change to Franchise Orders)
- wfordcls.pc (Franchise Order Close)
- wfordprg.pc (Franchise Order Purge)
- wfretupld.ksh (Franchise Return Upload)
- wfretcls.pc (Franchise Return Close)
- wfrtnprg.pc (Franchise Return Purge)
- wfslsupld.ksh (Upload of Franchise Sales to RMS)
- wfbillex.ksh (Franchise Billing Extract)

fcosttmplupld (Upload Cost Buildup Template)

Module Name	fcosttmplupld.ksh
Description	Upload Cost Buildup Template
Functional Area	Franchise Management
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS125
Runtime Parameters	DB Connection and Input File name

Design Overview

This module uploads cost buildup templates and franchise cost relationships used for franchise pricing from an external system into RMS staging tables. It also performs both technical and business validation of the data sent in the file; for example, it validates that start and end dates are included for new and updated templates.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	Should be run before fcosttmplprocess.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The restart recovery is different from the conventional RMS batch. There are three points on the batch upload process where users can evaluate the successful load of the data.

1. SQL load – SQL load dumps invalid records that do not meet certain technical requirements (i.e. file layout issues, data type inconsistencies, etc.). The rejected record is written either to a bad file or to a discard file. The discard file contains records that do not satisfy conditions such as missing or invalid record types. Records with other technical issues are written to the bad file. Note that a non-fatal code is returned by the program and a message will be written to the log file if reject files are created.

   User Action: When such conditions exist, the user may update either the bad or discard file and attempt to reload using the same files.

2. Business Validation Level – the data from the files are loaded into the staging tables for validation. PL/SQL functions determine if this loaded data is valid enough to be inserted into the actual RMS tables. Records that do not meet certain technical or business validations are rejected and the information is updated back into the staging table with an appropriate error message and the batch issues a NON-FATAL return code.

   User Action: When this condition exists, the user can fix the data upload file and try to reload.
3. Chunking validated data – At this point the data from staging tables that have passed business validation are chunked based on the number of valid transactions (cost templates) and max_chunk_size from RMS_PLSQL_BATCH_CONFIG table. If there are no valid transactions to be chunked, batch issues a FATAL return code.

   User Action: When this condition exists, the user can fix the data upload file and try to reload.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_WF_COST_TMPL_UPLD_FHEAD	Yes	Yes	Yes	No
SVC_WF_COST_TMPL_UPLD_THEAD	Yes	Yes	Yes	No
SVC_WF_COST_TMPL_UPLD_TDETL	Yes	Yes	Yes	No
SVC_WF_COST_TMPL_UPLD_TTAIL	Yes	Yes	Yes	No
SVC_WF_COST_TMPL_UPLD_FTAIL	Yes	Yes	Yes	No
SVC_WF_COST_TMPL_UPLD_STATUS	Yes	Yes	Yes	Yes
ELC_COMP	Yes	No	No	No
STORE	Yes	No	No	No
CLASS	Yes	No	No	No
SUBCLASS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
RMS_PLSQL_BATCH_CONFIG	Yes	No	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000021

SQL Loader Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)		Identifies file record type. Valid value is FHEAD.
	File Line Identifier	Number(10)		Sequential file line number
	File Type Definition	Char(5)	CTMPL	Identifies file as 'Cost Template Upload'
	File Create Date	Date	SYSDATE	Date on which the file was created by external system
Transaction Header	File Record Descriptor	Char(5)		Identifies transaction header record type. Valid value is THEAD
	File Line Identifier	Number(10)		Sequential file line number
	Message Type	Char(30)		Identifies the action that will be performed on the franchise cost template header information that is provided as part of this record It can be either create or update or delete a franchise cost template. Valid message types are: costtmpadd (for additions), costtmpmod (for updates), costtmpdel (for deletions)
	Template ID	Number(10)		Template ID
	Template Description	Char(120)		Template Description
	Template Type	Char(1)		Indicates the type of the template. Valid values are M = Margin then Up-Charge, U = Up-charges, then Margin, R = % of Retail and C = Cost
	Percentage	Number(12,4)		Margin percent or % off Retail value; required if template type is M, U and R types of templates

Record Name	Field Name	Field Type	Default Value	Description
	Cost	Number(20,4)		Indicates the franchise cost for an item when template type is 'C' This is mandatory and should only be populated if template type is 'C'
	Final Cost	Char(1)		Signifies if the cost is final or acquisition. Valid values are 'Y' or 'N'
Transaction Detail	File Record Descriptor	Char(5)		Identifies transaction detail record type. Valid value is TDETL
	File Line Identifier	Number(10)		Sequential file line number
	Message Type	Char(30)		Identifies the action that will be performed on the franchise cost template relationship information that is provided as part of this record. It can be either create or update or delete a cost relationship. Valid values are: costtmpreladd (for additions), costtmprelmod (for updates), costtmpreldel (for deletions)
	Dept	Number(4)		Department associated with the cost template
	Class	Number(4)		Class associated with the cost template
	Subclass	Number(4)		Subclass associated with the cost template
	Item	Char(25)		Unique number that identifies a valid item associated with the template. Used for template types of 'C' only
	Location	Number(10)		Franchise Store Number associated with the template

Record Name	Field Name	Field Type	Default Value	Description
	Start Date	Date		Date on which a cost template will be effective for the subclass/item and franchise store (required for update and delete of a cost relationship)
	End Date	Date		Date on which a cost template will expire for a subclass/item and franchise store (required for update and delete of a cost relationship)
	New Start Date	Date		New Date on which a franchise cost relationship will be effective
	New End Date	Date		New Date on which a franchise cost relationship will expire
	Cost Component ID	Char(10)		Unique code which signifies the up-charge cost component when First_Applied is 'U' This should only be populated if First Applied is 'U'
Transaction Trailer	File Record Descriptor	Char(5)		Identifies transaction trailer record type. Valid value is TTAIL
	File Line Identifier	Number(10)		Sequential file line number
	Transaction Record Counter	Number(10)		Number of TDETL records in this transaction set
File Trailer	File Record Descriptor	Char(5)		Identifies file trailer record type. Valid value is TTAIL
	File Line Identifier	Number(10)		Sequential file line number
	File Record Counter	Number(10)		Number of records/transactions processed in current file (only records between FHEAD & FTAIL)

Design Assumptions

- No date format is specified in the input file, as any valid PL/SQL date format can be used.

fcosttmplprocess (Process Cost Buildup Template Upload)

Module Name	fcosttmplprocess.ksh
Description	Process Cost Buildup Template Upload
Functional Area	Franchise Management
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS224
Runtime Parameters	

Design Overview

This module processes franchise cost buildup templates and franchise cost relationships that were uploaded from an external source into staging tables and loads them from the staging tables into RMS base tables. The module is designed to process inserts, updates and deletes for these data elements.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-hoc
Frequency	Daily
Scheduling Considerations	This program only needs to be scheduled if the client uploads franchise cost information from an external system Should be run after fcosttmplupld.ksh
Pre-Processing	fcosttmplupld.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The restart recovery is different from the conventional RMS batch. During the batch process users can evaluate the successful processing of data in the following way:

PL/SQL function will load the data from staging tables into RMS tables. For records that result (insert/update/delete) in constraint error or are not found in the RMS tables (for update/delete) are rejected and the information is updated back in the corresponding staging table with appropriate error message. Also, records that do not meet certain business validations (which can only be validated during data processing) are rejected and the information is updated back in the corresponding staging table with appropriate error message.

User Action: When this condition exists, the user can fix the data upload file and try to reload and process the data.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_WF_COST_TMPL_UPLD_FHEAD	Yes	No	Yes	No
SVC_WF_COST_TMPL_UPLD_THEAD	Yes	No	Yes	No
SVC_WF_COST_TMPL_UPLD_TDETL	Yes	No	Yes	No
SVC_WF_COST_TMPL_UPLD_TTAIL	Yes	No	Yes	No
SVC_WF_COST_TMPL_UPLD_FTAIL	Yes	No	Yes	No
SVC_WF_COST_TMPL_UPLD_STATUS	Yes	No	Yes	No
WF_COST_BUILDUP_TMPL_HEAD	Yes	Yes	Yes	Yes
WF_COST_BUILDUP_TMPL_DETAIL	Yes	Yes	Yes	Yes
WF_COST_RELATIONSHIP	Yes	Yes	Yes	Yes
GTT_WF_COST_RELATIONSHIP	No	Yes	No	No
COST_EVENT_COST_RELATIONSHIP	No	Yes	No	No
COST_EVENT	No	Yes	No	No
COST_EVENT_RESULT	No	Yes	No	No
COST_EVENT_THREAD	No	Yes	No	Yes
FUTURE_COST_GTT	No	Yes	No	No
FUTURE_COST	No	No	No	Yes

Design Assumptions

N/A

fcosttmplpurge (Purge Staged Cost Template Data)

Module Name	fcosttmplpurge.ksh
Description	Purge Staged Cost Template Data
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ksh
Catalog ID	RMS225
Runtime Parameters	

Design Overview

This module purges data from the staging tables used by the Cost Buildup Template Upload process. The module is designed to purge all the data from the staging tables that have passed the system parameter Foundation Staging Retention days (fdn_stg_retention_days).

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
SVC_WF_COST_TMPL_UPLD_FHEAD	No	No	No	Yes
SVC_WF_COST_TMPL_UPLD_THEAD	No	No	No	Yes
SVC_WF_COST_TMPL_UPLD_TDETL	No	No	No	Yes
SVC_WF_COST_TMPL_UPLD_TTAIL	No	No	No	Yes
SVC_WF_COST_TMPL_UPLD_FTAIL	No	No	No	Yes
SVC_WF_COST_TMPL_UPLD_STATUS	No	No	No	Yes

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No

Design Assumptions

N/A

fcustomerupload (Franchise Customer Upload)

Module Name	fcustomerupload.ksh
Description	Franchise Customers Upload
Functional Area	Franchise Management
Module Type	Integration
Module Technology	ksh
Integration Catalog ID	RMS126
Runtime Parameters	DB Connection and Input File name

Design Overview

This module uploads franchise customers and customer group details from an external system into RMS staging tables. It also performs both technical and business validation of the data sent in the file; for example, it validates that a customer cannot be deleted if a franchise store is associated with it.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-hoc
Scheduling Considerations	This program can run on need basis
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The restart recovery is different from the conventional RMS batch. There are three points on the batch upload process where users can evaluate the successful load of the data.

- SQL load – SQL load dumps invalid records that do not meet certain technical requirements (i.e. data type inconsistencies, etc.). The rejected record is written either to a bad file or to a discard file. The discard file contains records that do not satisfy conditions such as missing or invalid record types. Records with other technical issues are written to the bad file. Note that a non-fatal code is returned by the program and a message will be written to the log file if reject files are created.

User Action: When such conditions exist, the user may update either the bad or discard file and attempt to reload using the same files.

- File-Based Validations – the data from the files are loaded into the staging tables for validation. PL/SQL functions will validate the tables SVC_FCUSTUPLD_FHEAD and SVC_FCUSTUPLS_FTAIL to determine if there are any issues with FHEAD and FTAIL in the file. These kinds of errors are FATAL errors and the batch ends the file processing immediately with return code 255.

  User Action: When this condition exists, the user can fix the data upload file and try to reload.

- Business Validation Level – PL/SQL functions determine if the transactions loaded are valid enough to modify the actual RMS tables. Records that do not meet certain technical or business validations are rejected and the information is updated back into the staging table with an appropriate error message and the batch issues a NON-FATAL return code 1.

  User Action: When this condition exists, the user can fix the data upload file and try to reload.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_FCUSTUPLD_FHEAD	Yes	Yes	Yes	No
SVC_FCUSTUPLD_THEAD	Yes	Yes	Yes	No
SVC_FCUSTUPLD_TDETL	Yes	Yes	Yes	No
SVC_FCUSTUPLD_TTAIL	Yes	Yes	Yes	No
SVC_FCUSTUPLD_FTAIL	Yes	Yes	Yes	No
SVC_FCUSTUPLD_STATUS	Yes	Yes	Yes	No
WF_CUSTOMER_GROUP	Yes	No	No	No
WF_CUSTOMER	Yes	No	No	No
STORE	Yes	No	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000022

SQL Loader Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Record Descriptor	Char(5)		Identifies file record type. It should be FHEAD
	File Line ID	Number(10)		ID of current line being processed by input file
	File Type	Char(5)	FCUST	Identifies file as 'Franchise customer upload'
	File Create Date	Date	SYSDATE	Date file was written by external system
Transaction Header	File Record Descriptor	Char(5)		Identifies transaction record type. It should be THEAD
	File Line ID	Number(10)		ID of current line being processed by input file
	Message Type	Char(30)		Identifies the action that will be performed on the franchise customer transaction header record. It can be either create or update or delete a franchise customer group
	Franchise Customer group ID	Number(10)		Customer group ID
	Franchise Customer group Name	Char(120)		Customer group name. This field is optional for delete
Transaction Detail	File Record Descriptor	Char(5)		Identifies transaction record type. It should be TDETL
	File Line ID	Number(10)		ID of current line being processed by input file
	Message Type	Char(30)		Identifies the action that will be performed on the franchise customer transaction detail record. It can be either create or update or delete a franchise customer
	Franchise Customer ID	Number(10)		Customer ID to be processed
	Franchise Customer Name	Char(120)		Customer Name

Record Name	Field Name	Field Type	Default Value	Description
	Credit Ind	Char(1)	N	This field will determine if the franchise customer has good credit. Valid values are Y and N
	Auto approve Ind	Char(1)	N	To auto approve the externally uploaded orders and returns. Valid values are Y and N
Transaction Trailer	File Record Descriptor	Char(5)		Identifies file record type. It should be TTAIL
	File Line ID	Number(10)		ID of current line being processed by input file
	Transaction Record Count	Number(10)		Number of TDETL records in this transaction set.(total records between THEAD & TTAIL)
File Trailer	File Record Descriptor	Char(5)		Identifies file record type. It should be FTAIL
	File Line ID	Number(10)		ID of current line being processed by input file.
	File Record Counter	Number(10)		Number of records/transactions processed in current file (total records between FHEAD & FTAIL)

Design Assumptions

N/A

fcustomerprocess (Process Uploaded Franchise Customers and Customer Groups)

Module Name	fcustomerprocess.ksh
Description	Process Uploaded Franchise Customers and Customer Groups
Functional Area	Franchise Management
Module Type	Business Processing
Module Technology	ksh
Integration Catalog ID	N/A

Design Overview

This module processes the franchise customer groups and franchise customers information from the staging tables SVC_FCUSTUPLD_* and loads it into RMS base tables WF_CUSTOMER_GROUP and WF_CUSTOMER. The module is designed to process (insert/update or delete) the validated data that maps to franchise customer groups and franchise customer information.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-hoc
Scheduling Considerations	This program can run on need basis
Pre-Processing	This should be run after fcustomerupload.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The restart recovery is different from the conventional RMS batch. During the batch process users can evaluate the successful processing of data in the following way:

PL/SQL function will load the data from staging tables into RMS tables. For records that result (insert/update/delete) in constraint error or are not found in the RMS tables(for update/delete) are rejected and the information is updated back in the corresponding staging table with appropriate error message. Also, records that do not meet certain business validations (which can only be validated during data processing) are rejected and the information is updated back in the corresponding staging table with appropriate error message.

User Action: When this condition exists, the user can fix the data upload file and try to reload and process the data.

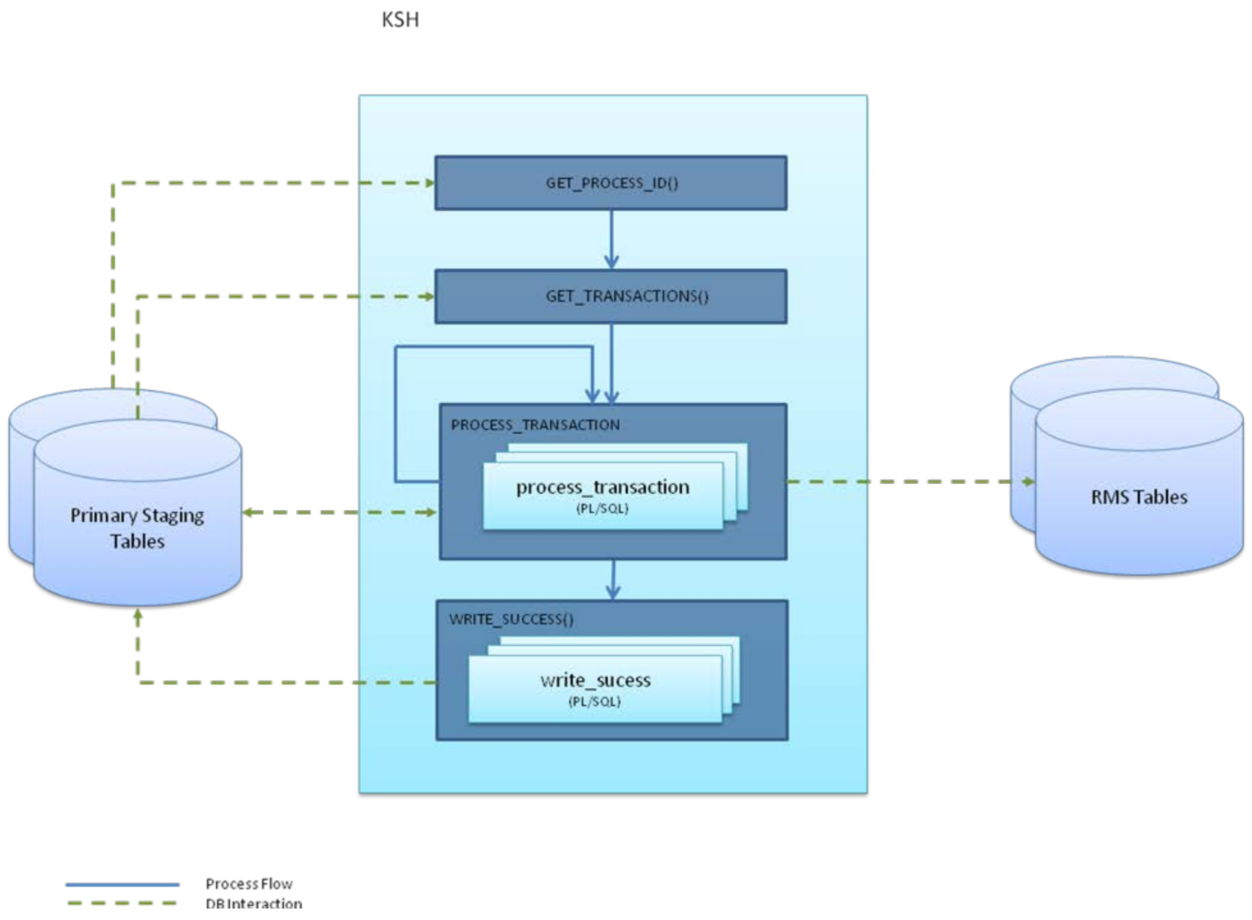
Commit Points

Commit points are done per transaction.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_FCUSTUPLD_FHEAD	Yes	No	Yes	No
SVC_FCUSTUPLD_THEAD	Yes	No	Yes	No
SVC_FCUSTUPLD_TDETL	Yes	No	Yes	No
SVC_FCUSTUPLD_TTAIL	Yes	No	Yes	No
SVC_FCUSTUPLD_FTAIL	Yes	No	Yes	No
SVC_FCUSTUPLD_STATUS	Yes	No	Yes	No
WF_CUSTOMER_GROUP	Yes	Yes	Yes	Yes
WF_CUSTOMER	Yes	Yes	Yes	Yes
STORE	Yes	No	No	No

Program Flow



fcustupldpurge (Franchise Customer Staging Purge)

Module Name	fcustomerupldpurge.ksh
Description	Franchise Customer Staging Purge
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ksh
Integration Catalog ID	N/A
Runtime Parameters	

Design Overview

This module purges data from the staging tables used by the Franchise Customer Upload and Franchise Customer Process scripts. The module is designed to purge all the data from the staging tables that have passed the system parameter for Foundation Staging Retention days (fdn_stg_retention_days).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	daily
Scheduling Considerations	Adhoc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_FCUSTUPLD_FHEAD	No	No	No	Yes
SVC_ FCUSTUPLD_THEAD	No	No	No	Yes
SVC_ FCUSTUPLD_TDETL	No	No	No	Yes
SVC_ FCUSTUPLD_TTAIL	No	No	No	Yes
SVC_ FCUSTUPLD_FTAIL	No	No	No	Yes
SVC_ FCUSTUPLD_STATUS	No	No	No	Yes
SYSTEM_OPTIONS	Yes	No	No	No

Design Assumptions

N/A

wfordupld.ksh (Franchise Order Upload)

Module Name	wfordupld.ksh
Description	Franchise Order Upload
Functional Area	Franchise Management
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS60
Runtime Parameters	Database connection, Input File Directory, Output File Directory, Number of threads

Design Overview

This batch program is used to upload franchisee orders from an external source. These orders will be created with an order type of 'EDI' and will be created for the source type specified in the upload file. If source type is not specified, then the costing location for the item/franchise store will be used. Orders will be created in approved status if the customer is setup for auto approval, assuming that the customer has valid credit.

If the customer fails credit check or if available inventory at the source location is insufficient to fulfill the order, the order will be generated in input status.

Franchise orders from customers that are not identified for 'Auto Approval' are uploaded into RMS in input status. These orders will need to be manually approved in RMS in order to be considered active.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	prepost wfordupld pre
Post-Processing	N/A
Threading Scheme	File-based

Restart/Recovery

The restart recovery is different from the conventional RMS batch. There are two points on the batch upload process where users can evaluate the successful load of the data.

- SQL load – At this point, SQL load dumps invalid records that do not meet certain technical requirements (i.e. file layout issues, data type inconsistencies, etc.). The rejected record is written to a bad file or to a discard file. The discard file contains records that do not satisfy conditions, such as missing or invalid record types. Records with other technical issues are written to the bad file. Note that a non-fatal code is returned by the program and a message will be written to the log file if reject files are created.

  User Action: When such conditions exist, the user may update either the bad or discard file and attempt to reload using the same files.
- Business Validation – At this point data from the file(s) are loaded into the staging table(s). PL/SQL functions determine if this loaded data is valid enough to be inserted into the actual RMS tables. For records that do not meet certain technical or business validations, the error message will be updated in staging table.

  User Action: When this condition exists, the user can fix the data upload file and try to reload the file with valid data.

Key Tables Affected

Table	Select	Insert	Update	Delete
FUTURE_COST	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
REPL_ITEM_LOC	Yes	No	No	No
STORE_ORDERS	Yes	No	No	No
SVC_WF_ORD_HEAD	Yes	Yes	Yes	No
SVC_WF_ORD_DETAIL	Yes	Yes	Yes	No
SVC_WF_ORD_TAIL	Yes	Yes	Yes	No
SYSTEM_OPTIONS	Yes	No	No	No
WF_COST_RELATIONSHIP	Yes	No	No	No
WF_COST_BUILDUP_TMPL_HEAD	Yes	No	No	No
WF_CUSTOMER	Yes	No	No	No
WF_ORDER_HEAD	Yes	Yes	No	No
WF_ORDER_DETAIL	Yes	Yes	No	No
WF_ORDER_EXP	No	Yes	No	No

I/O Specification

Integration Type	Download from RMS
File Name	wford*.dat
Integration Contract	IntCon000108

SQL Loader Input File Layout

The following is the file pattern for the upload file. Note that the values are pipe " | " delimited and can optionally be enclosed by " ".

Record Name	Field Name	Field Type	Null allowed?	Default Value	Description
FHEAD	File head descriptor	Char(5)	No	FHEAD	Describes file line type.
	Line Number	Number(10)	No		Id of the current line being processed.
	Customer Id	Number(10)	No		Customer ID of the customer requesting the order.
	Customer Order Reference number	Char(20)	No		A reference field used by the customer for their tracking purposes.
	Currency Code	Char(3)	No		This is the currency on which the order was transacted.
	Default Billing location	Number(10)	Yes		A customer's location where the billing for the entire order is sent. If blank, each location is billed.
	Comments	Char(2000)	Yes		Any other miscellaneous information relating to the order.
FDETL	File record descriptor	Char(5)	No	FDETL	Describes file line type.
	Line Number	Number(10)	No		Id of the current line being processed.
	Item	Char(25)	No		The item on the franchise order.
	Customer Location	Number(10)	No		The franchise store requesting the order.
	Source Loc Type	Char(2)	Yes		Source location type for which the franchise order has been created. Valid values are ST – Store, WH – warehouse, or SU - Supplier
	Source Location	Number(10)	Yes		Source location for which the franchise order has been created.
	Requested Quantity	Number (12,4)	No		Number of item units being ordered, includes 4 implied decimal places
	Unit of Purchase	Char(3)	No		Unit of purchase can be the item's standard unit of measure, case, inners or pallets.

Record Name	Field Name	Field Type	Null allowed?	Default Value	Description
	Fixed Cost	Number (20,4)	Yes		This is cost which will be charged to the customer for the item on the franchise order; value includes 4 implied decimal places.
	Need Date	Char(11)	No		Date on which the item is needed in the franchise store, with the following format "DD-MON-YYYY' .
	Not After Date	Char(11)	No		Date after which the item may no longer be accepted for a franchise store, with the following format "DD-MON-YYYY'.
FTAIL	File record descriptor	Char(5)		FTAIL	Marks end of file.
	Line Number	Number(10)			Id of current line being processed.
	File record count	Number(10)			Number of detail records.

Design Assumptions

N/A

wf_apply_supp_cc (Apply Supplier Cost Change to Franchise Orders)

Module Name	wf_apply_supp_cc.ksh
Description	Apply Supplier Cost Change to Franchise Orders
Functional Area	Franchise Management
Module Type	Business Processing
Module Technology	ksh
Catalog ID	RMS389
Runtime Parameters	

Design Overview

This function updates approved franchise orders for supplier sourced records whose items/franchise stores are impacted by supplier cost changes. Only those item/franchise store combinations that use cost templates based on supplier cost or have not had a fixed cost defined on the order are eligible to be updated. Only those supplier cost changes that were flagged as recalculating orders result in this update.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	To be run after fcexec.pc and sccext.pc
Pre-Processing	fcexec.pc and sccext.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
WF_ORDER_HEAD	Yes	No	No	No
WF_ORDER_DETAIL	No	No	Yes	No
WF_ORDER_EXP	No	Yes	No	Yes
FUTURE_COST	Yes	No	No	No
COST_SUSP_SUP_HEAD	Yes	No	No	No

Table	Select	Insert	Update	Delete
COST_SUSP_SUP_DETAIL	Yes	No	No	No
COST_SUSP_SUP_DETAIL_LOC	Yes	No	No	No
WF_COST_RELATIONSHIP	Yes	No	No	No
WF_COST_BUILDUP_TMPL_HEAD	Yes	No	No	No
MV_CURRENCY_CONVERSION_RATES	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Design Assumptions

The pricing cost for franchise orders in input or pending credit approval status is not updated because the order cost will be updated based on any changes on franchise order approval.

wfordcls (Franchise Order Close)

Module Name	wfordcls.pc
Description	Franchise Order Close
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS391
Runtime Parameters	

Design Overview

This batch program is used to close the WF orders if the conditions below are met:

- Franchise Order is not in Input (I) or Requires Credit Approval (R) status.
- All the transfers associated with the franchise order are in closed/deleted status.
- All the allocations associated with franchise order are in closed status.
- All the purchase orders associated with franchise order are in closed status.
- Store orders associated with franchise order do not have a null processed date or a need qty > 0.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	Run after docclose and before wfordprg
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multithreading based on franchise order number

Restart/Recovery

The logical unit of work for this module is defined as a unique franchise order number. The v_restart_wforder view is used for threading. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
WF_ORDER_HEAD	Yes	No	Yes	No
TSFHEAD	Yes	No	No	No
STORE_ORDERS	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No

Design Assumptions

N/A

wfordprg (Franchise Order Purge)

Module Name	wfordprg.pc
Description	Franchise Order Purge
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS392
Runtime Parameters	

Design Overview

This batch program is used to purge franchise orders from RMS after a set number of days have elapsed, as defined by the system parameter Franchise History Months. Additionally, in order to be purged via this process, the franchise orders must have no associated franchise returns and must not have any billing records that have not been extracted or where not enough time has elapsed since they were extracted, as defined by the Franchise History Months system parameter.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Monthly
Scheduling Considerations	Run after wfrtnprg, wfordcls
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multithreading based on WF Order number

Restart/Recovery

The logical unit of work for this module is defined as a unique wf_order_no. The v_restart_wforder view is used for threading. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
WF_ORDER_HEAD	Yes	No	No	Yes

Table	Select	Insert	Update	Delete
WF_ORDER_DETAIL	Yes	No	No	Yes
WF_BILLING_SALES	Yes	No	No	Yes
WF_ORDER_AUDIT	No	No	No	Yes
WF_ORDER_EXP	No	No	No	Yes
TSFHEAD	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
STORE_ORDERS	Yes	No	No	No

Design Assumptions

Transfers, Allocations, POs and Store Orders associated with franchise orders are deleted through purge processes for those functional areas (e.g. tsfprg for Transfers). Franchise orders will not be allowed to be deleted until these associated records have been removed via the other processes.

wfretupld.ksh (Franchise Return Upload)

Module Name	wfretupld.ksh
Description	Franchise Return Upload
Functional Area	Franchise Management
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS154
Runtime Parameters	Database connection, Input File Directory, Output File Directory, Number of threads

Design Overview

This batch program is used for uploading franchise returns sent from an external source, such as an external order management application. When returns are uploaded in this manner, the data will be validated and the return will be created in RMS. Additionally, an associated franchise return transfer will also be created.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	N/A

Schedule Information	Description
Pre-Processing	prepost wfretupld pre
Post-Processing	N/A
Threading Scheme	File-based processing

Restart/Recovery

The restart recovery is different from the conventional RMS batch. There are two points on the batch upload process where users can evaluate the successful load of the data.

- SQL load – At this point, SQL load dumps invalid records that do not meet certain technical requirements (i.e. file layout issues, data type inconsistencies, etc.). The rejected record is written either to a bad file or to a discard file. The discard file contains records that do not satisfy conditions, such as missing or invalid record types. Records with other technical issues are written to the bad file. Note that a non-fatal code is returned by the program and a message will be written to the log file if reject files are created. When such conditions exist, the user may either update the bad or discard file and attempt to reload using the same files.
- Business Validation – At this point data from the file(s) are loaded into the staging table(s). PL/SQL functions determine if this loaded data is valid enough to be inserted into the actual RMS tables. For all records that do not meet certain technical or business validations, the error message will be updated in staging table. When this condition exists, the user can fix the data upload file and try to reload the file with valid data.

Key Tables Affected

Table	Select	Insert	Update	Delete
SVC_WF_RET_HEAD	Yes	Yes	Yes	No
SVC_WF_RET_DETAIL	Yes	Yes	Yes	No
SVC_WF_RET_TAIL	Yes	Yes	Yes	No
WF_RETURN_HEAD	Yes	Yes	No	No
WF_RETURN_DETAIL	Yes	Yes	No	No
TSFHEAD	Yes	Yes	Yes	No
TSFDETAIL	Yes	Yes	No	No
ITEM_LOC	Yes	Yes	No	No
ITEM_LOC_SOH	Yes	Yes	Yes	No
TRAN_DATA	Yes	Yes	No	No

I/O Specification

Integration Type	Upload to RMS
File Name	wfreturn*.dat
Integration Contract	IntCon000109

SQL Loader Input File Layout

The following is the file pattern for the upload file. Note that the values are pipe “ | ” delimited and can optionally be enclosed by " ".

