Oracle Retail®
Advanced Inventory Planning™
11.4.2

Online Administration Guide

ORACLE

Corporate Headquarters:

Oracle
950 Nicollet Mall
Minneapolis, MN 55403
USA

888.61.RETEK (toll free US)
Switchboard:
+1 612 587 5000

Fax:
+1 612 587 5100

European Headquarters:

Oracle
110 Wigmore Street
London
W1U 3RW
United Kingdom

Switchboard:
+44 (0)20 7563 4600

Sales Enquiries:
+44 (0)20 7563 46 46

Fax:
+44 (0)20 7563 46 10

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Contact Method	Contact Information
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Internet (ROCS)	rocs.retek.com Oracle Retail's secure client Web site to update and view issues
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When contacting Customer Support, please provide:

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

Contents

Chapter 1 – Introduction

Document overview

This document describes the design and implementation of the Oracle Retail Advanced Inventory Planning (AIP) Online product, version 11.4. AIP Online includes two separate user interfaces: Data Management Online (DMo), and Order Management (OM). This document is intended for the system administrator of the online applications.

Where you can find more information

- AIP front-end documentation (for example, the DMo and OM User Guides)
- AIP - RMS Integration Guide
- AIP Installation Guide (to help facilitate the implementation process)
- Oracle Retail Integration Bus documentation

Chapter 2 – Application overview

AIP is a suite of products that are designed to manage the supply chain needs of large retailers, from interaction with their suppliers through various layers of warehouses down to individual stores and e-commerce sites. It couples time-phased replenishment and allocation algorithms to produce an actionable receipt plan over time. This is based on demand forecasts, replenishment parameters, and inventory availability at the numerous supply points within the supply chain. AIP Online includes two user interfaces (Data Management online and Order Management) to help retailers manage their supply chain needs.

Data Management online

Data Management online has five main functions that are related to the physical movement of SKUs through the supply chain:

- Maintain supply points with appropriate order cycles for store orders from warehouses and suppliers
- Maintain multi tier supply points with appropriate order cycles and deliver preferences for warehouses from suppliers and warehouses.
- Maintain shared data elements across WRP and SRP, such as pack sizes by warehouse

Order Management

Order Management allows you to create and edit purchase orders and view purchase orders or transfers from suppliers and warehouses.

- **Purchase orders** are orders that are sourced directly from suppliers.
- **Transfers** are orders that are sourced directly from a warehouse.

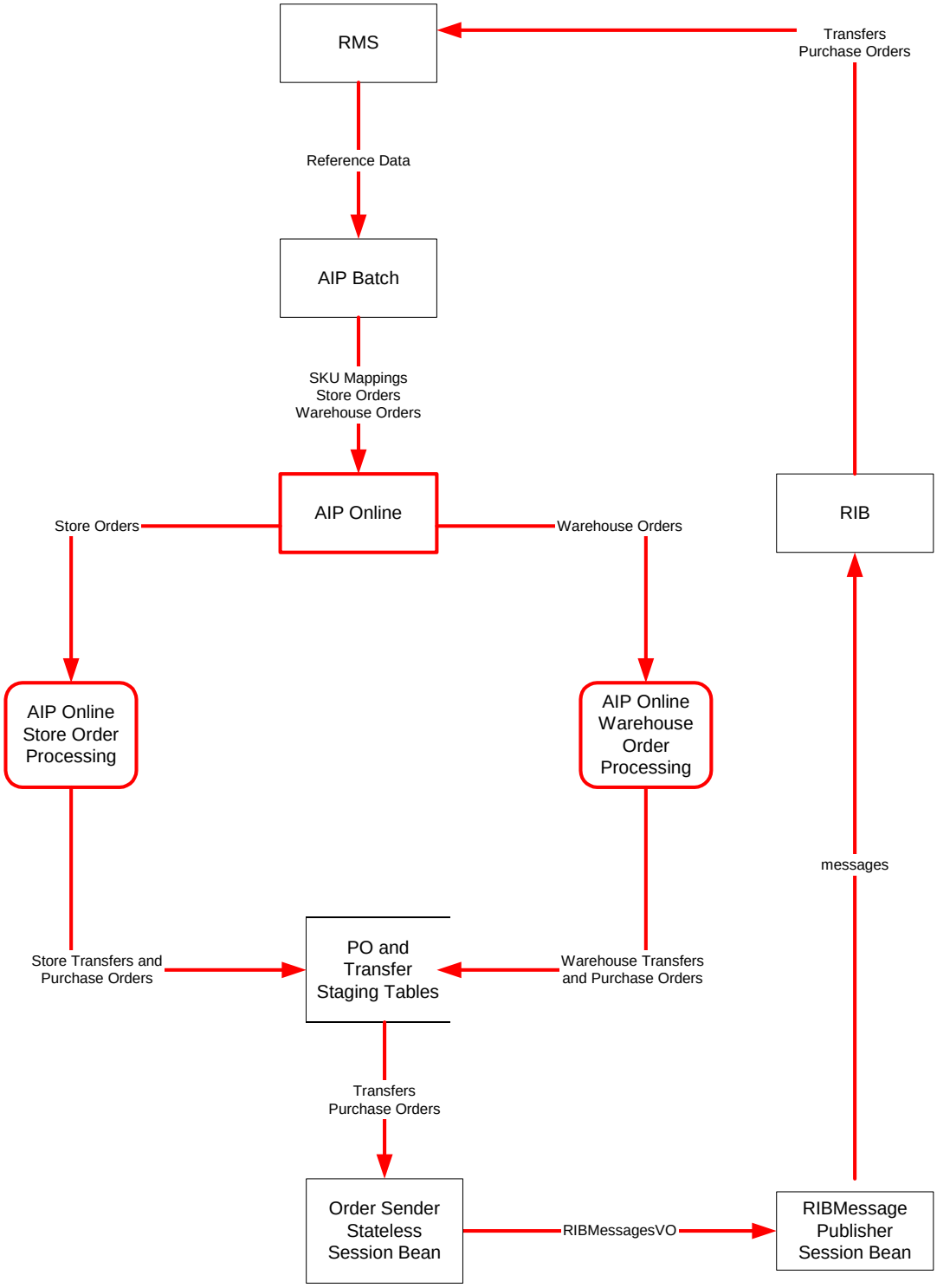
Orders exist in Order Management as a result of the following processes.

- You can manually create a purchase order in order management.
- Orders are automatically generated by AIP.

Purchase orders and transfers are available for review until a specified number of days after their release or delivery date.

Data flow

Merchandise data is imported from a merchandise system. Imported data includes stores, suppliers, commodities, and warehouses.



Chapter 3 – Set up the enterprise

Overview

System administration and AIP administration allows you to set up and maintain AIP for your enterprise.

Through the Administration Consoles you can set up features and default values for your enterprise and the AIP application. You can maintain information at the enterprise and application level.

- **Enterprise:** The enterprise maintenance area allows you to incorporate corporate information into the AIP interface. You can also view services enabled for your enterprise.
- **Application:** The application maintenance area allows you to maintain the information that users can view in the system.

Security

Security rights for each user is defined at a user level and administrated in the Administration Console. For DMo and OM there is user name and password-controlled access to the applications, data access restrictions that are based on assigned rights to classes, and screen-level access restrictions that are based on assigned privileges.

Note: Details for assigning the security parameters are in the following chapters.

Log on to the AIP administration console

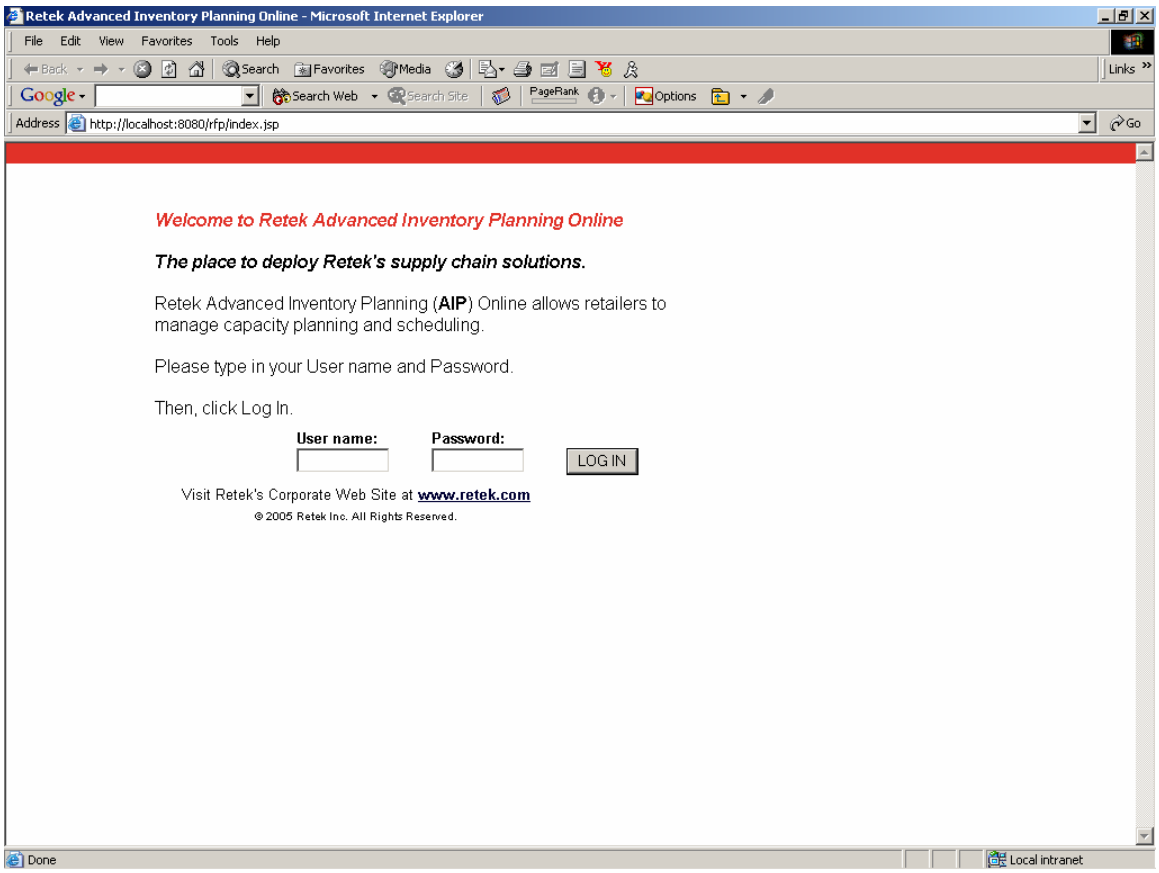
Overview

AIP administration is secured by an administrator password. Only individuals with an administrator profile and password can log on to the system administration area of AIP.

Procedure

Log onto AIP administration

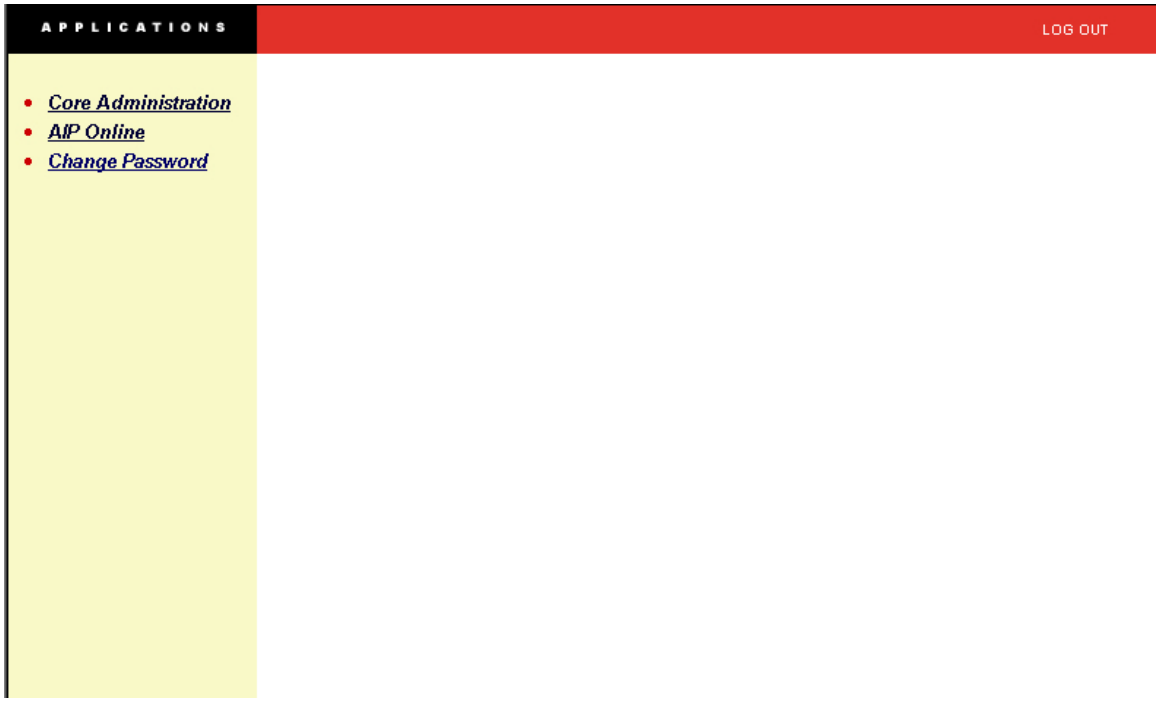
1. On the Login window, enter your user ID in the User Name field.