Record Name	Field Name	Field Type	Null Allowed?	Default Value	Description
FHEAD	File head descriptor	Char(5)	No	FHEAD	Describes file line type.
	Line Number	Number(10)	No		Id of the current line being processed.
	Customer ID	Number(10)	No		Franchise customer ID of the customer making the return.
	Customer Return Reference number	Char(20)	No		A reference field used by the franchise customer for their tracking purposes.
	Currency Code	Char(3)	No		This is the return currency.
	Comments	Char(2000)	Yes		Any other miscellaneous information related to the return.
FDETL	File record descriptor	Char(5)	No	FDETL	Describes file line type.
	Line Number	Number(10)	No		Id of the current line being processed.
	Item	Char(25)	No		The item on the franchise return.
	Franchise Order Number	Number(10)	No		The franchise order number against which the return is made.
	Customer Location	Number(10)	No		The franchise location which is making the return.
	Return Loc Type	Char(1)	No		Return location type for the franchise return; valid values are S – store or W – warehouse.
	Return Location	Number(10)	No		Return location for the franchise return.
	Return Method	Char(1)	No		The type of return; valid values are: - R-Return to Store/Warehouse - D-Destroy at site

Record Name	Field Name	Field Type	Null Allowed?	Default Value	Description
	Unit of measure	Char(3)	No		The unit measure of the return quantity. This is assumed to be the items standard UOM.
	Return qty	Number(12,4)	No		The quantity of item to be returned
	Return Reason	Char(6)	No		Return reason code; valid values are found on the CODE_DETAIL table where CODE_TYPE is 'RTVR'.
	Return unit cost	Number(20,4)	Yes		The per unit cost for the return.
	Restock Type	Char(1)	No		Indicates how the restocking fee will be calculated per item; valid values are S-specific or V-value.
	Restock Fee	Number(20,4)	No		Unit restocking fee.
FTAIL	File record descriptor	Char(5)	No	FTAIL	Marks end of file.
	Line Number	Number(10)	No		Id of current line being processed.
	File record count	Number(10)	No		Number of detail records.

Design Assumptions

N/A

wfretcls (Franchise Return Close)

Module Name	wfretcls.pc
Description	Franchise Return Close
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS394
Runtime Parameters	

Design Overview

This batch program is used to close franchise returns that are not in input status where all the associated transfers for the return are either in closed or deleted status.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Run after docclose and before wfrtnprg
Pre-Processing	docclose
Post-Processing	wfrtnprg
Threading Scheme	Multithreading based on WF Return number

Restart/Recovery

The logical unit of work for this module is defined as a unique rma_no (return order no). The v_restart_wfreturn view is used for threading. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
WF_RETURN_HEAD	Yes	No	Yes	No
TSFHEAD	Yes	No	No	No

Design Assumptions

N/A

wfrtnprg (Franchise Return Purge)

Module Name	wfrtnprg.pc
Description	Franchise Return Purge
Functional Area	Franchise Management
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS396
Runtime Parameters	

Design Overview

This batch program is used to purge franchise returns from RMS after a set number of days have elapsed, as defined by the system parameter Franchise History Months. Additionally, in order to be purged via this process, the franchise returns must have no associated billing records that have not been extracted or where not enough time has elapsed since they were extracted, as defined by the Franchise History Months system parameter.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Monthly
Scheduling Considerations	Run after wfretcls, ordprg, tsfprg and before wfordprg.pc
Pre-Processing	wfretcls ordprg tsfprg
Post-Processing	wfordprg
Threading Scheme	Multithreading based on WF Return number

Restart/Recovery

The logical unit of work for this module is defined as a unique rma_no (return order no). The v_restart_wfreturn view is used for threading. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
WF_RETURN_HEAD	Yes	No	No	Yes
WF_RETURN_DETAIL	No	No	No	Yes
WF_BILLING_RETURNS	Yes	No	No	Yes
TSFHEAD	Yes	No	No	No

Design Assumptions

- Transfers associated with franchise returns are deleted through the Transfer Purge (tsfprg) process. Franchise returns will not be allowed to be deleted until these associated records have been removed via that process.

wfslsupld.ksh (Upload of Franchise Sales to RMS)

Module Name	wfslsupld.ksh
Description	Upload of Franchise Sales to RMS
Functional Area	Franchise Management
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS156
Runtime Parameters	Database connection, Process Mode, Input File (load mode only)

Design Overview

Non-stockholding franchise stores in RMS are used for retailers who have franchise or other business customers for whom they supply inventory, but don’t manage it for them. However, even though inventory information will not be available for these locations in RMS, sales information will be able to be uploaded to RMS via this process to allow retailers to have better visibility to future demand from these customers. In addition to uploading sales information, this same batch script also purges old non-stockholding franchise store sales records from RMS. The script runs in 4 modes:

- Load – this mode will load the data from the file into a staging table in RMS for processing; any errors encountered in validating the data on the upload are also written to the staging table (WFSLSUPLD_STAGING).
- Process – this mode will process the records in the staging table that did not have errors during load, which includes both writing the data to the WF_NONSTOCKHOLDING_SALES table, as well as purging the processed records from the staging table.

- Reject – this mode will process the records on the staging table that had errors on initial load. It will create a reject file for each location/report date with the data in error for that location/date. The records will then be deleted from the staging table.
- Purge – this mode is used to purge old sales records from the WF_NON_STOCKHOLDING_SALES table. Records are deleted based on the system parameter Non-stockholding Franchise Sales History days (WF_NON_STOCK_SALES_HIST_DAYS).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threads based on the max concurrent threads and chunked based on the max chunk size from the RMS_PLSQL_BATCH_CONFIG table

Restart/Recovery

The program can be restarted by running the wfslsupld REJECT mode to create an input file of rejected records and wfslsupld LOAD/PROCESS mode to reprocess the rejected records.

Key Tables Affected

Table	Select	Insert	Update	Delete
WFSLSUPLD_STAGING	Yes	Yes	Yes	Yes
WFSLSUPLD_ROLLUP	Yes	Yes	No	Yes
WF_NONSTOCKHOLDING_SALES	No	Yes	Yes	Yes
RMS_PLSQL_BATCH_CONFIG	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Input file name is a parameter during runtime
Integration Contract	IntCon000111

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	File type definition	Char(4)	WFSU	Identifies the file type
	Customer Location	Number(10)		Store number identifier for the customer location
	Report Date	Char(14)		Report date of the file in YYYYMMDDHHMMSS format
	File Create Date	Char(14)		File Create Date in YYYYMMDDHHMMSS format
FDETL	Record descriptor	Char(5)	FDETL	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Item	Char(25)		Item number identifier
	Net Sales Quantity	Number(16)		Sales Quantity with 4 implied decimal places
	Net Sales Quantity UOM	Char(4)		Unit of Measure for the Net Sales Quantity
	Total Retail Amount	Number(24)		Total Retail Amount with 4 implied decimal places
	Total Retail Amount Currency	Char(3)		Currency code for the Total Retail Amount
FTAIL	Record descriptor	Char(5)	FTAIL	Identifies the file record type
	File Line Id	Number(10)		Sequential file line number
	File Record counter	Number(10)		Number of records/transactions processed in current file (only records between head & tail)

Design Assumptions

N/A

wfbillex.ksh (Franchise Billing Extract)

Module Name	wfbillex.ksh
Description	Franchise Billing Extract
Functional Area	Franchise Management
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS155
Runtime Parameters	

Design Overview

The purpose of this shell script module is to fetch all billing information for Franchise sale and return transactions and write these to an output file for integration with an external financial application that manages billing. A file is generated for each customer location (store)/day.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multi-threaded by customer location

Restart/Recovery

The logical unit of work for this module is defined as the customer location (store). Only one commit will be done for a customer location that has been completely processed. The WFBX formatted output file will be created with a temporary name and renamed just before a customer location commit. In case of failure, all work done will be rolled back.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
WF_BILLING_SALES	Yes	No	Yes	No
WF_BILLING_RETURNS	Yes	No	Yes	No
RMS_PLSQL_BATCH_CONFIG	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	WFBX_<store>_<SYSDATE>
Integration Contract	IntCon000110

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record descriptor	Char(5)	FHEAD	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	File type definition	Char(4)	WFBX	Identifies the file type
	File Create Date	Char(14)		File Create Date in YYYYMMDDHHMMSS format
THEAD	Record descriptor	Char(5)	THEAD	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Customer Location	Number(10)		Franchise store number
	Customer Order Reference Number	Char(20)		Reference number provided by the franchise customer
	Franchise Order Number	Number(10)		Franchise Order Number
	Transaction Type	Char(6)		SALES or RETURN
	RMA Number	Number(10)		Return Merchandise Authorization Number for the return
	Order Return Date	Number(8)		Order return date for Return transaction type or Order date for Sale transaction type in YYYYMMDD format
	Shipment Date	Number(8)		Date on which the item was shipped to the franchise location or returned to the retailer
TDETL	Record descriptor	Char(5)	TDETL	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Item	Char(25)		Item sequence number
	Department	Number(4)		Department number of the item
	Class	Number(4)		Class number of the item
	Subclass	Char(4)		Subclass number of the item
	Order Return Quantity	Number(12)		Return quantity with 4 implied decimal places

Record Name	Field Name	Field Type	Default Value	Description
	Order Return Quantity UOM	Char(4)		Return quantity unit of measure
	Order Return Cost	Number(20)		Return cost for Return transaction type or Customer cost for Sale transaction type. For both it is the per-unit cost
	Freight Cost	Number(20)		Freight associated to the franchise order
	Return Restocking Fee	Number(20)		Unit restocking fee charged for received items
	VAT Code	Char(6)		VAT code for the item
	VAT Rate	Number(20)		VAT rate associated to the VAT code for the item
	Other Order Charges	Number(20)		Other charges for the item
TTAIL	Record descriptor	Char(5)	TTAIL	Identifies the file record type
	File Line Id	Char(10)		Sequential file line number
	Tran Record Counter	Number(6)		Number of TDETL records in this transaction set
FTAIL	Record descriptor	Char(5)	FTAIL	Identifies the file record type
	File Line Id	Number(10)		Sequential file line number
	File Record counter	Number(10)		Number of records/transactions processed in current file (only records between head & tail)

Design Assumptions

N/A

22 Competitive Pricing

Overview

The RMS competitive pricing functionality extracts a competitor's price for an item. RMS masters competitor price information. Oracle Retail Price Management (RPM) uses this information to determine if a price review should be performed.

The batch programs in this chapter only need to be run if the retailer uses competitive shopping to track prices at other retailers and wishes to use this information to drive pricing decisions in RPM.

Batch Design Summary

The following batch designs are included in this functional area:

- cmpupld.pc (Upload Competitor's Prices)
- cmpprg.pc (Purge Aged Competitive Pricing Data)

cmpupld (Upload Competitor's Prices)

Module	cmpupld.pc
Description	Upload Competitor's Prices
Functional Area	Competitive Pricing
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS61
Runtime Parameters	

Design Overview

This program is used to upload and process competitor item prices from an external source. The flat file uploaded by cmpupld.pc can contain pricing data for a completed shopping list or data for a new list of items to be shopped. The module processes data for both features.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	This upload program should be scheduled to run before any of the Retail Pricing Management (RPM) batch modules
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	The number of threads will be based on the number of input files

Restart/Recovery

This is a file based upload, and file based restart/recovery logic is applied. The commit_max_ctr field should be set to prevent excessive rollback space usage and to reduce the overhead of file I/O. The recommended commit counter setting is 10000 records (subject to change based on experimentation).

Key Tables Affected

Table	Select	Insert	Update	Delete
COMP_SHOP_LIST	Yes	Yes	No	No
ITEM_MASTER	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000007

Input File Layout

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	CHAR (5)	FHEAD	Value that identifies the record type.
	File Line Identifier	NUMBER (10)	0000000001	Sequential file line number.
	File Type Definition	CHAR(4)	CMPU	Value that identifies the file as that for this program.
	File Create Date	CHAR (14)		Date when the file was written by the external system. It should be in the YYYYMMDDHH24MISS format.
File Detail	File Type Record Descriptor	CHAR (5)	FDETL	Value that identifies the record type.

Record Name	Field Name	Field Type	Default Value	Description
	File Line Identifier	NUMBER (10)		Sequential file line number.
	Shopper ID	NUMBER (4)		Numeric value that uniquely identifies the shopper to which the competitive shopping list is assigned.
	Shop Date	CHAR (14)		Date when the competitive shop was performed. It should be in the YYYYMMDDHH24MISS format.
	Item	CHAR (25)		Alphanumeric value that uniquely identifies the transaction level or below transaction level item that was competitively shopped.
	Competitor ID	NUMBER(10)		Numeric value that uniquely identifies a competitor.
	Competitor Store ID	NUMBER(10)		Numeric value that uniquely identifies a competitor's store.
	Recorded Date	CHAR (14)		Date when the item's retail price was recorded at the competitor's store. It should be in the YYYYMMDD24MISS format.
	Competitive Retail Price	NUMBER(20,4)		Numeric value that represents the retail price at the competitor’s store. Format for this value should include four implied decimal places.
	Competitive Retail Type	CHAR(6)	R, P, C	Value that represents the retail type (‘R’ is for regular; ‘P’, promotional; and ‘C’, clearance) that was recorded.
	Promotion Start Date	CHAR (14)		Effective start date of the competitor’s price. It should be in the YYYYMMDDHH24MISS format.
	Promotion End Date	CHAR (14)		Effective end date of the competitor’s price. It should be in the YYYYMMDDHH24MISS format.
	Offer Type Code	CHAR(6)		Alphanumeric value that corresponds to a valid offer type (e.g. Coupon, Bonus Card, Pre-priced). Valid values are defined on CODE_DETAIL table with CODE_TYPE ‘OFTP’.

Record Name	Field Name	Field Type	Default Value	Description
	Multi-Units	NUMBER(12,4)		Numeric value that represents the number of units that must be purchased to qualify for a multi-unit price. An example of a multi-unit price would be 2 for $3.00. There are four implied decimal places.
	Multi-Units Retail	NUMBER(20,4)		Numeric value that represents the price for a multi-unit item that was competitively shopped. There should be four implied decimal places.
File Trailer	File Type Record Descriptor	CHAR(5)	FTAIL	Value that identifies the record type.
	File Line Identifier	NUMBER (10)		Sequential file line number.
	File Record Counter	NUMBER (10)		Numeric value that represents the number of FDETL records in the file.

Design Assumptions

- Items included in the file must be defined as transaction level items in RMS.

cmpprg.pc (Purge Aged Competitive Pricing Data)

Module	cmpprg.pc
Description	Purge Aged Competitive Pricing Data
Functional Area	Competitive Pricing
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS198
Runtime Parameters	

Design Overview

This program deletes from the competitive price history (COMP_PRICE_HIST) table and the competitive shopping list (COMP_SHIP_LIST) table based purge criteria based on system parameter settings. The Competitive Pricing Months parameter (comp_price_months) will determine how many months competitive price history should be maintained before deletion. The Competitive Pricing List Days (comp_list_days) parameter will determine how long a requested shopping list should remain on the shopping list table if it is not complete by the requested shop date.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
PERIOD	Yes	No	No	No
PURGE_CONFIG_OPTIONS	Yes	No	No	No
COMP_PRICE_HIST	Yes	No	No	Yes
COMP_SHOP_LIST	No	No	No	Yes

Design Assumptions

N/A

23 Item Induction

Overview

Item induction is a process for importing item related information into RMS from an external source. For many retailers, item creation is initiated in a system outside RMS. Some retailers receive item information from their vendors, others initiate items in a planning application, and still others use a product lifecycle management (PLM) application, or a product hub (e.g. a PIM application).

RMS offers a flexible method of importing items, which supports inducting items into RMS with a bare minimum of data and provides a working area for enrichment of those items prior to upload into the production tables in RMS. Item induction functionality allows users and systems to upload item data into a staging area or directly into RMS using any of the below modes

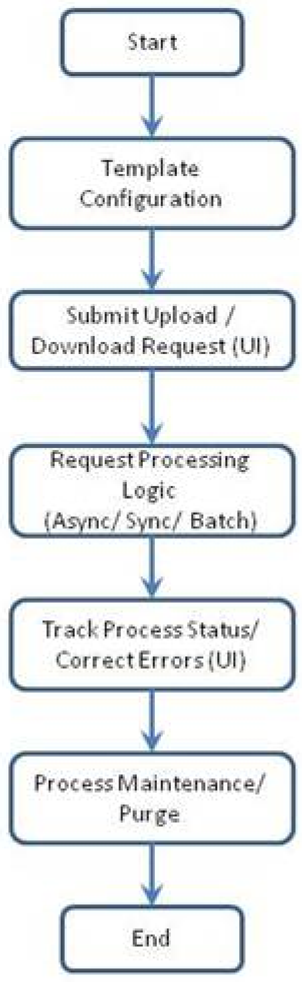
- Batch
- RIB
- Manual upload

Data uploaded into the staging area though any of the above modes can be downloaded into a spreadsheet, enriched and re-uploaded into the staging area or into RMS. Maintainence of items that already existing in RMS can also be achieved by downloading the data into a spreadsheet which in turn offers mass maintenance, filtering, and sorting capabilities.

The processing of upload or download requests of item data through manual and batch options is linked to a template definition that specifies which tables and columns are to be made available to the user or system for data entry and update. Templates can be created based on user role, business line, item type, etc. and provide the flexibility to define default values for one or more fields.

Overall management of data in the staging area is achieved through provision of a dedicated purge batch.

For more information on the RIB options for uploading items into the staging area, see the *Oracle Retail Merchandising System Operations Guide, Volume 2 - Message Publication and Subscription Design*


Start
Template Configuration
Submit Upload / Download Request (UI)
Request Processing Logic (Async/ Sync/ Batch)
Track Process Status/ Correct Errors (UI)
Process Maintenance/ Purge
End

Batch Design Summary

The following batch designs are included in this functional area:

- loadods.ksh (Item Induction)
- iindbatch.ksh (Upload Item Data)
- iindfiles.ksh (Upload Data From Templates)

loadods.ksh (Item Induction)

Module Name	loadods.ksh
Description	Spreadsheet Tables Upload
Functional Area	Admin
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS473
Runtime Parameters	Database connection, Path of input File

Design Overview

This batch program is used to upload data from template files to S9T_FOLDER table. The path of template files (ODS_SYSTEM_TEMPLATE_FOR_OUTPUT_FILES.ods and template_config.ods) are passed as input parameter to this batch.
This program will be called from other shell script ld_iindfiles.ksh which does initial validations to check if template files exist and post processing of uploading data from S9T_FOLDER table to other spreadsheet tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

The restart recovery is different from the conventional RMS batch. There are two points on the batch upload process where users can evaluate the successful load of the data.

1. SQL load – In this program control and data files are created dynamically. In case of any error while creation of data/control file a non-fatal code is returned by the program and a message will be written to the log file.
   User Action: When such conditions exist, the user should check if template files passed are valid and in expected format.
2. Other Validation – At this point data from the file(s) are loaded into the staging table(s). PL/SQL function is used to get the next sequence for each file_id. In case of any error while getting next sequence value from sequence - s9t_folder_seq fatal code is returned by the program and a message will be written to the log and error file.

User Action: When this condition exists, the user needs to check for DB connection and state of sequence should be valid in DB.

Key Tables Affected

Table	Select	Insert	Update	Delete
S9T_FOLDER	No	Yes	No	Yes

SQL Loader Input File Layout

Refer to ODS_SYSTEM_TEMPLATE_FOR_OUTPUT_FILES.ods and template_config.ods.

iindbatch.ksh (Upload Item Data)

Module Name	iindbatch.ksh
Description	Upload Item Data
Functional Area	Item Maintenance
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS474
Runtime Parameters	Database connection, Input File Name, Template Name, Destination (Optional Input Parameter)

Design Overview

This batch program is used to Bulk upload xml file data from template files to S9T_FOLDER table (into content_xml column).
This batch will be responsible for validating the input parameters, below are the list of validations.

- The Input file should exist.
- The Input file's extension must be ".xml".
- The template_name should be valid. Function S9T_PKG.CHECK_TEMPLATE is called for validation.
- Destination (Optional Parameter) should be STG or RMS. If destination is not passed then default it to STG.

Once xml data is loaded into S9T_FOLDER table, the script will do post processing by calling below packages

- ITEM_INDUCT_SQL.INIT_PROCESS - This initialize a row in svc_process_tracker for asynchronous processing.
- RMS_ASYNC_PROCESS_SQL.ENQUEUE_ITEM_INDUCT – This function en-queues the record for processing.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
S9T_FOLDER	No	Yes	No	No
S9T_TEMPLATE	Yes	No	No	No
SVC_PROCESS_TRACKER	No	Yes	No	No
RMS_ASYNC_STATUS	No	Yes	No	No
RMS_ASYNC_RETRY	No	Yes	No	No

iindfiles.ksh (Upload Data From Templates)

Module Name	ld_iindfiles.ksh
Description	Updload Data From Templates
Functional Area	Item Maintenance
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS199
Runtime Parameters	Database connection, Input Directory

Design Overview

This batch program is used to upload data from template files to S9T_FOLDER table calling another script loadods.ksh. Once data is loaded into S9T_FOLDER table it will do post processing, uploading data to other spreadsheet tables. This batch will be responsible for validating if input files (ODS_SYSTEM_TEMPLATE_FOR_OUTPUT_FILES.ods and template_config.ods) are present in input directory (passed as parameter).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
S9T_FOLDER	No	Yes	No	Yes
S9T_TMPL_COLS_DEF_SHADOW	No	Yes	No	Yes
S9T_TMPL_COLS_DEF	No	Yes	No	Yes
S9T_TMPL_WKSHT_DEF_SHADOW	No	Yes	No	Yes
S9T_TMPL_WKSHT_DEF	No	Yes	No	Yes
S9T_TEMPLATE_SHADOW	No	Yes	No	Yes
S9T_TEMPLATE	No	Yes	No	Yes

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Integration with Xstore

Overview

This chapter contains information about the batch processes that related to the integration of Xstore.

The integration of the Merchandising applications and the Xstore Suite consists of two major data flows:

- Foundation and price data from Oracle Retail Merchandising System (RMS) and Oracle Retail Price Management (RPM) to Oracle Retail Xcenter and Xstore Office
- Point of Service transactions from Oracle Retail Xstore Point of Service to Oracle Retail Sales Audit (ReSA).

In combination, these data flows represent the round trip of data between the stores and headquarters. New items, other foundation data, and prices from headquarters are communicated to Xstore. Sales and returns from Xstore are communicated to Merchandising, where these transactions impact inventory. Merchandising further integrates summarized sales and inventory information from Xstore to other Oracle Retail applications, such as Planning and Analytics.

Foundation Data Bulk Export

RMS serves as the system of record for retail foundation data in the Oracle Retail enterprise. Many customers use RMS as the system of record for retail foundation data in their larger IT operations.

Foundation data needs to be integrated out of RMS to both Oracle Retail and 3rd party/legacy systems. RMS supports two categories of foundation data export:

Foundation Data RIB Publishing

- RMS publishes near real time messages to the Oracle Retail Integration Bus (RIB) to client applications. These messages describe the changes (additions, modifications, deletes) that have occurred.
  - In the Oracle Retail enterprise, SIM and WMS subscribe to these foundation data messages to stay in synch with RMS foundation data.
  - In most implementations, customers configure other 3rd party systems to also subscribe to these messages.
  - See *Oracle Retail Integration Guide* for more information about RIB integration.

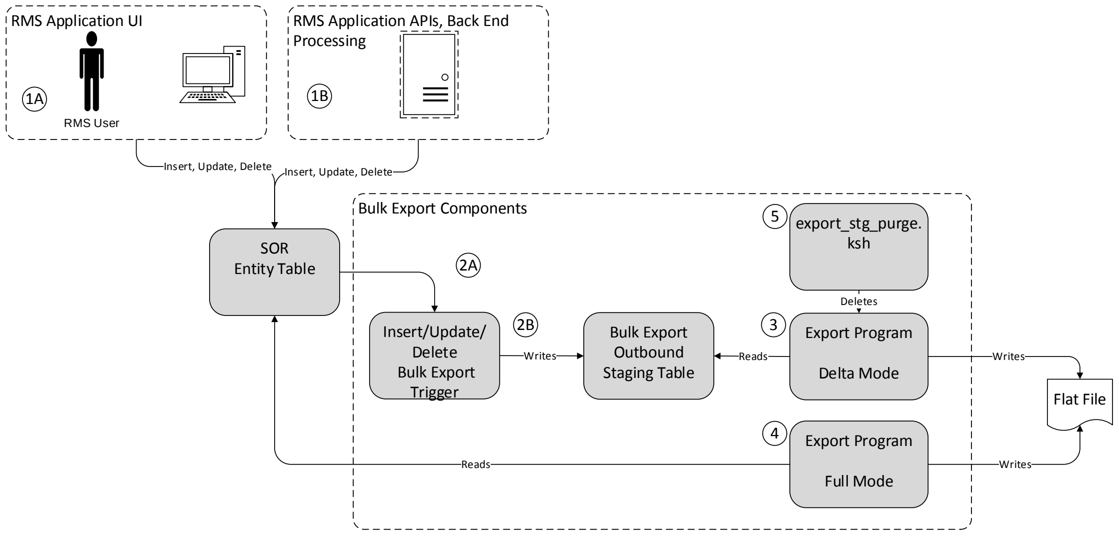
Foundation Data Bulk Export

- RMS creates files of foundation data information. Files can contain either
  - Changes (additions, modifications, deletes) since last bulk export
  - Full set of data for the entity

The goal of both forms of integration is to present complete entities to downstream systems in a neutral format. RMS expects that downstream systems will filter and transform the foundation data to meet the requirements of the downstream system.

Bulk Export Pattern

There are some entity specific variations (detailed in the program specific details in this chapter), but RMS uses a general pattern for foundation data bulk export:



Pattern Conceptual Flow:

1. (1A) Using RMS application UI, business user or (1B) API/Batch Process performs an insert/update/delete on a System of Record table.
2. (2A) Trigger on SOR entity table fires on insert/update/delete. (2B) Trigger writes new/changed/deleted information to outbound staging table.
3. In a delta mode, program reads bulk export staging table to get recently created, modified and deleted records and writes them to a file. Records are marked as exported.
4. In a full mode, program reads all current records from the SOR table and writes them to a file. Note that recently deleted records are not part of the data set.
5. export_stg_purge.ksh drops aged partitions from the export outbound staging tables. Note – if bulk extract programs are not run for some time, it is possible that delta records will be purges without having been exported. It is important to run these jobs daily.

Points of Note

- These bulk exports contain all information RMS knows about an entity that might be useful to downstream systems. It is the responsibility of integration code to drop unneeded information.
- Naming convention for export staging tables is <entity>_EXPORT_STG. Examples include:
  - MERCHHIER_EXPORT_STG
  - ITEM_EXPORT_STG
- Naming convention for triggers in SOR tables is de_table_<table abbreviation>_aiudr.trg
  - de_table_grp_aiudr.trg
  - de_table_dept_aiudr.trg

- ITEM is a very complex entity. In addition to ITEM_EXPORT_STG, there is an additional helper table, ITEM_EXPORT_INFO. This table helps to ensure new items are complete before they are published.

Base Oracle Retail Usage

- The foundation data bulk export programs in this chapter are used in the integration between RMS and Xcenter/Xstore.
  - See implementation guide for details
- In future releases, other bulk foundation data integration jobs will be deprecated in favor of these processes.

Client Specific Usage Recommendations

Oracle Retail recommends that these jobs also be used for

- Initial load of data to 3rd party systems that will be operationally integrated using RIB.
- File based Integration with 3rd party POS.
- File based Integration with other 3rd party systems

Batch Design Summary

The following batch designs are included in this functional area:

- export_merchhier.ksh
- export_orghier.ksh
- export_stores.ksh
- export_diffs.ksh
- export_diffgrp.ksh
- export_itemloc.ksh
- export_itemvat.ksh
- export_itemmaster.ksh
- export_vat.ksh
- export_relitem.ksh
- export_stg_purge.ksh

export_merchhier.ksh (Extract of Merchandise Hierarchy data)

Module	export_merchhier.ksh
Description	Extraction of merchandise hierarchy data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS merchandise hierarchy information from division to subclass into a flat file. Data to be extracted will be pulled off from the MERCHHIER_EXPORT_STG table and the main merchandise hierarchy tables.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all merchandise hierarchy records in RMS) as well as delta processing (all merchandise hierarchy changes since the last export) of data.

For a full extract, records will be solely retrieved from the main merchandise hierarchy tables. For a delta extract, the action type and entity ID will be retrieved from the MERCHHIER_EXPORT_STG table and the attributes of the entities will be retrieved from their corresponding man entity tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
MERCHHIER_EXPORT_STG	Yes	No	Yes	No
COMPHEAD	Yes	No	No	No
DIVISION	Yes	No	No	No
GROUPS	Yes	No	No	No
DEPS	Yes	No	No	No
CLASS	Yes	No	No	No
SUBCLASS	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	merchhierarchy_[Date]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000207

Design Assumptions

N/A

export_orghier.ksh (Extract of Organizational Hierarchy Data)

Module	export_orghier.ksh
Description	Extraction of organizational hierarchy data.
Functional Area	Foundation
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS organizational hierarchy information from company to stores and warehouses into a flat file. Data to be extracted will be pulled off from the ORGHIER_EXPORT_STG table and the main organizational hierarchy tables.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all organizational hierarchy records in RMS) as well as delta processing (all organizational hierarchy changes since the last export) of data.

For a full extract, records will be solely retrieved from the main organizational hierarchy tables. For a delta extract, the action type and entity ID will be retrieved from the ORGHIER_EXPORT_STG table and the attributes of the entities will be retrieved from their corresponding man entity tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORGHIER_EXPORT_STG	Yes	No	Yes	No
COMPHEAD	Yes	No	No	No
CHAIN	Yes	No	No	No
AREA	Yes	No	No	No
REGION	Yes	No	No	No
DISTRICT	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	orghierarchy_[Date]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000203

Design Assumptions

N/A

export_stores.ksh (Extract of Store Data)

Module	export_stores.ksh
Description	Extraction of store data.
Functional Area	Foundation
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS store information into two flat files – one for store and one for store addresses. Data to be extracted will be pulled off from the STORE_EXPORT_STG, STORE and ADDR tables.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all store records in RMS) as well as delta processing (all store changes since the last export) of data.

For a full extract, records will be solely retrieved from the STORE table for store information and ADDR table for store addresses. For a delta extract, the action type, store ID and address will be retrieved from the STORE_EXPORT_STG table and the details of the store will be retrieved from both the STORE and ADDR tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE_EXPORT_STG	Yes	No	Yes	No
STORE	Yes	No	No	No
ADDR	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	store_[Date]_[full/delta]_[#ofLines].dat storeaddr_[Date]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000204 IntCon000205

Design Assumptions

N/A

export_diffs.ksh (Extraction of differentiators data defined for a differentiator type)

Module	export_diffs.ksh
Description	Extraction of differentiator's data defined for a differentiator type.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS differentiator information into a flat file. Data to be extracted will be pulled off from the DIFFS_EXPORT_STG and the DIFF_IDS table.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all differentiator records in RMS) as well as delta processing (all differentiator record changes in the time frame passed in the program) of data.

For a full extract, records will be solely retrieved from the DIFF_IDS table. For a delta extract, the action type and differentiator ID will be retrieved from the DIFFS_EXPORT_STG table and the attributes will be retrieved from the DIFF_IDS table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
DIFFS_EXPORT_STG	Yes	No	Yes	No
DIFF_IDS	Yes	No	No	No
DIFF_TYPE	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	diffs_date_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000206.html

Design Assumptions

N/A

export_diffgrp.ksh (Extraction of differentiator groups data)

Module	export_diffgrp.ksh
Description	Extraction of differentiator groups data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS diff group information into a flat file. Data to be extracted will be pulled off from the DIFFGRP_EXPORT_STG, DIFF_GROUP_HEAD and DIFF_GROUP_DETAIL tables.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all diff group records in RMS) as well as delta processing (all diff group record changes in the time frame passed in the program) of data.

For a full extract, records will be retrieved from the DIFF_GROUP_HEAD and DIFF_GROUP_DETAIL tables. For a delta extract, the action type and diff group ID will be retrieved from the DIFFGRP_EXPORT_STG table and the attributes will be retrieved from the DIFF_GROUP_HEAD and DIFF_GROUP_DETAIL tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
DIFFGRP_EXPORT_STG	Yes	No	Yes	No
DIFF_GROUP_HEAD	Yes	No	No	No
DIFF_GROUP_DETAIL	Yes	No	No	No
DIFF_IDS	Yes	No	No	No
DIFF_TYPE	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	diffgrphdr_date_[full/delta]_[#ofLines].dat diffgrpdtl_date_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000212.html IntCon000213.html

Design Assumptions

N/A

export_itemloc.ksh (Extraction of item location data)

Module	export_itemloc.ksh
Description	Extraction of item location data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection, mode of extract ('full' or 'delta') and threading indicator (Y/N). With 'full/delta' mode optional parameter ('store number') for single store file.

Design Overview

This new batch job will extract new, updated and deleted RMS item-location information into a flat file.

- This new batch will support both a full and delta export of item-location data.
- A threading indicator parameter should be passed. Passing 'Y' means a thread number (1-20) will be passed in. Passing 'N' means no thread number will be passed in and the program will use a default thread number.
- An optional location parameter may be passed in for either modes. If this value is passed in, the batch will create a flat file for the location passed in. If it is not passed in, the batch will create flat files for all locations.
- This creates separate files per location (Store, Warehouse or External Finisher).
- This will export data only for approved, sellable items.
- This will export item location information from the ITEM_EXPORT_STG, ITEM_LOC and ITEM_LOC_TRAITS tables.
- This should also include the item parent as its own record in the extract.
- The flat files that will be created will now be pipe delimited.

The flat files that will be created will now be pipe delimited.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_EXPORT_INFO	Yes	No	No	No
ITEM_EXPORT_STG	Yes	No	Yes	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_TRAITS	Yes	No	No	No
STORE	Yes	No	No	No
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	itemloc_[#date]_[#loc_type]_[#location]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000209

Design Assumptions

N/A

export_itemvat.ksh (Extraction of vat item data)

Module	export_itemvat.ksh
Description	Extraction of vat item data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract (‘full’ or ‘delta’). Threading indicator (Y/N). With ‘full’ mode optional parameter (‘store’) for single store file.

Design Overview

This new batch job will extract new, updated and deleted RMS item VAT information into a flat file.

- This new batch will support both a full and delta export of item VAT data.
- A threading indicator parameter should be passed. Passing ‘Y’ means a thread number (1-20) will be passed in. Passing ‘N’ means no thread number will be passed in and the program will use a default thread number.
- In full mode, normal operation will produce both a corporate level file and files for all stores. An optional input parameter will also allow the program to produce a location level file for a specified store.
- In full mode for store specific file if store belong to such a vat region, which is exempt (In case of tax type SVAT), then files for that store won’t get generated.
- In delta mode, this will produce both corporate level files and files for all stores the modified items are ranged to and the vat region the store is associated with.
- In delta mode for store specific file if store belong to such a vat region, which is exempt, then files for that store won’t get generated.
- This will export data only for approved, sellable items.
- This will export item VAT information from the ITEM_EXPORT_STG and VAT_ITEM tables.
- This should also include the item parent as its own record in the extract.
- The flat files that will be created will now be pipe delimited.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily

Schedule Information	Description
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_EXPORT_INFO	Yes	No	No	No
ITEM_EXPORT_STG	Yes	No	Yes	No
VAT_REGION	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
STORE	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	vatitem_[#date]_corp_[full/delta]_[#ofLines].dat vatitem_[#date]_[location]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000214

Design Assumptions

N/A

export_itemmaster.ksh (Extraction of item data)

Module	export_itemmaster.ksh
Description	Extraction of item data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract (‘full’ or ‘delta’). Threading indicator (Y/N). With ‘full’ mode optional parameter (‘store’) for single store file.

Design Overview

This new batch job will extract new, updated and deleted RMS item master information into a flat file.

- Data to be extracted will be pulled off from the ITEM_EXPORT_INFO, ITEM_EXPORT_STG and ITEM_MASTER tables.
- The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all approved, sellable items in RMS) as well as delta processing (all approved, sellable item changes in ITEM_MASTER since the last export) of data.
- A threading indicator parameter should be passed. Passing ‘Y’ means a thread number (1-20) will be passed in. Passing ‘N’ means no thread number will be passed in and the program will use a default thread number.
- In full mode, normal operation will produce both a corporate level file and files for all stores. An optional input parameter will also allow the program to produce a location level file for a specified store.
- In delta mode, the only option is to produce both corporate level files and files for all stores the modified items are ranged to.
- The store specific file will also include UPC items. To determine which UPC Items to include, the store where the UPC’s parent and/or grandparent item is ranged should be taken into consideration.
- The flat files that will be created will now be pipe delimited.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_EXPORT_INFO	Yes	No	Yes	No
ITEM_EXPORT_STG	Yes	No	Yes	No
CLASS	Yes	No	No	No
SUBCLASS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
DIFF_IDS	Yes	No	No	No
DIFF_GROUP_HEAD	Yes	No	No	No
STORE	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	itemhdr_[#date]_corp_full_[#ofLines].dat itemhdr_[#date]_[location]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000208

Design Assumptions

N/A

export_vat.ksh (Extraction of vat data)

Module	export_vat.ksh
Description	Extraction of vat data.
Functional Area	Foundation
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract ('full' or 'delta')

Design Overview

This new batch job will extract new, updated and deleted RMS VAT information into a flat file. Data to be extracted will be pulled off from the VAT_EXPORT_STG, VAT_REGION, VAT_CODES and VAT_CODE_RATES tables.

The mode (full vs. delta) will be an input parameter for this new batch. The mode will allow a full extract (all vat region/vat code/vat code rate combination records in RMS) as well as delta processing (all VAT record changes in the time frame passed in the program) of data.

In either of the mode exempt vat region won't get fetched in case of SVAT tax type.

For a full extract, records will be retrieved from the VAT_REGION, VAT_CODE and VAT_CODE_RATES tables. For a delta extract, the action type, vat region, vat code and active date will be retrieved from the VAT_EXPORT_STG table and the attributes will be retrieved from the main table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
VAT_EXPORT_STG	Yes	No	Yes	No
VAT_CODES	Yes	No	No	No
VAT_CODE_RATES	Yes	No	No	No
VAT_REGION	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	vat_date_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000215

Design Assumptions

N/A

export_relitem.ksh (Extraction of item data)

Module	export_relitem.ksh
Description	Extraction of related item data.
Functional Area	Foundation
Module Type	Integration
Module Technology	ksh
Catalog ID	
Runtime Parameters	Database connection and mode of extract (‘full’ or ‘delta’). Threading indicator (Y/N). With ‘full’ mode optional parameter (‘store’) for single store file.

Design Overview

This new batch job will extract new, updated and deleted RMS related items information into a flat file.

- This new batch will support both a full and delta export of related item data.
- A threading indicator parameter should be passed. Passing ‘Y’ means a thread number (1-20) will be passed in. Passing ‘N’ means no thread number will be passed in and the program will use a default thread number.

- In full mode, normal operation will produce both a corporate level files and files for all stores. An optional input parameter will also allow the program to produce location level files for a specified store.
- In delta mode, this will produce both corporate level files and files for all stores the modified data are ranged to.
- This will export data only for approved, sellable items.
- This will export item related item information from the RELITEM_EXPORT_STG, RELATED_ITEM_HEAD and RELATED_ITEM_DETAIL tables.
- Two types of flat files will be created for this extract – one for the related item header information (those from the RELATED_ITEM_HEAD table) and one for the related item detail information (those from the RELATED_ITEM_DETAIL table).
- When creating the location level files, ensure that both items (the main item and related item) are ranged in the location.
- The flat files that will be created will now be pipe delimited.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_EXPORT_INFO	Yes	No	No	No
RELITEM_EXPORT_STG	Yes	No	Yes	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
RELATED_ITEM_HEAD	Yes	No	No	No
RELATED_ITEM_DETAIL	Yes	No	No	No
STORE	Yes	No	No	No
DATA_EXPORT_HIST	No	Yes	No	No

Integration Contract

Integration Type	Extract from RMS
File Name	relitemhead_date_corp_[full/delta]_[#ofLines].dat relitemhead_date_[Location]_[full/delta]_[#ofLines].dat relitemdet_date_corp_[full/delta]_[#ofLines].dat relitemdet_date_[Location]_[full/delta]_[#ofLines].dat
Integration Contract	IntCon000210 IntCon000211

Design Assumptions

N/A

export_stg_purge.ksh (Purging of all the extracted data)

Module	export_stg_purge.ksh
Description	Purging of all the extracted records (week old) for Xstore.
Functional Area	Foundation
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	Database connection.

Design Overview

This new batch job will be used to remove records that are a week old from the following staging tables.

- MERCHHIER_EXPORT_STG
- ORGHHIER_EXPORT_STG
- STORE_EXPORT_STG
- DIFFS_EXPORT_STG
- DIFFGRP_EXPORT_STG
- ITEM_EXPORT_STG
- VAT_EXPORT_STG
- RELITEM_EXPORT_STG
- DATA_EXPORT_HIST

Batch will purge all the records (Week old records) from its respective staging table whether data get extracted or not.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Adhoc
Frequency	Weekly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
MERCHHIER_EXPORT_STG	No	No	No	Yes
ORGHIER_EXPORT_STG	No	No	No	Yes
STORE_EXPORT_STG	No	No	No	Yes
DIFFS_EXPORT_STG	No	No	No	Yes
DIFFGRP_EXPORT_STG	No	No	No	Yes
ITEM_EXPORT_STG	No	No	No	Yes
VAT_EXPORT_STG	No	No	No	Yes
RELITEM_EXPORT_STG	No	No	No	Yes
DATA_EXPORT_HIST	No	No	No	Yes

Integration Contract

N/A

Design Assumptions

N/A

25
Integration with Third Party POS

This chapter contains information about the batch processes that send information to 3rd Party POS systems.

For information about integration of transactions from either 3rd party POS systems or the Oracle Retail POS Suite to RMS, see the chapter Sales Posting.

Program Summary

Program	Description
poscdnld.pc	Download of POS Configuration Data to 3rd Party POS
export_merchhier.ksh	Dowload of Merchandise Hierarchy to 3rd Party POS
posdnld.pc	Download of Information to 3rd Party POS Systems
posrefresh.pc	Download of Full Refresh Information for a Full Store to 3rd Party POS
taxdnld.pc	Tax Download to 3rd Party POS in Global Tax [GTAX] Implementations
txrposdn	Preparation for Tax Download to 3rd Party POS in Sales and US tax [SALES] Implementations
tifposdn.pc	Tax Download to 3rd Party POS in Sales and US tax [SALES] Implementations

It is likely that all 3rd Party POS Integration programs will not be used by most clients. The programs a client should use are dependent on their POS systems, business processes for managing those POS systems and operations requirements.

The information sent to 3rd Party POS systems falls into several broad categories:

Category	Programs	Usage Recomendation
POS Configuration	poscdnld.pc	Only run this program if you use RMS to master POS Configuration Data
Item/Price Information for Sales Txns	posdnld.pc	This program must be run to send item/price information to store locations. All clients should run this program daily
	export_merhhier.ksh	This program sends merchandise hierarchy information to POS systems. Client business process and POS system requirements will determine if this program needs to be run.
	posrefresh.pc	This program sends full refreshes of item/price information to stores. It should be used at implementation and to address exception conditions
Tax	taxdnld.pc	This program should be used when clients run 'GTAX' Tax
	txrposdn.pc ifposdn.pc	These programs should be used when clients run 'SALES' Tax

poscdnld (Download of POS Configuration Data to 3rd Party POS)

Module Name	poscdnld.pc
Description	Download of POS Configuration Data to 3rd Party POS
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS69
Runtime Parameters	

Design Overview

This program downloads POS configuration information from RMS to a flat file. This file can be used to load POS and back-office systems.

This program (and it's related prepost function poscdnld_post()) should only be run if RMS is used to master:

- Accepted tenders/location
- POS Button Definitions, including but not limited to layout, button text, button colors, etc
- Coupon definitions and relationships to items
- Restrictions on product sales, including but not limited to minimum age of purchaser, time/days when product cannot be sold, tenders that cannot be used to purchase the product, etc.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	This program (and it's related prepost function poscdnld_post()) should only be run if RMS is used to master: • Accepted tenders/location • POS Button Definitions, including but not limited to layout, button text, button colors, etc • Coupon definitions and relationships to items • Restrictions on product sales, including but not limited to minimum age of purchaser, time/days when product cannot be sold, tenders that cannot be used to purchase the product, etc. This program should be run directly after posdnld.pc
Pre-Processing	posdnld.pc
Post-Processing	poscdnld_post() – set status back to NULL
Threading Scheme	Single Thread

Restart/Recovery

The logic unit of work is pos configuration type and pos configuration ID. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
POS_PAYINOUT_HEAD	Yes	No	No	Yes
POS_TENDER_TYPE_HEAD	Yes	No	No	Yes
POS_BUTTON_HEAD	Yes	No	No	Yes
POS_SUP_PAY_CRITERIA	Yes	No	No	Yes
POS_PROD_REST_HEAD	Yes	No	No	Yes
POS_COUPON_HEAD	Yes	No	No	Yes
POS_MONEY_ORD_HEAD	Yes	No	No	Yes
POS_CONFIG_ITEMS	No	No	No	Yes
POS_STORE	No	No	No	Yes
POS_DAY_TIME_DATE	No	No	No	Yes
SA_CC_VAL	No	No	No	Yes
POS_ITEM_BUTTON	No	No	No	Yes
POS_BUTTON_DETAIL	No	No	No	Yes

I/O Specification

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000063

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record Type	Char(5)	'FHEAD'	Record Identifier
	Line id	Number(10)	0000000001	Sequential Line Identifier
	File Name	Char(4)	'POSC'	File Identifier
	File Date	Char(14)		Date the file was created in 'YYYYMMDD HHMMSS' format
TCOUP	Record Type	Char(5)	'TCOUP'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Coupon id	Number(6)		
	Coupon Desc	Char(250)		
	Currency Code	Char2(3)		
	Max Discount Amount	Number(20,4)		
	Amount	Number(20,4)		
	Percent Ind	Char(1)	'N' – Amount 'Y'- Percentage	
	Profit Center	Char(6)		
	Tax Class	Char(6)		
	Export Code	Char(6)		
	Effective Date	Char(14)		Indicates the first day the coupon can be used in 'YYYYMMDD HHMMSS' format
	Expiration Date	Char(14)		Indicates the day the coupon becomes invalid in 'YYYYMMDD HHMMSS' format
	Prompted Ind	Char(1)	'Y', 'N'	This indicator identifies if the cashier should be prompted to ask for a Coupon

Record Name	Field Name	Field Type	Default Value	Description
	Display Ind	Char(1)	'Y', 'N'	This indicator specifies whether the coupon is displayed in the list of valid coupons on the register
	Status	Char(1)	'A','C','D'	Indicates if the coupon configuration is new, has been changed, or being deleted
	Vendor	Number(10)		
	Vendor Type	Char(6)	'AG' - Agent 'AP' - Applicant 'BK' - Bank 'BR' - Broker 'CN' - Coonsignee 'CO' - Consolidator 'FA' - Factory 'FF' - Freight Forwarder 'IM' - Importer 'SU' - Supplier	
	Promotion	Number(10)		
	Coupon Barcode	Char(20)		
	Coupon Max Qty	Number(6)		
TPRES	Record Type	Char(5)	'TPRES'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	POS Product Restriction id	Number(6)		
	POS Product Restriction Desc	Char(120)		

Record Name	Field Name	Field Type	Default Value	Description
	POS Product Restriction Type	Char(6)	'PPRT' include: 'STMP' - Food Stamp 'MNAG' - Minimum Age 'CNDP' -Container Deposit 'CNVL' - Container Redemption Value 'DTDR' - Day/Time/Date Restriction 'TENT' - Tender Type 'NDSC' - Non-Discountable 'RTRN' - Returnable 'QLMT' - Quantity Limit	
	Effective Date	Char(14)		Date the product restriction is first effective in 'YYYYMMDD HHMMSS' format
	Currency Code	Char(3)		
	Product Restriction Amount	Number(20,4)		
	Age Minimum	Number(2)		
	Date Restriction	Char(14)		Date on which a specified product restriction is applied in 'YYYYMMDD HHMMSS' format
	Before Time Restriction	Char(6)		
	After Time Restriction	Char(6)		
	Day Restriction	Char(6)		
	Max Qty Amount	Number(12,4)		

Record Name	Field Name	Field Type	Default Value	Description
	Tender Type Group	Char(6)	'CASH' - Cash, 'CHECK' - Check, 'CCARD' - Credit, 'COUPON' - Coupon, 'LOTTRY' - Lottery, 'FSTAMP' - Food Stamp, 'DCARD' - Debit Card, 'MORDER' - Money Order 'VOUCH' - Voucher 'ERR' - Error, 'SOCASS' - Social Assistance, 'TERM' - Termination Record, 'DRIVEO' - Drive Off, 'EBS' - Electronic Benefits (Food Stamps)	
	Status	Char(1)	'A','C','D'	Indicates if the product restriction configuration is new, has been changed, or being deleted
TMORD	Record Type	Char(5)	'TMORD'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Money Order id	Number(6)		
	Money Order Desc	Char(120)		
	Currency Code	Char(3)		
	Fee	Number (20,4)		
	Max Face Value	Number (20,4)		
	Max Sale Amount	Number (20,4)		
	Tax Class	Char (6)		
	Cash Only Ind	Char (1)	'Y', 'N'	The CASH_ONLY field identifies whether cash is the only method that can be used to purchase the Money Order

Record Name	Field Name	Field Type	Default Value	Description
	Serial Input Ind	Char (1)	‘Y’, ‘N’	The SERIAL_INPUT_IND field will specify whether or not a serial input is associated with the Money Order
	Pack Size	Number (6)		
	Refund Fee Ind	Char (1)	‘Y’, ‘N’	The REFUND_FEE_IND field will specify whether or not the Money Order Fee can be refunded
	Effective Date	Char(14)		Indicates the date which the Money Order becomes effective for use in ‘YYYYMMDD HHMMSS’ format
	Expiration Date	Char(14)		The EXPIRATION_DATE field identifies the last day money order machine will create this Money Order in ‘YYYYMMDD HHMMSS’ format
	Status	Char(1)	‘A’,’C’,’D’	Indicates if the money order configuration is new, has been changed, or being deleted
TTTYP	Record Type	Char(5)	‘TTTYP’	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Tender Type id	Char(6)		
	Tender Type Desc	Char (120)		
	Tender Type Group	Char (6)	'CASH' - Cash, 'CHECK' - Check, 'CCARD' - Credit, 'COUPON' - Coupon, 'LOTTRY' - Lottery, 'FSTAMP' - Food Stamp, 'DCARD' - Debit Card, 'VOUCH' - Voucher, 'MORDER' - Money Order, 'ERR' - Error	

Record Name	Field Name	Field Type	Default Value	Description
	Effective Date	Char(14)		Contains the date the tender type is first effective in 'YYYYMMDD HHMMSS' format
	Currency Code	Char(3)		
	Preset Amount	Number(20,4)		
	Authorize Minimum	Number(20,4)		
	Open Drawer Ind	Char (1)		
	Exact Change Ind	Char (1)		
	Accumulate Cash Intake Ind	Char (1)		
	Next Dollar Ind	Char (1)		
	Deposit in Bank Ind	Char (1)		
	Deposit Override Ind	Char (1)		
	Automatic Deposit Ind	Char (1)		
	Pay In Deposit Ind	Char (1)		
	Ask For Invoice Ind	Char (1)		
	Imprint Ind	Char (1)		
	Imprint Tender Type	Char (20)		
	Show in Breakdown Ind	Char (1)		
	Display Ind	Char (1)		
	Discrepancy Display Type	Char (6)		
	Processor Type	Char (6)		
	Export Code	Char(6)		
	Profit Center	Char(6)		

Record Name	Field Name	Field Type	Default Value	Description
	Phone Authorization Type	Char(6)		
	Status	Char(1)	'A','C','D'	Indicates if the tender type configuration is new, has been changed, or being deleted
TBTTN	Record Type	Char(5)	'TBTTN'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Button configuration id	Number (6)		Left-Justified Identifier
	Button Config Desc	Char(120)		
	Button id	Number (6)		
	Button Desc	Char (120)		
	Layer Number	Number (1)		
	Sequence Number	Number (4)		Left-Justified Identifier

	Button Type	Char(6)		Valid Values include:
				U = Multi Selection
				S = Single Selection
				I = Single Item
				M = Major Category
				N = Minor Category
				X = No Button
				P = Programmable

	Effective Date	Char(14)		
	Text Color	Char (6)		
	Background Color	Number (6)		
	Department	Char(4)		
	Text	Char (10)		
	Parent Button id	Char(6)		
	Status	Char(1)	'A','C','D'	Indicates if the button configuration is new, has been changed, or being deleted
TPYIO	Record Type	Char(5)	'TPYIO'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier

Record Name	Field Name	Field Type	Default Value	Description
	Pay In Out id	Number(6)		
	Pay In Out Desc	Char(120)		
	Pay In Out Type	Char(1)	'I' – Pay In 'O' – Pay Out	Indicates whether the Pay In/Out type is a Pay In or a Pay Out
	Profit Center	Char(6)		
	Export Code	Char(6)		
	Tax Chart Code	Char(6)		
	Invoice Link	Char(1)	'Y', 'N'	Indicates whether or not an invoice should be linked with this Pay In/Out type
	Display Ind	Char(1)	'Y', 'N'	Indicates whether the Pay In/Out configuration is displayed as a valid option in the register
	Effective Date	Char(14)		Indicates the date that the Pay In/Out becomes effective for use in 'YYYYMMDD HHMMSS' format
	Status	Char(1)	'A','C','D'	Indicates if the Pay In/Out configuration is new, has been changed, or being deleted
TSPAY	Record Type	Char(5)	'TSPAY'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Supplier	Number(10)		

	Pay Type	Char(6)		Valid Values include:
				CASH = Cash
				MP = Money Order
				INVC = Invoice

	Supplier Payment Type id	Number(6)		
	Effective Date	Char(14)		Date the supplier payment method is first effective in 'YYYYMMDD HHMMSS' format
	Status	Char(1)	'A','C','D'	Indicates if the POS configuration is new, has been changed, or being deleted
TSTOR	Record Type	Char(5)	'TSTOR'	Record Identifier

Record Name	Field Name	Field Type	Default Value	Description
	Line id	Number(10)		Sequential Line Identifier
	Store	Number(10)		Left-Justified Store Identifier
	Status	Char(1)	'A' – Add 'D' – Delete 'C' - Change	Indicates to the POS if the POS configuration must be added or deleted or changed
TITEM	Record Type	Char(5)	'TITEM'	Record Identifier
	Line id	Number(10)		Sequential Line Identifier
	Item	Char(25)		Left-Justified Item Identifier
	Status	Char(1)	'A' – Add 'D' – Delete 'C' – Change	Indicates the item's status at the POS. Overlays of items as a result of a change to the merch criteria will have a 'C' status
	Button id	Number(6)	id	Indicates the identification number of the button
FTAIL	Record Type	Char(5)	'FTAIL'	Marks end of file
	Line id	Number(10)		Total number of lines in file
	Number of transactions	Number(10)		Number of transactions in file

posdnld (Download of Information to 3rd Party POS Systems)

Module Name	posdnld.pc
Description	Download of Information to 3rd Party POS Systems
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS70
Runtime Parameters	

Design Overview

Posdnld sends new and changed item/location information to 3rd Party POS systems.

Whenever new item/location level information is created or changed in RMS, a record is written to the POS_MODS table. This program moves information from this table to a flat file for downstream POS systems. Note that posdnld.pc produces a single output file for all locations.

Posdnld.pc sends only information that has changed since its last run. If a customer needs a full refresh of all item/location information to address some type of exception situation, posrefresh.pc should be run.

For ease of downstream client processing, posdnld and posrefresh produce output files with the same file format.

This program should be run daily.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program is run towards the end of the batch run when all pos_mods records have been created for the transaction day
Pre-Processing	N/A
Post-Processing	prepost.pc - posdnld_post() – records in POS_MODS are truncated.
Threading Scheme	Threaded by store

Restart/Recovery

The logical unit of work for this program is set at the store/item level. Threading is done by store using the v_restart_store view to thread properly.

Both table and file restart/recovery must be used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 10000 records (subject to change based on implementation).

Security Considerations

Price changes for all stores are stored in a Unix file with the processes default permissions (umask). Care should be exercised so that this file cannot be tampered with.

Key Tables Affected

Table	Select	Insert	Update	Delete
POS_MODS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
V_RESTART_STORE	Yes	No	No	No
POS_CONFIG_ITEMS	Yes	Yes	No	Yes
POS_COUPON_HEAD	Yes	No	Yes	No
POS_PROD_REST_HEAD	Yes	No	Yes	No
POS_MERCH_CRITERIA	Yes	No	No	No
POS_STORE	Yes	No	No	No

I/O Specification

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Determined by runtime parameter	IntCon000064

Output flat file specification

When the data is sent to the POS via POSDNLD.PC, the regular/clearance price indicator is included in the download file shown below.

All input comes from the POS_MODS table. All columns of this table can be NULL with the exception of tran_type and store. Most columns should default to blank (spaces) with the exception of:

- new_price, new_multi_units, new_multi_units_retail, proportional_tare_pct and fixed_tare_value. These should default to zero (0).
- start_date, start_time and end_time. These should default to period.vdate + 1.

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type.
	File Line Identifier	Number ID(10)	0000000001	ID of current line being created for output file.
	File Type Definition	Char(4)	POSD	Identifies file as 'POS Download'.
	File Create Date	Char(8)		Vdate, formatted to 'YYYYMMDD'.
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type.
	File Line Identifier	Number ID(10)	Sequential number. Created by program.	ID of current line being created for output file.
	Location Number	Number (10)	Store	Contains the store location that has been affected by the transaction.
	Update Type	Char(1)	Update type. Created by program.	Code used for retailer specific POS system. 1 - Transaction Types 1 & 2. 2 - Transaction Types 10 thru 18, 31 and 32, 50 thru 57, 59 thru 64. 3 - Transaction Types 21 & 22 4 - Transaction Types 25 & 26 0 - All other Transaction Types. These should never exist.
	Start Date	Char(8)	Start_date or vdate + 1 if NULL.	The effective date for the action determined by the transaction type of the record. Formatted to 'YYYYMMDD'.

Record Name	Field Name	Field Type	Default Value	Description
	Time	Char(6)	Start_time, End_time or start_date.	This field will be used in conjunction with starting a promotion (Transaction Type = 31). Start time will indicate the time of day that the promotion is scheduled to start. This field will also be used in conjunction with ending a promotion (Transaction Type = 32). Any other Transaction Type will use the time from the start_date column. Formatted to 'HH24MISS'.

Record Name	Field Name	Field Type	Default Value	Description
	Transaction Type	Number(2)	Tran_type	Indicates the type of transaction to determine what Oracle Retail action is being sent down to the stores from the Oracle Retail POS_MODS table. Valid values include: 01 - Add new transaction level item 02 - Add new lower than transaction level item 10 - Change Short Description of existing item 12 - Change Description of an existing item 13 - Change Department/Class/Subclass of an existing item 20 - Change in VAT rate 21 - Delete existing transaction level item 22 - Delete existing lower than transaction level item 25 - Change item's status 26 - Change item's taxable indicator 50 - Change item's launch date 51 - Change item's quantity key options 52 - Change item's manual price entry options 53 - Change item's deposit code 54 - Change item's food stamp indicator 55 - Change item's WIC indicator 56 - Change item's proportional tare percent 57 - Change item's fixed tare value 58 - Change item's rewards eligible indicator 59- Change item's electronic marketing clubs 60 - Change item's return policy 61 - Change item's stop sale indicator 62 – Change item's returnable indicator 63 – Change item's refundable indicator 64 – Change item's back order indicator 65 – Change items deposit linked item 66 - Change Existing Item's Uin Type 67 - Change Existing Item's Uin Label 68 - Change Existing Item's Capture Time 69 - Change Existing Item's External UIN Ind 70 - Related Item's information added 71 – Related Item's information updated 72 – Related Item's information deleted
	Item Number ID	Char(25)	Item	This field identifies the unique alphanumeric value for the transaction level item. The ID number of an item from the Retail ITEM_MASTER table.
	Item Number Type	Char(6)	Item_number_type	This field identifies the type of the item number ID.

Record Name	Field Name	Field Type	Default Value	Description
	Format ID	Char(1)	Format_id	This field identifies the type of format used if the item_number_type is 'VPLU'.
	Prefix	Number(2)	Prefix	This field identifies the prefix used if the item_number_type is 'VPLU'. In case of single digit prefix, the field will be right-justified with blank padding.
	Reference Item	Char(25)	Ref_item	This field identifies the unique alphanumeric value for an item one level below the transaction level item.
	Reference Item Number Type	Char(6)	Ref_item_number_type	This field identifies the type of the ref item number ID.
	Reference Item Format ID	Char(1)	Ref_format _id	This field identifies the type of format used if the ref item_number_type is 'VPLU'.
	Reference Item Prefix	Number (2)	Ref_prefix	This field identifies the prefix used if the ref item_number_type is 'VPLU'. In case of single digit prefix, the field will be right-justified with blank padding.
	Item Short Description	Char(120)	Item_short _desc	Contains the short description associated with the item.
	Item Long Description	Char (250)	Item_long _desc	Contains the long description associated with the item.
	Department ID	Number (4)	Dept	Contains the item's associated department.
	Class ID	Number (4)	Class	Contains the item's associated class.
	Subclass ID	Number (4)	Subclass	Contains the item's associated subclass.
	New Price	Number (20,4)	New_price	Contains the new effective price in the selling unit of measure for an item when the transaction type identifies a change in price. Otherwise, the current retail price is used to populate this field. This field is stored in the local currency.
	New Selling UOM	Char(4)	New_selling _uom	Contains the new selling unit of measure for an item's single-unit retail.
	New Multi Units	Number (12,4)	New_multi _units	Contains the new number of units sold together for multi-unit pricing. This field is only filled when a multi-unit price change is being made.
	New Multi Units Retail	Number (20,4)	New_multi _units_retail	Contains the new price in the selling unit of measure for units sold together for multi-unit pricing. This field is only filled when a multi-unit price change is being made. This field is stored in the local currency.
	New Multi Selling UOM	Char(4)	New_multi _selling _uom	Contains the new selling unit of measure for an item's multi-unit retail.