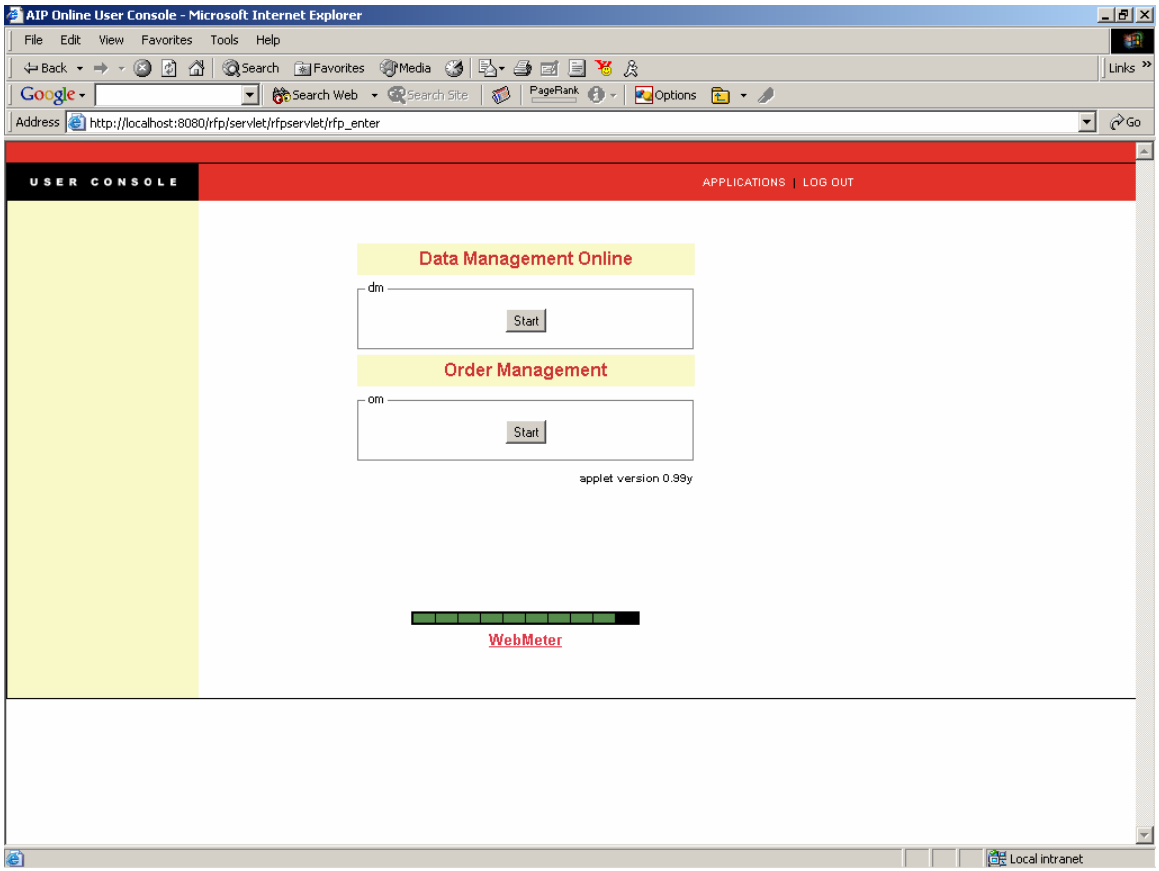
Login window

2. In the Password field, enter your password.

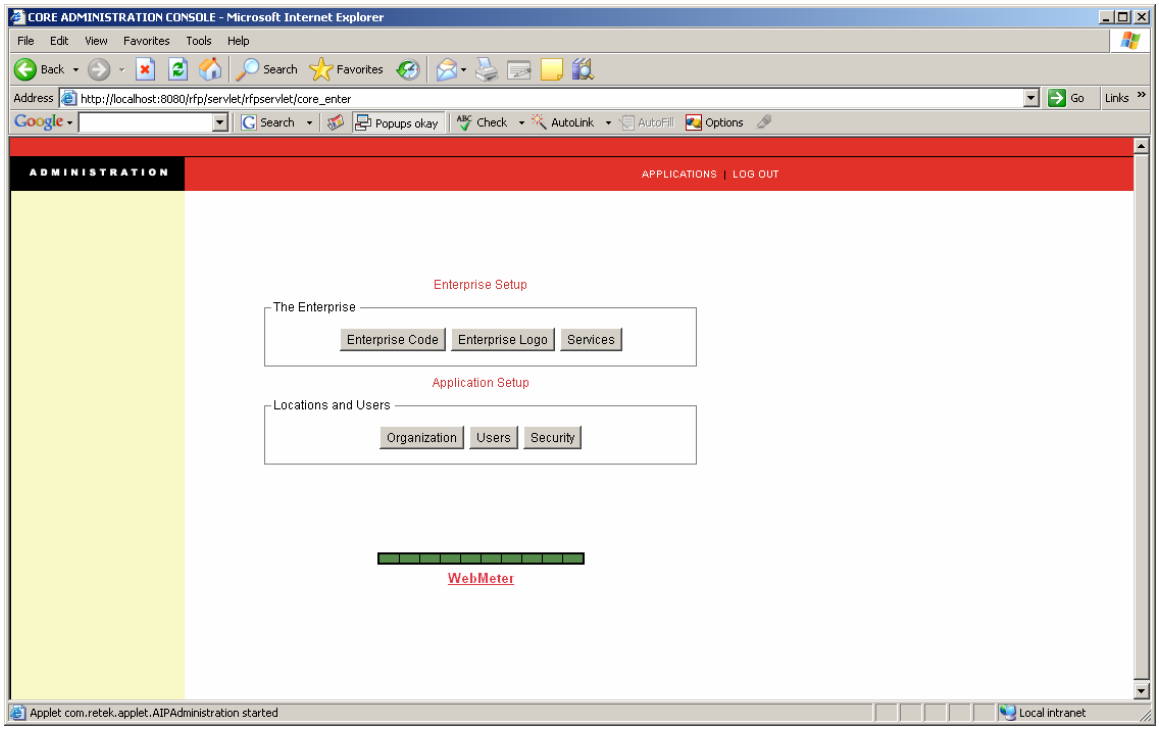
3. Click **Log In**. The User Console opens.
4. In the Applications area, click Core Administration. The Administration Console opens.



AIP Applications area



AIP User Console



AIP Administration Console

AIP administration

Set up enterprise code

When your enterprise is established, an enterprise code or enterprise ID is set up to differentiate your organization from other enterprises set up on the exchange. You can update your enterprise code as necessary.

Set up enterprise logo

You can maintain the company logo displayed in the AIP application. When you change the logo in the Set Logo window, the logo will be changed on the Administration Console and on the User Console.

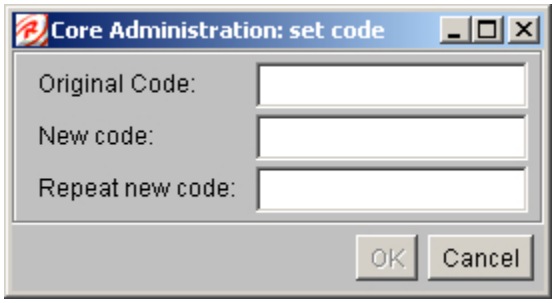
View services

Your enterprise's e-service license agreement with Oracle Retail defines the number of users you are able to set up in your enterprise. You can view this information in the Services window.

Procedures

Change the enterprise code

1. On the Administration Console, click **Enterprise Code**. The Set Code window is displayed

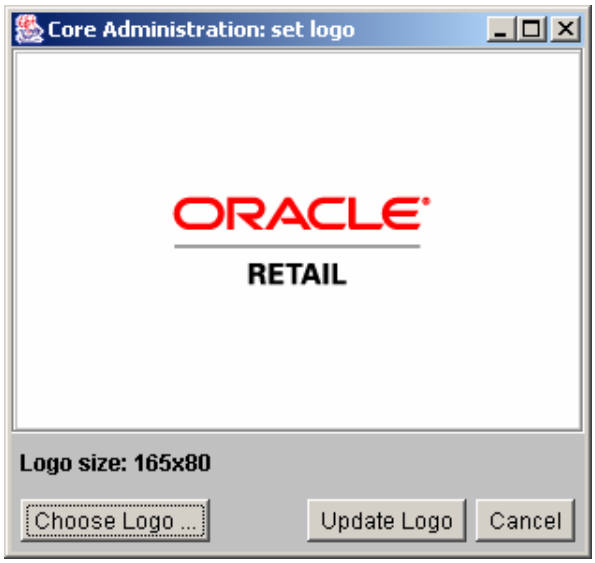


Set Code window

2. In the Original Code field, enter the code assigned to your organization by Oracle Retail.
3. In the New Code field, enter the new code.
4. In the Repeat New Code field, reenter the new code.
5. Click **OK** to save the new Enterprise code.

Add the company logo

1. On the Administration Console, click **Enterprise Logo**. The Set Logo window dialog box is displayed.



Set Logo window

2. Click **Choose Logo**.
3. Navigate to and select the file containing the image of your logo.

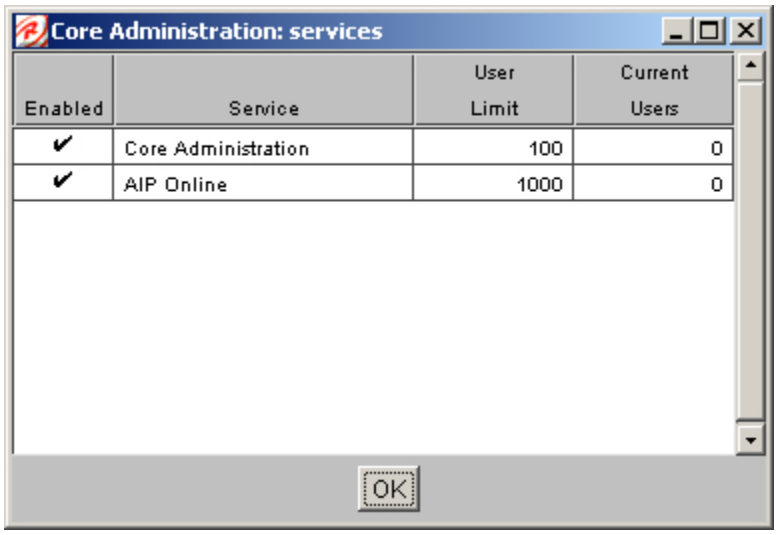
   Note: The logo image file must be a .gif, .jpeg, or .jpg.

4. Click **Open**.
5. Click **Update Logo**.

   Note: After you click **Update Logo**, you cannot cancel your changes.

View e-services subscription information

⇒ **Navigate:** On the Administration Console, click **Services**. The read-only Services window is displayed.



Services window

1. On the Services window, you can:
   - View the subscription information for your enterprise. A check mark in the Enabled column indicates that you can access that e-service in your current subscription agreement.
   - View the number of users at your Enterprise that can use each e-service.
   - View the current number of users at your Enterprise configured for each e-service.

   Note: The software license counts each user once. If an administrator also configures a user account for him or herself, both accounts are counted.
2. To change your service user limit, contact support@retek.com.
3. After viewing the information, click **OK** to close the window.

Chapter 4 – Set up the application

You can set up information pertaining to two main areas:

- **Organization:** Allows you to view or maintain the foundation information used in AIP.
- **Security and Users:** Allows you to define who is using AIP.

Log on to the system administration console

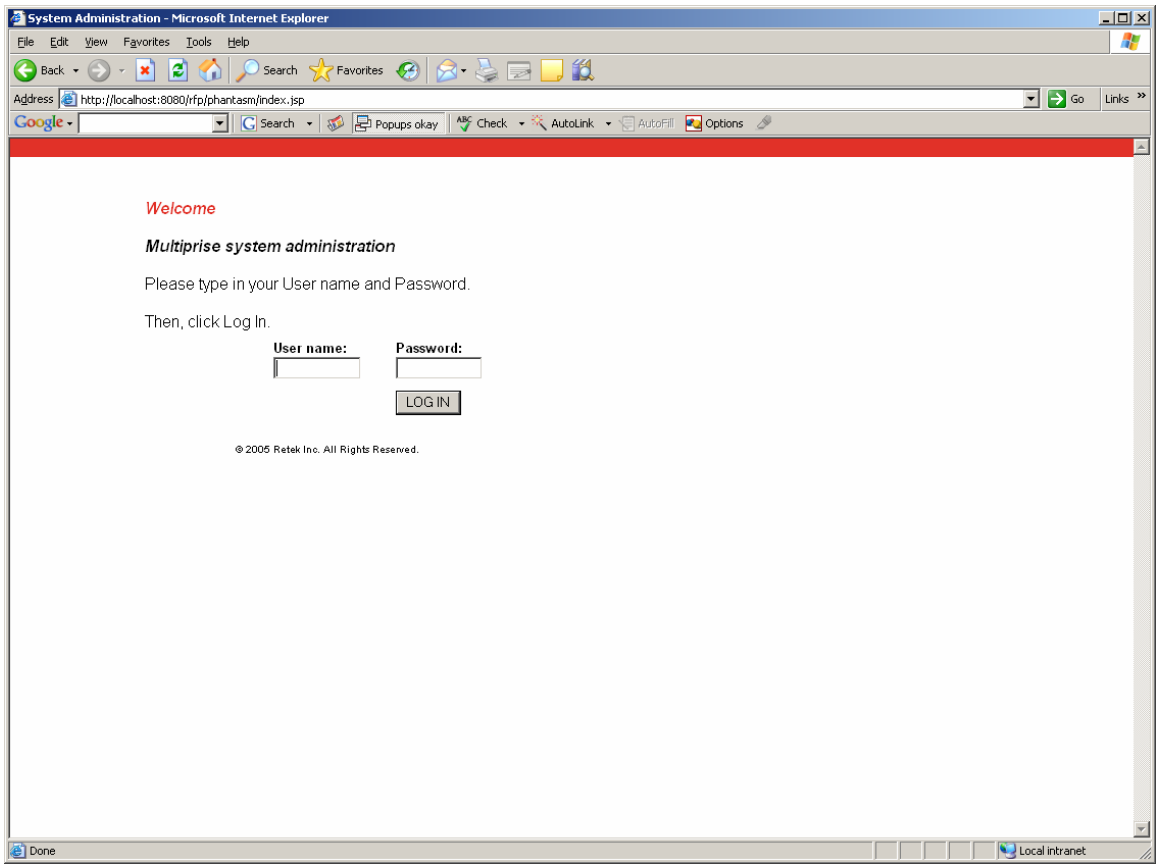
Overview

System administration is secured by an administrator password. Only individuals with an administrator profile and password can log on to the system administration area of AIP.