Record Name	Field Name	Field Type	Default Value	Description

	Status	Char(1)	Status	Populates if tran_type for the item is 1(new item added) or 25 (change item status) or 26 (change taxable indicator).
				Contains the current status of the item at the store.
				Valid values are:
				A = Active
				I = Inactive
				D = Delete
				C = Discontinued

	Taxable Indicator	Char(1)	Taxable_ind	Populates if tran_type for the item is 1 (new item added) or 25 (change item status) or 26 (change taxable indicator). Indicates whether the item is taxable at the store. Valid values are 'Y' or 'N'.
	Promotion Number	Number (10)	Promotion	This field contains the number of the promotion for which the discount originated. This field, along with the Mix Match Number or Threshold Number is used to isolate a list of items that tie together with discount information.
	Mix Match Number	Number (10)	Mix_match_no	This field contains the number of the mix and match in a promotion for which the discount originated. This field, along with the promotion, is used to isolate a list of items which tie together with the mix and match discount information.
	Mix Match Type	Char(1)	Mix_match_type	This field identifies which types of mix and match record this item belongs to. The item can either be a buy (exists on PROM_MIX_MATCH_BUY) or a get (exists on PROM_MIX_MATCH_GET) item. This field is only populated when the MIX_MATCH_NO is populated. Valid values are: B - Buy G – Get
	Threshold Number	Number (10)	Threshold_no	This field contains the number of the threshold in a promotion for which the discount originated. This field, along with the promotion, is used to isolate a list of items that tie together with discount information.
	Launch Date	Char(8)	Launch_date	Date that the item should first be sold at this location, formatted to 'YYYYMMDD'.
	Quantity Key Options	Char(6)	Qty_key _options	Determines whether the price can/should be entered manually on a POS for this item at the location. Valid values are in the code_type 'RPO'. Current values include 'R - required', 'P - Prohibited'.
	Manual Price Entry	Char(6)	Manual_price_entry	Determines whether the price can/should be entered manually on a POS for this item at the location. Valid values are in the code_type 'RPO'. Current values include 'R - required', 'P - Prohibited', and 'O - Optional'.

Record Name	Field Name	Field Type	Default Value	Description
	Deposit Code	Char(6)	Deposit_code	Indicates whether a deposit is associated with this item at the location. Valid values are in the code_type 'DEPO'. Additional values may be added or removed as needed. Deposits are not subtracted from the retail of an item uploaded to RMS, etc. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.
	Food Stamp Indicator	Char(1)	Food_stamp _ind	Indicates whether the item is approved for food stamps at the location.
	WIC Indicator	Char(1)	Wic_ind	Indicates whether the item is approved for WIC at the location.
	Proportional Tare Percent	Number (12,4)	Proportional_tare_p ct	Holds the value associated of the packaging in items sold by weight at the location. The proportional tare is the proportion of the total weight of a unit of an item that is packaging (for example, if the tare item is bulk candy, this is the proportional of the total weight of one piece of candy that is the candy wrapper). The only processing RMS does involving the proportional tare percent is downloading it to the POS.
	Fixed Tare Value	Number (12,4)	Fixed_tare_value	Holds the value associated of the packaging in items sold by weight at the location. Fixed tare is the tare of the packaging used to (for example, if the tare item is bulk candy, this is weight of the bag and twist tie). The only processing RMS does involving the fixed tare value is downloading it to the POS. Fixed tare is not subtracted from items sold by weight when sales are uploaded to RMS, and so on. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.
	Fixed Tare UOM	Char(4)	Fixed_tare _uom	Holds the unit of measure value associated with the tare value. The only processing RMS does involving the proportional tare value and unit of measure (UOM) is downloading it to the POS. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.
	Reward Eligible Indicator	Char(1)	Reward _eligible_ind	Holds whether the item is legally valid for various types of bonus point/award programs at the location.
	Elective Marketing Clubs	Char(6)	Elect_mtk _clubs	Holds the code that represents the marketing clubs to which the item belongs at the location. Valid values can belong to the code_type 'MTKC'. Additional values can be added or removed from the code type as needed.
	Return Policy	Char(6)	Return _pocily	Holds the return policy for the item at the location. Valid values for this field belong to the code_type 'RETP'.
	Stop Sale Indicator	Char(1)	Stop_sale _ind	Indicates that sale of the item should be stopped immediately at the location (for example, in case of recall, and so on).
	Returnable Indicator	Char(1)	Returnable _ind	Indicates that the item is returnable at the location when equal to 'Y'es. Indicates that the item is not returnable at the location when equal to 'N'o.

Record Name	Field Name	Field Type	Default Value	Description
	Refundable Indicator	Char(1)	Refundable _ind	Indicates that the item is refundable at the location when equal to 'Y'es. Indicates that the item is not refundable at the location when equal to 'N'o.
	Back Order Indicator	Char(1)	Back_order _ind	Indicates that the item is back orderable at the location when equal to 'Y'. Indicates that the item is not back orderable when equal to 'N'o.
	Vat Code	Char(6)		Indicates the VAT code used with this item.
	Vat Rate	Number (20,10)		Indicates the VAT rate associated with this item and VAT code.
	Class Vat Indicator	Char(1)		Indicates whether or not the class VAT indicator is on or off for the class that this item exists in.
	Promotion Item Type	Char(1)	Prom_item _type	Indicates the type of items where the promotion should apply. Valid values for this field belong to the code_type 'PREM.'
	CATCH_WEI GHT_IND	Char(1)		Indicator whether or not an item is a catch weight item.
	SALE_TYPE	CHAR(6)		Set-up of the item at the time of sale. Valid values are: V – variable weight each L – loose weight
	CONTAINER _ITEM	CHAR(25)		Linked container item number for a contents item.
	UIN_TYPE	CHAR(6)		Unique identification number (UIN) used to identify the instances of the item at the location.
	UIN_LABEL	CHAR(6)		The label for the UIN when displayed in SIM.
	CAPTURE_T IME	CHAR(6)		Indicate when the UIN should be captured for an item during transaction processing.
	EXT_UIN_IN D	CHAR(1)		This Yes/No indicator indicates if UIN is being generated in the external system.
	RELATIONS HIP_ID	NUMBER(20)		Unique identifier for each relationship.
	RELATIONS HIP_NAME	VARCHAR2(25 5)		Relationship name for the relationship id.
	RELATIONS HIP_TYPE	VARCHAR2(6)		The type of relationship.
	MANDATOR Y_IND	VARCHAR2(1)		Indicate if the relationship is mandatory or not (Y/N).
	RELATED_IT EM	VARCHAR2(25)		The related item associated with relationship.
	PRIORITY	NUMBER(4)		The priority of the relationship mainly for SUBS type.
	REL_START_ DATE	DATE		The effective date of the relationship.
	END_DATE	DATE		The end date of the relationship.

Record Name	Field Name	Field Type	Default Value	Description
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type.
	Line number	Number(10)		Sequential file line number (total # lines in file).
	Number of transactions	Number(10)		Number of transactions in file.

posrefresh (Download of Full Refresh Information for a Full Store to 3rd Party POS)

Module Name	posrefresh.pc
Description	Download of Full Refresh Information for a Full Store to 3rd Party POS
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS148
Runtime Parameters	

Design Overview

Posrefresh sends item/location information to 3rd Party POS systems.

This program is intended to be used for initial implementation and to address exception situations. For regular download of new and changed item/location information to 3rd party POS systems, posdnld.pc should be run.

For ease of downstream client processing, posdnld and posrefresh produce output files with the same file format.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	This program is intended to be used for initial implementation and to address exception situations. For regular download of new and changed item/location information to 3rd party POS systems, posdnld.pc should be run.
Pre-Processing	N/A

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Security Considerations

Price changes for all stores are stored in a Unix file with the processes default permissions (`umask`). Care should be exercised so that this file cannot be tampered with.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
CLASS	Yes	No	No	No
ITEM_LOC_TRAITS	Yes	No	No	No
STORE	Yes	No	No	No

I/O Specification

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000064

Record Name	Field Name	Field Type	Default Value	Description
File Header	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type.
	File Line Identifier	Number ID(10)	0000000001	ID of current line being created for output file.
	File Type Definition	Char(4)	POSD	Identifies file as 'POS Download'.
	File Create Date	Char(8)		Vdate, formatted to 'YYYYMMDD'.
File Detail	File Type Record Descriptor	Char(5)	FDETL	Identifies file record type.

Record Name	Field Name	Field Type	Default Value	Description
	File Line Identifier	Number ID(10)	Sequential number. Created by program.	ID of current line being created for output file.
	Location Number	Number (10)	Store	Contains the store location that has been affected by the transaction.
	Update Type	Char(1)	Update type. Created by program.	Code used for retailer specific POS system. 1 - Transaction Types 1 & 2. 2 - Transaction Types 10 thru 18, 31 and 32, 50 thru 57, 59 thru 64. 3 - Transaction Types 21 & 22 4 - Transaction Types 25 & 26 0 - All other Transaction Types. These should never exist.
	Start Date	Char(8)	Start_date or vdate + 1 if NULL.	The effective date for the action determined by the transaction type of the record. Formatted to 'YYYYMMDD'.
	Time	Char(6)	Start_time, End_time or start_date.	This field will be used in conjunction with starting a promotion (Transaction Type = 31). Start time will indicate the time of day that the promotion is scheduled to start. This field will also be used in conjunction with ending a promotion (Transaction Type = 32). Any other Transaction Type will use the time from the start_date column. Formatted to 'HH24MISS'.

Record Name	Field Name	Field Type	Default Value	Description
	Transaction Type	Number(2)	Tran_type	Indicates the type of transaction to determine what Oracle Retail action is being sent down to the stores from the Oracle Retail POS_MODS table. Valid values include: 01 - Add new transaction level item 02 - Add new lower than transaction level item 10 - Change Short Description of existing item 12 - Change Description of an existing item 13 - Change Department/Class/Subclass of an existing item 20 - Change in VAT rate 21 - Delete existing transaction level item 22 - Delete existing lower than transaction level item 25 - Change item's status 26 - Change item's taxable indicator 50 - Change item's launch date 51 - Change item's quantity key options 52 - Change item's manual price entry options 53 - Change item's deposit code 54 - Change item's food stamp indicator 55 - Change item's WIC indicator 56 - Change item's proportional tare percent 57 - Change item's fixed tare value 58 - Change item's rewards eligible indicator 59- Change item's electronic marketing clubs 60 - Change item's return policy 61 - Change item's stop sale indicator 62 – Change item's returnable indicator 63 – Change item's refundable indicator 64 – Change item's back order indicator 65 – Change items deposit linked item
	Item Number ID	Char(25)	Item	This field identifies the unique alphanumeric value for the transaction level item. The ID number of an item from the Retail ITEM_MASTER table.
	Item Number Type	Char(6)	Item_number_type	This field identifies the type of the item number ID.

Record Name	Field Name	Field Type	Default Value	Description
	Format ID	Char(1)	Format_id	This field identifies the type of format used if the item_number_type is 'VPLU'.
	Prefix	Number(2)	Prefix	This field identifies the prefix used if the item_number_type is 'VPLU'. In case of single digit prefix, the field will be right-justified with blank padding.
	Reference Item	Char(25)	Ref_item	This field identifies the unique alphanumeric value for an item one level below the transaction level item.
	Reference Item Number Type	Char(6)	Ref_item_number_type	This field identifies the type of the ref item number ID.
	Reference Item Format ID	Char(1)	Ref_format_id	This field identifies the type of format used if the ref item_number_type is 'VPLU'.
	Reference Item Prefix	Number (2)	Ref_prefix	This field identifies the prefix used if the ref item_number_type is 'VPLU'. In case of single digit prefix, the field will be right-justified with blank padding.
	Item Short Description	Char(120)	Item_short_desc	Contains the short description associated with the item.
	Item Long Description	Char (250)	Item_long_desc	Contains the long description associated with the item.
	Department ID	Number (4)	Dept	Contains the item's associated department.
	Class ID	Number (4)	Class	Contains the item's associated class.
	Subclass ID	Number (4)	Subclass	Contains the item's associated subclass.
	New Price	Number (20,4)	New_price	Contains the new effective price in the selling unit of measure for an item when the transaction type identifies a change in price. Otherwise, the current retail price is used to populate this field. This field is stored in the local currency.
	New Selling UOM	Char(4)	New_selling_uom	Contains the new selling unit of measure for an item's single-unit retail.
	New Multi Units	Number (12,4)	New_multi_units	Contains the new number of units sold together for multi-unit pricing. This field is only filled when a multi-unit price change is being made.
	New Multi Units Retail	Number (20,4)	New_multi_units_retail	Contains the new price in the selling unit of measure for units sold together for multi-unit pricing. This field is only filled when a multi-unit price change is being made. This field is stored in the local currency.

Record Name	Field Name	Field Type	Default Value	Description
	New Multi Selling UOM	Char(4)	New_multi_selling_uom	Contains the new selling unit of measure for an item's multi-unit retail.

	Status	Char(1)	Status	Populates if tran_type for the item is 1(new item added) or 25 (change item status) or 26 (change taxable indicator).
				Contains the current status of the item at the store.
				Valid values are:
				A = Active
				I = Inactive
				D = Delete
				C = Discontinued

	Taxable Indicator	Char(1)	Taxable_ind	Populates if tran_type for the item is 1 (new item added) or 25 (change item status) or 26 (change taxable indicator). Indicates whether the item is taxable at the store. Valid values are 'Y' or 'N'.
	Promotion Number	Number (10)	Promotion	This field contains the number of the promotion for which the discount originated. This field, along with the Mix Match Number or Threshold Number is used to isolate a list of items that tie together with discount information.
	Mix Match Number	Number (10)	Mix_match_no	This field contains the number of the mix and match in a promotion for which the discount originated. This field, along with the promotion, is used to isolate a list of items which tie together with the mix and match discount information.
	Mix Match Type	Char(1)	Mix_match_type	This field identifies which types of mix and match record this item belongs to. The item can either be a buy (exists on PROM_MIX_MATCH_BUY) or a get (exists on PROM_MIX_MATCH_GET) item. This field is only populated when the MIX_MATCH_NO is populated. Valid values are: B - Buy G – Get
	Threshold Number	Number (10)	Threshold_no	This field contains the number of the threshold in a promotion for which the discount originated. This field, along with the promotion, is used to isolate a list of items that tie together with discount information.
	Launch Date	Char(8)	Launch_date	Date that the item should first be sold at this location, formatted to 'YYYYMMDD'.

Record Name	Field Name	Field Type	Default Value	Description
	Quantity Key Options	Char(6)	Qty_key _options	Determines whether the price can/should be entered manually on a POS for this item at the location. Valid values are in the code_type 'RPO'. Current values include 'R - required', 'P - Prohibited'.
	Manual Price Entry	Char(6)	Manual_pric e_entry	Determines whether the price can/should be entered manually on a POS for this item at the location. Valid values are in the code_type 'RPO'. Current values include 'R - required', 'P - Prohibited', and 'O - Optional'.
	Deposit Code	Char(6)	Deposit_cod e	Indicates whether a deposit is associated with this item at the location. Valid values are in the code_type 'DEPO'. Additional values may be added or removed as needed. Deposits are not subtracted from the retail of an item uploaded to RMS, etc. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.
	Food Stamp Indicator	Char(1)	Food_stamp _ind	Indicates whether the item is approved for food stamps at the location.
	WIC Indicator	Char(1)	Wic_ind	Indicates whether the item is approved for WIC at the location.
	Proportional Tare Percent	Number (12,4)	Proportional _tare_pct	Holds the value associated of the packaging in items sold by weight at the location. The proportional tare is the proportion of the total weight of a unit of an item that is packaging (for example, if the tare item is bulk candy, this is the proportional of the total weight of one piece of candy that is the candy wrapper). The only processing RMS does involving the proportional tare percent is downloading it to the POS.
	Fixed Tare Value	Number (12,4)	Fixed_tare_v alue	Holds the value associated of the packaging in items sold by weight at the location. Fixed tare is the tare of the packaging used to (for example, if the tare item is bulk candy, this is weight of the bag and twist tie). The only processing RMS does involving the fixed tare value is downloading it to the POS. Fixed tare is not subtracted from items sold by weight when sales are uploaded to RMS, and so on. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.

Record Name	Field Name	Field Type	Default Value	Description
	Fixed Tare UOM	Char(4)	Fixed_tare _uom	Holds the unit of measure value associated with the tare value. The only processing RMS does involving the proportional tare value and unit of measure (UOM) is downloading it to the POS. This kind of processing is the responsibility of the retailer and should occur before sales are sent to any Oracle Retail application.
	Reward Eligible Indicator	Char(1)	Reward _eligible_ind	Holds whether the item is legally valid for various types of bonus point/award programs at the location.
	Elective Marketing Clubs	Char(6)	Elect_mtk _clubs	Holds the code that represents the marketing clubs to which the item belongs at the location. Valid values can belong to the code_type 'MTKC'. Additional values can be added or removed from the code type as needed.
	Return Policy	Char(6)	Return _pocily	Holds the return policy for the item at the location. Valid values for this field belong to the code_type 'RETP'.
	Stop Sale Indicator	Char(1)	Stop_sale _ind	Indicates that sale of the item should be stopped immediately at the location (for example, in case of recall, and so on).
	Returnable Indicator	Char(1)	Returnable _ind	Indicates that the item is returnable at the location when equal to 'Y'es. Indicates that the item is not returnable at the location when equal to 'N'o.
	Refundable Indicator	Char(1)	Refundable _ind	Indicates that the item is refundable at the location when equal to 'Y'es. Indicates that the item is not refundable at the location when equal to 'N'o.
	Back Order Indicator	Char(1)	Back_order _ind	Indicates that the item is back orderable at the location when equal to 'Y'. Indicates that the item is not back orderable when equal to 'N'o.
	Vat Code	Char(6)		Indicates the VAT code used with this item.
	Vat Rate	Number (20,10)		Indicates the VAT rate associated with this item and VAT code.
	Class Vat Indicator	Char(1)		Indicates whether or not the class VAT indicator is on or off for the class that this item exists in.
	Promotion Item Type	Char(1)	Prom_item _type	Indicates the type of items where the promotion should apply. Valid values for this field belong to the code_type 'PREM.'
	CATCH_WEIGHT_IND	Char(1)		Indicator whether or not an item is a catch weight item.

Record Name	Field Name	Field Type	Default Value	Description
	SALE_TYPE	CHAR(6)		Set-up of the item at the time of sale. Valid values are: V – variable weight each L – loose weight
	CONTAINER_ITEM	CHAR(25)		Linked container item number for a contents item.
	UIN_TYPE	CHAR(6)		Unique identification number (UIN) used to identify the instances of the item at the location.
	UIN_LABEL	CHAR(6)		The label for the UIN when displayed in SIM.
	CAPTURE_TIME	CHAR(6)		Indicate when the UIN should be captured for an item during transaction processing.
	EXT_UIN_IND	CHAR(1)		This Yes/No indicator indicates if UIN is being generated in the external system.
	RELATIONSHIP_ID	NUMBER(20)		Unique identifier for each relationship.
	RELATIONSHIP_NAME	VARCHAR2(255)		Relationship name for the relationship id.
	RELATIONSHIP_TYPE	VARCHAR2(6)		The type of relationship.
	MANDATORY_IND	VARCHAR2(1)		Indicate if the relationship is mandatory or not (Y/N)
	RELATED_ITEM	VARCHAR2(25)		The related item associated with relationship.
	PRIORITY	NUMBER(4)		The priority of the relationship mainly for SUBS type.
	REL_START_DATE	DATE		The effective date of the relationship.
	END_DATE	DATE		The end date of the relationship.
File Trailer	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type.
	Line number	Number(10)		Sequential file line number (total # lines in file).
	Number of transactions	Number(10)		Number of transactions in file.

taxdnld (Tax Download to 3rd Party POS in Global Tax [GTAX] Implementations)

Module Name	taxdnld
Description	Tax Download to 3rd Party POS in Global Tax [GTAX] Implementations
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS124

Design Overview

Taxdnld.pc downloads the tax information to 3rd Party POS systems when the RMS default tax type is GTAX.

This program only needs to be run is the client uses RMS Global Tax functionality.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	As Needed
Scheduling Considerations	Optional - This program only needs to be run is the client uses RMS Global Tax (GTAX) functionality
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threading logic is based on STORE number

Restart/Recovery

The logical unit of work for this module is defined by item, ref_item and store combination. This batch program uses table-based restart/recovery. The commit happens in the database when the commit_max_ctr is reached.

Key Tables Affected

Table	Select	Insert	Update	Delete
POS_MODS_TAX_INFO	Yes	No	No	No
GTAX_ITEM	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No

Table	Select	Insert	Update	Delete
V_RESTART_STORE	Yes	No	No	No
CLASS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000020

I/O Specification

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File Type Record Descriptor	Char(5)	FHEAD	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	File Type Definition	Char(4)	TAXD	Identifies file as 'Tax Details'
	File Create Date	Char(14)	create date	Vdate in 'YYYMMDDHHMISS'format
FDETL	FDETL	Char(5)	FDETL	FDETL
	File Line Sequence	Number(10)		Line number of the current file
	STORE	Char(10)		Store number
	ITEM	Char(25)		Item
	item_number_type	Char(6)	S - Store W - Warehouse	Item number type
	format_id	Char(1)		Format id
	prefix	Char(2)		Prefix
	ref_item	Char(25)		Reference Item
	ref_item_number_type	Char(6)		Refrerence item number type
	ref_format_id	Char(1)		Ref format id
	ref_prefix	Char(2)		Ref no. prefix

Record Name	Field Name	Field Type	Default Value	Description
	taxable indicator	Char(1)		Taxable indicator
	class_vat_ind	Char(1)		Class vat indicator
FTAXD	FTAXD	Char(5)	FTAXD	FTAXD
	File Line Sequence	Number(10)		Line number of the current file
	tax_code	Char(10)		Tax code
	tax_rate	Char(20)		Tax rate
	calculation_basis	Char(1)		Calculation basis
	tax_amount	Char(20)		Tax amount
	effective_from	Char(8)		Effective from
	time	Char(6)		Time
	status	Char(1)		Status
FTAIL	File Type Record Descriptor	Char(5)	FTAIL	Identifies file record type
	File Line Sequence	Number(10)		Line number of the current file
	rec_counter	Number(10)		Record counter

txrposdn (Preparation for Tax Download to 3rd Party POS in Sales and US Tax [SALES] Implementations)

Module Name	txrposdn
Description	Preparation for Tax Download to 3rd Party POS in Sales & US Tax [SALES] Implementations
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Integration Catalog ID	RMS152

Design Overview

This batch program processes records from the GEOCODE_TXCDE (GEOCODE tax code), PRODUCT_TAX_CODE (PRODUCT tax code), and TAX_RATES (tax rate) tables and writes all item/location combinations to the TIF_EXPLODE table. A separate batch program TIFPOSDN.PC processes records on the TIF_EXPLODE table, computes the tax rate and writes it to the POS flat file.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	Optional - This program only needs to be run is the client uses RMS Sales and Use Tax (SALES) functionality
Pre-Processing	N/A
Post-Processing	TIFPOSDN.PC
Threading Scheme	N/A

Restart/Recovery

The logical unit of work for the TXRPOSDN module is store/item or store/department with a recommended commit counter setting of 10,000. Each time the record counter equals the maximum recommended commit number, the processed value is stored into the database and saved.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
PRODUCT_TAX_CODE	Yes	No	Yes	No
STORE	Yes	No	No	No
GEOCODE_TXCDE	Yes	No	Yes	No
GEOCODE_STORE	Yes	No	No	No
TAX_RATES	Yes	No	Yes	No
TIF_EXPLODE	Yes	Yes	No	No
PERIOD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000105

Input/Output Specification

This program writes to the TIF_EXPLODE table. The structure of the table is the specification.

tifposdn (Tax Download to 3rd Party POS in Sales and US Tax [SALES] Implementations)

Module Name	tifposdn
Description	Tax Download to 3rd Party POS in Sales & Use Tax [SALES] Implementations
Functional Area	Integration – 3rd Party POS
Module Type	Integration
Module Technology	ProC
Integration Catalog ID	RMS116

Design Overview

This program processes data from TIF_EXPLODE table, computes a cumulative tax rate for each item-location combination, and writes the cumulative tax rate to a flat file. The flat file is then available for upload to and processing in the point-of-sale system.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	Optional - This program only needs to be run is the client uses RMS Sales and Use Tax (SALES) functionality
Pre-Processing	txrposdn.pc
Post-Processing	Prepost tifposdn post
Threading Scheme	N/A

Restart/Recovery

The TIFPOSDN program is used to download records in the TIF_EXPLODE table into a POS flat file. The logical unit of work for this program is set at the item/department/store combination level. Only table recovery is used. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Key Tables Affected

Table	Select	Insert	Update	Delete
TIF_EXPLODE	Yes	No	No	No
GEOCODE_STORE	Yes	No	No	No
PRODUCT_TAX_CODE	Yes	No	No	No
TAX_RATES	Yes	No	No	No
GEOCODE_TXCDE	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000104

Input/Output Specification

The output filename is not fixed; the output filename is determined by a runtime parameter.

Output File Layout

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	File record descriptor	Char(5)	FHEAD	Identifies file record type
	Line number	Number(10)	0000000001	Identifies the line number
	Program descriptor	Char(8)	tifposdn	Identifies the program
	Create date	Char(14)	File create date	YYYYMMDDHH24MISS format
THEAD	File record descriptor	Char(5)	THEAD	Identifies Transaction Header
	Line Number	Number(10)		Sequential Line Number
	Transaction Number	Number(10)		Transaction Number
	Store	Number(10)		Identifies store number

Record Name	Field Name	Field Type	Default Value	Description
TDETL	File Record descriptor	Char(5)	TDETL	Identifies transaction detail
	Line Number	Number(10)		Sequential Line Number
	Transaction Number	Number(10)		Transaction Number
	Department	Number(4)		Department number
	Item	Char(25)		Identifies the item
	Tax Rate	Number(8)		A new sales tax associated with the item (% = /5)
	Start Date	Char(14)		Start date for the new tax rate. (in YYYYMMDD format)
TTAIL	File Record Descriptor	Char(5)	TTAIL	Identifies transaction trailer
	Line Number	Number(10)		Sequential line number
	Transaction Number	Number(10)		Transaction Number
	Detail Counter	Number(10)		Number of detail records in transaction.
FTAIL	File Record descriptor	Char(5)	FTAIL	Identifies file trailer
	Line Number	Number(10)		Sequential Line Number
	Detail Line Counter	Number(10)		Total Number of detail records processed

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Integration with Advanced Inventory Planning

Overview

This chapter contains information about the processes that enables out of the box integration with Oracle Retail Advanced Inventory Planning (AIP).

AIP is a time phased replenishment system. AIP uses foundation and inventory information mastered in RMS to suggest purchase orders. These suggested purchase orders are sent to RMS to be actualized.

Extracts from RMS are performed via batch ReTL (Retail Extract Transform) scripts described in this chapter. Suggested purchase orders are publiched to the RIB by AIP; RMS subscribes to these purchase order RIB messages. For more information about the PO Subscription, see the *Oracle Retail Merchandising System Operations Guide, Volume 2 - Message Publication and Subscription Design*

According to RRA, there are two RPAS programs that should be run for AIP integration, they are:

- ftmednld.pc
- rmse_rpas_dailt_sales.ksh

For more information about the rpas programs, see chapter Integration with Oracle retail Planning.

RMS and AIP integration stands independent of additional RPAS integration for other RPAS based solutions. For more information about configuration of ReTL, see the *Oracle Retail Merchandising System Operations Guide Volume 3 – Back-End Configuration and Operations.*

AIP integration jobs only need to be scheduled if a client integrates with AIP.

Foundation Data vs Transaction/Inventory Data

AIP requires both foundation and transaction data from RMS. In most cases, foundation data extracts can be run ad hoc at any time.

Transaction and inventory extracts should be scheduled in phase 4 after main RMS inventory processing (Phase 3).

Scheduling and dependency information for each program can be found in the program details section of this chapter.

Program Summary

Program	Description
rmse_aip_batch.ksh	Optional Wrapper Script to run all AIP Extracts
pre_rmse_aip.ksh	Extract of RMS System level settings for AIP
rmse_aip_merchhier.ksh	Extract of Merchandise Hierarchy for AIP
rmse_aip_orghier.ksh	Extract of Organization Hierarchy for AIP

Program	Description
rmse_aip_item_master.ksh	Extract of Items for AIP
rmse_aip_store.ksh	Extract of Stores for AIP
rmse_aip_wh.ksh	Extract of Warehouses for AIP
rmse_aip_substitute_items.ksh	Extract of Substitute Items for AIP
rmse_aip_suppliers.ksh	Extract of Suppliers for AIP
rmse_aip_alloc_in_well.ksh	Extract of Allocations in the Well Quantities for AIP
rmse_aip_cl_po.ksh	Extract of AIP Generated POs, Allocations and Transfers Cancelled or Closed in RMS for AIP
rmse_aip_future_delivery_alloc.ksh	Extract of Allocation Quantities for Future Delivery for AIP
rmse_aip_future_delivery_order.ksh	Extract of Purchase Order Quantities for Future Delivery for AIP
rmse_aip_future_delivery_tsf.ksh	Extract On Order and In Transit Transfer Quantities for Future Delivery for AIP
rmse_aip_future_item_loc_traits.ksh	Extract of Shelf Life on Receipt Location Trait for AIP
rmse_aip_item_retail.ksh	Extract of Forecasted Items for AIP
rmse_aip_item_sale.ksh	Extract of Scheduled Item Maintenance On/Off Sale Information for AIP
rmse_aip_item_supp_country.ksh	Extract of Order Multiples by Item/Supplier/Origin Country for AIP
rmse_aip_rec_qty.ksh	Extract of Received PO, Allocation and Transfer Quantities for AIP
rmse_aip_store_cur_inventory.ksh	Extract of Store Current Inventory data for AIP
rmse_aip_tsf_in_well.ksh	Extract of Transfer in the Well Quantities to AIP
rmse_aip_wh_cur_inventory.ksh	Extract of Warehouse Current Inventory for AIP

rmse_aip_batch (Optional Wrapper Script to run all AIP Extracts)

Module Name	rmse_aip_batch.ksh
Description	Optional Wrapper Script to run all AIP Extracts
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	ksh
Catalog ID	N/A
Runtime Parameters	RMS118

Design Overview

The rmse_aip_batch.ksh script is an optional wrapper that runs all extracts from RMS for AIP.

This wrapper script assumes default input parameters for some jobs. Care should be taken to ensure that if a client uses this wrapper script, those default input parameters are either correct or updated to the correct value for the implementation.

This wrapper script also assumes that all extracts from RMS should be run. There are cases (detailed in the extract script specific documentation) where this might not be the case. Care should be taken to ensure that if a client uses this wrapper script, it is updated as needed to reflect the extracts appropriate to the implementation.

This wrapper script also assumes that that all extracts should be run sequentially at a single point in the RMS batch cycle. This may or may not be the best assumption for a given implementation.

If a client chooses not to use this wrapper script, he can schedule most AIP integration jobs at ad-hoc at any time in the batch cycle. Only a few jobs have specific dependencies. Most data can be sent to AIP early in the cycle. Only a few jobs will have to wait until later in the batch cycle. Some clients find are able to start the AIP processing cycle earlier in if they do not use this wrapper script.

If a client uses this wrapper script, no extraction for AIP will be performed until the most restrictive dependencies allow it. This may mean a delay in getting any information to AIP so its processing cycle can begin.

The wrapper script is convienet, but may not be the right choice for all implementations.

The scripts included in this wrapper are:

- pre_rmse_aip.ksh
- rmse_aip_item_master.ksh
- rmse_aip_item_supp_country.ksh
- rmse_aip_merchhier.ksh
- rmse_aip_orghier.ksh
- rmse_aip_store.ksh
- rmse_aip_suppliers.ksh
- rmse_aip_wh.ksh

- rmse_aip_item_retail.ksh
- rmse_aip_item_loc_traits.ksh
- rmse_aip_substitute_items.ksh
- rmse_aip_store_cur_inventory.ksh
- rmse_aip_wh_cur_inventory.ksh
- rmse_aip_future_delivery_alloc.ksh
- rmse_aip_alloc_in_well.ksh
- rmse_aip_future_delivery_order.ksh
- rmse_aip_future_delivery_tsf.ksh
- rmse_aip_tsf_in_well.ksh
- rmse_aip_item_sale.ksh
- rmse_aip_cl_po.ksh
- rmse_aip_rec_qty.ksh

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Optional – If a client uses this wrapper script, no extraction for AIP will be performed until the most restrictive sub script dependencies allow it (late in Phase 4) This may mean a delay in getting any information to AIP so its processing cycle can begin If this script is NOT used, it is possible to get some data to AIP earlier in the total batch cycle. This may have an impact on when AIP is able to begin AIP batch processing
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Integration Contract

N/A

pre_rmse_aip (Extract of RMS System level settings for AIP)

Module Name	pre_rmse_aip.ksh
Description	Extract of RMS System level settings for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS159
Runtime Parameters	

Design Overview

This script extracts assorted RMS system level settings to files. This module produces 14 single value output files. These files can be loaded into AIP.

Most RETL programs use schema files to describe the definition of the output files. As the files produced by this module are incredibly simple, no schema files are used.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	This program should be scheduled early in the ad hoc cycle. It must be run before all other extracts for AIP
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
RETL_EXTRACT_DATES	Yes	No	No	No

Table	Select	Insert	Update	Delete
CURRENCY_RATES	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	consolidation_code.txt
Integration Contract	IntCon000180

Field Name	Field Type	Required
CONSOLIDATION_CODE	Varchar2(1)	Yes

Integration Type	Download from RMS
File Name	vat_ind.txt
Integration Contract	IntCon000181

Field Name	Field Type	Required
VAT_IND	Varchar2(6)	Yes

Integration Type	Download from RMS
File Name	stkldgr_vat_incl_retl_ind.txt
Integration Contract	IntCon000182

Field Name	Field Type	Required
STKLDGR_VAT_INCL_RETL_IND	Varchar2(1)	Yes

Integration Type	Download from RMS
File Name	multi_currency_ind.txt
Integration Contract	IntCon000183

Field Name	Field Type	Required
MULTI_CURRENCY_IND	Varchar2(1)	Yes

Integration Type	Download from RMS
File Name	prime_currency_code.txt
Integration Contract	IntCon000184

Field Name	Field Type	Required
CURRENCY_CODE	Varchar2(3)	Yes

Integration Type	Download from RMS
File Name	class_level_vat_ind.txt
Integration Contract	IntCon000185

Field Name	Field Type	Required
CLASS_LEVEL_VAT_IND	Varchar2(1)	Yes

Integration Type	Download from RMS
File Name	domain_level.txt
Integration Contract	IntCon000186

Field Name	Field Type	Required
DOMAIN_LEVEL	Varchar2(1)	Yes

Integration Type	Download from RMS
File Name	vdate.txt
Integration Contract	IntCon000187

Field Name	Field Type	Required
VDATE	Date	Yes

Integration Type	Download from RMS
File Name	next_vdate.txt
Integration Contract	IntCon000188

Field Name	Field Type	Required
NEXT_VDATE	Date	Yes

Integration Type	Download from RMS
File Name	last_eom_date.txt
Integration Contract	IntCon000189

Field Name	Field Type	Required
LAST_EOM_DATE	Date	Yes

Integration Type	Download from RMS
File Name	curr_bom_date.txt
Integration Contract	IntCon000190

Field Name	**Field Type**	**Required**
CURR_BOM_DATE	Date	Yes

Integration Type	Download from RMS
File Name	max_backpost_days.txt
Integration Contract	IntCon000191

Field Name	**Field Type**	**Required**
MAX_BACKPOST_DAYS	Date	Yes

Integration Type	Download from RMS
File Name	last_extr_closed_pot_date.txt
Integration Contract	IntCon000192

Field Name	**Field Type**	**Required**
LAST_EXTR_CLOSED_POT_DATE	Date	Yes

Integration Type	Download from RMS
File Name	last_extr_received_pot_date.txt
Integration Contract	IntCon000193

Field Name	Field Type	Required
LAST_EXTR_RECEIVED_ POT_DATE	Date	Yes

Integration Type	Download from RMS
File Name	last_extr_received_pot_date.txt
Integration Contract	IntCon000194

Field Name	Field Type	Required
LAST_EXTR_RECEIVED_ POT_DATE	Date	Yes

Integration Type	Download from RMS
File Name	prime_exchng_rate.txt
Integration Contract	IntCon000195

Field Name	Field Type	Required
PRIME_EXCHNG_RATE	Number(20, 10)	Yes

rmse_aip_merchhier (Extract of Merchandise Hierarchy for AIP)

Module Name	Rmse_aip_merchhier.ksh
Description	Extract of Merchandise Hierarchy for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS32
Runtime Parameters	

Design Overview

This script extracts RMS merchandise hierarchy information for integration with Oracle Retail Advanced Inventory Planning (AIP).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After dlyprg.pc and pre_rmse_aip.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUBCLASS	Yes	No	No	No
CLASS	Yes	No	No	No
DEPS	Yes	No	No	No
GROUPS	Yes	No	No	No
DIVISION	Yes	No	No	No
COMPHEAD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000077 rmse_aip_merchhier.schema

Field Name	Field Type	Required	Description
SUBCLASS	Integer(5)	Yes	Subclass.subclass
SUB_NAME	Char(20)	Yes	Subclass.sub_name
CLASS	Integer(5)	Yes	Subclass.class
CLASS_NAME	Char(20)	Yes	Class.class_name
DEPT	Integer(5)	Yes	Class.dept
DEPT_NAME	Char(20)	Yes	Deps.dept_name
GROUP_NO	Integer(5)	Yes	Deps.Group_no
GROUP_NAME	Char(20)	Yes	Groups.group_name
DIVISION	Integer(5)	Yes	Groups.division
DIV_NAME	Char(20)	Yes	Division.div_name
COMPANY	Integer(5)	Yes	Comphead.company
CO_NAME	Char(20)	Yes	Comphead.co_name
PURCHASE_TYPE	Integer(1)	Yes	Deps.purchase_type

rmse_aip_orghier (Extract of Organization Hierarchy for AIP)

Module Name	rmse_aip_orghier.ksh
Description	Extract of Organization Hierarchy for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS26
Runtime Parameters	

Design Overview

This script extracts from RMS organizational hierarchy information for integration with Oracle Retail Advanced Inventory Planning (AIP).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After dlyprg.pc and pre_rmse_aip.ksh
Pre-Processing	dlyprg.pc and pre_rmse_aip.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
COMPHEAD	Yes	No	No	No
CHAIN	Yes	No	No	No
AREA	Yes	No	No	No
REGION	Yes	No	No	No
DISTRICT	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_orghier.dat
Integration Contract	IntCon000078 rmse_aip_orghier.schema

Field Name	Field Type	Required	Description
DISTRICT	Integer(11)	No	District.district
DISTRICT_NAME	Char(20)	No	District.district_name
REGION	Integer(11)	No	Region.region
REGION_NAME	Char(20)	No	Region.region_name
AREA	Integer(11)	No	Area.area
AREA_NAME	Char(20)	No	Area.area_name
CHAIN	Integer(11)	Yes	Chain.chain
CHAIN_NAME	Char(20)	Yes	Chain.chain_name
COMPANY	Integer(5)	Yes	Comphead.company
CO_NAME	Char(20)	Yes	Comphead.co_name

rmse_aip_item_master (RMS Extract of Items for AIP)

Module Name	rmse_aip_item_master.ksh
Description	Extract of Items for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS30
Runtime Parameters	

Design Overview

This script extracts RMS item information for integration with Oracle Retail Advanced Inventory Planning (AIP).

Two output files are produced by this extract. One contains approved transaction-level items while the other contains purged items from the daily_purge table.

Note: Items are generally not deleted from RMS in a one day process (records will exist on the DAILY_PURGE table for some time). This assumption means that it is reasonable for the dlyprg program (which deleted from DAILY_PURGE) to run before this extract.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, sitmain.pc, reclsdly.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
DAILY_PURGE	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_item_master.dat
Integration Contract	IntCon000073 rmse_aip_item_master.schema

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
ITEM_DESC	Char(250)	Yes	Item_master.item_desc
ITEM_PARENT	Char(25)	No	Item_master.item_parent
ITEM_GRANDPARENT	Char(25)	No	Item_master.item_grandparent
AIP_SKU	Char(25)	Yes	V_packsku_qty.item or Item_master.item
SUBCLASS	Integer(5)	Yes	Item_master.subclass
CLASS	Integer(5)	Yes	Item_master.class
DEPT	Integer(5)	Yes	Item_master.dept
FORECAST_IND	Char(1)	Yes	Item_master.forecast_ind
SUPPLIER	Integer(11)	Yes	Item_supplier.supplier
PRIMARY_SUPP_IND	Char(1)	Yes	Item_supplier.primary_supp_ind
STANDARD_UOM	Char(4)	Yes	Item_master.standard_uom
STANDARD_UOM_DESCRIPTION	Char(120)	Yes	Uom_class.uom_desc
SKU_TYPE	Char(6)	No	Item_master.handling_temp or 0
SKU_TYPE_DESCRIPTION	Char(40)	No	Code_detail.code_desc (for code_type 'HTMP')
PACK_QUANTITY	Char(6)	No	V_packsku_qty.qty or 0
PACK_IND	Char(1)	Yes	Item_master.pack_ind
SIMPLE_PACK_IND	Char(1)	Yes	Item_master.simple_pack_ind
ITEM_LEVEL	Integer(1)	Yes	Item_master.item_level
TRAN_LEVEL	Integer(1)	Yes	Item_master.tran_level
RETAIL_LABEL_TYPE	Char(6)	No	Item_master.retail_label_type
CATCH_WEIGHT_IND	Char(1)	Yes	Item_master.catch_weight_ind
SELLABLE_IND	Char(1)	Yes	Item_master.sellable_ind
ORDERABLE_IND	Char(1)	Yes	Item_master.orderable_ind
DEPOSIT_ITEM_TYPE	Char(6)	No	Item_master.deposit_item_type
ITEM	Char(25)	Yes	Item_master.item

Integration Type	Download from RMS
File Name	rmse_aip_purged_item.dat
Integration Contract	IntCon000136 rmse_aip_item_master.schema

The purged items output file is in fixed-length format matching to the schema definition in rmse_aip_purged_item.schema.

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Daily_purge.key_value

rmse_aip_store (Extract of Stores for AIP)

Module Name	Rmse_aip_store.ksh
Description	Extract of Stores for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS40
Runtime Parameters	

Design Overview

This script extracts store information for integration with Oracle Retail Advanced Inventory Planning (AIP).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After dlyprg.pc and pre_rmse_aip.ksh
Pre-Processing	dlyprg.pc and pre_rmse_aip.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
STORE_FORMAT	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000080 rmse_aip_store.schema

Field Name	Field Type	Required	Description
STORE	Integer(11)	Yes	Store.store
STORE_NAME	Char(20)	Yes	Store.store_name
DISTRICT	Integer(11)	Yes	Store.district
STORE_CLOSE_DATE	Date	No	Store.store_close_date
STORE_OPEN_DATE	Date	Yes	Store.store_open_date
STORE_CLASS	Char(1)	Yes	Store.store_class
STORE_CLASS_DESCRIPTION	Char(40)	Yes	Code_detail.code_desc
STORE_FORMAT	Integer(5)	No	Store.store_format
FORMAT_NAME	Char(20)	No	Store_format.format_name
STOCKHOLDING_IND	Char(1)	Yes	Store.stockholding_ind
REMERCH_IND	Char(1)	Yes	Store.remerch_ind
CLOSING_STORE_IND	Char(1)	Yes	'N' if Store.store_close_date is empty, else 'Y'

rmse_aip_wh (Extract of Warehouses for AIP)

Module Name	rmse_aip_wh.ksh
Description	Extract of Warehouses for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS35
Runtime Parameters	

Design Overview

This script extracts from RMS warehouse information for integration with Oracle Retail Advanced Inventory Planning (AIP).

The script produces three extract files:

- rmse_aip_wh.dat
- rmse_aip_wh.txt
- rmse_aip_wh_type.txt

Only stock holding warehouses are extracted to the rmse_aip_wh.txt and rmse_aip_wh_type.txt files

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Ho
Frequency	Daily
Scheduling Considerations	After dlyprg.pc., pre_rmse_aip.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
WH	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_wh.dat
Integration Contract	IntCon000085 rmse_aip_wh_dat.schema

Field Name	Field Type	Required	Description
WH	Integer(11)	Yes	Wh.wh
WH_NAME	Char(20)	Yes	Wh.wh_name
FORECAST_WH_IND	Char(1)	Yes	Wh.forecast_wh_ind
STOCKHOLDING_IND	Char(1)	Yes	Wh.stockholding_ind
WH_TYPE	Char(6)	No	Wh.vwh_type

Integration Type	Download from RMS
File Name	rmse_aip_wh.txt
Integration Contract	IntCon000137 rmse_aip_wh_dat.schema

Field Name	Field Type	Required	Description
WAREHOUSE_CHAMBER	Char(20)	Yes	Wh.wh
WAREHOUSE_CHAMBER_ DESCRIPTION	Char(40)	Yes	Wh.wh_name
WAREHOUSE	Integer(20)	Yes	Wh.wh
WAREHOUSE_DESCRIPTION	Char(40)	Yes	Wh.wh_name

Integration Type	Download from RMS
File Name	rmse_aip_wh_type.txt
Integration Contract	IntCon000138 rmse_aip_wh_dat.schema

Field Name	Field Type	Required	Description
WAREHOUSE	Integer(20)	Yes	Wh.wh
WH_TYPE	Char(6)	No	Wh.wh_type

rmse_aip_substitute_items (Extract of Substitute Items for AIP)

Module Name	rmse_aip_substitute_item.ksh
Description	Extract of Substitute Items for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS38
Runtime Parameters	

Design Overview

This script extracts substitute item information from RMS for integration with Oracle Retail Advanced Inventory Planning (AIP).

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc Interface
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh
Pre-Processing	pre_rmse_aip.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
SUB_ITEMS_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_substitute_items.dat
Integration Contract	IntCon000082 rmse_aip_substitute_items.schema

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Sub_items_detail.item
LOCATION	Integer(10)	Yes	Sub_items_detail.location
SUB_ITEM	Char(25)	Yes	Sub_items_detail.sub_item
LOC_TYPE	Char(1)	Yes	Sub_items_detail.loc_type
START_DATE	Date	No	Sub_items_detail.start_date
END_DATE	Date	No	Sub_items_detail.end_date
SUBSTITUTE_REASON	Char(1)	No	Sub_items_detail.substitute_reason

rmse_aip_suppliers (Extract of Suppliers for AIP)

Module Name	rmse_aip_suppliers.ksh
Description	Extract of Suppliers for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS37
Runtime Parameters	

Design Overview

This script extracts supplier/supplier site information for integration with Oracle Retail Advanced Inventory Planning (AIP).

The script produces three extract files:

- rmse_aip_suppliers.dat
- splr.txt
- dmx_dirspl.txt

Splr.txt and dmx_dirspl.txt only contain active suppliers (sups.sup_status = 'A').

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUPS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_suppliers.dat
Integration Contract	IntCon000083 rmse_aip_suppliers.schema

Field Name	Field Type	Required	Description
SUPPLIER	Integer(11)	Yes	Sups.supplier
SUP_NAME	Char(32)	Yes	Sups.sup_name

Integration Type	Download from RMS
File Name	splr.txt
Integration Contract	IntCon000175 rmse_aip_suppliers.schema

Field Name	Field Type	Required	Description
SUPPLIER	Integer(20)	Yes	Sups.supplier

Field Name	Field Type	Required	Description
SUPPLIER_DESCRIPTION	Char(40)	Yes	Sups.sup_name

Integration Type	Download from RMS
File Name	dmx_dirspl.txt
Integration Contract	IntCon000176 rmse_aip_suppliers.schema

Field Name	Field Type	Required	Description
SUPPLIER	Integer(20)	Yes	Sups.supplier
DIRECT_SUPPLIER	Char(1)	Yes	If sup.dsd_ind = 'Y' then 1, else if sup.dsd_ind = 'N' then 0

rmse_aip_alloc_in_well (Extract of Allocations in the Well Quantities for AIP)

Module Name	rmse_aip_alloc_in_well.ksh
Description	Extract of Allocations in the Well Quantities for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS20
Runtime Parameters	

Design Overview

This script extracts RMS "in the well" allocation quantities for integration with Oracle Retail Advanced Inventory Planning (AIP). In the well pertains to inventory that has been reserved by allocations in approved or reserved status. The expected release date is also included in the extract.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	After pre_rmse_aip.ksh, onordext All RMS inventory jobs should complete before this extract is performed
Pre-Processing	pre_rmse_aip.ksh, onordext
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_alloc_in_well.dat
Integration Contract	IntCon000066 rmse_aip_alloc_in_well.schema

Field Name	Field Type	Required	Description
DAY	Char(9)	Yes	alloc_header.release_date
LOC	Integer(20)	Yes	Alloc_header.wh

Field Name	Field Type	Required	Description
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and alloc_detail.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char(6)	Yes	Formal Case Type: If simple pack and alloc_detail.to_loc_type = 'W' then this would be v_packsku_qty.qty of the pack component else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
ALLOC_RESERVE_QTY	Char(8)	Yes	Formal Case Type: Alloc_detail.qty_allocated – alloc_detail.qty_received. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.qty_allocated – alloc_detail.qty_received expressed in multiples of the primary case size. The remainder is expressed in Standard UOM.
ORDER_NO	Integer(12)	No	Order number

The reject file rmse_aip_alloc_in_well_reject_ord_mult.txt is in pipe delimited (|) format

Field Name	Field Type	Required	Description
DAY	Char(9)	Yes	alloc_header.release_date
LOC	Integer(20)	Yes	Alloc_header.wh
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and alloc_detail.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item

Field Name	Field Type	Required	Description
ORDER_MULTIPLE	Char(6)	Yes	Formal Case Type: If simple pack and alloc_detail.to_loc_type = 'W' then this would be v_packsku_qty.qty of the pack component else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
ALLOC_RESERVE_QTY	Char (8)	Yes	Formal Case Type: Alloc_detail.qty_allocated – alloc_detail.qty_received. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.qty_allocated – alloc_detail.qty_received expressed in multiples of the primary case size. The remainder is expressed in Standard UOM.
ORDER_NO	Integer(12)	No	Order number

rmse_aip_cl_po (Extract of AIP Generated POs, Allocations and Transfers Cancelled or Closed in RMS for AIP)

Module Name	rmse_aip_cl_po.ksh
Description	Extract of AIP Generated POs, Allocations and Transfers Cancelled or Closed in RMS for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS21
Runtime Parameters	

Design Overview

This script extracts from RMS cancelled or closed purchase orders, transfers and allocations for integration with Oracle Retail Advanced Inventory Planning (AIP). Only records that meet the following criteria below are extracted:

For Purchase Orders:

- Ordhead.close_date is not NULL
- Ordhead.orig_ind = 6 (external system generated)
- Ordhead.close_date > Retl_extract_dates.last_extr_closed_pot_date

For Transfers:

- Tsfhead.close_date is not NULL
- Tsfhead.tsf_type = 'AIP' (generated by AIP)
- Ordhead.close_date > Retl_extract_dates.last_extr_closed_pot_date

For Allocations:

- Alloc_header.close_date is not NULL
- Alloc_header.origin_ind = 'AIP'(generated by AIP)
- Alloc_header.close_date> Retl_extract_dates.last_extr_closed_pot_date

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	Before tsfprg.pc and ordprg.pc. After pre_rmse_aip.ksh
Pre-Processing	pre_rmse_aip.ksh
Post-Processing	tsfprg.pc and ordprg.pc
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	No	No
TSFHEAD	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No

rmse_aip_cl_po.ksh calls another script rmsl_aip_update_retl_date.ksh, which updates the AIP RETL extract dates. The tables affected by this script is:

Table	Select	Insert	Update	Delete
RETL_EXTRACT_DATES	No	No	Yes	No

Integration Contract

Integration Type	Download from RMS
File Name	output file closed_order.txt
Integration Contract	IntCon000068 rmse_aip_cl_po.schema

Field Name	Field Type	Required	Description
ORDER_NUMBER	Integer(12)	Yes	Ordhead.order_no or tsfhead.tsf_no or alloc_header.alloc_no
ORDER_TYPE	Char(1)	Yes	'P' for purchase orders or 'T' for transfers or 'A' for allocations

rmse_aip_future_delivery_alloc (Extract of Allocation Quantities for Future Delivery for AIP)

Module Name	rmse_aip_future_delivery_alloc.ksh
Description	Extract of Allocation Quantities for Future Delivery for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS28
Runtime Parameters	

Design Overview

This script extracts RMS in-transit and on-order allocation quantities for future delivery for integration with AIP.
For warehouse-inbound transactions (i.e. alloc_detail.to_loc_type = 'W'), alloc_no will be included as the transaction number in the output file. For store-inbound transactions (i.e. alloc_detail.to_loc_type = 'S'), NULL will be included as the transaction number in the output file and transaction quantity will be rolled up by item/store/day. Both standalone allocations and cross-docked allocations from a PO will be extracted, but cross-docked allocations from a PO associated with a customer order (i.e. order_type = 'CO') will NOT be extracted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	4
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, onordext.pc All RMS inventory jobs should complete before this extract is performed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No
TRANSIT_TIMES	Yes	No	No	No
V_WH	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_future_delivery_alloc.dat
Integration Contract	IntCon000069 rmse_aip_future_delivery_alloc.schema

Field Name	Field Type	Required	Description
TRANSACTION_NUM	Integer(12)	No	If alloc_detail.to_loc_type ='W' then value will be Alloc_header.alloc_no else null

DAY	Char(9)	Yes	'D' | | Alloc_header.release_date + transit_times.transit_time
SUPPLIER	Integer(20)	No	If there is no associated order then primary supplier on item_supplier.supplier else ordhead.supplier
LOC	Integer(20)	Yes	Alloc_detail.to_loc
LOC_TYPE	Char(1)	Yes	Alloc_detail.to_loc_type
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and alloc_detail.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
IN_TRANSIT_ALLOC_QTY	Char (8)	Yes	Formal Case Type: Alloc_detail.Qty_transferred – Alloc_detail.Qty_received. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.Qty_transferred – Alloc_detail.Qty_received expressed in the primary case size. Remainder is in Standard UOM
ON_ORDER_ALLOC_QTY	Char (8)	Yes	Formal Case Type: Alloc_detail.Qty_allocated – Alloc_detail.Qty_transferred. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.Qty_allocated – Alloc_detail.Qty_transferred expressed in the primary case size. Remainder is in Standard UOM

The reject file rmse_aip_future_delivery_alloc_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	Field Type	Required	Description
TRANSACTION_NUM	Integer(12)	No	If alloc_detail.loc_type ='W' then value will be Alloc_header.alloc_no else null
DAY	Char(9)	Yes	'D'|| Alloc_header.release_date + transit_times.transit_time
SUPPLIER	Integer(20)	No	If there is no associated order then primary supplier on item_supplier.supplier else ordhead.supplier
LOC	Integer(20)	Yes	Alloc_detail.to_loc
LOC_TYPE	Char(1)	Yes	Alloc_detail.to_loc_type
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and alloc_detail.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
IN_TRANSIT_ALLOC_QTY	Char (8)	Yes	Formal Case Type: Alloc_detail.Qty_transferred – Alloc_detail.Qty_received. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.Qty_transferred – Alloc_detail.Qty_received expressed in the primary case size. Remainder is in Standard UOM

ON_ORDER_ALLOC_QTY	Char (8)	Yes	Formal Case Type: Alloc_detail.Qty_allocated – Alloc_detail.Qty_transferred. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Alloc_detail.Qty_allocated – Alloc_detail.Qty_transferred expressed in the primary case size. Remainder is in Standard UOM

rmse_aip_future_delivery_order (Extract of Purchase Order Quantities for Future Delivery to AIP)

Module Name	rmse_aip_future_delivery_order.ksh
Description	Extract of Purchase Order Quantities for Future Delivery to AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS22
Runtime Parameters	

Design Overview

This script extracts RMS purchase order quantities for future delivery for integration with Oracle Retail Advanced Inventory Planning (AIP).

For warehouse-inbound transactions (i.e. ordloc.to_loc_type = 'W'), order_no will be included as the transaction number in the output file. For store-inbound transactions (i.e. ordloc.to_loc_type = 'S'), NULL will be included as the transaction number in the output file and transaction quantity will be rolled up by item/store/day. Both standalone POs and cross-docked POs to a transfer or allocation will be extracted, but POs associated with a customer order (i.e. order_type = 'CO') will NOT be extracted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	After pre_rmse_aip.ksh, onordext.pc All RMS inventory jobs should complete before this extract is performed.
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDLOC	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_future_delivery_order.dat
Integration Contract	IntCon000070 rmse_aip_future_delivery_order.schema

Field Name	Field Type	Required	Description
TRANSACTION_NUM	Integer(12)	No	If ordloc.loc_type ='W' then value will be ordloc.order_no else null
DAY	Char(9)	Yes	'D' || Ordhead.not_after_date
SUPPLIER	Integer(20)	Yes	Ordhead.supplier
LOC	Integer(20)	Yes	Ordloc.location
ITEM	Char(20)	Yes	<u>Formal Case Type</u>: If simple pack and ordloc.loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. <u>Informal Case Type</u>: Item_master.item
ORDER_MULTIPLE	Char(6)	Yes	<u>Formal Case Type</u>: If ordloc.loc_type = 'S' then 1 If ordloc.loc_type = 'W' and (ordloc.qty_ordered – ordloc.qty_received) >= item_supp_country.supp_pack_size and a simple pack then V_packsku_qty.qty else 1 <u>Informal Case Type</u>: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
PO_QTY	Char(8)	Yes	(Ordloc.qty_ordered – Ordloc.qty_received) or 0
LOC_TYPE	Char(1)	Yes	Ordloc.loc_type

The reject file rmse_aip_future_delivery_order_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	Field Type	Required	Description
TRANSACTION_NUM	Integer(12)	No	If ordloc.loc_type ='W' then value will be ordloc.order_no else null
DAY	Char(9)	Yes	'D' || Ordhead.not_after_date
SUPPLIER	Integer(20)	Yes	Ordhead.supplier
LOC	Integer(20)	Yes	Ordloc.location

ITEM	Char(20)	Yes	Formal Case Type: If simple pack and ordloc.loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char(6)	Yes	Formal Case Type: If ordloc.loc_type = 'S' then 1 If ordloc.loc_type = 'W' and (ordloc.qty_ordered – ordloc.qty_received) >= item_supp_country.supp_pack_size and a simple pack then V_packsku_qty.qty else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
PO_QTY	Char(8)	Yes	(Ordloc.qty_ordered – Ordloc.qty_received) or 0
LOC_TYPE	Char(1)	Yes	Ordloc.loc_type

rmse_aip_future_delivery_tsf (Extract On Order and In Transit Transfer Quantities for Future Delivery for AIP)

Module Name	rmse_aip_future_delivery_tsf.ksh
Description	Extract On Order and In Transit Transfer Quantities for Future Delivery for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS29
Runtime Parameters	

Design Overview

This script extracts RMS on-order and in-transit transfer quantities for future delivery for integration with AIP.

For warehouse-inbound transactions (i.e. tsfhead.to_loc_type = 'W'), transfer number will be included as the transaction number in the output file. For store-inbound transactions (i.e. tsfhead.to_loc_type = 'S'), NULL will be included as the transaction number in the output file and transaction quantity will be rolled up by item/store/day. Transfers created by RMS's franchise ordering/returning processes will not be extracted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, onordext.pc All RMS inventory jobs should complete before this extract is performed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
TSFHEAD	Yes	No	No	No
TSFDETAIL	Yes	No	No	No
SHIPITEM_INV_FLOW	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No
TRANSIT_TIMES	Yes	No	No	No
V_WH	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_future_delivery_tsf.dat
Integration Contract	IntCon000071 rmse_aip_future_delivery_tsf.schema

Field Name	Field Type	Required	Description
TRANSACTION_NUM	Integer(12)	No	If tsfhead.to_loc_type ='W' then value will be tsfhead.tsf_no else null
DAY	Char(9)	Yes	'D' | | tsfhead.delivery_date + transit_times.transit_time
SUPPLIER	Integer(20)	No	Item_supp_country.supplier
LOC	Integer(20)	Yes	Shipitem_inv_flow.to_loc if tsfhead.to_loc_type = 'W' and tsfhead.tsf_type = 'EG else Tsfhead.to_loc
ITEM	Char(20)	Yes	Formal Case Type: If simple pack and tsfhead.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: If simple pack and tsfhead.to_loc_type = 'W' the v_packsku_qty.qty else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.received_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.received_qty expressed in the primary case size. Remainder is in Standard UOM
IN_TRANSIT_TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.ship_qty – tsfdetail.received_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.ship_qty – tsfdetail.received_qty expressed in the primary case size. Remainder is in Standard UOM

ON_ORDER_TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty expressed in the primary case size. Remainder is in Standard UOM.
LOC_TYPE	Char(1)	Yes	Tsfhead.to_loc_type
TSF_TYPE	Char(6)	Yes	Tsfhead.tsf_type

The reject file rmse_aip_future_delivery_tsf_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	**Field Type**	**Required**	**Description**
TRANSACTION_NUM	Integer(12)	No	If tsfhead.to_loc_type ='W' then value will be tsfhead.tsf_no else null
DAY	Char(9)	Yes	'D' || tsfhead.delivery_date + transit_times.transit_time
SUPPLIER	Integer(20)	No	Item_supp_country.supplier
LOC	Integer(20)	Yes	Shipitem_inv_flow.to_loc if tsfhead.to_loc_type = 'W' and tsfhead.tsf_type = 'EG else Tsfhead.to_loc
ITEM	Char(20)	Yes	Formal Case Type: If simple pack and tsfhead.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char(6)	Yes	Formal Case Type: If simple pack and tsfhead.to_loc_type = 'W' the v_packsku_qty.qty else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)

TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.received_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.received_qty expressed in the primary case size. Remainder is in Standard UOM
IN_TRANSIT_TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.ship_qty – tsfdetail.received_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.ship_qty – tsfdetail.received_qty expressed in the primary case size. Remainder is in Standard UOM
ON_ORDER_TSF_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty expressed in the primary case size. Remainder is in Standard UOM.
LOC_TYPE	Char(1)	Yes	Tsfhead.to_loc_type
TSF_TYPE	Char(6)	Yes	Tsfhead.tsf_type

rmse_aip_item_loc_traits (Extract of Shelf Life on Receipt Location Trait for AIP)

Module Name	rmse_aip_item_loc_traits.ksh
Description	Extract of Shelf Life on Receipt Location Trait for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS23
Runtime Parameters	

Design Overview

This script extracts from RMS item location traits information for integration with Oracle Retail Advanced Inventory Planning (AIP). Only the following items are extracted:

- Approved, non-pack and forecastable
- Approved and a simple pack item whose component is forecastable.
- Items which are intentionally ranged to the location.(ie, item which has ranged_ind='Y' for the location in the item_loc table)

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc Interface
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh
Pre-Processing	pre_rmse_aip.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_LOC_TRAITS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_item_loc_traits.dat
Integration Contract	IntCon000072 rmse_aip_item_loc_traits.schema

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
LOC	Integer(10)	Yes	Item_loc_traits.loc
REQ_SHELF_LIFE_ON_RECEIPT	Integer(8)	No	Item_loc_traits.req_shelf_life_on_receipt

rmse_aip_item_retail (Extract of Forecasted Items for AIP)

Module Name	rmse_aip_item_retail.ksh
Description	Extract of Forecasted Items for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS24
Runtime Parameters	

Design Overview

This script extracts from RMS item information required by the item transformation script aipt_item.ksh for integration with Oracle Retail Advanced Inventory Planning (AIP).