Procedure

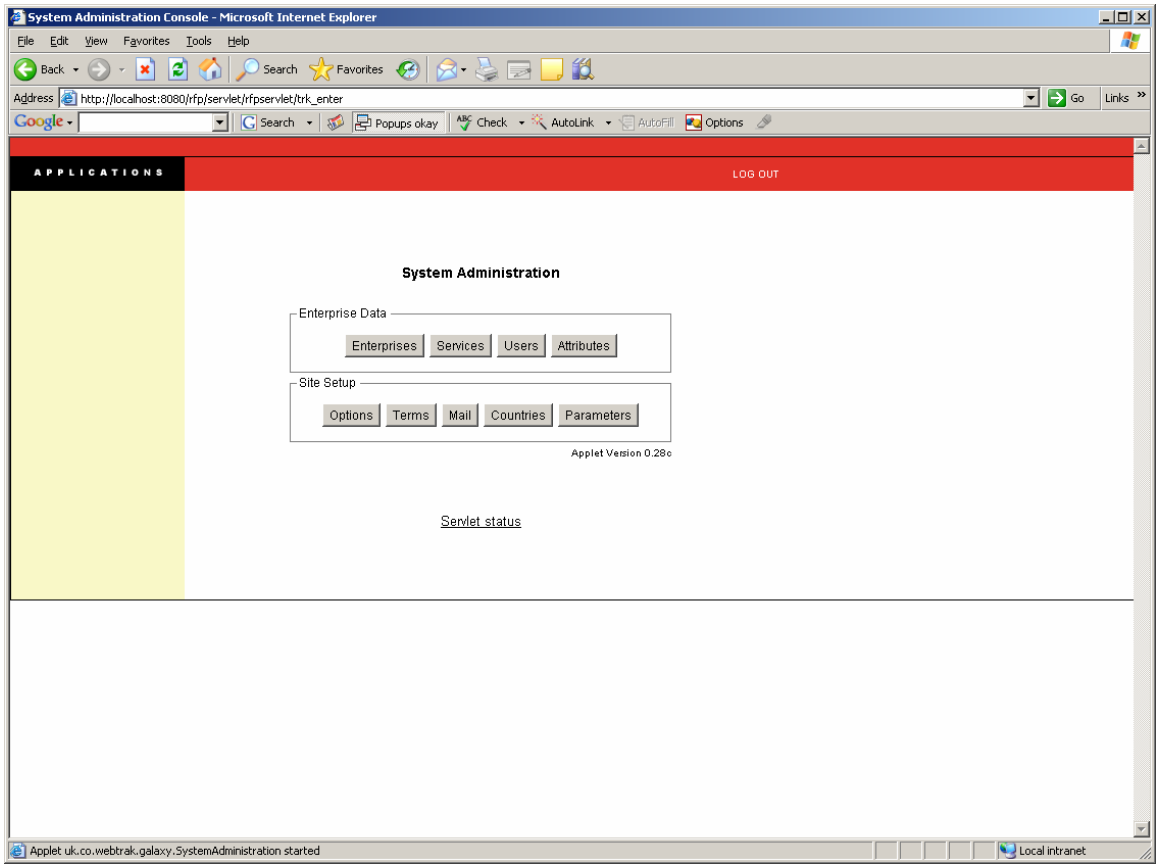
Log onto system administration

1. At the standard application login the 'address' or URL should be modified to include 'phantasm' after the aip online location: http://servername:port/aiponline/phantasm
2. On the Oracle Retail Login window, enter your user ID in the User Name field.



Oracle Retail Login window

3. In the Password field, enter your password.
4. Click **Log In**. The System Administration Console opens.



AIP System Administration Console

Set up organization and user types

Overview

The Organization Administration function allows you to identify the divisions and departments in your enterprise that use AIP. Additionally, you can define the local user types your organization uses. A local user type is a way to group users with similar responsibilities in the system.

When you set up a user, you assign the departments, and local user types that a user has access to throughout AIP.

Adding new classes

Adding or removing classes to the available list occurs automatically as they are taken directly from the DEPARTMENTS table. The ENTERPRISE_ID column in the DEPARTMENTS table must be set to the appropriate ID from the WT_ENTERPRISES table for the data to appear as choices when assigning class privileges. Classes assigned are saved in the DEPARTMENT_LIST column in the ENT_USERS table. The trigger DEPARTMENT_SCOPE_TRIGGER then copies that data to the DEPARTMENT_SCOPE table, which is used in the joins to filter data.

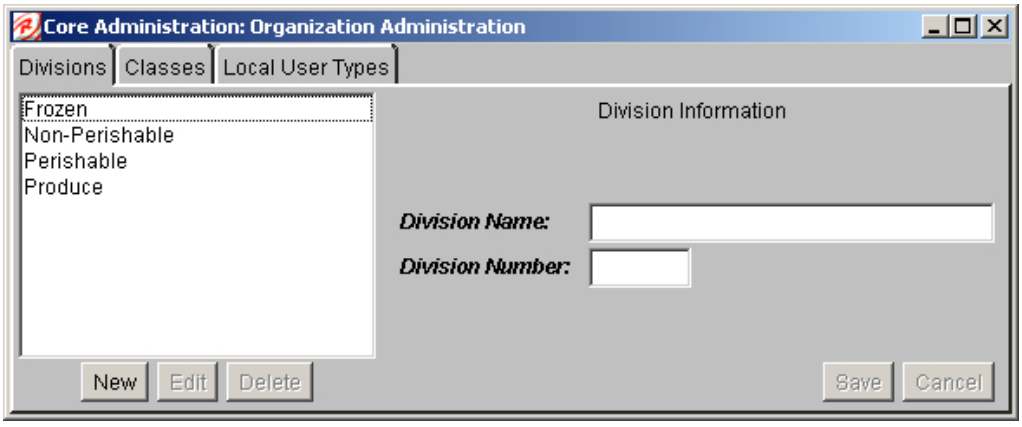
Data restriction

The queries for populating the SKU, SKU Pack-size, Demand Group, and Classes lists of values (LOVs) in DMo join with the DEPARTMENT_SCOPE table to restrict their data display.

Procedures

Add a division

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.



Organization Administration window – divisions tab

1. On the Divisions tab, click **New**.
2. In the Division Name field, enter the name of the new division.
3. In the Division Number field, enter the number that identifies this division
4. Click **Save**. The database is updated with the new entry.
5. Click the close window button to return to the Administration Console window.

Edit a division

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

1. On the Divisions tab, select the name of the division in the list that you want to edit.
2. Click **Edit**.
3. Modify the information in the entry fields.
4. Click **Save**. The database is updated with the new entry.
5. Click the close window button to return to the Administration Console window.

Delete a division

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

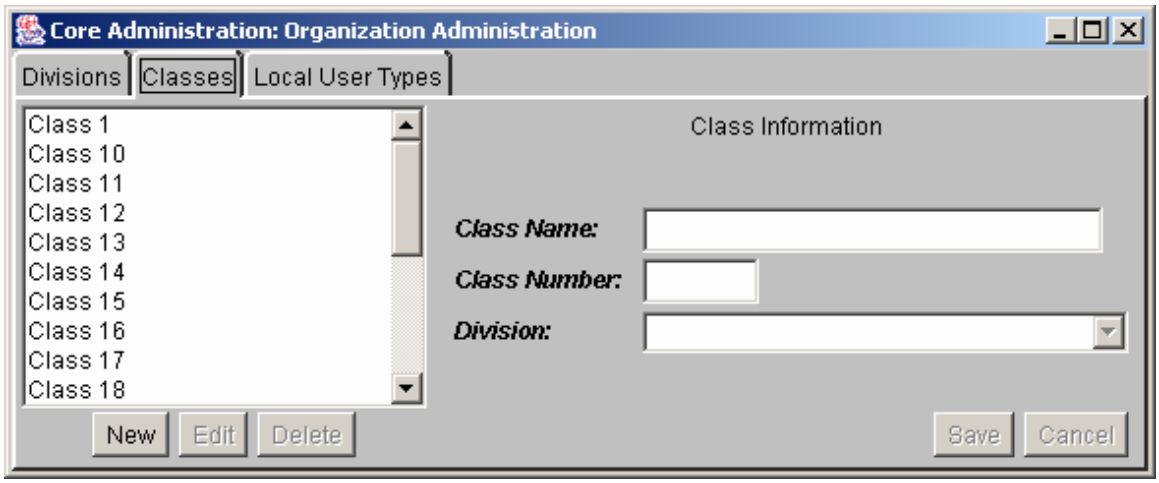
1. On the Divisions tab, select the name of the division in the list that you want to delete.

   Note: You cannot delete a division that is currently in use.

2. Click **Delete**. A dialog box is displayed to confirm your decision.
3. To proceed, click **OK**. The division is deleted from the list
4. Click the close window button to return to the Administration Console window.

Add a class

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.



Organization Administration window – Classes tab

1. Click on the **Classes** tab. A list of classes and class information fields are displayed.
2. Click **New**.
3. In the Class Name field, enter the name of the new class.
4. In the Class Number field, enter the number that will be used to identify this new class.
5. In the Division field, select the division associated with this new class from the drop-down list.
6. Click **Save**. The database is updated with the new entry.
7. Click the close window button to return to the Administration Console window.

Edit a class

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

1. Click on the **Classes** tab. A list of classes and class information fields are displayed.
2. Select the class you want to edit.
3. Click **Edit**. The fields are enabled.
4. Edit the details as is necessary.
5. Click **Save**. The database is updated with the new entry.
6. Click the close window button to return to the Administration Console window.

Delete a class

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

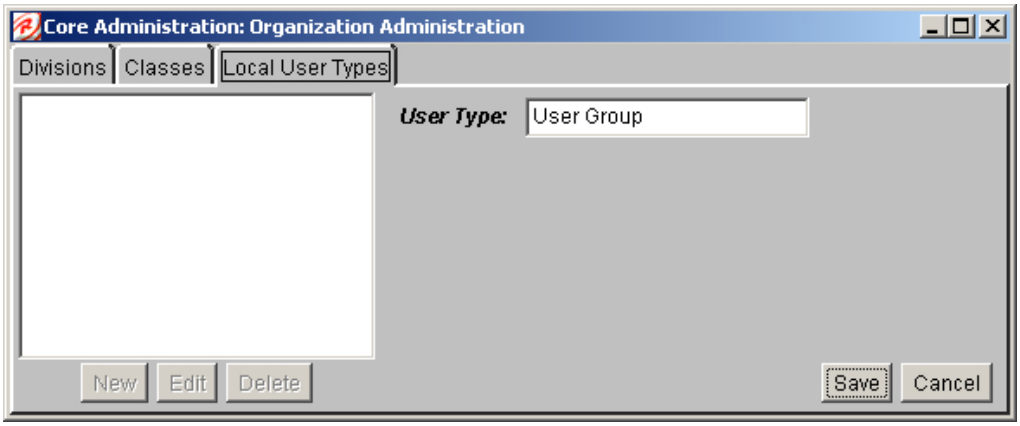
1. Click on the **Classes** tab. A list of classes and class information fields are displayed.
2. Select the class you want to delete.

   Note: You cannot delete a class that is currently in use.

3. Click **Delete**. A dialog box is displayed to confirm your decision.
4. To proceed, click **OK**. The class is deleted from the list.
5. Click the close window button to return to the Administration Console window.

Add a local user type

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.



Organization Administration window – Local User Types tab

1. Click on the Local User Types tab.
2. Click **New**.
3. In the User Type field, enter the role you want to assign to users.
4. Click **Save**. The database is updated with the new entry.
5. Click the close window button to return to the Administration Console window.

Edit a local user type

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

1. Click on the Local User Types tab.
2. Select the user type to edit.
3. Click **Edit**.
4. Edit the enabled fields as necessary.
5. Click **Save**. The database is updated with the new entry.
6. Click the close window button to return to the Administration Console window.

Delete a local user type

⇒ **Navigate:** On the Administration Console, click **Organization**. The Organization Administration window opens.

1. Click on the Local User Types tab.
2. Select the user type you want to delete.
3. Click **Delete**. A dialog box is displayed to confirm your decision.
4. To proceed, click **OK**. The local user type is deleted from the list.
5. Click the close window button to return to the Administration Console window.

Set up system security

Overview

Each user must have their application permissions granted by the administrator. The administrator can choose to set up default selections, remove options, or create new security roles. The security setup will be used during the set-up and maintenance of each user's security permissions.

The creation of screen privileges will be provided in the installation. Application upgrades may also provide new screen privileges when necessary. The table for the permission list is WT_SRVUSERTYPES. Permission groups will be defined only by the client, either during implementation or later.

Setting a privilege as a default will cause the privilege to be defaulted as a "selected" security option when the security privileges are displayed for a new user.