Records that meet the following criteria are extracted:

Non-pack items

- Approved and transaction level items
- Have supplier pack sizes greater than 1
- Forecastable (item_master.forecast_ind = 'Y')

- Inventory items

Simple pack components

- Component of approved and transaction level simple packs
- Components are forecastable (item_master.forecast_ind = 'Y')
- Simple packs are inventory items

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, dlyprg.pc
Pre-Processing	pre_rmse_aip.ksh, dlyprg.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_item_retail.dat
Integration Contract	IntCon000074 rmse_aip_item_retail.schema

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
AIP_SKU	Char(25)	Yes	Item_master.item
SUBCLASS	Integer(5)	Yes	Item_master.subclass

Field Name	Field Type	Required	Description
CLASS	Integer(5)	Yes	Item_master.class
DEPT	Integer(5)	Yes	Item_master.dept
STANDARD_UOM	Char(4)	Yes	Item_master.standard_uom
STANDARD_UOM_ DESCRIPTION	Char(20)	Yes	Uom_class.uom_desc_standard
SKU_TYPE	Char(6)	No	Non-pack items Item_master.handling_temp. "0" if NULL. Simple pack components Item_master.handling_temp or NULL.
SKU_TYPE_ DESCRIPTION	Char(40)	No	Non-pack items Code_detail.code_desc . "0" if NULL. Simple pack components Code_detail.code_desc or NULL.
ORDER_MULTIPLE	Char(6)	Yes	1
PACK_QUANTITY	Char(6)	No	0

rmse_aip_item_sale (Extract of Scheduled Item Maintenance On/Off Sale Information for AIP)

Module Name	rmse_aip_item_sale.ksh
Description	Extract of Scheduled Item Maintenance On/Off Sale Information for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS31
Runtime Parameters	

Design Overview

This script extracts on/off sale information for integration with Oracle Retail Advanced Inventory Planning (AIP). This integration is designed to be used in conjunction with Scheduled Item Maintenance functionality in RMS.

The script produces two output files, one containing on sale records (sit_detail.status = 'A') and the other off sale records (sit_detail.status = 'C').

If a client does not use Scheduled Item Maintenance functionality to manage the on and off sale attributes of items at locations, the client does not need to run this program. Instead, the customer should create on/off sales information for AIP through a custom process.

This information extracted for AIP includes the status, status update date and order multiple for an item/location. A status of 'A' indicates that an item/location is valid and can be ordered and sold. A status of 'C' indicates than an item/location is invalid and cannot be ordered or sold. The script only extracts items that meet the following criteria:

- In active status
- Transaction-level
- Either non-pack or a simple pack
- Sit_detail.status is either 'A' or 'C'
- Sit_detail.status_update_date is greater than the current date

Only the order multiple for the primary supplier and primary supplier country is extracted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After sitmain.pc and pre_rmse_aip.ksh
Pre-Processing	sitmain.pc and pre_rmse_aip.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
SIT_EXPLODE	Yes	No	No	No
SIT_DETAIL	Yes	No	No	No

V_PACKSKU_QTY	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	dm0_onseffdt_.txt
Integration Contract	IntCon000075 rmse_aip_item_on_sale.schema

Field Name	**Field Type**	**Required**	**Description**
STORE	Integer(20)	Yes	Sit_explode.location
RMS_SKU	Char(20)	Yes	Sit_explode.item
ORDER_MULTIPLE	Char(6)	Yes	If item_master.pack_ind = 'Y' then v_packsku_qty.qty (for the component item) else item_supp_country.order_multiple
ON_SALE_EFFECTIVE_DATE	Date	Yes	Sit_detail.status_update_date

Integration Type	Download from RMS
File Name	dm0_ofseffdt_.txt
Integration Contract	IntCon000135 rmse_aip_item_off_sale.schema

Field Name	**Field Type**	**Required**	**Description**
STORE	Integer(20)	Yes	Sit_explode.location
RMS_SKU	Char(20)	Yes	Sit_explode.item
ORDER_MULTIPLE	Char(6)	Yes	If item_master.pack_ind = 'Y' then v_packsku_qty.qty (for the component item) else item_supp_country.order_multiple
OFF_SALE_EFFECTIVE_DATE	Date	Yes	Sit_detail.status_update_date

The reject file rmse_aip_item_sale_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	**Field Type**	**Required**	**Description**
STORE	Integer(20)	Yes	Sit_explode.location
RMS_SKU	Char(20)	Yes	Sit_explode.item

Field Name	Field Type	Required	Description
ORDER_MULTIPLE	Char(6)	Yes	If item_master.pack_ind = 'Y' then v_packsku_qty.qty (for the component item) else item_supp_country.order_multiple
OFF_SALE_EFFECTIVE _DATE/ ON_SALE_EFFECTIVE _DATE	Date	Yes	Sit_detail.status_update_date

rmse_aip_item_supp_country (Extract of Order Multiples by Item/Supplier/Origin Country for AIP)

Module Name	rmse_aip_item_supp_country.ksh
Description	Extract of Order Multiples by Item/Supplier/Origin Country for AIP
Functional Area	RMS to AIP Integration
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS25
Runtime Parameters	

Design Overview

This script extracts RMS item-supplier information for integration with Oracle Retail Advanced Inventory Planning (AIP).

Three output files are produced by this extract. Two contain item-supplier information. The other is a reject file containing item suppliers with rejected order multiples.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After sitmain.pc, reclsdly.pc, pre_rmse_aip.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_item_supp_country.dat
Integration Contract	IntCon000076 rmse_aip_item_supp_country.schema

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_supp_country.item
SUPPLIER	Integer(11)	Yes	Item_supp_country.supplier
ORDER_MULTIPLE	Integer(4)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
PRIMARY_SUPP_IND	Char(1)	Yes	Item_supp_country.primary_supp_ind

Integration Type	Download from RMS
File Name	aip_dmx_prdsplks.txt
Integration Contract	IntCon000133 rmse_aip_dmx_prdspllks.schema

Field Name	Field Type	Required	Description
SUPPLIER	Integer(20)	Yes	Item_supp_country.supplier

Field Name	Field Type	Required	Description
RMS_SKU	Char(20)	Yes	Item_supp_country.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
COMMODITY_SUPPLIER_LINKS	Char(1)	Yes	1

The reject file rmse_aip_item_supp_country_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_supp_country.item
SUPPLIER	Integer(11)	Yes	Item_supp_country.supplier
ORDER_MULTIPLE	Char(6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
PRIMARY_SUPP_IND	Char(1)	Yes	Item_supp_country.primary_supp_ind

rmse_aip_rec_qty (Extract of Received PO, Allocation and Transfer Quantities for AIP)

Module Name	rmse_aip_rec_qty.ksh
Description	Extract of Received PO, Allocation and Transfer Quantities for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS33
Runtime Parameters	

Design Overview

This script extracts from RMS received PO, transfer and allocation quantities for integration with Oracle Retail Advanced Inventory Planning (AIP). Only records that meet the following criteria below are extracted:

For Purchase Orders:

- Ordhead.close_date is NULL or ordhead.close_date >= (current date - 1max_notafter_days)
- Ordhead.not_after_date is not NULL
- Ordhead.orig_ind = 6 (external system generated)
- Ordloc.received_qty is not NULL

For Transfers:

- Tsfhead.close_date is NULL or tsfhead.close_date >= (current date - 1max_notafter_days)
- Tsfhead.tsf_type = ‘AIP’ (generated by AIP)
- Tsfhead.delivery_date is not NULL
- Tsfdetail.received_qty is not NULL

For Allocations:

- Alloc_header.close_date is NULL or alloc_header.close_date >= (current date - 1max_notafter_days)
- Alloc_header.origin_ind = ‘AIP’ (generated by AIP)
- Alloc_header.release_date is not NULL
- Alloc_detail.qty_received is not NULL
- Alloc_header.order_no is not NULL(AIP generated allocations will always have an order associated with them)

1*Defined in <etc_directory>/max_notafter_days.txt*

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, onordext.pc All RMS inventory jobs should complete before this extract is performed.
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	No	No
ORDLOC	Yes	No	No	No
ORDSKU	Yes	No	No	No
TSFHEAD	Yes	No	No	No
TSFDETAIL	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	received_qty.txt
Integration Contract	IntCon000079 rmse_aip_rec_qty.schema

Field Name	Field Type	Required	Description
ORDER_NUMBER	Integer(12)	Yes	Ordhead.order_no or tsfhead.tsf_no or alloc_header.alloc_no
ORDER_TYPE	Char(1)	Yes	'P' for purchase orders or 'T' for transfers or 'A' for allocations

Field Name	Field Type	Required	Description
RMS_SKU	Char(25)	Yes	Ordsku.item or tsfdetail.item or alloc_header.item
ORDER_MULTIPLE	Char(6)	Yes	Ordsku.supp_pack_size or tsfdetail.supp_pack_size
PACK_QTY	Char(6)	Yes	If pack item then sum of V_packsku_qty.qty else 0
STORE	Integer(10)	No	If ordloc.loc_type = 'S' then ordloc.location or If tsfhead.to_loc_type = 'S' then tsfhead.to_loc or If alloc_detail.to_loc_type = 'S' then alloc_detail.to_loc
WAREHOUSE	Integer(10)	No	If ordloc.loc_type = 'W' then ordloc.location or If tsfhead.to_loc_type = 'W' then tsfhead.to_loc or If alloc_detail.to_loc_type = 'W' then alloc_detail.to_loc
RECEIVED_DATE	Date	Yes	Ordhead.not_after_date or tsfhead.delivery_date or alloc_header.release_date
QUANTITY	Char(8)	No	Ordloc.qty_received or tsfdetail.received_qty or alloc_detail.qty_received

rmse_aip_store_cur_inventory (Extract of Store Current Inventory data for AIP)

Module Name	rmse_aip_store_cur_inventory.ksh
Description	Extract of Store Current Inventory data for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS39
Runtime Parameters	

Design Overview

This script extracts RMS current inventory for store locations for integration with Oracle Retail Advanced Inventory Planning (AIP). This script requires an 'F' or 'D' parameter:

- F - full extract of items/locations. Multiple output files. One file per item_loc_soh partition.
- D - delta extract of items/locations for the current day's transactions as well as for the locations for which backorder message was received. Single output file.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	All RMS inventory jobs should complete before this extract is performed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	One thread per partition of item_loc_soh will be invoked if the script is run with a parameter of 'F'

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
STORE	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
IF_TRAN_DATA_TEMP	Yes	Yes	No	No
INV_RESV_UPDATE_TEMP	Yes	No	Yes	Yes
PACKITEM	Yes	No	No	No
DBA_TAB_PARTITIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	sr0_curinv_{THREAD_NO}.txt
Integration Contract	IntCon000081 rmse_aip_store_cur_inventory.schema

Field Name	Field Type	Required	Description
STORE	Integer(20)	Yes	Item_loc_soh.loc
RMS_SKU	Char(20)	Yes	Item_master.item
STORE_CUR_INV	Char (8)	No	Item_loc_soh.stock_on_hand – (item_loc_soh.tsf_reserved_qty + item_loc_soh.rtv_qty + item_loc_soh.non_sellable_qty + item_loc_soh.customer_resv)
BACKORDER_QUANTITY	Char (8)	No	Item_loc_soh.customer_backorder

rmse_aip_tsf_in_well (Extract of Transfer in the Well Quantities to AIP)

Module Name	rmse_aip_tsf _in_well.ksh
Description	Extract of Transfer in the Well Quantities to AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS36
Runtime Parameters	

Design Overview

This script extracts RMS "in the well" transfer quantities for integration with AIP. In the well pertains to inventory that has been reserved by an approved or shipped transfer. The expected delivery date is also included in the extract.

Transfers created by the RMS wholesale/franchise ordering and return processes will not be extracted.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After pre_rmse_aip.ksh, onordext.pc All RMS inventory jobs should complete before this extract is performed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
TSFHEAD	Yes	No	No	No

Table	Select	Insert	Update	Delete
TSFDETAIL	Yes	No	No	No
SHIPITEM_INV_FLOW	Yes	No	No	No
TRANSIT_TIMES	Yes	No	No	No
V_WH	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
PACKITEM	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_aip_tsf_in_well.dat
Integration Contract	IntCon000084 rmse_aip_tsf_in_well.schema

Field Name	Field Type	Required	Description
DAY	Char(9)	Yes	tsfhead.delivery_date – transit_times.transit_time
LOC	Integer(20)	Yes	If tsfhead.from_loc type = 'W' and (tsfhead.tsf_type = 'EG' or tsfhead.tsf_type = 'CO' and OMS_IND = 'Y') then shipitem_inv_flow.from_loc else tsfhead.from_loc
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and tsfhead.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)

Field Name	Field Type	Required	Description
TSF_RESERVED_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty expressed in the primary case size. Remainder is in Standard UOM

The reject file rmse_aip_tsf_in_well_reject_ord_mult.txt is in pipe delimited (|) format.

Field Name	Field Type	Required	Description
DAY	Char(9)	Yes	tsfhead.delivery_date – transit_times.transit_time
LOC	Integer(20)	Yes	If tsfhead.from_loc type = 'W' and (tsfhead.tsf_type = 'EG' or tsfhead.tsf_type = 'CO' and OMS_IND = 'Y') then shipitem_inv_flow.from_loc else tsfhead.from_loc
ITEM	Char(20)	Yes	Formal Case Type: If simple pack then and tsfhead.to_loc_type = 'S' then this would be the component of the pack in v_packsku_qty else item_master.item. Informal Case Type: Item_master.item
ORDER_MULTIPLE	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)
TSF_RESERVED_QTY	Char (8)	Yes	Formal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty. Resulting quantity is multiplied by V_packsku_qty.qty if item is a pack. Informal Case Type: Tsfdetail.tsf_qty – tsfdetail.ship_qty expressed in the primary case size. Remainder is in Standard UOM

rmse_aip_wh_cur_inventory (Extract of Warehouse Current Inventory for AIP)

Module Name	rmse_aip_wh_cur_inventory.ksh
Description	Extract of Warehouse Current Inventory for AIP
Functional Area	Integration - AIP
Module Type	Integration
Module Technology	ksh
Integration Catalog ID	RMS34
Runtime Parameters	

Design Overview

This script extracts RMS current warehouse inventory information for integration with Oracle Retail Advanced Inventory Planning (AIP).

This script requires an 'F' or 'D' parameter:

- F - full extract of items/locations. Creates multiple files per warehouse. Files are concatenated into a single file upon successful completion.
- D - delta extract of items/locations for the current day's transactions as well as for the locations for which backorder message was received. Creates a single extract file.

The script creates a backup of the previous day's data file labeled with the date on which they were created.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	All RMS inventory jobs should complete before this extract is performed
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	One thread per warehouse will be invoked if the script is run with a parameter of 'F'

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
WH	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
PACKITEM	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
IF_TRAN_DATA_TEMP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	wr1_curinv.txt
Integration Contract	IntCon000092 rmse_aip_wh_cur_inventory.schema

Field Name	Field Type	Required	Description
WAREHOUSE	Integer(20)	Yes	Item_loc_soh.loc
RMS_SKU	Char(20)	Yes	Item_master.item
ORDER_MULT	Char (6)	Yes	Formal Case Type: V_packsku_qty.qty for simple pack, else 1 Informal Case Type: One unique record for each item/supplier with order multiples of: 1, supp_pack_size, inner_pack_size and (ti * hi * supp_packsize)

Field Name	Field Type	Required	Description
WH_CUR_INV	Char (8)	Yes	Formal Case Type: ((Item_loc_soh.stock_on_hand – (item_loc_soh.tsf_reserved_qty + item_loc_soh.rtv_qty + item_loc_soh.non_sellable_qty + item_loc_soh.customer_resv)) - alloc_detail.qty_distro * (v_packsku_qty.qty for simple pack, else 1) Informal Case Type: ((Item_loc_soh.stock_on_hand – (item_loc_soh.tsf_reserved_qty + item_loc_soh.rtv_qty + item_loc_soh.non_sellable_qty + item_loc_soh.customer_resv)) - alloc_detail.qty_distro)
WH_BO_INV	Char (8)	Yes	Item_loc_soh.customer_backorder

Integration with General Ledger

Overview

RMS stages GL data for subsequent upload into a financial system. A set of batch processes gather and organize the data before using it to populate the staging table, STG_FIF_GL_DATA.

For more information about how data moves from these staging tables to the General Ledger of a financial application and other integration between RMS and financial applications, see *Oracle Retail Financial Integration for Oracle Retail Merchandise Operations Management and Oracle E-Business Suite Financials Implementation Guide*

Batch Design Summary

The following batch designs are included in this functional area:

- dealfinc.pc - Calculation & Interface of Fixed Deal Income for General Ledger
- fifgldn1.pc - Interface to General Ledger of Item/Loc Level Transactions
- fifgldn2. pc - Interface to General Ledger of Rolled Up Transactions
- fifgldn3. pc - Interface to General Ledger of Month Level Information

dealfinc (Calculation of Fixed Deal Income for General Ledger)

Module Name	dealfinc.pc
Description	Calculation & Interface of Fixed Deal Income for General Ledger
Functional Area	Integration – General Ledger
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS65
Runtime Parameters	

Design Overview

This module writes to the STG_FIF_GL_DATA financial staging table to perform stock ledger processing for fixed deals. It splits deal income over all dept/class/subclass locations on the deal. This prorated income is written to the general ledger under a suitable cost center mapping.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Should be run after DEALACT.PC, before DEALFCT.PC, DEALDAY.PC and SALMTH.PC
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Multithreaded on Deal ID

Restart/Recovery

The logical unit of work for this program is a DEAL_ID. The database commit takes place when number of deal records processed is equal to the commit max counter in the restart control table.

Key Tables Affected

Table	Select	Insert	Update	Delete
FIXED_DEAL	Yes	No	No	No
FIXED_DEAL_DATES	Yes	No	No	No
FIXED_DEAL_MERCH	Yes	No	No	No
FIXED_DEAL_MERCH_LOC	Yes	No	No	No
SUBCLASS	Yes	No	No	No
FIF_GL_CROSS_REF	Yes	No	No	No
STG_FIF_GL_DATA	No	Yes	No	No
MV_LOC_SOB	Yes	No	No	No
KEY_MAP_GL	No	Yes	No	No
FIXED_DEAL_GL_REF_DATA	No	Yes	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
SUPS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000019 STG_FIF_GL_DATA table

Design Assumptions

N/A

fifgldn1 (Interface to General Ledger of Item/Loc Level Transactions)

Module Name	fifgldn1.pc
Description	Interface to General Ledger of Item/Loc Level Transactions
Functional Area	General Ledger
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS66
Runtime Parameters	

Design Overview

This program extracts the detailed stock ledger information for certain transaction types on a daily basis in order to bridge the information to an interfaced financial application. The program reads from the IF_TRAN_DATA table for each transaction type/amount type and posts it to the Oracle Retail General Ledger staging table (STG_FIF_GL_DATA) at the SKU detail level.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Should run after SALSTAGE and prior to SALAPND
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work is department/class/subclass. The batch is multithreaded using the v_restart_dept view.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
FIF_GL_CROSS_REF	Yes	No	No	No
STG_FIF_GL_DATA	No	Yes	No	No
MV_LOC_SOB	Yes	No	No	No
KEY_MAP_GL	No	Yes	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000019 STG_FIF_GL_DATA table

Design Assumptions

N/A

fifgldn2 (Interface to General Ledger of Rolled Up Transactions)

Module Name	fifgldn2.pc
Description	Interface to General Ledger of Rolled Up Transactions
Functional Area	Integration - General Ledger
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS67
Runtime Parameters	

Design Overview

This program summarizes stock ledger data from the transaction staging table (IF_TRAN_DATA) based on the level of information required and writes it to the financial general ledger staging table. The transactions extracted are determined by the CODE_TYPE 'GLRT' (General Ledger Rolled Transactions). The written information can then be extracted by the financial applications. Stock ledger information may be rolled-up at department, class or subclass level. The level at which information is rolled-up to is determined by the system parameter GL_ROLLUP.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Daily
Scheduling Considerations	Should run after salstage.pc and prior to salapnd.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by department

Restart/Recovery

The logical unit of work is dependent on the level of rollup defined in system_options.gl_rollup. It can be department (department rollup), department/class (class rollup) or department/class/subclass (subclass rollup). The batch is multithreaded using the v_restart_dept view.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No

Table	Select	Insert	Update	Delete
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
FIF_GL_CROSS_REF	Yes	No	No	No
STG_FIF_GL_DATA	No	Yes	No	No
MV_LOC_SOB	Yes	No	No	No
KEY_MAP_GL	No	Yes	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000019 STG_FIF_GL_DATA table

Design Assumptions

N/A

fifgldn3 (Interface to General Ledger of Month Level Information)

Module Name	fifgldn3.pc
Description	General Ledger Interface 3
Functional Area	Interface to General Ledger of Month Level Information
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS68
Runtime Parameters	

Design Overview

This program summarizes stock ledger data from the monthly stock ledger table (MONTH_DATA) based on the level of information required and writes it to the financial general ledger staging table. The transactions extracted are determined by the CODE_TYPE 'GLRT' (general ledger rolled transactions). Written information is then sent to the financial application. Stock ledger information may be rolled-up at department, class or subclass level. The level at which information is rolled-up to is determined by the system parameter GL_ROLLUP.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Monthly
Scheduling Considerations	Should run after salmth.pc
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

The logical unit of work is dependent on the level of rollup defined in system_options.gl_rollup. It can be department (department rollup), department/class (class rollup) or department/class/subclass (subclass rollup). The batch is multithreaded using the v_restart_all_locations view.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
WH	Yes	No	No	No
PARTNER	Yes	No	No	No
MONTH_DATA	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No
FIF_GL_CROSS_REF	Yes	No	No	No
FIF_GL_SETUP	Yes	No	No	No
TRAN_DATA_HISTORY	Yes	No	No	No
STG_FIF_GL_DATA	No	Yes	No	No
KEY_MAP_GL	No	Yes	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
V_RESTART_ALL_LOCATIONS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000019 STG_FIF_GL_DATA table

Design Assumptions

N/A

Integration with Oracle Retail POS Suite

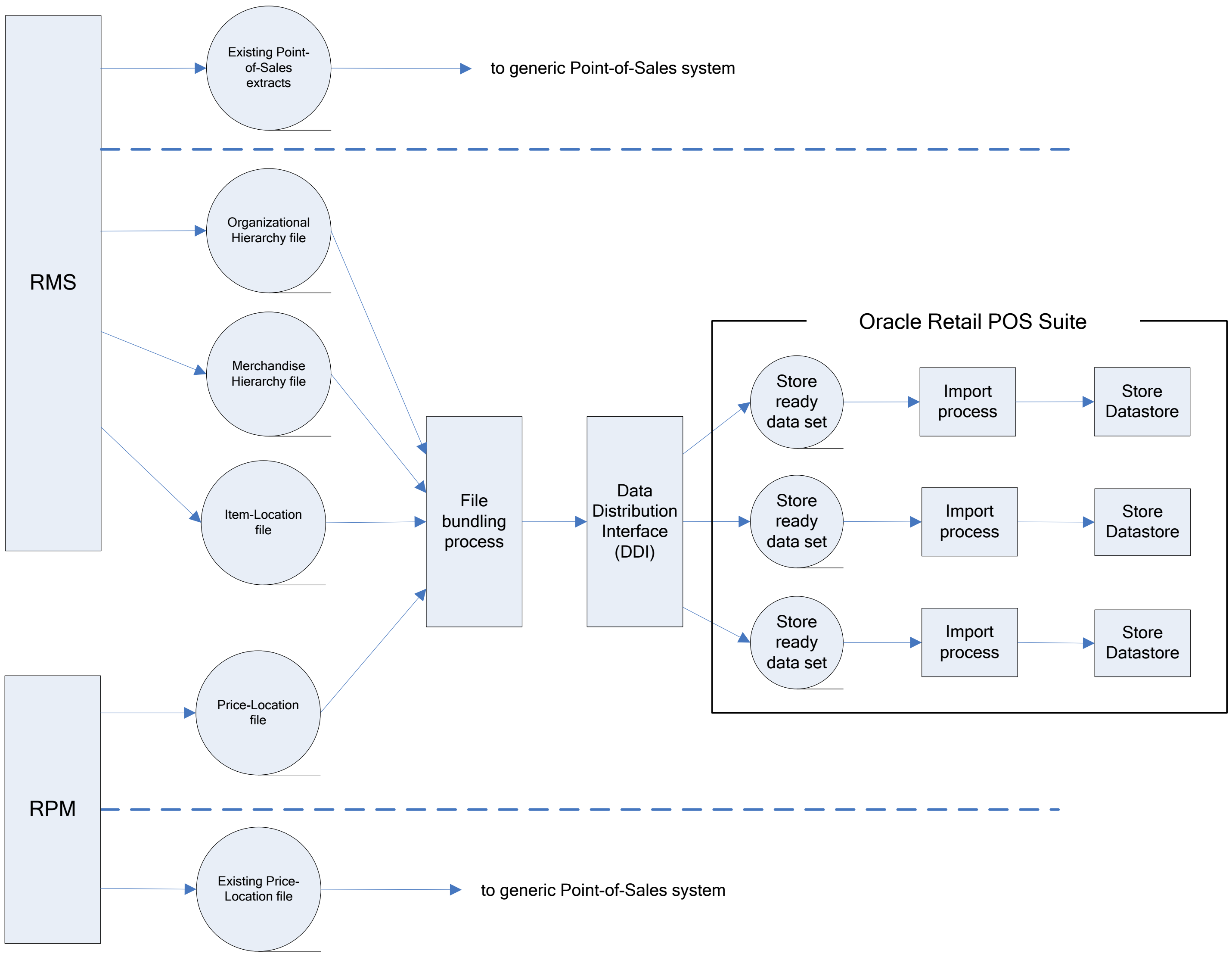
This chapter provides information describes the RMS processes that send foundation data to the Oracle Retail POS Suite. For information about the programs that upload data from the Oracle Retail POS Suite, see the *Oracle Retail Sales Audit Operations Guide*.

For additional information on RMS, ReSA, and Oracle Retail Price Management (RPM) integration with Oracle Retail POS Suite, including detailed flow diagrams, deployment considerations and discussions of functional gaps, see the *Oracle® Retail POS Suite 14.1/Merchandising Operations Management 14.1 Implementation Guide*

Program Summary

Program	**Description**
batch_orpos_extract.ksh	Control Process for Foundation Data Extracts for ORPOS
orposcouponitemdnld	
	Extract of Item/Coupon Data for ORPOS
orposcouponpricednld	Extract of Item/Coupon/Price Data for ORPOS
orpositemsdnld	Extract of Item Data for ORPOS
orposmerchdnld	Extract of Merchandise Hierarchy Data for ORPOS
orposstorednld	Extract of Organizational Hierarchy Data for ORPOS
orposcustsegdnld.sql	Extract of Customer Segment Data for ORPOS

RMS/Oracle Retail POS Suite Communication Flow Diagram



Data Flow from RMS to ORBO

RMS and RPM pass data to Oracle Retail Back Office (ORBO). RMS passes organizational hierarchy, merchandise hierarchy, and item data. This data is combined with pricing data from RPM; the data is bundled, reorganized by store, and then sent to ORBO.

Data Bundling

The data bundling process within RMS reads the organization hierarchy data, merchandise hierarchy data, and item location data and bundles it to create separate files for each ORPOS store.

Data bundling specific to the RMS to Oracle Retail POS Suite integration is done by jarring the XML files generated by SQL extract scripts. This jarring (bundling) is performed by the batch_orpos_extract.ksh. This extract batch also creates a manifest file that defines the interdependencies of the XML files and is included in the bundle too. Here is the flow:

1. batch_orpos_extract.ksh runs and calls the SQL extract scripts.
2. SQL extract scripts generates the XML files needed by ORPOS
3. batch_orpos_extract.ksh checks these files for valid data and creates the manifest file
4. batch_orpos_extract.ksh creates the bundle via jar command and clears the temporary files

RMS creates the following data files for ORBO:

File	Data (in the file Stores will consume)	Description	Full Load or Incremental
Item	Item	Contains item and item location data, as well as some VAT data and coupon data.	Incremental
POS Config	Coupon	Contains coupon related information.	Incremental
Organizational Hierarchy	Store (Organizational) Hierarchy and Stores data	Retailer's hierarchical organization/grouping of stores for business purposes and information about individual stores.	Full Load
Merchandise Hieracrchy	Merchandise (Item) Hierarchy	Retailer's organization/grouping of items (merchandise) for business purposes.	Full Load

Note: RMS does not keep backup copies of produced files. Once the files are successfully saved to the output directory, RMS cannot reproduce them.

Feed Methods

There are three feed methods:

Kill and Fill

Temporary tables are created at the beginning of a file's processing. Batches are written to the temporary tables. If the entire file is processed without error (all batches), the temporary table data replaces the production data and the temporary tables are dropped. If an error occurs, it is logged and the entire file import is aborted.

Full Incremental

Full Incremental is a fill type that performs adds, updates, or deletes expecting that all data attributes for a particular record are included in the file. Any missing attributes are provided default values.

Note: All columns for a row must be present in the import data.

For Full Incremental imports, each import XML data element must include all values. If some values are omitted from the import file, then the Data Import still updates the records in question, but uses default values for the omitted elements or attributes. Usually the default value chosen is **null**, **zero** or **false** unless otherwise specified in the XSD.

Delta Incremental

Delta Incremental is a fill type that produces dynamic update statements that allow for only those data attributes which are included in the file to be updated, leaving existing data attributes intact.

Note: Only those fields being updated are required in the import data.

batch_orpos_extract.ksh (Control Process for Foundation Data Extracts for ORPOS)

Module	batch_orpos_extract.ksh
Description	Control Process for Foundation Data Extracts for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	ksh
Catalog ID	RMS19
Runtime Parameters	

Design Overview

This process supports the integration of foundation data between RMS and ORPOS by means of XML extracts. The RMS portion of the data flow will produce XML files for Organizational Hierarchy, Merchandise Hierarchy, Item-Location data, Coupon and pricing data.

This is a ksh shell script that drives this extraction functionality. It calls different internal functions, spawns multiple threads, SQL scripts to extract data in appropriate XML formats and creates bundles of extracted XMLs.

It accepts ‘no. of threads’ to be created as an argument, and spawns those many threads to fetch coupon/item data by store. It also accepts a directory location where all extraction bundles are to be kept.

This process uses the following SQL scripts:

- orposcouponitemdnld.sql: Coupon Data
- orposcouponpricednld.sql: Coupon Pricing Data
- orposcustsegdnld.sql: Customer Segment Data
- orpositemsdnld.sql: Item Data
- orposmerchdnld.sql: Merchandise Hierarchy Data
- orposstorednld.sql: Store Data

The files produced by these scripts are bundled together along with a manifest, using jar command to create .jar archive.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	If running in conjunction with generic extracts, batch_orpos_extract.ksh should execute prior to 'posdnld' and 'poscdnld' and their corresponding post jobs Also, if RPM pricing info is required then this should run after extraction script 'RPMtoORPOSPublishExport.sh'
Pre-Processing	N/A
Post-Processing	prepost.pc - poscdnld_post() and posdnld_post() Note: If RMS is not integrated with any other POS system using the generic extracts (apart from ORPOS) then poscdnld_post and posdnld_post can be executed here If it is integrated, then poscdnld_post() and posdnld_post() should be executed after respective batches of poscdnld and posdnld
Threading Scheme	Threading is done on coupon/item extract at the store level. Number of threads executed depends on the parameter passed at the command line

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORPOS_PRELOAD_ITEM_TEMP	Yes	Yes	No	Yes
POS_MODS	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
SUPS	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
POS_COUPON_HEAD	Yes	No	No	No
POS_STORE	Yes	No	No	No
PERIOD	Yes	No	No	No
STORE	Yes	No	No	No
STORE_HIERARCHY	Yes	No	No	No
POS_MERCH_CRITERIA	Yes	No	No	No

Table	Select	Insert	Update	Delete
DEPS	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
ITEM_LOC_TRAITS	Yes	No	No	No
POS_CONFIG_ITEMS	Yes	No	No	No
POS_PROD_REST_HEAD	Yes	No	No	No
VAT_DEPS	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
DIVISION	Yes	No	No	No
MERCH_ORG_MAP	Yes	No	No	No
COMPHEAD	Yes	No	No	No
V_DEPS	Yes	No	No	No
GROUPS	Yes	No	No	No
V_MERCH_HIER	Yes	No	No	No
V_REGION	Yes	No	No	No
V_DISTRICT	Yes	No	No	No
ADDR	Yes	No	No	No
CHAIN	Yes	No	No	No
V_AREA	Yes	No	No	No
RELATED_ITEM_CHANGES_TEMP	Yes	No	No	Yes
ORPOS_PRELOAD_RELATEDITEM_TEMP	Yes	Yes	No	Yes

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	See sub-program detail programs

Design Assumptions

- There are some conditions required on data in order to filter out the RMS data being extracted to the XML files. This is required mainly because of data type mismatch between RMS and ORPOS. Some of these conditions are:
  - Store value length is <= 5.
  - Chain value length is <= 4
  - Item value length <= 14
  - UOM length <= 2
  - Diff_1 length <= 20
  - Diff_2 length <= 6
  - Diff_1 and Diff_2 are only differentiators utilized by the extract which corresponds to color and size respectively.
  - Unit retail is <= 999999.99

- While selecting coupons, if creation date matches with vdate, then it is assumed that status is 'A'DD.

orposcouponitemdnld.sql (Extract of Item/Coupon Data for ORPOS)

Module	orposcouponitemdnld.sql
Description	Extract of Item/Coupon Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS141
Runtime Parameters	

Design Overview

This script extracts the coupon data for the passed in store using SQL into an XML file. The script accepts parameters as 'store' value and a 'Dir' value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORPOS_PRELOAD_ITEM_TEMP	Yes	No	No	No
POS_COUPON_HEAD	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	ItemExportCoupon_<store_id>.xml (for ORPOS) ItemExportCoupon_corp.xml (for Central Office)
Integration Contract	IntCon000057

Design Assumptions

N/A

orposcouponpricednld.sql (Extract of Item/Coupon Data for ORPOS)

Module	orposcouponpricednld.sql
Description	Extract of Item/Coupon/Price Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS142
Runtime Parameters	

Design Overview

This script extracts the coupon data for the passed in store using SQL into an XML file. The script accepts parameters as 'store' value and a 'Dir' value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORPOS_PRELOAD_ITEM_TEMP	Yes	No	No	No
POS_COUPON_HEAD	Yes	No	No	No
POS_MERCH_CRITERIA	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
DEPS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	PricingExtractCoupon_<store_id>.xml (for ORPOS)
Integration Contract	IntCon000058

Design Assumptions

N/A

orpositemsdnld.sql (Extract of Item Data for ORPOS)

Module	orpositemsdnld.sql
Description	Extract of Item Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS143
Runtime Parameters	

Design Overview

This script extracts the item data using SQL into an XML file. The script accepts parameters as ‘store’ value and a ‘Dir’ value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORPOS_PRELOAD_ITEM_TEMP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	ItemExport_<store_id>.xml (for ORPOS) ItemExport_corp.xml (for Central Office)
Integration Contract	IntCon000059

Design Assumptions

N/A

orposmerchdnld.sql (Extract of Merchandise Hierarchy Data for ORPOS)

Module	orposmerchdnld.sql
Description	Extract of Merchandise Hierarchy Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS144
Runtime Parameters	

Design Overview

This script extracts the item data using SQL into an XML file. The script accepts parameters as 'store' value and a 'Dir' value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
MERCH_ORG_MAP	Yes	No	No	No
COMPHEAD	Yes	No	No	No
DIVISION	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	MerchandiseHier_<store_id>.xml (for ORPOS) MerchandiseHier_corp.xml (for Central Office)
Integration Contract	IntCon000060

Design Assumptions

N/A

orposstorednld.sql (Extract of Organizational Hierarchy Data for ORPOS)

Module	orposstorednld.sql
Description	Extract of Organizational Hierarchy Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS146
Runtime Parameters	

Design Overview

This script extracts organizational hierarchy data using SQL into an XML file. The script accepts parameters as 'store' value and a 'Dir' value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
STORE_HIERARCHY	Yes	No	No	No
ADDR	Yes	No	No	No
PERIOD	Yes	No	No	No
COMPHEAD	Yes	No	No	No
CHAIN	Yes	No	No	No
V_AREA	Yes	No	No	No
V_REGION	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	StoreOrgHier_<store_id>.xml (for ORPOS) StoreOrgHier_corp.xml (for Central Office)
Integration Contract	IntCon000062

Design Assumptions

N/A

orposcustsegdnld.sql (Extract of Customer Segment Data for ORPOS)

Module	orposcustsegdnld.sql
Description	Extract of Customer Segment Data for ORPOS
Functional Area	Integration - Oracle Retail POS Suite
Module Type	Integration
Module Technology	SQL
Catalog ID	RMS145
Runtime Parameters	

Design Overview

This script extracts customer segment data using SQL into an XML file. The script accepts parameters as 'store' value and a 'Dir' value, indicating a directory path where output is to be spooled. These parameters are passed by the driving shell script, batch_orpos_extract.ksh.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	See batch_orpos_extract.ksh considerations
Pre-Processing	N/A
Post-Processing	prepost batch_orpos_extract post
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
CUSTOMER_SEGMENT_POS_STG	Yes	No	No	No
CUSTOMER_SEGMENT	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	CustomerExtractCustSeg.xml
Integration Contract	IntCon000061

Design Assumptions

N/A

Integration with Oracle Retail Planning

Overview

Retail Predictive Application Server (RPAS) is the platform for Oracle Retail's planning applications. RMS provides foundation and inventory information to RPAS for use in planning processes. All RPAS based planning processes require a minimum amount of information. These platform level integration processes are discussed in this chapter.

Some of additional planning products based on the RPAS platform require additional information from RMS and produce additional results for RMS. RMS also provides specific integrations for Retail Demand Forecasting (RDF) and Merchandise Financial Planning (MFP). These product level integration processes are also discussed in this chapter.

Deeper information about the flow of information between RMS and Planning applications can be found in the Retail Reference Architecture (available on MyOracleSupport).

Many of the integrations described in this chapter use RETL (Retail Extract, Transform, Load). For more information about configuration of ReTL see *Oracle Retail Merchandising System Operations Guide Volume 3 – Back-End Configuration and Operations.*

Foundation Data vs Transaction/Inventory Data

RPAS requires both foundation and transaction data from RMS. In most cases, foundation data extracts can be run ad hoc at any time.

Transaction and inventory extracts should be scheduled in phase 4 after main RMS inventory processing (Phase 3). Weekly information in RMS is rolled up in Phase 8, which pushes some weekly RPAS extracts to quite late in the RMS schedule.

Scheduling and dependency information for each program can be found in the program details section of this chapter.

RPAS Integration Program Summary

Program	Description
pre_rmse_rpas.ksh	Extract of RMS System level settings for RPAS
rmse_rpas_suppliers.ksh	Extract of Suppliers for RPAS
rmse_rpas_merchhier.ksh	Extract of Merchandise Hierarchy for RPAS
rmse_rpas_orghier.ksh	Extract of Organizational Hierarchy for RPAS
rmse_rpas_wh.ksh	Extract of Warehouses for RPAS
rmse_rpas_store.ksh	Extract of Stores for RPAS
rmse_rpas_item_master.ksh	Extract of Items for RPAS

Program	Description
rmse_rpas_domain.ksh	Extract of Domains for RPAS
rmse_rpas_attributes.ksh	Extract of User Defined Attributes for RPAS
rmse_rpas_weekly_sales.ksh	Extract of Weekly Sales of Forecasted Items for RPAS
rmse_rpas_daily_sales.ksh	Extract of Daily Sales of Forecasted Items for RPAS
rmse_rpas_stock_on_hand.ksh	Extract of Stock On Hand of Forecasted Items for RPAS
rmse_rpas	RMS-Planning Extract Wrapper Script
rmsl_rpas_update_retl_date.ksh	Update Last RPAS Extract Date
onictext	On Inter-Company Transfer Exhibit
onordext	On Order Extract
gradupld	Upload of Store Grade Classifications from RPAS
onorddnld	On Order Download to Financial Planning

RDF Integration Program Summary

Program	Description
soutdnld.pc	Download of Out Of Stock Items
ftmednld.pc	Download of Time Hierarchy for Planning Systems
fcstrbld_sbc.pc	Forecasting Rollup by Department, Class and Subclass
fcstrbld.pc	Forecasting Data Rollup
rmsl_rpas_forecast.ksh	Load Daily/Weekly Forecast from RPAS
fcstprg.pc	Purge Forecast Data
rmse_rdf_daily_sales	Extract of Daily Sales of Forecasted Items for RPAS
rmse_rdf_weekly_sales	Extract of Weekly Sales of Forecasted Items for RPAS

MFP Integration Program Summary

Program	Description
rmse_mfp_inventory.ksh	Extract of Inventory Aggregation for MFP
rmse_mfp_onorder.ksh	Extract of On Order for MFP

For additional details on the RMS/MFP integration from the perspective of MFP, see the *Oracle Retail Merchandise Financial Planning Operations Guide*

pre_rmse_rpas (Extract of RMS System level settings for RPAS)

Module Name	pre_rmse_rpas.ksh
Description	Extract of RMS System level settings for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS160
Runtime Parameters	

Design Overview

The purpose of this batch module is to fetch the RMS system parameters that must be referenced in RPAS. This program produces a number of output files.

Some of the output files contain relatively static data that generally only changes at implementation. However, two files concern the current and next date in RMS. As dates change in RMS, this program should be run daily.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad-hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
PERIOD	Yes	No	No	No
RETL_EXTRACT_DATES	Yes	No	No	No
CURRENCY_RATES	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	consolidation_code.txt
Integration Contract	IntCon000140

Output File

Field Name	Field Type	Required	Description
CONSOLIDATION_CODE	Varchar2(1)	Yes	Indicates whether Oracle Retail will support the addition, maintenance, and viewing for the consolidation exchange rate in the Pending Exchange Rate Maintenance process.

Integration Contract

Integration Type	Download from RMS
File Name	vat_ind.txt
Integration Contract	IntCon000141

Output File

Field Name	Field Type	Required	Description
VAT_IND	Varchar2(1)	Yes	Indicates whether taxation is used in the system. Valid values: N for SALES tax type. Y for other values.

Integration Contract

Integration Type	Download from RMS
File Name	prime_currency_code.txt
Integration Contract	IntCon000142

Output File

Field Name	Field Type	Required	Description
CURRENCY_CODE	Varchar2(3)	Yes	Indicates the currency code

Integration Contract

Integration Type	Download from RMS
File Name	stkldgr_vat_incl_retl_ind.txt
Integration Contract	IntCon000143

Output File

Field Name	**Field Type**	**Required**	**Description**
STKLDGR_VAT_INCL_RETL_IND	Varchar2(1)	Yes	Indicates if the retail value in stock ledger is VAT inclusive or not

Integration Contract

Integration Type	Download from RMS
File Name	multi_currency_ind.txt
Integration Contract	IntCon000144

Output File

Field Name	**Field Type**	**Required**	**Description**
MULTI_CURRENCY_IND	Varchar2(1)	Yes	Indicates if there are more than one currency in the system

Integration Contract

Integration Type	Download from RMS
File Name	class_level_vat_ind.txt
Integration Contract	IntCon000145

Output File

Field Name	**Field Type**	**Required**	**Description**
CLASS_LEVEL_VAT_IND	Varchar2(1)	Yes	Indicates if VAT is used at the class level

Integration Contract

Integration Type	Download from RMS
File Name	domain_level.txt
Integration Contract	IntCon000146

Output File

Field Name	Field Type	Required	Description
DOMAIN_LEVEL	Varchar2(1)	Yes	Indicates the domain grouping level.

Integration Contract

Integration Type	Download from RMS
File Name	vdate.txt
Integration Contract	IntCon000147

Output File

Field Name	Field Type	Required	Description
VDATE	Date	Yes	Indicates the system date

Integration Contract

Integration Type	Download from RMS
File Name	next_vdate.txt
Integration Contract	IntCon000148

Output File

Field Name	Field Type	Required	Description
NEXT_VDATE	Date	Yes	Indicates the next system date in the system. VDATE+1

Integration Contract

Integration Type	Download from RMS
File Name	last_eom_date.txt
Integration Contract	IntCon000149

Output File

Field Name	**Field Type**	**Required**	**Description**
LAST_EOM_DATE	Date	Yes	Indicates the date of the end of month cycle

Integration Contract

Integration Type	Download from RMS
File Name	curr_bom_date.txt
Integration Contract	IntCon000150

Output File

Field Name	**Field Type**	**Required**	**Description**
CURR_BOM_DATE	Date	Yes	Indicates the next succeeding date after the end of the month cycle

Integration Contract

Integration Type	Download from RMS
File Name	max_backpost_days.txt
Integration Contract	IntCon000151

Output File

Field Name	**Field Type**	**Required**	**Description**
MAX_BACKPOST_DAYS	Date	Yes	Indicates the number of days from the system date and the last end of month date cycle

Integration Contract

Integration Type	Download from RMS
File Name	last_extr_closed_pot_date.txt
Integration Contract	IntCon000152

Output File

Field Name	**Field Type**	**Required**	**Description**
LAST_EXTR_CLOSED_POT_DATE	Date	Yes	Indicates the date of the most recent extraction of closure dates for transactions

Integration Contract

Integration Type	Download from RMS
File Name	last_extr_received_pot_date.txt
Integration Contract	IntCon000153

Output File

Field Name	**Field Type**	**Required**	**Description**
LAST_EXTR_RECEIVED_POT_DATE	Date	Yes	Indicates the date of the most recent quantity extraction

Integration Contract

Integration Type	Download from RMS
File Name	prime_exchng_rate.txt
Integration Contract	IntCon000154

Output File

Field Name	**Field Type**	**Required**	**Description**
PRIME_EXCHNG_RATE	Number(20, 10)	Yes	Indicates the primary exchange rate for the given currency in the system

Design Assumptions

N/A

rmse_rpas_suppliers (Extract of Suppliers for RPAS)

Module Name	rmse_rpas_suppliers.ksh
Description	Extract of Suppliers for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS11
Runtime Parameters	

Design Overview

This script extracts supplier information for interfacing to an external planning system, such as RPAS. All suppliers are extracted so no delta processing exists.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SUPS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000095 rmse_rpas_suppliers.schema

Output File

Field Name	Field Type	Required	Description
SUPPLIER	Integer(11)	Yes	Sups.supplier
SUP_NAME	Char(240)	Yes	Sups.sup_name

Design Assumptions

N/A

rmse_rpas_merchhier (Extract of Merchandise Hierarchy for RPAS)

Module Name	rmse_rpas_merchhier.ksh
Description	Extract of Merchandise Hierarchy for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS10
Runtime Parameters	

Design Overview

This script extracts the RMS merchandise hierarchy information for interfacing to an external planning system, such as RPAS. The full hierarchy is extracted so no delta processing exists.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After dlyprg.pc, pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh, dlyprg.pc
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
COMPHEAD	Yes	No	No	No
DIVISION	Yes	No	No	No
GROUPS	Yes	No	No	No
DEPS	Yes	No	No	No
CLASS	Yes	No	No	No
SUBCLASS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000090 rmse_rpas_merchhier.schema

Output File

Field Name	Field Type	Required	Description
SUBCLASS	Integer(5)	Yes	Subclass.subclass
SUB_NAME	Char(120)	Yes	Subclass.sub_name
CLASS	Integer(5)	Yes	Class.class
CLASS_NAME	Char(120)	Yes	Class.class
DEPT	Integer(5)	Yes	Deps.dept
DEPT_NAME	Char(120)	Yes	Deps.dept_name
GROUP_NO	Integer(5)	Yes	Groups.group_no
GROUP_NAME	Char(120)	Yes	Groups.group_name
DIVISION	Integer(5)	Yes	Division.division
DIV_NAME	Char(120)	Yes	Division.div_name
COMPANY	Integer(5)	Yes	Comphead.company
CO_NAME	Char(120)	Yes	Comphead.co_name

Design Assumptions

N/A

rmse_rpas_orghier (Extract of Organizational Hierarchy for RPAS)

Module Name	rmse_rpas_orghier.ksh
Description	Extract of Organizational Hierarchy for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS04
Runtime Parameters	

Design Overview

This script extracts the RMS organizational hierarchy information for interfacing to an external planning system, such as RPAS. The full hierarchy is extracted so no delta processing exists.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After dlyprg.pc After pre_rmse_rpas.ksh
Pre-Processing	Dlyprg.pc, pre_rmse_rpas.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
COMPHEAD	Yes	No	No	No
CHAIN	Yes	No	No	No
AREA	Yes	No	No	No

Table	Select	Insert	Update	Delete
REGION	Yes	No	No	No
DISTRICT	Yes	No	No	No

Integration Contract

Output File Layout

The output file is in fixed-length format matching to the schema definition in rmse_rpas_orghier.schema.

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000091 rmse_rpas_orghier.schema

Output File:

Field Name	Field Type	Required	Description
DISTRICT	Integer(11)	No	District.district
DISTRICT_NAME	Char(120)	No	District.district_name
REGION	Integer(11)	No	Region.region
REGION_NAME	Char(120)	No	Region.region_name
AREA	Integer(11)	No	Area.area
AREA_NAME	Char(120)	No	Area.area_name
CHAIN	Integer(11)	Yes	Chain.chain
CHAIN_NAME	Char(120)	Yes	Chain.chain_name
COMPANY	Integer(5)	Yes	Comphead.company
CO_NAME	Char(120)	Yes	Comphead.co_name

Design Assumptions

N/A

rmse_rpas_wh (Extract of Warehouses for RPAS)

Module Name	rmse_rpas_wh.ksh
Description	Extract of Warehouses for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS03
Runtime Parameters	

Design Overview

This script extracts warehouse information for interfacing to an external planning system, such as RPAS. All stockholding warehouses are extracted so no delta processing exists.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc Interfaces
Frequency	Daily
Scheduling Considerations	After dlyprg.pc After pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh, dlyprg.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
WH	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000097 rmse_rpas_wh.schema

Output File

Field Name	Field Type	Required	Description
WH	Integer(11)	Yes	Wh.wh
WH_NAME	Char(150)	Yes	Wh.wh_name
FORECAST_WH_IND	Char(1)	Yes	Wh.forecast_wh_ind
STOCKHOLDING_IND	Char(1)	Yes	Wh.stockholding_ind
CHANNEL_ID	Number(4)	Yes	Wh.channel_id
CHANNEL_NAME	Varchar2(120)	Yes	Channels.channel_name

Design Assumptions

N/A

rmse_rpas_store (Extract of Stores for RPAS)

Module Name	rmse_rpas_store.ksh
Description	Extract of Stores for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS02
Runtime Parameters	

Design Overview

This script extracts store information for interfacing to an external planning system, such as RPAS. All open stores are extracted so no delta processing exists.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc Interfaces
Frequency	Daily
Scheduling Considerations	After dlyprg.pc After pre_rmse_rpas.ksh
Pre-Processing	dlyprg.pc, pre_rmse_rpas.ksh
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
STORE_FORMAT	Yes	No	No	No
CODE_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000094 rmse_rpas_store.schema

Output File

Field Name	Field Type	Required	Description
STORE	Integer(11)	Yes	Store.store
STORE_NAME	Char(150)	Yes	Store.store_name
DISTRICT	Integer(11)	Yes	Store.district
STORE_CLOSE_DATE	Date(8)	No	Store.store_close_date
STORE_OPEN_DATE	Date(8)	Yes	Store.store_open_date
STORE_CLASS	Char(1)	Yes	Store.store_class
STORE_CLASS_DESCRIPTION	Char(40)	Yes	Code_detail.code_desc (for code_type ‘CSTR’)
STORE_FORMAT	Integer(5)	No	Store.store_format
FORMAT_NAME	Char(60)	No	Store_format.format_name

Field Name	Field Type	Required	Description
CHANNEL_ID	Number(4)	Yes	Store.channel_id
CHANNEL_NAME	Varchar2(120)	Yes	Channels.channel_name

Design Assumptions

N/A

rmse_rpas_item_master (Extract of Items for RPAS)

Module Name	rmse_rpas_item_master.ksh
Description	Extract of Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS05
Runtime Parameters	

Design Overview

This script extracts item information from RMS for interfacing to an external planning system, such as RPAS. This extract will pull all approved items. All items meeting the criteria will be extracted so no delta processing exists.

Note: In RMS, diff_type is a string of up to 6 characters. However, in RPAS, the diff_type is only 1 character long. IF_RDF_DIFF_MAP table holds the mapping between the RMS diff_type and RPAS diff_type. The RPAS diff_type is extracted to the output file.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After sitmain.pc, reclsdly.pc and dlyprg.pc After pre_rmse_rpas.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
DIFF_IDS	Yes	No	No	No
IF_RDF_DIFF_MAP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000089 rmse_rpas_item_master.schema

Output File

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
ITEM_DESC	Char(250)	Yes	Item_master.item_desc
ITEM_PARENT	Char(25)	No	Item_master.item_parent
ITEM_GRANDPARENT	Char(25)	No	Item_master.item_grandparent
ITEM_LEVEL	Integer(1)	Yes	Item_master.item_level
TRAN_LEVEL	Integer(1)	Yes	Item_master.tran_level
SUBCLASS	Integer(5)	Yes	Item_master.subclass
CLASS	Integer(5)	Yes	Item_master.class
DEPT	Integer(5)	Yes	Item_master.dept
FORECAST_IND	Char(1)	Yes	Item_master.forecast_ind
SUPPLIER	Integer(11)	Yes	Item_supplier.supplier – primary supplier only
DIFF_1_TYPE	Char(1)	No	If_rdf_diff_map.rdf_diff_type_map
DIFF_1	Char(10)	No	Diff_ids.diff_id
DIFF_DESC_1	Char(120)	No	Diff_ids.diff_desc
DIFF_FILE_POSITION_1	Integer(2)	No	If_rdf_diff_map.file_position
DIFF_1_AGGREGATE_IND	Char(1)	No	Item_master.diff_1_aggregate_ind
DIFF_2_TYPE	Char(1)	No	If_rdf_diff_map.rdf_diff_type_map
DIFF_2	Char(10)	No	Diff_ids.diff_id
DIFF_DESC_2	Char(120)	No	Diff_ids.diff_desc

Field Name	Field Type	Required	Description
DIFF_FILE_POSITION_2	Integer(2)	No	If_rdf_diff_map.file_position
DIFF_2_AGGREGATE_IND	Char(1)	No	Item_master.diff_2_aggregate_ind
DIFF_3_TYPE	Char(1)	No	If_rdf_diff_map.rdf_diff_type_map
DIFF_3	Char(10)	No	Diff_ids.diff_id
DIFF_DESC_3	Char(120)	No	Diff_ids.diff_desc
DIFF_FILE_POSITION_3	Integer(2)	No	If_rdf_diff_map.file_position
DIFF_3_AGGREGATE_IND	Char(1)	No	Item_master.diff_3_aggregate_ind
DIFF_4_TYPE	Char(1)	No	If_rdf_diff_map.rdf_diff_type_map
DIFF_4	Char(10)	No	Diff_ids.diff_id
DIFF_DESC_4	Char(120)	No	Diff_ids.diff_desc
DIFF_FILE_POSITION_4	Integer(2)	No	If_rdf_diff_map.file_position
DIFF_4_AGGREGATE_IND	Char(1)	No	Item_master.diff_4_aggregate_ind

Design Assumptions

N/A

rmse_rpas_domain (Extract of Domains for RPAS)

Module Name	rmse_rpas_domain.ksh
Description	Extract of Domains for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS06
Runtime Parameters	

Design Overview

This script extracts from RMS domain information for RMS integration with an external planning system, for example RPAS.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After pre_rmse_rpas.ksh

Schedule Information	Description
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
SYSTEM_OPTIONS	Yes	No	No	No
DOMAIN	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000088 rmse_rpas_domain.schema

Field Name	Field Type	Required	Description
DOMAIN_ID	Integer(3)	No	Domain.domain_id
DOMAIN_DESC	Char(20)	No	Domain.domain_desc
DEPT	Integer(5)	No	Domain_dept.dept or Domain_class.dept or Domain_subclass.dept
CLASS	Integer(5)	No	Domain_class.class or Domain_subclass.class or NULL
SUBCLASS	Integer(5)	No	Domain_subclass.subclass or NULL
LOAD_SALES_IND	Char(2)	No	Domain_dept.load_sales_ind or Domain_class.load_sales_ind or Domain_subclass.load_sales_ind

Design Assumptions

N/A

rmse_rpas_attributes (Extract of User Defined Attributes for RPAS)

Module Name	Rmse_rpas_attributes.ksh
Description	Extract of User Defined Attributes for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS01
Runtime Parameters	

Design Overview

This script extracts from RMS user defined attributes information for RMS integration with an external planning system, for example RPAS.

If launched through rmse_rpas.ksh, this program is only going to be executed if either PROD_ATTRIBUTES_ACTIVE or LOC_ATTRIBUTES_ACTIVE parameter is set to TRUE in rmse_rpas_config.ksh.

Note: This script provides a framework of UDA extract. Each client will have to customize it to reflect the UDA ids associated with the desired attributes (e.g. season, brand, ethnic, etc.).

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	After pre_rmse_rpas.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
UDA_ITEM_LOV	Yes	No	No	No
UDA	Yes	No	No	No
UDA_VALUES	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000086 rmse_rpas_attributes.schema

Note: Each client needs to customize the field definitions in rmse_rpas_attributes.schema. The field definitions must be kept in sync with the UDAxxx fields of rdft_merchhier.attributes.schema.

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
COMPANY	Integer(20)	Yes	Comphead.company
CO_NAME	Char(120)	Yes	Comphead.co_name
UDA_VALUE_101	Char(20)	No	Uda_values.uda_value
UDA_VALUE_DESC_101	Char(250)	No	Uda_values.uda_value_desc
UDA_VALUE_103	Char(20)	No	Uda_values.uda_value
UDA_VALUE_DESC_103	Char(250)	No	Uda_values.uda_value_desc
UDA_VALUE_104	Char(20)	No	Uda_values.uda_value
UDA_VALUE_DESC_104	Char(250)	No	Uda_values.uda_value_desc
UDA_VALUE_501	Char(20)	No	Uda_values.uda_value
UDA_VALUE_DESC_501	Char(250)	No	Uda_values.uda_value_desc

rmse_rpas_weekly_sales (Extract of Weekly Sales of Forecasted Items for RPAS)

Module Name	rmse_rpas_weekly_sales.ksh
Description	Extract of Weekly Sales of Forecasted Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS09
Runtime Parameters	

Design Overview

This script extracts item weekly sales information at a location for interfacing to an external planning system, such as RPAS. Only forecastable items are extracted. This extract will contain only weeks that have yet to be extracted. Once the extract is completed this process with execute the rmsl_rpas_update_last_hist_exp_date.ksh script to update the last export date for any extracted item/locations which is used for subsequent extracts.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 8
Frequency	Weekly
Scheduling Considerations	After hstwkupd.pc After salweek.pc After pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh, hstwkupd, salweek
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
PERIOD	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000096 rmse_rpas_weekly_sales.schema

Output File

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
LOC	Integer(11)	Yes	Item_loc_soh.loc
EOW_DATE	Date(8)	No	Item_loc_hist.eow_date in YYYYMMDD format
SALES_ISSUES	Double(18)	No	Item_loc_hist.sales_issues
SALES_TYPE	Char(1)	Yes	Item_loc_hist.sales_type
ROW_ID	Char(18)	No	Item_loc_soh.row_id
DOMAIN_ID	Integer(3)	Yes	Domain_dept.domain_id or domain_class.domain_id or domain_subclass.domain_id

Design Assumptions

N/A

rmse_rpas_daily_sales (Extract of Daily Sales of Forecasted Items for RPAS)

Module Name	Rmse_rpas_daily_sales.ksh
Description	Extract of Daily Sales of Forecasted Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS08
Runtime Parameters	

Design Overview

This script extracts from RMS item's daily sales information at a location for RMS integration with an external planning system, for example RPAS. Only forecastable items are extracted. For a store, the sales data represents the net sales (gross sales – returns); for a warehouse, the sales data represents the stock transferred out of the warehouse.