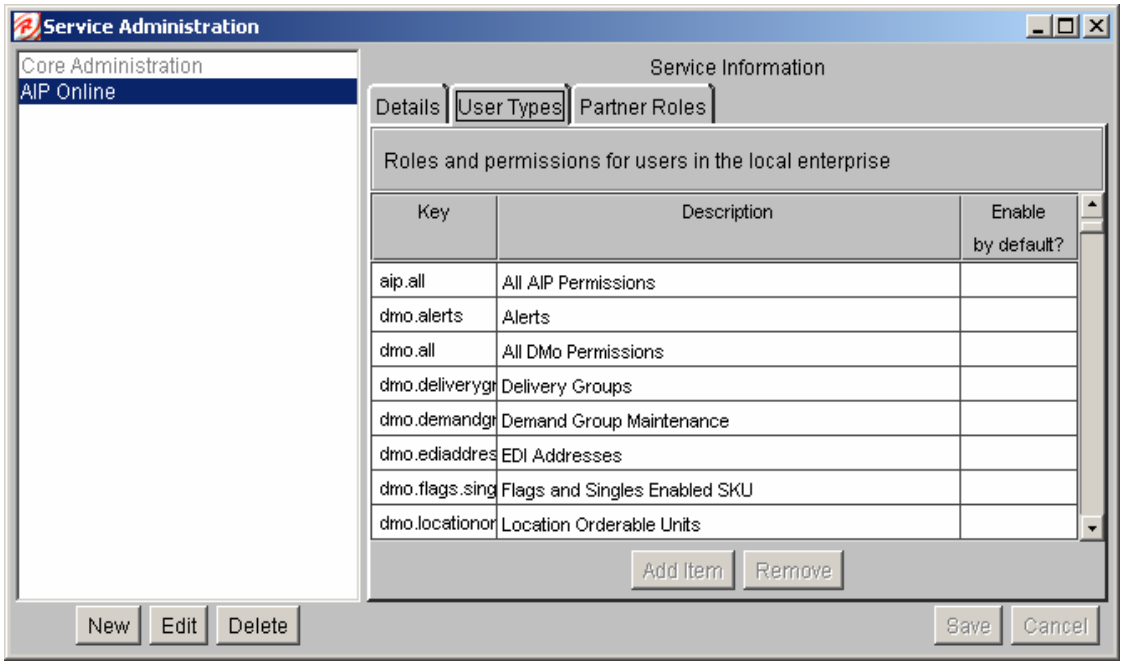
Adding a new permission group will allow you to set up groups of screen privileges which can be assigned to users. Assigning a permission group to a user grants them permission to all privileges assigned to the permission group. This provides a way to mass assign privileges. The permission group must first be created in the System Administration console before screen privileges can be assigned to the group.

Removing a privilege or permission group will prevent the privilege from being displayed as a user security privilege. This will prevent you or other administrators from assigning the privilege to any users.

Procedures

Create a default privilege

⇒ **Navigate:** On the System Administration Console, click **Services**. The Services Administration window opens.



Services Administration window –User Types tab

1. Select 'AIP Online' in the services list.
2. Click on the User Types tab.
3. Click **Edit**.
4. Click in the 'Enable by Default' column next to the desired permission.
5. Click **Save**.

Delete a default privilege

⇒ **Navigate:** On the System Administration Console, click **Services**. The Services Administration window opens.

1. Select 'AIP Online' in the services list.
2. Click on the User Types tab.
3. Click **Edit**.
4. Click on the check make in the 'Enable by Default' column next to the defaulted permission.
5. Click **Save**.

Create a permission group

⇒ **Navigate:** On the System Administration Console, click **Services.** The Services Administration window opens.

1. Select ‘AIP Online’ in the services list.
2. Click on the User Types tab.
3. Click **Edit**.
4. Click **Add Item**.
5. Enter a key in the field.

Note: The key must start with **sec:** to be recognized as a permission group..

6. Enter a description.
7. Determine the desired default option.
8. Click **Save**.

Delete a permission group

⇒ **Navigate:** On the System Administration Console, click **Services.** The Services Administration window opens.

1. Select ‘AIP Online’ in the services list.
2. Click on the User Types tab.
3. Click **Edit.**
4. Select the permission group to be deleted.
5. Click **Remove.**
6. Click **Save**.

Set up permission groups

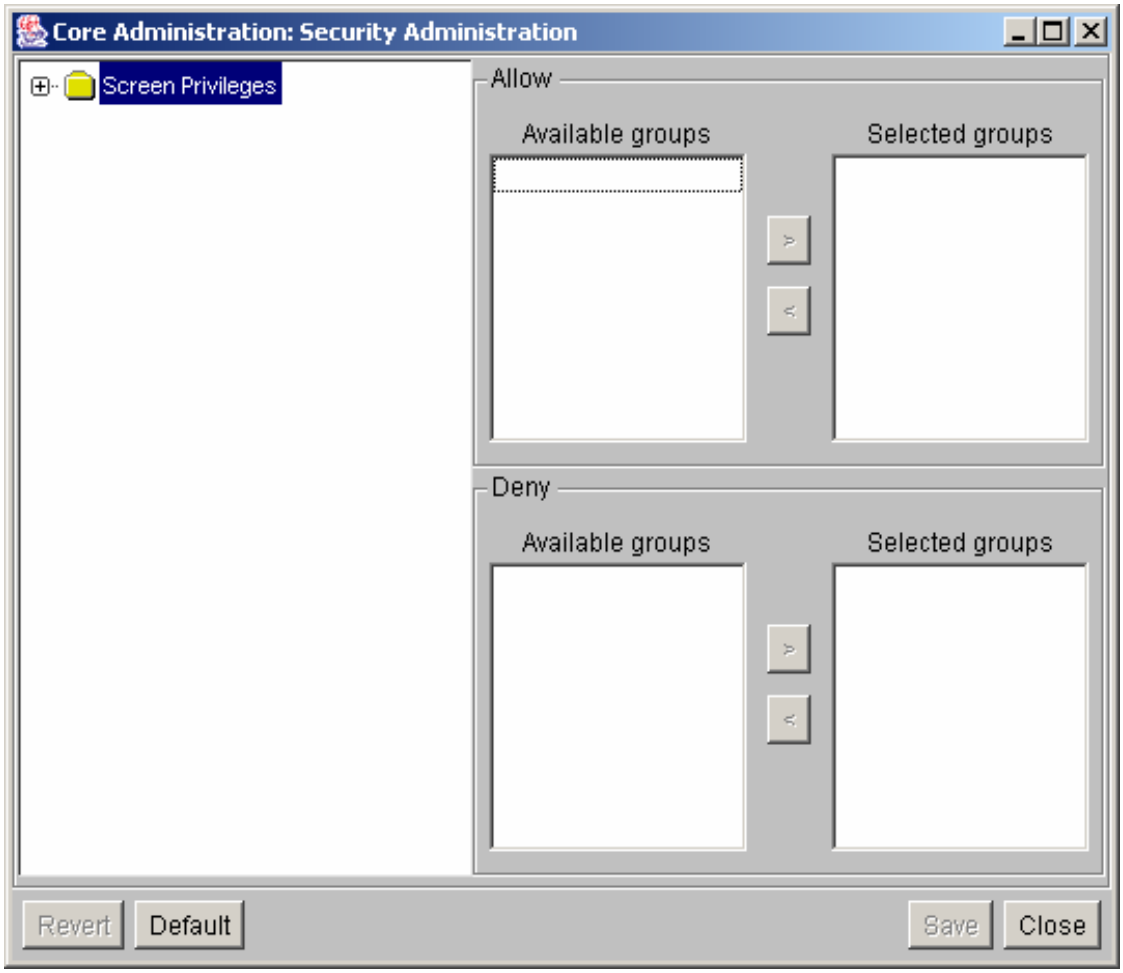
Overview

Permission groups are created in the System Administration console. Once created, you can assign privileges to them. By assigning privileges you are creating groupings of privileges that can be assigned to a user en masse rather than individually picking each privilege and assigning it to the user. This also provides a type of mass maintenance capability. By adding a privilege to a permission group you are automatically assigning the privilege to every user which is assigned the permission group. Similarly, removing a privilege from the permission group denies that privilege to all users which are assigned the permission group.

Procedures

Assign privileges to a permission group

⇒ **Navigate:** On the AIP Administration Console,click **Security**. The Security Administration window opens.



1. Click **+** to display the screen privileges
2. Select a screen privilege
3. In the Allow Available groups select a permission group to be assigned to the screen privilege.
4. Click > to move the permission group to the Allow Selected groups list.
5. Click **Save**.

Delete privilege from permission group

⇒ **Navigate:** On the AIP Administration Console,click **Security**. The Security Administration window opens.

1. Click + to display the screen privileges
2. Select a screen privilege
3. In the Allow Selected Groups select a permission group to be removed from the screen privilege.
4. Click < to move the permission group to the Allow Available groups list.
5. Click **Save**.

Set up users

Overview

Each user must be set up by an administrator. There are two types of users, administrators and users. Administrators have access to and can maintain the administration console. There must be at least one system administration user. This user is created during implementation and has the access to create new privilege types as described below.

Users have access to the User Console of AIP. They cannot maintain any of the system level settings. A user's permissions may be further limited by scope set by the administrator. Scope defines which departments a user has access to maintain tracks for.

Note: When you set up the users, you assign local user types.

User definition

User name restrictions

- Must be a minimum of 1 and a maximum of 16 characters in length
- May contain any characters, which means that symbols, including spaces, are allowed
- Must be unique

Password restrictions

- Must be a minimum of 6 and a maximum of 128 characters in length
- Must have at least five different characters
- Must not be simple; The following are not allowed:
  - Sequences (ABCDE or ABCXYZ)
  - Four consecutive characters as this results in “pairing” (ABCDEF results in give pairs AB, BC, CD, DE, EF)
- Must not be easily derivable from the user name or full name
- Must not be easily derivable from the previous password
- Must not be derivable from a dictionary entry (the dictionary is configurable)

The rules are defined via the opt/rfp/properties/security.properties file. The format of this is:

Password:

trackeradmin.prop.pwrules.code=uk.co.webtrak.security.passwords.rules.simple.Checker

trackeradmin.prop.simplepw.dictionary=pw_dictionary

Failed Login Lockout

Three invalid entries of a password for a given user ID within twenty-four hours turns off that user ID for five days. The password must be reset using the enterprise administrator screen shown above.

The properties for setting the parameters, the number of failed login tries, and the number of days locked out can be set in the opt/rfp/properties/security.properties file:

Lockout parameters

trackeradmin.prop.password.lockout.count=3

trackeradmin.prop.password.lockout.interval=20m

trackeradmin.prop.password.lockout.wait=3d

Auditing

Security changes and session activity are recorded in an audit table (ENT_AUDIT).

Note: Password cycling, failed logins, and so on are driven from this table. It is important to recognize the impact of clearing this table too frequently.

opt/rfp/properties/security.properties file setting:

Auditing (on or off)

trackeradmin.prop.audit=1

Password cycling

A password may be set to NOT be reused within ‘N’ changes or ‘M’ days. For example:

- If an “N” change is set to 5, the first password cannot be used on turns 2, 3, 4, or 5; however, the first password can be used again in turn 6.
- If an “M” change is set to 3, the same password cannot be used again in the space of days.

These parameters are specified via the opt/rfp/properties/security.properties file.

Note: The history used to validate these parameters is the audit table (ENT_AUDIT). See the Auditing section above.

Uniqueness parameters:
trackeradmin.prop.password.uniqueness=1

trackeradmin.prop.password.uniqueness.interval=120d

Here the password can be reused every time or after 120 days.

Password aging

The aging of passwords can be set to be seconds, minutes, hours, or days. The settings are specified via the opt/rfp/properties/security.properties file. See the following format:

Password expiry

trackeradmin.prop.passwordexpiry=300s

In this example the password expires in five minutes.

Tables referenced

ENT_ATTRS

ENT_AUDIT

ENT_LOCATIONS

ENT_LOCKS

ENT_MCLDATA

ENT_MCLHEADINGS

ENT_PARAMETERS

ENT_PARAMVALUES

ENT_PARTNERDEPTS

ENT_PARTNERS

ENT_PHASES

ENT_RESOURCES

ENT_SEASONS

ENT_SRVUSERTYPES

ENT_STAMPS

ENT_USERS

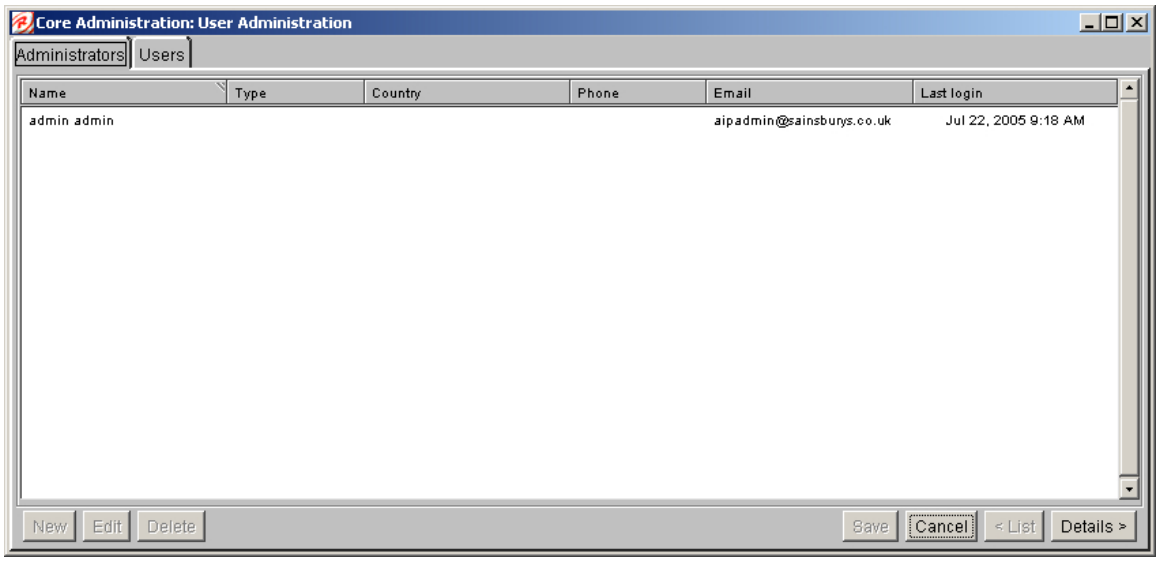
Properties Files

opt/rfp/properties/security.properties

Procedures

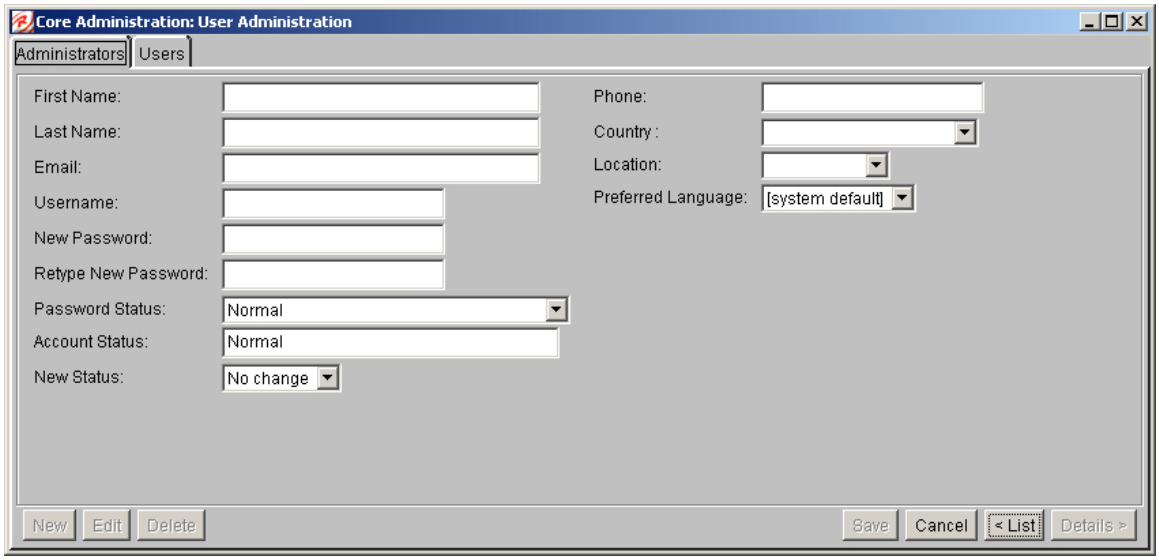
Add an administrator

⇒ **Navigate**: On the Administration Console, click **Users**. The User Administration window opens.