Each client can customize the variable USE_IF_TRAN_DATA in this script to choose whether the sales data should come from IF_TRAN_DATA table or TRAN_DATA_HISTORY table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After saldly.pc After pre_rmse_rpas.ksh
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No

Table	Select	Insert	Update	Delete
IF_TRAN_DATA	Yes	No	No	No
TRAN_DATA_HISTORY	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000087 rmse_rpas_daily_sales.schema

Field Name	Field Type	Required	Description
LOC	Integer(11)	Yes	Item_loc_soh.loc
ITEM	Char(25)	No	If_tran_data.item or tran_data_history.item
TRAN_DATE	Date(8)	Yes	If_tran_data.tran_date or tran_data_history.tran_date
SUM_UNITS	Double(14)	No	If_tran_data.units or tran_data_history.units
SALES_TYPE	Char(1)	No	If_tran_data.sales_type or tran_data_history.sales_type
TRAN_CODE	Integer(3)	Yes	If_tran_data.tran_code or tran_data_history.tran_code
DOMAIN_ID	Integer(3)	Yes	Domain_dept.domain_id or domain_class.domain_id or domain_subclass.domain_id

Design Assumptions

N/A

rmse_rpas_stock_on_hand (Extract of Stock On Hand of Forecasted Items for RPAS)

Module Name	rmse_rpas_stock_on_hand.ksh
Description	Extract of Stock On Hand of Forecasted Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS07
Runtime Parameters	

Design Overview

This script extracts item stock on hand information at a location for interfacing to an external planning system, for example RPAS. Only Approved items marked as forecastable will be extracted.

A run-time parameter is used to indicate whether the stock on hand information for warehouses should be extracted or not. Item/store's stock on hand is always extracted as 'sales'. However, item/warehouse's stock on hand is only extracted as 'issues' when the run-time parameter ISSUES_ACTIVE is 'True'.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After stkdly.pc After pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh, stkdly.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No

Table	Select	Insert	Update	Delete
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No

Integration Contract

There are two output files associated with this script, one for stores and one for warehouses.

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000093 rmse_rpas_stock_on_hand_sales.schema rmse_rpas_stock_on_hand_issues.schema

Output File

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_loc_soh.item
LOC	Integer(11)	Yes	Item_loc_soh.loc
STOCK_ON_HAND	Double(14)	Yes	Item_loc_soh.stock_on_hand

Design Assumptions

N/A

rmse_rpas (RMS-Planning Extract Wrapper Script)

Module Name	rmse_rpas.ksh
Description	Optional Wrapper Script to run all RPAS RETL Extracts
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	
Runtime Parameters	

Design Overview

The rmse_rpas.ksh script is an optional wrapper that runs all extracts from RMS for RPAS.

This wrapper script assumes default input parameters for some jobs. Care should be taken to ensure that if a client uses this wrapper script, those default input parameters are either correct or updated to the correct value for the implementation.

This wrapper script also assumes that all extracts from RMS should be run. There are cases (detailed in the extract script specific documentation) where this might not be the case. Care should be taken to ensure that if a client uses this wrapper script, it is updated as needed to reflect the extracts appropriate to the implementation.

This wrapper script also assumes that that all extracts should be run sequentially at a single point in the RMS batch cycle. This may or may not be the best assumption for a given implementation.

If a client chooses not to use this wrapper script, he can individually schedule RPAS extract jobs. Some jobs which send stable foundation data can be scheduled ad hoc at any time. Other jobs that concern inventory positions must wait until Phase 4 of the batch cycle.

If a client uses this wrapper script, no extraction for RPAS will be performed until the most restrictive dependencies allow it. This may mean a delay in getting any information to RPAS so its processing cycle can begin.

The wrapper script is convenient, but may not be the right choice for all implementations.

The scripts included in this wrapper are:

- rmse_rpas_attributes
- rmse_rpas_daily_sales
- rmse_rpas_domain
- rmse_rpas_item_master
- rmse_rpas_merchhier
- rmse_rpas_orghier
- rmse_rpas_stock_on_hand
- rmse_rpas_store
- rmse_rpas_suppliers
- rmse_rpas_weekly_sales
- rmse_rpas_wh

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Scheduling Considerations	Optional – If a client uses this wrapper script, no extraction for RPAS will be performed until the most restrictive sub script dependencies allow it. This wrapper script must be scheduled in phase 4 This may mean a delay in getting any information to RPAS so its processing cycle can begin If this script is NOT used, it is possible to get some data to RPAS earlier in the total batch cycle. This may have an impact on when RPAS is able to begin it's batch processing
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Integration Contract

Integration Type	Download from RMS
File Name	See specific rmse_rpas* batch designs
Integration Contract	N/A

Design Assumptions

N/A

rmsl_rpas_update_retl_date (Update Last RPAS Extract Date)

Module Name	rmsl_rpas_update_retl_date.ksh
Description	Update Last RPAS Extract Date
Functional Area	Integration - RPAS
Module Type	Admin
Module Technology	Ksh
Catalog ID	RMS161
Runtime Parameters	

Design Overview

This script updates the RMS RETL extract date on RETL_EXTRACT_DATES table. The program can be run with a run-time parameter of 'CLOSED_ORDER' or 'RECEIVED_QTY' which indicates whether the purchase order closed date or last received date is to be updated.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	After all daily RPAS Integration RETL scripts are run
Pre-Processing	pre_rmse_rpas.ksh rmse_rpas.ksh rmse_rpas_attributes.ksh rmse_rpas_daily_sales.ksh rmse_rpas_domain.ksh rmse_rpas_item_master.ksh rmse_rpas_merchhier.ksh rmse_rpas_orghier.ksh rmse_rpas_stock_on_hand.ksh rmse_rpas_store.ksh rmse_rpas_suppliers.ksh rmse_rpas_wh.ksh rmsl_rpas_forecast.ksh rmse_rpas_merchhier.ksh rmse_rpas_item_master.ksh rmse_rpas_orghier.ksh rmse_rpas_store.ksh rmse_rpas_wh.ksh

Schedule Information	Description
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
RETL_EXTRACT_DATES	No	No	Yes	No

Integration Contract

N/A

Design Assumptions

N/A

soutdnld (Stockout Download)

Module Name	soutdnld.pc
Description	Download of Out Of Stock Items
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS115
Runtime Parameters	

Design Overview

A forecasting interface requires a notification whenever an item stock on hand at a store goes to zero or below that level. This soutdnld program loops through the item/store stock on hand table and outputs any item/store combinations that have a stock out condition to an output file. This output file will then be sent to the forecasting system.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4 (Daily)
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	Processing that updates the stock levels should be completed before running this program
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	The forecasting system requires that the output files generated by this program be grouped by domain number. To accommodate this requirement, soutdnld.pc should be threaded by a domain

Restart/Recovery

The logical unit of work for this program is set at item/location level. Table based restart/recovery is used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of the file I/O.

Since threads are determined by the value of the domain ID, the RESTART_PROGRAM_STATUS table should contain a row for each domain ID. The thread value of the domain ID should be used as the thread value on this table. The total number of domains/number of threads should be equal to the number of rows on the RESTART_PROGRAM_STATUS table. This value must be entered into the restart_control table num_threads field. Note that anytime a new domain is created, an additional row should be added to the RESTART_PROGRAM_STATUS table with the thread value equal to the domain ID and the restart_control table num_threads field must be incremented to equal the total number of domains.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No
SUB_ITEMS_DETAIL	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	sout%d.dat, where %d is substitued with the department id
Integration Contract	IntCon000036

The output filename is hardcoded to sout%d.dat where %d is substitued with the department id. Each run of the program can produce multiple output files, one for each department.

Field Name	Field Type	Default Value	Description
Date	Char(8)	Period.vdate	The date of the stockout in YYYYMMDD format
Store	Number(10)		The store at which the sku encountered the stockout – left justified with trailing blanks
Item	Char(25)		The item that encountered the stockout – left justified with trailing blanks

Design Assumptions

N/A

ftmednld (Download of Time Hierarchy for Planning Systems)

Module Name	ftmednld.pc
Description	Download of Time Hierarchy for Planning Systems
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS15
Runtime Parameters	

Design Overview

The FTMEDNLD.PC module downloads the RMS calendar (year, half, quarter, month, week, day, and date) in the 454-calendar format. The download consists of the entire calendar in the RMS. This program accounts for a fiscal year that could be different from the standard year in the CALENDAR table.

As part of the implementation, the extracted flat file needs to be transferred to a location where the planning system (with its transformation script) can access it.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A (Single Thread)

Restart/Recovery

Due to the relatively small amount of processing this program performs; restart recovery will not be used. The calls to retek_init() and retek_close() are used in the program only for logging purposes (to prevent double-runs).

Locking Strategy

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
CALENDAR	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No

I/O Specification

Output Files

The file outputted will be named rmse_rpas_clndmstr.dat.

Record Name	Field Name	Field Type	Default Value	Description
	Year	Number(4)		The 4-5-4 year
	Half	Number(1)		The 4-5-4 half of the year, valid values are 1 or 2
	Quarter	Number(1)		The 4-5-4 quarter of the year, valid values 1-4
	Month	Number(2)		The 4-5-4 month of the year, valid values 1-12
	Week	Number(2)		The 4-5-4 week of the year, valid values 1-53
	Day	Number(1)		The 4-5-4 day of the current week, valid values 1-7
	Date	Date		The date from which the 4-5-4 data was derived, in YYYYMMDD format

Integration Contract

Integration Type	Download from RMS
File Name	rmse_rpas_clndmstr.dat
Integration Contract	IntCon000035

Design Assumptions

N/A

fcstrbld_sbc (Forecasting Rollup by Department, Class and Subclass)

Module Name	fcstrbld_sbc.pc
Description	Forecasting Rollup by Department, Class and Subclass
Functional Area	Integration - Planning
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS229
Runtime Parameters	

Design Overview

The module rolls up the sales forecast data at subclass and class level to class and department level respectively and inserts the data. The program selects records from the table SUBCLASS_SALES_FORECAST and writes the records to CLASS_SALES_FORECAST and selects the data from CLASS_SALES_FORECAST and writes into DEPT_SALES_FORECAST using the domain ID stored in the table FORECAST_REBUILD. The record in FORECAST_REBUILD is deleted after the record is written to the above destination tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase
Frequency	Weekly
Scheduling Considerations	After completion of fcstrbld.pc
Pre-Processing	prepost fcstrbld post
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

Restart/recovery is based on the values stored in restart_bookmark from the last commit prior to failure. The values are for the last domain_id that was not rolled up completely.

Key Tables Affected

Table	Select	Insert	Update	Delete
FORECAST_REBUILD	Yes	No	No	Yes
CLASS_SALES_FORECAST	Yes	Yes	No	No
DEPT_SALES_FORECAST	No	Yes	No	No

Table	Select	Insert	Update	Delete
SUBCLASS_SALES_FORECAST	Yes	No	No	No
STORE	Yes	No	No	No

Input/Out Specification

N/A

Design Assumptions

N/A

fcstrbld (Forecasting Data Rollup)

Module Name	fcstrbld.pc
Description	Forecasting Data Rollup
Functional Area	Integration - Planning
Module Type	Business Processing
Module Technology	ProC
Catalog ID	RMS228
Runtime Parameters	

Design Overview

This program is designed to roll-up new or updated forecasted unit sales data from the item_forecast table. This data will be summarized into the subclass, class and department level sales forecast tables.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 3
Frequency	Weekly
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	prepost fcstrbld post – truncates the FORECAST_REBUILD table
Threading Scheme	Threaded by domain id

Restart/Recovery

The logical unit of work is a domain id. The program commits each time the rollups (dept, class and subclass) for a domain id is successfully processed.

Key Tables Affected

Table	Select	Insert	Update	Delete
FORECAST_REBUILD	Yes	No	No	Yes
SUBCLASS_SALES_FORECAST	Yes	Yes	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_FORECAST	Yes	No	No	No
STORE	Yes	No	No	No
CLASS_SALES_FORECAST	Yes	Yes	No	No
DEPT_SALES_FORECAST	Yes	Yes	No	No

Design Assumptions

N/A

rmsl_rpas_forecast (RMS Load of Forecast from RPAS)

Module Name	rmsl_rpas_forecast.ksh
Description	Load Daily/Weekly Forecast from RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS134
Runtime Parameters	

Design Overview

This script loads item forecast data into the RMS forecast tables. The forecast data comes from an external planning system such as RPAS.

A run-time parameter of 'daily' or 'weekly' indicates whether the daily or weekly forecast data is being loaded into RMS. If the forecast is a daily forecast, information is written to the DAILY_ITEM_FORECAST table. If the forecast is a weekly forecast, information is written to the ITEM_FORECAST table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc Interfaces
Frequency	Daily
Scheduling Considerations	N/A

Schedule Information	Description
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
DAILY_ITEM_FORECAST	No	Yes	No	Yes
ITEM_FORECAST	No	Yes	No	Yes
FORECAST_REBUILD	No	Yes	No	Yes

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000038 (weekly) rmse_rpas_forecast_weekly.schema IntCon000155 (weekly) rmse_rpas_forecast_daily.schema

If a run-time parameter of 'weekly' is used, the input file is in fixed-length format matching to the schema definition in rmse_rpas_forecast_weekly.schema:

Field Name	Field Type	Required	Description
EOW_DATE	Date(8)	Yes	Item_forecast.eow_date
ITEM	Char(25)	Yes	Item_forecast.item
LOC	Char(20)	Yes	Item_forecast.loc
FORECAST_SALES	Double(14)	Yes	Item_forecast.forecast_sales
FORECAST_STD_DEV	Double(14)	Yes	Item_forecast.forecast_std_dev

If a run-time parameter of 'daily' is used, the input file is in fixed-length format matching to the schema definition in rmse_rpas_forecast_daily.schema:

Field Name	Field Type	Required	Description
DATA_DATE	Date(8)	Yes	Daily_item_forecast.data_date
ITEM	Char(25)	Yes	Daily_item _forecast.item
LOC	Char(20)	Yes	Daily_item _forecast.loc
FORECAST_SALES	Double(14)	Yes	Daily_item_forecast.forecast_sales

Field Name	Field Type	Required	Description
FORECAST_STD_DEV	Double(14)	Yes	Daily_item_forecast.forecast_std_dev

Design Assumptions

N/A

fcstprg (Purge Forecast Data)

Module Name	fcstprg.pc
Description	Purge Forecast Data
Functional Area	Interface - Planning
Module Type	Admin
Module Technology	ProC
Catalog ID	RMS227
Runtime Parameters	

Design Overview

This program deletes data from the RMS forecast information tables. Data deletion is performed by partition truncation, table truncation or deletion by domain. The method of deletion is dependent on whether or not the table is partitioned. This program serves to delete data by domains so that they can re-loaded with new forecast information from a forecasting system such as RDF.

This program must be run as either the RMS schema owner, or be run by a user that has been granted the following system privileges:

- drop any table
- alter any table

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Ad Hoc
Frequency	Daily
Scheduling Considerations	N/A
Pre-Processing	prepost fcstprg pre - disables indexes
Post-Processing	prepost fcstprg post - rebuilds indexes
Threading Scheme	N/A

Restart/Recovery

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_FORECAST	No	No	No	Yes
DEPT_SALES_FORECAST	No	No	No	Yes
CLASS_SALES_FORECAST	No	No	No	Yes
SUBCLASS_SALES_FORECAST	No	No	No	Yes

Design Assumptions

N/A

rmse_rdf_daily_sales (Extract of Daily Sales of Forecasted Items for RPAS)

Module Name	Rmse_rdf_daily_sales.ksh
Description	Extract of Daily Sales of Forecasted Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS08
Runtime Parameters	

Design Overview

This script extracts from RMS item's daily sales information at a location for RMS integration with an external planning system, for example RDF. Only forecastable items are extracted. For a store, the sales data represents the net sales (gross sales – returns); for a warehouse, the sales data represents the stock transferred out of the warehouse.

Each client can customize the variable USE_IF_TRAN_DATA in this script to choose whether the sales data should come from IF_TRAN_DATA table or TRAN_DATA_HISTORY table.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily

Schedule Information	Description
Scheduling Considerations	After saldly.pc After pre_rmse_rpas.ksh
Pre-Processing	pre_rmse_rpas.ksh, saldly.pc
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
IF_TRAN_DATA	Yes	No	No	No
TRAN_DATA_HISTORY	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No
SUB_ITEMS_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000087 rmse_rdf_daily_sales.schema

Field Name	Field Type	Required	Description
LOC	Integer(11)	Yes	Item_loc_soh.loc
ITEM	Char(25)	No	If_tran_data.item or tran_data_history.item
TRAN_DATE	Date(8)	Yes	If_tran_data.tran_date or tran_data_history.tran_date
SUM_UNITS	Double(14)	No	If_tran_data.units or tran_data_history.units
SALES_TYPE	Char(1)	No	If_tran_data.sales_type or tran_data_history.sales_type

Field Name	Field Type	Required	Description
TRAN_CODE	Integer(3)	Yes	If_tran_data.tran_code or tran_data_history.tran_code
DOMAIN_ID	Integer(3)	Yes	Domain_dept.domain_id or domain_class.domain_id or domain_subclass.domain_id

Design Assumptions

N/A

rmse_rdf_weekly_sales (Extract of Weekly Sales of Forecasted Items for RPAS)

Module Name	rmse_rdf_weekly_sales.ksh
Description	Extract of Weekly Sales of Forecasted Items for RPAS
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS09
Runtime Parameters	

Design Overview

This script extracts item weekly sales information at a location for interfacing to an external planning system, such as RDF. Only forecastable items are extracted. This extract will contain only weeks that have yet to be extracted. Once the extract is completed this process with execute the rmsl_rpas_update_last_hist_exp_date.ksh script to update the last export date for any extracted item/locations which is used for subsequent extracts.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 8
Frequency	Weekly
Scheduling Considerations	After hstwkupd.pc After salweek.pc After pre_rmse_rpas.ksh
Pre-Processing	N/A
Post-Processing	N/A

Schedule Information	Description
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC_HIST	Yes	No	No	No
PERIOD	Yes	No	No	No
DOMAIN_DEPT	Yes	No	No	No
DOMAIN_CLASS	Yes	No	No	No
DOMAIN_SUBCLASS	Yes	No	No	No
SUB_ITEMS_DETAIL	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000096 rmse_rdf_weekly_sales.schema

Output File:

Field Name	Field Type	Required	Description
ITEM	Char(25)	Yes	Item_master.item
LOC	Integer(11)	Yes	Item_loc_soh.loc
EOW_DATE	Date(8)	No	Item_loc_hist.eow_date in YYYYMMDD format
SALES_ISSUES	Double(18)	No	Item_loc_hist.sales_issues
SALES_TYPE	Char(1)	Yes	Item_loc_hist.sales_type
ROW_ID	Char(18)	No	Item_loc_soh.row_id
DOMAIN_ID	Integer(3)	Yes	Domain_dept.domain_id or domain_class.domain_id or domain_subclass.domain_id

Design Assumptions

N/A

rmse_mfp_inventory (Extract of Inventory Aggregation for MFP)

Module Name	rmse_mfp_inventory.ksh
Description	Extract of Inventory Aggregation for MFP
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS106
Runtime Parameters	

Design Overview

The purpose of this batch module is to extract the item inventory aggregates for the integrated Oracle Retail Predictive Application Server (RPAS) application. MFP refers to the Merchandise Financial Planning component.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Weekly
Scheduling Considerations	In normal processing, this program is run weekly (with the input parameter W-'W'eekly load) However, it is also possible to run this program for an intial load of aggregated inventory for MFP (using the input parameter I – 'Initial Load)
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
PERIOD	Yes	No	No	No
TRAN_DATA_HISTORY	Yes	No	No	No
CALENDAR	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
WH	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
DEPS	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_mfp_inventory.W.dat
Integration Contract	IntCon000100

Output File

Field Name	Field Type	Description
EOW_DATE	Date	Indicates the date of the end of week cycle
ITEM	VARCHAR2(25)	Item number in the item
LOCATION	NUMBER(10)	Location number
CLEARANCE_INVENTORY_UNITS	NUMBER(25)	
CLEARANCE_INVENTORY_COST	NUMBER(25)	
CLEARANCE_INVENTORY_RETAIL	NUMBER(25)	
REGULAR_INVENTORY_UNITS	NUMBER(25)	
REGULAR_INVENTORY_COST	NUMBER(25)	
REGULAR_INVENTORY_RETAIL	NUMBER(25)	
RECEIPT_UNITS	NUMBER(25)	
RECEIPT_COST	NUMBER(25)	
RECEIPT_RETAIL	NUMBER(25)	

Design Assumptions

N/A

rmse_mfp_onorder (Extract of On Order for MFP)

Module Name	rmse_mfp_onorder.ksh
Description	Extract of On Order for MFP
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	Ksh
Catalog ID	RMS107
Runtime Parameters	

Design Overview

The purpose of this batch module is to extract on-order units, cost, and retail values from RMS for the integrated Oracle Retail Predictive Application Server (RPAS) application. MFP refers to the Merchandise Financial Planning component. Data is extracted at the Parent Item / Diff Aggregate level.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	4
Frequency	Weekly
Scheduling Considerations	This program must be run after core RMS inventory processing
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A

Restart/Recovery

This is a standard Oracle Retail RETL script. No restart/recovery is used.

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
WH	Yes	No	No	No
ORDHEAD	Yes	No	No	No
ORDSKU	Yes	No	No	No
ORDLOC	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No

Table	Select	Insert	Update	Delete
ITEM_LOC	Yes	No	No	No
ITEM_SUPP_COUNTRY	Yes	No	No	No
DEPS	Yes	No	No	No
V_PACKSKU_QTY	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
CLASS	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
SYSTEM_VARIABLES	Yes	No	No	No
GTAX_ITEM_ROLLUP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	rmse_mfp_onorder.dat
Integration Contract	IntCon000101

Output File

Field Name	Field Type	Required	Description
EOW_DATE	Date	Yes	Indicates the date of the end of week cycle
ITEM	VARCHAR 2(25)	Yes	Item number – will contain the parent item ID with the aggregated diff ID value(s) concatenated
LOCATION	NUMBER(1 0)	Yes	Location number of the order
ON_ORDER_UNITS	NUMBER(1 2)	Yes	Indicates the total quantity of the item in the order
ON_ORDER_COST	NUMBER(2 0,4)	Yes	Unit cost of the item
ON_ORDER_RETAIL	NUMBER(2 0,4)	Yes	Retail price of the item

Design Assumptions

N/A

onictext (On Inter-Company Transfer Exhibit)

Module Name	onictext.pc
Description	On Inter-Company Transfer Exhibit
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS128

Design Overview

This program calculates the value in cost and retail of items that are on intercompany transfers. It calculates the on order cost and retail for all approved intercompany transfers that have exp_dc_eow_dates less than or equal to the planning horizon date. Once the program has calculated the costs and retails, they are inserted into the ON_ORDER_TEMP table.

This program takes in a small input file. The input file determines if the run should be for weekly or historical data.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Weekly
Scheduling Considerations	Note that program can be run ad hoc for a historical extract, but is generally run weekly
Pre-Processing	onordext
Post-Processing	onorddnld
Threading Scheme	Threaded by Transfer number

Restart/Recovery

The logical unit of work is unique transfer number. Each time the record counter equals the maximum recommended commit number the retek_commit function is called. The program is multithreaded using v_restart_transfer view.

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
STORE	Yes	No	No	No
WH	Yes	No	No	No
TSF_ITEM_COST	Yes	No	No	No
TSFHEAD	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
TSF_XFORM	Yes	No	No	No
TSF_XFORM_DETAIL	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
ON_ORDER_TEMP	No	Yes	No	No

Integration Contract

Integration Type	Input File for RMS from Planning
File Name	Determined by runtime parameter
Integration Contract	IntCon000026

Record Name	Field Name	Field Type	Default Value	Description
	Weekly or historic indicator	Char (1)		Weekly or historic indicator
	Planning horizon start date	Date (8)		Planning start date in YYYYMMDD format
	Planning horizon end date	Date (8)		Planning end date in YYYYMMDD format

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000028

Staging Table	**Description**
ON_ORDER_TEMP	See the RMS data model for more details about the staging table structure.

onordext (On Order Extract)

Module Name	onordext.pc
Description	On Order Extract
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS129

Design Overview

This program calculates the value in cost and retail of items that are on order for the department/class/subclass/location level. This program is the first step in the stock ledger download process to RPAS. It calculates the on order cost and retail for all approved orders that have not before dates less than or equal to the planning horizon date. Once the program has calculated the costs and retails, they are inserted into the ON_ORDER_TEMP table. Customer Order POs are filtered out and will not affect the on order quantity that is sent to RPAS.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	before onictext
Pre-Processing	Run prepost onordext pre program
Post-Processing	onictext
Threading Scheme	Threaded by Order number

Restart/Recovery

The logical unit of work is unique order number. Each time the record counter equals the maximum recommended commit number the retek_commit function is called.

It is also split into two sections item and pack. First all items on orders are processed. When they are done a pack 'flag' is turned on and the restart order is reset. Then all the packs on order are processed. So all orders are considered twice, once for items and once for packs.

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ORDHEAD	Yes	No	No	No
ORDLOC	Yes	No	No	No
ORDSKU	Yes	No	No	No
ALLOC_HEADER	Yes	No	No	No
ALLOC_DETAIL	Yes	No	No	No
ITEM_MASTER	Yes	No	No	No
ITEM_SUPP_COUNTRY_LOC	Yes	No	No	No
PERIOD	Yes	No	No	No
SYSTEM_OPTIONS	Yes	No	No	No
CLASS	Yes	No	No	No
ON_ORDER_TEMP	No	Yes	No	No
DEFAULT_TAX_TYPE	Yes	No	No	No
VAT_REGION	Yes	No	No	No
WH	Yes	No	No	No
VAT_ITEM	Yes	No	No	No
ITEM_LOC	Yes	No	No	No
ITEM_LOC_SOH	Yes	No	No	No
ITEM_SUPPLIER	Yes	No	No	No
UOM_CLASS	Yes	No	No	No
UOM_CONVERSION	Yes	No	No	No
ITEM_SUPP_UOM	Yes	No	No	No

Integration Contract

Integration Type	Input File for RMS from Planning
File Name	Determined by runtime parameter
Integration Contract	IntCon000026

Record Name	Field Name	Field Type	Default Value	Description
	Weekly or historic indicator	Char (1)		Weekly or historic indicator.
	Planning horizon start date	Date (8)		Planning start date in YYYYMMDD format.
	Planning horizon end date	Date (8)		Planning end date in YYYYMMDD format.

Integration Type	Download from RMS
File Name	N/A
Integration Contract	IntCon000028

Staging Table	Description
ON_ORDER_TEMP	See the RMS data model for more details about the staging table structure.

gradupld (Upload of Store Grade Classifications from RPAS)

Module Name	gradupld.pc
Description	Upload of Store Grade Classifications from RPAS
Functional Area	Integration - RPAS
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS133
Runtime Parameters	

Design Overview

The store grade upload module is designed to load forecasting-driven store grades into RMS. Data will be loaded into the STORE_GRADE_GROUP, STORE_GRADE and STORE_GRADE_STORE tables.

Scheduling Constraints

Schedule Information	**Description**
Processing Cycle	Ad Hoc
Frequency	As Needed
Scheduling Considerations	N/A
Pre-Processing	N/A
Post-Processing	N/A
Threading Scheme	N/A – File-based processing

Restart/Recovery

Oracle Retail standard restart/recovery is used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Key Tables Affected

Table	**Select**	**Insert**	**Update**	**Delete**
Buyer	Yes	No	No	No
Store	Yes	No	No	No
Store_grade_group	Yes	Yes	No	No
Store_grade	Yes	Yes	No	No

Table	Select	Insert	Update	Delete
Store_grade_store	Yes	Yes	Yes	No

Integration Contract

Integration Type	Upload to RMS
File Name	Determined by runtime parameter
Integration Contract	IntCon000037

The input filename is not fixed; the input filename is determined by a runtime parameter. Records rejected by the import process are written to a reject file. The reject filename is not fixed; the reject filename is determined by a runtime parameter.

Input File Layout

The input file should be sorted by grade group description, grade ID, and grade store. The grade group description should be unique by grade group ID.

Record Name	Field Name	Field Type	Default Value	Description
FHEAD	Record type	Char(5)	FHEAD	Record Identifier
	Line ID	Number(10)	0000000001	Line Sequence Identifier
	File name	Char(5)	GRADU	File Identifier
FDETL	Record type	Char(5)	FDETL	Record Identifier
	Line id	Number(10)		Line Sequence Identifier
	Grade Group ID	Number(8)		Valid Grade Group ID
	Grade Group	Char(120)		Valid Grade Group
	Grade store	Number(10)		Valid Grade store
	Grade ID	Number(10)		Valid Grade ID
	Grade name	Char(120)		Valid Grade name
FTAIL	Record Type	Char(5)	FTAIL	Record Identifier
	Line id	Number(10)		Line Sequence Identifier
	Line Total	Number(10)		Total number of FDETL lines in the file.

Design Assumptions

N/A

onorddnld (On Order Download to Financial Planning)

Module Name	ONORDDNLD.PC
Description	On Order Download to Financial Planning
Functional Area	Integration - Planning
Module Type	Integration
Module Technology	ProC
Catalog ID	RMS12

Design Overview

This program sends on order cost, retail and quantity at the item/location/week level to a planning system. The values are used by a financial planning system to generate OTB numbers that are interfaced back into the RMS.

This program creates three output files: one for orders, one for intercompany transfer sending locations and one for intercompany transfer receiving locations.

Scheduling Constraints

Schedule Information	Description
Processing Cycle	Phase 4
Frequency	Daily
Scheduling Considerations	This program is run towards end of batch cycle after the ONORDEXT.PC (on order extract) and ONICTEXT.PC
Pre-Processing	onordext.pc, onictext.pc
Post-Processing	N/A
Threading Scheme	Threaded by location

Restart/Recovery

The logical unit of work for this program is set at item/location/eow_date level. Table based restart/recovery must be used. The commit_max_ctr field should be set to prevent excessive rollback space usage, and to reduce the overhead of file I/O. The recommended commit counter setting is 1000 records (subject to change based on implementation).

Locking Strategy

N/A

Security Considerations

N/A

Performance Considerations

N/A

Key Tables Affected

Table	Select	Insert	Update	Delete
ON_ORDER_TEMP	Yes	No	No	No

Integration Contract

Integration Type	Download from RMS
File Name	The filename is hardcoded to onorder.dat%d, onictsend.dat%d, or onictrcv.dat%d where %d is substituted with the domain ID
Integration Contract	IntCon000027

Each run of the program can produce multiple output files, one for each domain.

Record Name	Field Name	Field Type	Default Value	Description
	ITEM	Char(25)		RMS ITEM Identifier.
	Location (Store / WH)	NUMBER(20)		Store or WH identifier.
	Location Type (‘S’ or ‘W’)	Char(1)		Indicates if the location is a store or a warehouse: S – if the location is a store, W – If the location is a warehouse.
	OTB EOW date	DATE (8)		The OTB End of week date.
	On Order Retail	NUMBER(25,4)		Total on order retail for the item/location/EOW date.
	On order Cost	NUMBER(25,4)		Total on order cost for the item/location/EOW date.
	On Order Quantity	NUMBER(17,4)		Total on order Quantity for the item/location/EOW date.