User Administration window – Administrators tab list view

1. Click **New**. The details view of the Administrators tab is displayed.



User Administration window – Administrators tab detail view

2. Enter necessary information in the fields. Required fields are:
   - First and last Name
   - E-mail
   - Username
   - New Password
   - Retype New Password

   Note: Save is not enabled until all required entries are made.
3. Click **Save** to save the changes.
4. Click the close window button to return to the Administration Console window.

Edit an administrator

⇒ **Navigate**: On the Administration Console, click **Users**. The User Administration window opens.

1. Select the name of an administrator.
2. Click **Edit**. The details list is displayed.
3. Update the information as necessary.
4. Click **Save** to commit the changes.
5. Click the close window button to return to the Administration Console window.

Delete an administrator

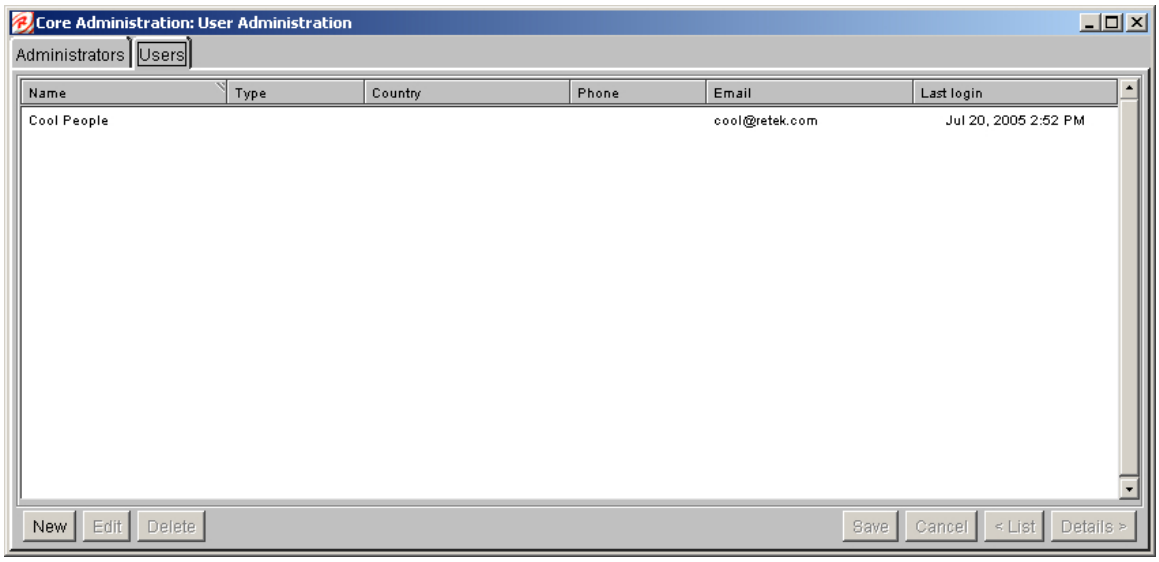
⇒ **Navigate**: On the Administration Console, click **Users**. The User Administration window opens.

1. Select the name of an administrator. All contact information is highlighted.
2. Click **Delete**. A dialog box is displayed to confirm your decision.
3. To proceed, click **OK**. The administrator's name is deleted from the list.
4. Click the close window button to return to the Administration Console window.

Add a user

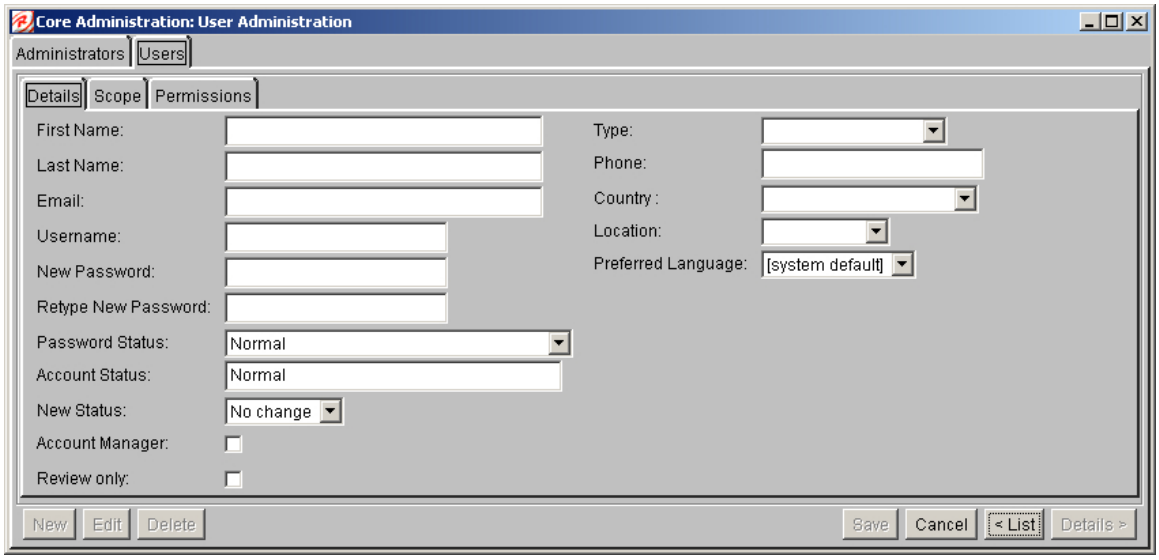
⇒ **Navigate**: On the Administration Console, click **Users**. The User Administration window opens.

1. Click on the **Users tab**. The Users list is displayed.



User Administration window – Users tab list view

2. Click **New**. The details view of the Users tab is displayed.



User Administration window – Users tab details view

3. Add user details:
    a. On the Details tab, enter necessary information about the new user. Entries are required in these fields:
        - First Name
        - Last Name
        - E-mail
        - Username
        - New Password
        - Retype New Password
    b. Select or clear the Account Manager check box.

    Note: When selected, trading partners can see this user in your Enterprise and assign tracks to them. When the check box is cleared, the trading partner is unable to see or assign tracks to this user.

    c. Select or clear the Review Only check box.

    Note: When selected, the user has read-only access, and cannot edit or update in AIP. If the check box is cleared, this user can edit and update in AIP.

    d. Select items for Type, Country, and Location from the drop-down lists.
4. Define a user's scope
    a. Select the **Scope tab**. The Scope tab is displayed.
    b. In the Available Classes list, click on a class name to be assigned to the user. At least one Class is required to create a user.
    c. Click > to move the class to the Selected Class list.
    d. To remove a class from the Selected Classes list, select the class name. The Left Arrow at the center of the window is enabled. Click < to return the class to the Available Classes list.

    Note: Save is not enabled until there are entries in all required fields.
5. Define a user's system permissions
    a. Select the **Permissions tab**. The Permissions tab is displayed.
    b. In the Enabled column, select AIP from the list of Services. The Available Types column lists the user roles for your enterprise.
    c. In the Available Types list, select the role that applies to this user.

    Note: The permission groups are listed along with each individual screen privilege. The selected individual screen privileges along with the screen privileges assigned to any selected permissions groups comprise the list of the users security permissions.

    d. Click > to move the role to the Selected Types list.
6. Click **Save** to commit your changes.
7. Click the close window button to return to the Administration Console window.

Edit user information

⇒ **Navigate:** On the Administration Console, click Users. The User Administration window opens.

1. Select the **Users tab**. The Users list is displayed.
2. Select the user name you wish to edit.
3. Click **Edit**. The Details tab is displayed with the entry fields enabled.
4. Change the information in any or all of the entry fields.
5. Click **Save** to save the changes.
6. Click the close window button to return to the Administration Console window.

Delete a user

⇒ **Navigate**: On the Administration Console, click **Users**. The User Administration window opens.

1. Select the **Users tab**. The Users list is displayed.
2. Select the name you wish to delete.
3. Click **Delete**. You are prompted to confirm your decision.
4. Click **OK**. The selected user is deleted from the list and the database.
5. Click **List** to return to the Users tab list view. The user's name is deleted from the list.
6. Click the close window button to return to the Administration Console window.

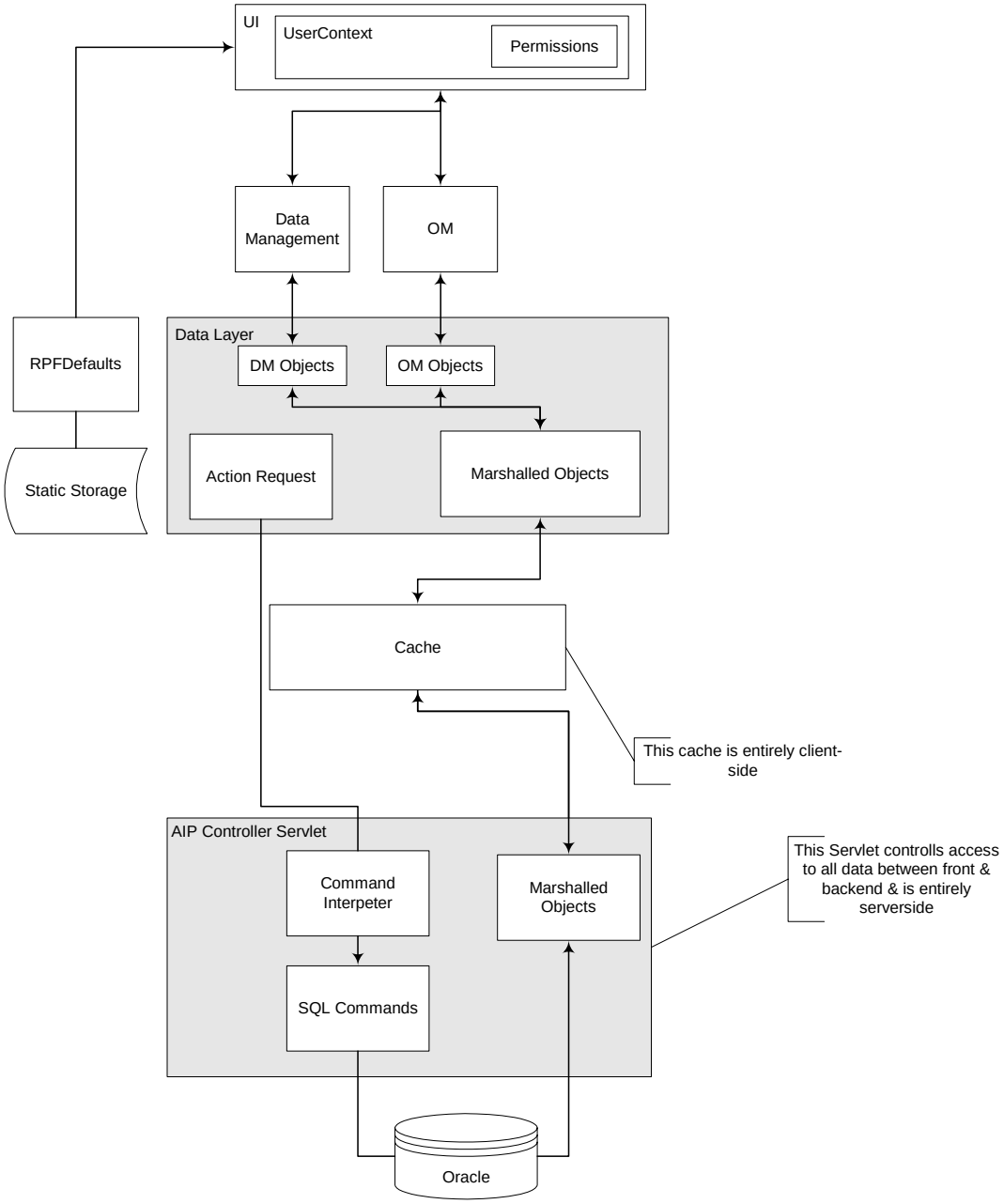
Chapter 5 – Technical architecture

Overview

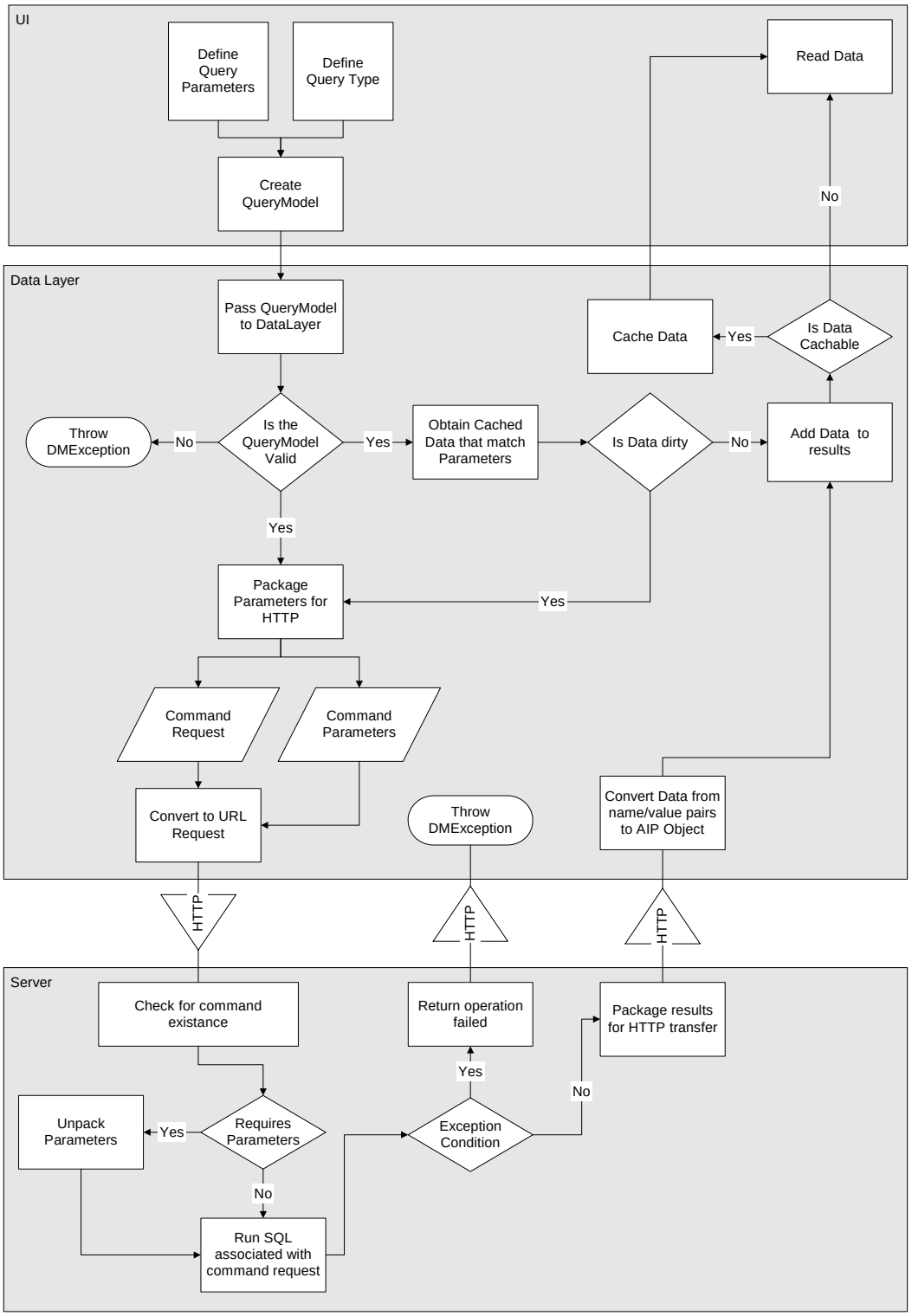
The technical architecture of the AIP Online application is in four layers. The front-end GUI is a Java 1.4.1 AWT applet.

The applet provides presentation logic, business logic, and data validation. The applet communicates with an IBM Websphere application server through a proprietary communication layer. The server runs a Java 1.4.1 servlet that provides a data access layer. The server communicates through a proprietary communication layer and the Oracle JDBC thin driver to an Oracle database. The Oracle database imports data from RMS through RETL, and it exports data to RPAS through RETL.

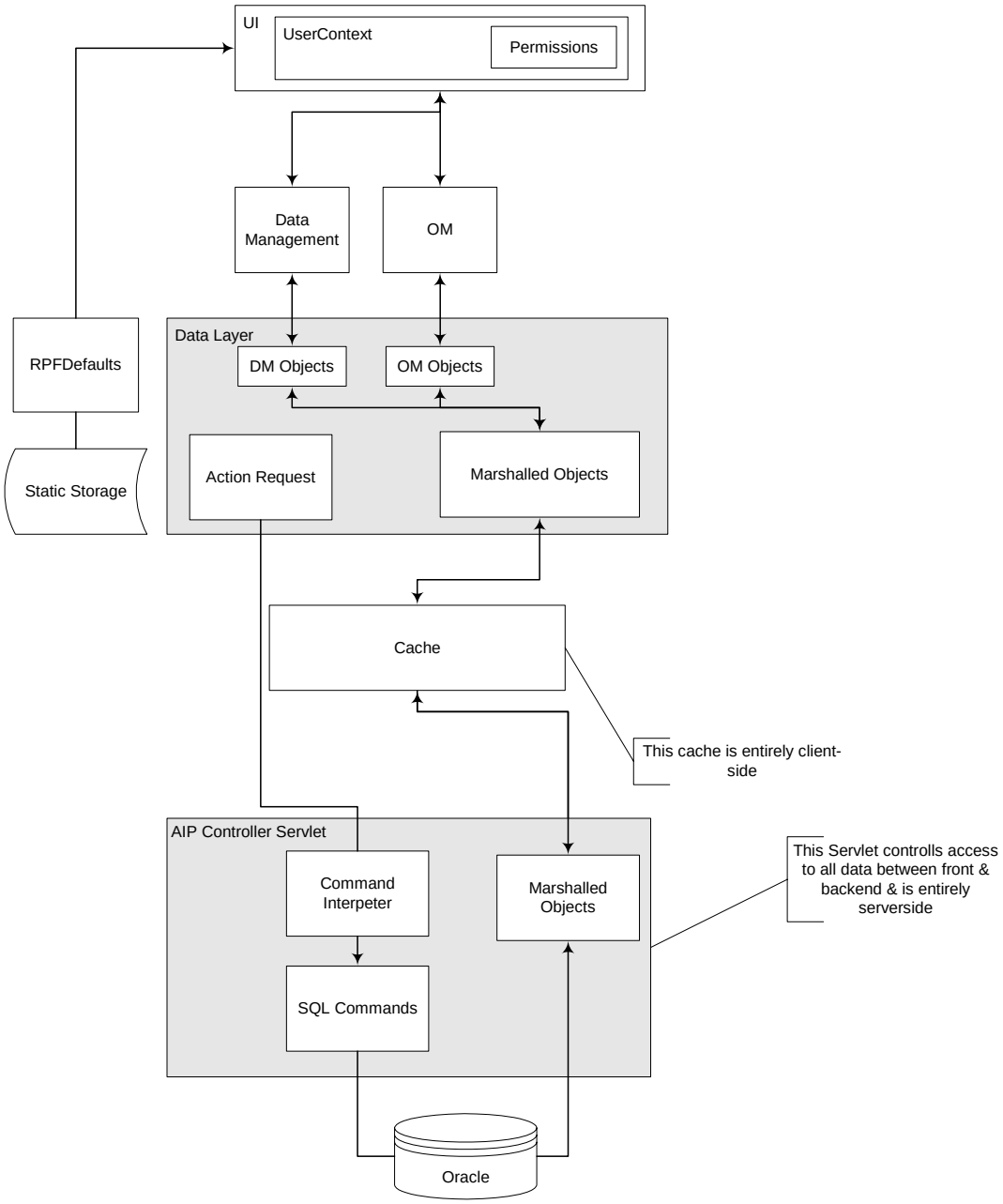
Process overview



Data retrieval



Save process



Access control

Rights are assumed to be denied unless explicitly assigned. Permissions exist for granting all rights within a given application or across the AIP suite.

For Data Management and Order Management, all fields within the windows in inaccessible tabs are disabled. An alert message displays when a user attempts to access an unassigned or denied tab. The message indicates that this area is not accessible for the user.

Note: This alert message will not display if the tab is the default selection in a selected area.

Message: The security privileges of the current user do not grant access to this functionality.

Table for permission list is WT_SRVUSERTYPES.

Privileges

Key	Description
aip.all	All AIP Permissions
dmo.alerts	Alerts
dmo.all	All DMo Permissions
dmo.deliverygroups	Delivery Groups
dmo.demandgroupmaintenance	Demand Group Maintenance
dmo.ediaddresses	EDI Addresses
dmo.flags.singles.enabled.sku	Flags and Singles Enabled SKU
dmo.locationorderableunits	Location Orderable Units
dmo.nonordernondelivery	Non Order/Non Delivery Days
dmo.nonrelease	Non Release/Non Receipt Days
dmo.onsupplyoffsupply	On Supply/Off Supply
dmo.ordercyclecreation	Order Cycle Creation/Maintenance
dmo.ordercycle	Order Cycle
dmo.ordergroups	Order Groups
dmo.pallet.order.multiples	Pallet Order Multiples
dmo.planninghorizon	Planning Horizon
dmo.profilecopyexceptions	Copy Profile Exceptions
dmo.profilereleaseplacement	Profile Release and Placement Schedule Exceptions
dmo.profiles.department	Class to Profile Assignment
dmo.profiles.planninggroup	Planning Group Maintenance
dmo.profiles.supplyprofiles	Supply Profiles

Key	Description
dmo.promstartenddates	Promotional Start and End Dates
dmo.push.singles	Push Singles Flag
dmo.rangingwarehouse	Ranging
dmo.receipt.avail.leadtimes	Receipt to Availability Lead Time
dmo.receivingwindows	Receiving Windows
dmo.release.placement.schedule	Release And Placement Schedule Exceptions
dmo.release.profile.store	Profile - Store Schedule Exceptions
dmo.siteandchamber	Site and Chamber Maintenance
dmo.skukeeptogether	SKU Keep Together
dmo.skureleaseschedule	SKU Release Schedule Exceptions
dmo.slotsandshifts	Slots and Shifts
dmo.sourcesplits.timebalanced	Time Balanced Supply Source Splits
dmo.stockless.ind.exceptions	Stockless Indicator Exceptions
dmo.storeformatpacksize	Store Format Packsize Defaults
dmo.storepriority	Store Priority
dmo.storereceivingcalendar	Store Receiving Calendar
dmo.storereconflag	RDC to Store Reconciliation Flag Exceptions
dmo.storesource	Store Source
dmo.storesource.massmaintenance	Store Source Mass Maintenance
dmo.supplierlocks	Supplier Locks
dmo.supplierreleaseplacement	Supplier Release and Placement Schedule Exceptions
dmo.two.stage.ordering	Two Stage Ordering
dmo.warehouse.coupled	Warehouse Coupled Flag
dmo.warehousecalendar	Warehouse Calendar
dmo.whstoreorderingschedules	WH and Store Ordering Schedules
dmo.withindayswitching	Within Day Switching

Caching

Data objects that are used in more than one screen are usually cached. Those that are used in a single screen are not usually cached. The data cache resides on the client layer, so the contents are specific to the data that is requested by a given user. When cached data is updated, all attributes are updated, such as name, flags, and so on.

Cached Data
Commodity
CommodityPackSize
Communication
DeliveryGroup
DemandGroup
Class
NetworkGroup
OrderCycle
OrderGroup
PlanningGroup
ProductType
Profile
ReceivingWinow
Shift
Slot
StockingPoint
StockingPointStatus
Store
StoreFormat
StoreOrderCycle
Supplier
SupplierCommodityPackSize
SupplierLocation

Cached data update

In the following table:

- The first column defines cached data status.
- The first row defines how data are retrieved.
- The second row defines retrieved data status.
- Each cell defines whether the cached data is updated.

	Data retrieved by querying		Data retrieved by refreshing	
	No timestamp change	**Timestamp changed**	**No timestamp change**	**Timestamp changed**
Cached data unmodified	Do not update cached data	Update cached data	Do not update cached data	Update cached data
Cached data modified	Update cached data	Update cached data	Update cached data	Update cached data

Chapter 6 – Configuration

Configuration

The following properties files are used to configure the application during implementation. All files are located in opt/rfp/properties.

db.properties

This file contains configuration values that are related to the system's database.

- common.prop.db

This value defines the database that the system is utilizing. This value is set to Oracle.

Oracle parameters

- common.prop.oracle.sid

This value defines the database name that the system is utilizing. SID stands for system identifier.

- common.prop.oracle.host

This value refers to the database listener. This value defines the 'host:port' that the database listener is using.

- common.prop.user

This value defines the 'username/password' of the database.

mail.properties

- common.prop.mailfrom – This property defines the sender of email sent by the application. This is what appears in the "From" field when a user views the email.
- mailhost – This property is the servername or IP address that the application uses as a "mailhost."
- mailtest – This property is used to redirect mail to a dead-end account rather than to the intended recipient. This is a safety precaution designed to prevent users from getting confused by misleading emails from a test system. mailserver.properties may also contain a "mailtestfile" parameter, which designates an alternate file that contains "mailtest." A mailtest value in mailtestfile takes precedence over one in main.properties. See the following example:

Value	Result
#mailtest=deadend@mydomain.com	Commented out. All mail works.
mailtest=deadend@mydomain.com	Enabled. All mail is redirected to the deadend account, so nobody receives mail.
mailtest=deadend@mydomain.com,+@mydomain.com	Mail destined to mydomain.com succeeds, but those destined anywhere else are redirected to the deadend account.
Mailtest=deadend@mydomain.com,+john.doe@retek.com	Mail destined for John Doe succeeds, but those destined anywhere else are redirected to the deadend account.

- mailtestfile – A file that contains another mailtest parameter. A mailtest value in mailtestfile takes precedence over one in main.properties. Unlike mailserver.properties, changing the value of mailtest here does not require an Application Server bounce afterward.

main.properties

- base – This must match the context root of the ear or war file. This is "/" for a production system, or "/test1" for the 1st of several test systems on a single physical computer.
- securemode – This is set to "1" to force connections to switch from http (non-secure) to https (secure) upon logon. It can also be set to "0" to not do this.
- setfileattr.rcapps.properties – This defines a file to contain color attributes (default is rcapps.properties).

AIP Online can be configured to publish Purchase Order and Transfer Data to the Oracle Retail Merchandising System (RMS) via the Oracle Retail Integration Bus (RIB).

The following parameters in the main.properties file should be uncommented to activate the OrderSenderBean, which calls the RIB publication routines:

```
#aip.prop.order.period.count=1
#aip.prop.order.period.start.1=08:00:00
#aip.prop.order.period.end.1=20:00:00
#aip.prop.order.time.interval=00:01:00

#aip.prop.order.po.message.family=XOrder
#aip.prop.order.po.message.type.name=msg_type
#aip.prop.order.po.queue.table.name=PO_MFQUEUE
#aip.prop.order.po.table.id.name=order_no

#aip.prop.order.tsf.message.family=XTsf
#aip.prop.order.tsf.message.type.name=msg_type
#aip.prop.order.tsf.queue.table.name=TSF_MFQUEUE
#aip.prop.order.tsf.table.id.name=tsf_no

#aip.prop.order.max.message.bundle.size=10
#aip.prop.order.max.publishing.count=20
```

The file must then be saved. Finally, the administrator must restart the WebSphere instance on which the OrderSenderBean and AIP Online application are deployed.

Property	Description
aip.prop.order.period.count	The number of periods in the day during which the OrderSenderBean will invoke RIB publication. This value must be greater than zero if RIB-based publication is to be used.
aip.prop.order.period.start.x	The start time in HH:MM:SS format of period x where x is 1 … aip.prop.order.period.count.
aip.prop.order.period.end.x	The end time in HH:MM:SS format of period x where x is 1 … aip.prop.order.period.count.
aip.prop.order.time.interval	The amount of time in HH:MM:SS format between calls to OrderSenderBean.checkAndPublish().
aip.prop.order.po.message.family	The purchase order message family name. This value is required by the RIB to ensure proper validation of message payloads. This value should be set to 'XOrder'.
aip.prop.order.po.message.type.name	This value can be used to indicate if the message is a header-create, header-update, detail-create or detail-update message. Although message types are used to order the OrderSenderBean query, this parameter value is not currently used.
aip.prop.order.po.queue.table.name	The AIP Online table which the OrderSenderBean will query to check for Purchase Order related messages awaiting publication. This value should be 'PO_MFQUEUE'.
aip.prop.order.po.table.id.name	This value is used to group functionally related message content. For example, all message content related to purchase order number 123 would be grouped. This value should be 'order_no'.
aip.prop.order.tsf.message.family	The transfer message family name. This value is required by the RIB to ensure proper validation of message payloads. This value should be set to 'XTsf'.
aip.prop.order.tsf.message.type.name	This value can be used to indicate if the message is a header-create, header-update, detail-create or detail-update message. Although message types are used to order the OrderSenderBean query, this parameter value is not currently used.

Property	Description
aip.prop.order.tsf.queue.table.name	The AIP Online table which the OrderSenderBean will query to check for Transfer related messages awaiting publication. This value should be 'TSF_MFQUEUE'.
aip.prop.order.tsf.table.id.name	This value is used to group functionally related message content. For example, all message content related to transfer number 456 would be grouped. This value should be 'tsf_no'.
aip.prop.order.max.message.bundle.size	The maximum number of message bundles to publish per call to OrderSenderBean.checkAndPublish().This value is defaulted to 10 but should be recalculated by the client based upon on-site performance testing.
aip.prop.order.max.publishing.count	The maximum number of messages per message bundle. For example, multiple Purchase Order header create message can be grouped in one message bundle to improve performance. This value is defaulted to 20 but should be recalculated by the client based upon on-site performance testing.

rcapps.properties

- about.width – Width of about windows (default is 753)
- appbanner.bg – Main banner backgroup color (default is #E13128)
- appbot.page – Standard bottom banner (default is /fragments/appbot.jsp)
- applet.codebase – Applet default codebase (default is appclasses)
- appmenu.bg – Menu banner background (default is #F9F8C7)
- apppage_bot.page – page fragment (default is /fragments/apppage_bot.jsp)
- apppage_top.page – page fragment (default is /fragments/apppage_top.jsp)
- apps.width – Width of application windows (default is 753)
- apptop.page – Standard top banner (normal and compact versions) (default is /fragments/apptop.jsp)
- apptop_about.page – (default is /fragments/apptop_about.jsp)
- head.page – Standard head elements (default is /fragments/head.jsp)
- securemode.allow – Set to "*" to enable securemode on all clients, or "*, !Mac" to enable securemode on all clients except those that are using a Macintosh
- text.fg – Main test color (default is #E13128)
- webmeter.allow – Set to "*" to display webmeter for all clients, or "*, !Mac" to display webmeter for all clients except those that are using a Macintosh
- webmeter.page – WebMeter page (default is /fragments/webmeter.jsp)

platform-override.properties (warfile/classes/uk/co/webtrak/gui)

- disabledtextcolour=color. This sets the color of a display-only field on a config sheet. "color" can be any of the following: white, lightGray, gray, darkGray, black, red, pink, orange, yellow, green, magenta, cyan, blue, or a hex RGB value that starts with # (for example, #ab34ef). Restart browser upon change.

security.properties

This file defines security administration settings for the application. See the security section above for further details on settings and options.

- trackeradmin.prop.adminhosts – This is a comma separated list of "host/mask" values that is allowed to access phantasm (the primary administration page).

warp.properties

- monitor – 1 (process midnight mail run) or 0 (do NOT process midnight mail run). This is set to 1 on only one of the WebServers. Changes here to DO require a bounce.

The following files provide all displayed text for the suite and the field entry lengths.

Client-side:

<rfp appserver location >/installedApps/<node>
/AIPOnlineApp.ear/rfp.war/appclasses/res/com/retek/applet/strings_en.properties

Server-side messages:

/rfp/servlet/res/com/retek/servlet/FulfillmentPlanning_strings_en.properties

config.properties

This file is located in < rfp appserver location >/installedApps/<node>
/AIPOnlineApp.ear/rfp.war/appclasses/res/com/retek/applet.

This file contains configurable settings for Data Management and Order Management that determine how certain screens appear immediately when opened. It also contains settings which allow or prevent certain user activities on the screens.

SYSTEM_PARAMETERS

The configuration parameters in the table are populated with default values that need to be set according to your individual business needs. Each parameter has an associated description that identifies what the parameter controls.

NAME	VALUE	DESCRIPTION
ON_SUPPLY_OFFSET	3	The corporate on supply offset value is used to calculate on-supply dates based on on-sale dates imported from the merchandising system. On-supply dates will be set to: [on-sale date] - ON_SUPPLY_OFFSET
OFF_SUPPLY_OFFSET	3	The corporate off supply offset value is used to calculate off-supply dates based on off-sale dates imported from the merchandising system. Off-supply dates will be set to: [off-sale date] - OFF_SUPPLY_OFFSET

NAME	VALUE	DESCRIPTION
SYSTEM_HIGH_DATE	99991231	Default end date used for default batch assignments where no end date is specified. Date format is yyyymmdd
ON_OFF_SUPPLY_OVERWRITE_IND	N	Indicates whether to overwrite on_supply, off_supply dates with on_sale, off_sale_dates.
VALID_SOURCE_VALIDATION_IND	Y	Indicates whether to execute the validation to determine whether a source is valid. A valid source is one that is currently acting as a destination with a split % against it or where all the commodity pack sizes for the demand group are pending de-ranged.
DLG_OG_VALIDATION_IND	Y	This property indicates whether the validation which checks if there is a delivery group and/or order group assigned for the given demand group, destination and effective date should execute.
AUTO_CREATION_OF_DELIVERY_GROUP	Y	Indicates whether to auto create delivery groups for a new supplier.
AUTO_CREATION_OF_ORDER_GROUP	Y	Indicates whether to auto create order groups for a new supplier.
AUTO_RANGE_DEMAND_GROUP	Y	Indicates whether to auto range new SKU pack sizes.
COPY_SISTER_STORE	Y	Indicates whether to copy sister store to associated new store.
COPY_SISTER_WAREHOUSE	Y	Indicates whether to copy sister warehouse to associated new warehouse.

NAME	VALUE	DESCRIPTION
AUTO_ASSIGN_ORDER_CYCLES	Y	Indicates whether to calculate the store lead time prior to the store opening. If no calculation is performed the profile order cycle and any applicable exceptions will be used.
AUTO_CREATION_OF_PROFILE	Y	Indicates whether to auto create Direct Profiles for new suppliers.
AUTO_ASSIGN_OF_SKUS_TO_PROFILES	Y	Indicates whether to auto assign the SKU of new SKU/supplier combos to profiles.
AUTO_ASSIGN_ORDER_MULTIPLES	Y	Indicates whether order multiples should be automatically assigned for new sku/pack_size combinations.
SISTER_STORE_OFFSET_WEEKS	12	Indicates the maximum number of weeks before store open that a sister store copy will take place.
SISTER_WAREHOUSE_OFFSET_WEEKS	12	Indicates the maximum number of weeks before warehouse open that a sister warehouse copy will take place.
WALKING_LEAD_TIME_OFFSET	45	Indicates the number of days before a store open date to begin calculating a walking lead time for that store.
MAX_WALKING_LEAD_TIME	22	Indicates the maximum lead time to use in calculating a walking lead time.

NAME	VALUE	DESCRIPTION
SCHEDULE_EXCEPTION_OFFSET	9	Indicates the number of days - 1 after store open that the normal store ordering schedule will take effect. (For example if store open (SO) is a Friday and the default order cycle should take effect two Mondays after (10 days later) the value should be 9. This value is used when setting up the "Walking lead time" and when copying exceptions from the sister store. Sister store exceptions will be copied from SO + SCHEDULE_EXCEPTION _OFFSET + 1 onward when AUTO_ASSIGN_ORDER _CYCLES = 'Y'.)
AUTO_RANGE_BY_SHIP_TO_ONLY	N	Indicates whether to auto range new SKU packs only to warehouses that match the supplier Ship To value. Otherwise ranges to all valid SKU pack/warehouse combinations.
DEFAULT_PALLET_SETTING_USE _PALLET_HEIGHT	Y	Indicates whether to use pallet height in pallet settings for system generated delivery groups.
DEFAULT_PALLET_SETTING_USE _PALLET_WEIGHT	Y	Indicates whether to use pallet weight in pallet settings for system generated delivery groups.
DEFAULT_VEHICLE_FOOTPRINT	22	Indicates the default vehicle footprint for system generated delivery groups.
DEFAULT_VEHICLE_HEIGHT	1	Indicates the default vehicle height for system generated delivery groups.
DEFAULT_VEHICLE_WEIGHT_LIMIT	99999	Indicates the default vehicle weight limit for system generated delivery groups.

NAME	VALUE	DESCRIPTION
DEFAULT_VEHICLE_MINIMUM_DROP	0	Indicates the default vehicle minimum drop for system generated delivery groups.

ORDER_NUMBER

The order number table defines the valid range of order numbers for purchase orders and transfers. The range of values should not overlap the range of values allocated to any other system capable of generating orders.

ORDER_PURGE_PERIOD

The order purge period table defines the number of day an order remains in the system after it has been set to Closed status.

ORDER_DEFINITION

In AIP Online orders are held at order detail level, i.e. order line time level. When an order number is generated, it is generated at order header level. This table holds the information which specifies how order line items are grouped into to order headers.

The following options are available for defining the level of grouping:

- Source - Indicates if order sources are used in order header roundup.
- SKU - Indicates if SKUs are used in order header roundup.
- Pack Size - Indicates if pack sizes used in order header roundup.
- Destination - Indicates if the order destinations are used in order header roundup.
- Delivery Date - Indicates if delivery dates are used in order header roundup.

In the example below SKU (commodity) and pack size are not used in the order definition. This means that for each order type an order number will be assigned to each unique combination of source, destination, and delivery date. This will result in one to many SKU pack sizes being grouped under a single order number for an order type.

Destination	Order Type	USE_ SOURCE	USE_ COMMODITY	USE_ PACK_SIZE	USE_DEST	USE_ DELIVERY_DATE
Warehouse	Purchase	Y	N	N	Y	Y
Store	Purchase	Y	N	N	Y	Y
Warehouse	Transfer	Y	N	N	Y	Y
Store	Transfer	Y	N	N	Y	Y

Order Cycles

The default order cycles created at implementation time are used by the batch procedures that automatically create Profiles and Order Groups. These Order cycles can be modified to match your business needs however **they must remain in sync with the same "special default order cycles" created in the RPAS platform**.

Store Order Cycles

Store order cycles are assigned to a profile when it is automatically generated by the batch procedures. Two Store Order Cycles exist for these procedures. One will be assigned to Warehouse profiles (PRFWS), the other to Direct Profiles (PRFVS).

The following store order cycles are created at installation.

Order Cycle	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
PRFVS		15					
PRFWS	1	1	1	1	1	1	1

Store Order cycles are maintained in two tables.

STORE_ORDER_CYCLE

STORE_ORDER_CYCLE_ID	STORE_ORDER_CYCLE_CODE	STORE_ORDER_CYCLE_NAME	STORE_ORDER_CYCLE_LENGTH
2	PRFVS	New Sup To Store Default OC	7
3	PRFWS	New Sup Warehouse to Store OC	7

STORE_ORDER_CYCLE_LEAD_TIME

STORE_ORDER _CYCLE_ID	STORE_ORDER _CYCLE_SEQ	RELEASE _LEAD_TIME	PLACEMENT _LEAD_TIME
2	1	-1	-1
2	2	15	15
2	3	-1	-1
2	4	-1	-1
2	5	-1	-1
2	6	-1	-1
2	7	-1	-1
3	1	1	1
3	2	1	1
3	3	1	1
3	4	1	1
3	5	1	1
3	6	1	1
3	7	1	1

- The store order cycle length is 7 therefore there is one row in the STORE_ORDER_CYCLE_LEAD_TIME table for each of the 7 days in the order cycle. Changing the length of the Store order cycle would require additional rows to be added to the STORE_ORDER_CYCLE_LEAD_TIME table such that the STORE_ORDER_CYCLE_SEQ runs from 1 to n where n is the order cycle length. The ONLY supported lengths are 7, 14, or 28. DO NOT choose a length other than those values.
- A RELEASE_LEAD_TIME, or PLACEMENT_LEAD_TIME value of -1 indicates ‘blank’ on the screen or no lead time.
- The PLACEMENT_LEAD_TIME value MUST be equal to or greater than the RELEASE_LEAD_TIME. Therefore you cannot change one and not the other. The PLACEMENT_LEAD_TIME must NOT contain a value other than -1 when the RELEASE_LEAD_TIME is -1.

Warehouse Order Cycles

Warehouse order cycles are assigned to an Order Group when it is automatically generated by the batch procedures. Two Warehouse Order Cycles exist for these procedures. One will be assigned to Warehouse sourced Order Groups (OGWW), the other to Supplier sourced Order Groups (OGVW).

The following store order cycles are created at installation.

Order Cycle	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
OGVW		15					
OGWW	1	1	1	1	1	1	1

Warehouse order cycles are maintained in two tables.

ORDER_CYCLE

ORDER_CYCLE_ID	ORDER_CYCLE_CODE	ORDER_CYCLE_NAME	ORDER_CYCLE_LENGTH	COLLECTION_LEAD_TIME
1	OGVW	New Supplier Default Order Cycle	7	-1
2	OGWW	New Supplier Whs to Whs Order Cycle	7	-1

ORDER_CYCLE_LEAD_TIME

ORDER_CYCLE_ID	ORDER_CYCLE_SEQ	ORDER_LEAD_TIME
1	1	-1
1	2	15
1	3	-1
1	4	-1
1	5	-1
1	6	-1
1	7	-1
2	1	1
2	2	1
2	3	1
2	4	1
2	5	1
2	6	1
2	7	1

- The warehouse order cycle length is 7 therefore there is one row in the ORDER_CYCLE_LEAD_TIME table for each of the 7 days in the order cycle. Changing the length of the warehouse order cycle would require additional rows to be added to the ORDER_CYCLE_LEAD_TIME table such that the ORDER_CYCLE_SEQ runs from 1 to n where n is the order cycle length. The ONLY supported lengths are 7, 14, or 28. DO NOT choose a length other than those values.
- An ORDER_LEAD_TIME value of -1 indicates ‘blank’ on the screen or no lead time.
- The COLLECTION_LEAD_TIME must be equal to or less than the smallest ORDER_LEAD time for the order cycle. For the existing, unmodified, order cycle OGVW the COLLECTION_LEAD_TIME can be at most 15. For the existing, unmodified, order cycle OGWW the COLLECTION_LEAD_TIME can be at most 1.

WH_TYPE_INITIAL_PACK_TYPE

This table contains the warehouse type and pack type associations that are used for defaulting warehouse orderable units and order multiples. When the batch process(es) is enabled the pack type value will define which pack size should be used for assignment first. If the pack size associated with the pack type is not valid for a given warehouse of the assigned warehouse type additional logic in the batch will determine the next valid pack size to use.

The constraints on the table will need to be modified if additional warehouse types are added to the system via the STOCKING_POINT table.

SUPPLIER

Prior to importing any supplier data the column constraint on the SHIP_TO column should be modified to match the SHIP_TO values that will be imported from the merchandising system. Please refer to the AIP batch guide to identify any RPAS dependencies on specific SHIP_TO values.

STOCKING_POINT

Prior to importing any warehouse data the column constraint on the WH_TYPE column should be modified to match the WH_TYPE values that will be imported from the merchandising system.

SHIP_TO_WH_TYPE_SOURCE

This table contains the mappings between Supplier SHIP_TO values and the appropriate sources. These values are used when automatically generating Delivery Groups and Order Groups. When the WH_TYPE column is null the supplier will be used as the source. A not null WH_TYPE indicates that the warehouse the supplier ships to is an intermediate warehouse that does not ship directly to the store. When the WH_TYPE is populated the source of the delivery groups and Order Groups created will be Warehouses that match the WH_TYPE.

SHIP_TO_WH_TYPE_DEST

This table contains the mappings between Supplier sources (SHIP_TO_WH_TYPE_SOURCE) and the destinations. The destinations are used to determine the valid warehouse chambers to assign to the delivery groups and order groups. Each source type will map to only one destination WH_TYPE, however one SHIP_TO value can map to many sources and destination WH_TYPEs.

ALERT_DEFINITION

Every Alert is assigned a priority based on the type of the alert. The priority assigned to each alert type can be set in the ALERT_DEFINITION table. The priority setting currently has no bearing on the rest of the system. It is simply a visual indicator of importance, and search mechanism, for the user.

Note: Updating the priority changes the priority of any alerts, corresponding to that alert type, that exist in the ALERT table.

ALERT_DEFINITION_DESC

The ALERT_DEFINITION_DESC table contains the text of each Alert, and the corresponding SHORT_DESC or alert type description. The SHORT_DESC is displayed to the user as search criteria. You may modify the text of the SHORT_DESC however the screen is optimized to display the values provided in the installation. It is not recommended that you modify the LONG_DESC as the correct placement of the data displayed to the user depends on the structure of the LONG_DESC text.

The LONG_DESC and SHORT_DESC can be translated for another LANG and COUNTRY if desired.

ALERT_STATUS_DESC

Each alert that is imported or generated by DM Online batch will be assigned a status. The status is displayed to the user in the DM Online screen. The user can then modify the status of the alert by choosing a status from a list. The valid statuses and their descriptions are contained in the ALERT_STATUS_DESC table.

Adding a status

The ALERT_STATUS_CODE indicates the chronological order of the statuses displayed on the screen as well as the code that is saved indicating the alert's current status.

When adding a status:

- The smallest value will be automatically assigned to every new alert.
- The largest value will be considered the final status indicating no more work needs to be completed related to the alert.
- It must be added to every set of LANG/COUNTRY combinations. Therefore, the same set of ALERT_STATUS_CODE values must exist for every LANG and COUNRTY on the table.

Chapter 7 – Interfaces

Overview

The online portion of AIP is essentially a reviewing and manipulation tool for the data that is ultimately stored and processed in the RPAS platform. There are a substantial number of files to communicate the data between these two systems, and this section describes the interface that handles this transfer.

Note: The data in RPAS is considered to be the master version.

Each data file falls into one of four categories:

1. Hierarchy data
2. Data Management
3. Warehouse Inbound Planning
4. Store sourcing

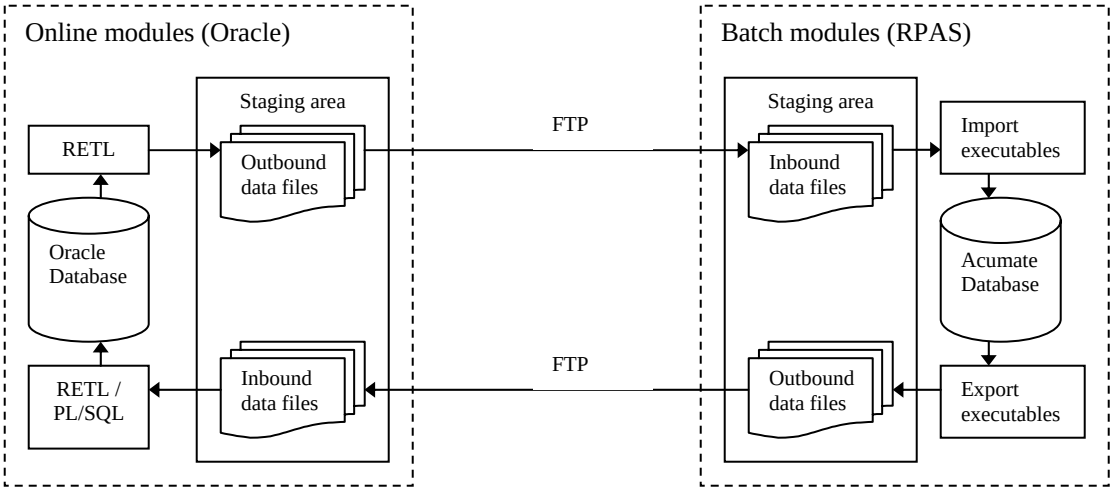
Refer to Appendix B for a comprehensive list of the data files and their descriptions.

Interface architecture

The online-side interface between the online portion and the RPAS system uses the following technologies:

- RETL (Oracle Retail Extract, Transform and Load) scripts
- Oracle PL/SQL packages
- Shell scripts
- Scheduler (cron)
- FTP

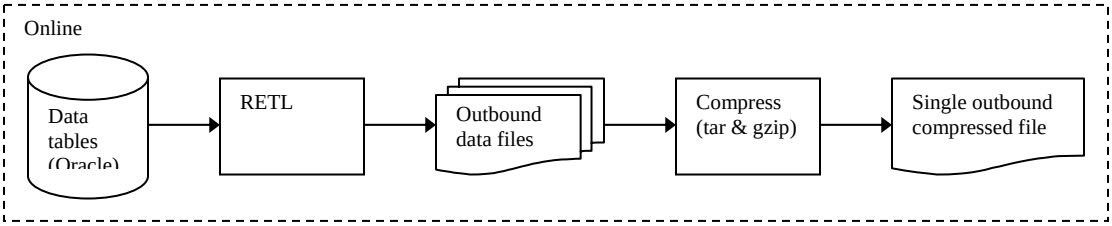
The diagram below shows how these components fit together.



The import/export process is triggered by a job scheduler (typically ‘cron’) on a nightly basis. The scheduler calls the import and export shell scripts that perform the necessary file transfers and run the RETL scripts.

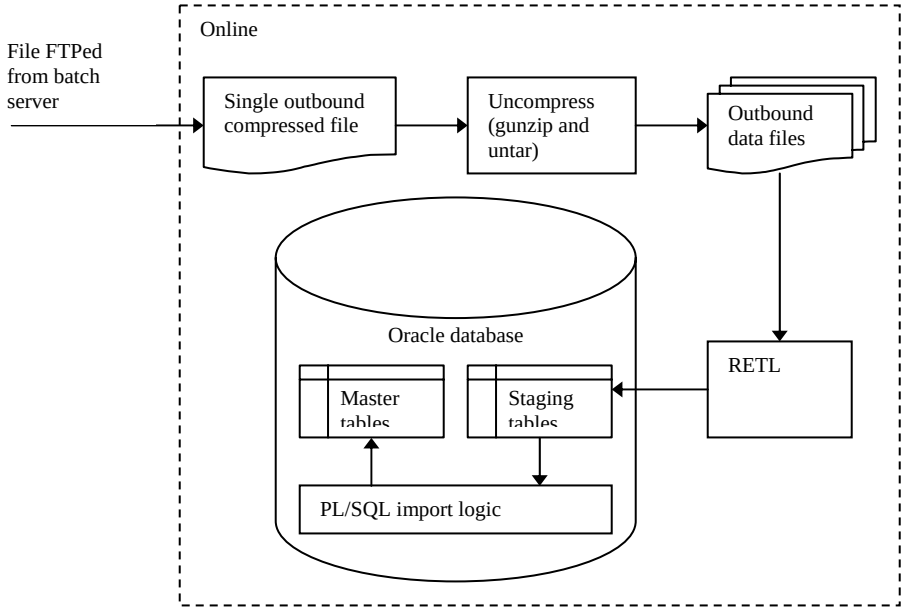
Exporting

The export process involves running the export RETL scripts to create the outbound data files. It then compresses them into one file and places them into a staging area that is ready for the batch system to retrieve it. RETL is able to export the data directly from the Oracle tables with no additional processing involved.



Importing

The import process is slightly more complex than the export process. The data files must be fetched from the batch system and decompressed before feeding them through RETL. Due to the required additional pre-insert processing, RETL is unable to perform a direct import to the database. For instance, duplicate entries must be checked so that updates are performed rather than inserted. This introduces another layer of processing in the form of PL/SQL packages embedded in the database. Data is first imported to staging tables by RETL, and then the PL/SQL logic is executed to update the master tables.



Configuration

The interface process was designed to be fully automated once configured. There are three files that need to be configured to the specific environment. These files are located under the root integration directory:

integration/

config.xml	RETL configuration file
import.sh	Script to be run by scheduler to perform data import
export.sh	Script to be run by scheduler to perform data export

Note: Please refer to the AIP 11.3 Installation Guide for installation instructions.

Configuring config.xml

This configuration file contains the database connect information for RETL for import and export. See the RETL documentation for detailed descriptions of element definitions. The ‘oraread’ section describes the database for the export and ‘orawrite’ for the import. Both would normally be the same. Databases can be local or remote, but if they are remote, they must be reachable by normal means. In other words, they should be described in tnsnames if an Oracle database and reachable by SQLPlus.

Configuring import.sh

All editable properties are stored in the top section of the script before the 'End of configurable section' comment. The parameters, which are described below, are commented in the file:

Note: The source call to load the profile is to setup RFX_HOME and appropriate database environment variables to enable programs to function correctly. For instance, setting ORACLE_HOME and paths so sqlldr will function.

Note: The location of 'integration_base' is the path to the integration directory that was extracted earlier (that these shell scripts reside in)

Note: The import process performs an FTP to fetch the compressed data files from the batch server. There is a basic form of retrying if the FTP fails to find the files (because they are not yet ready) and the number of retries and the timeout are configurable.

- integration_base – Base integration directory where hierarchy, dm, wip and store_source directories reside
- working_directory – Location for inbound data files; All input flow files refer to this directory
- retl_config_file – RETL config file location
- ftp_host – Host name of machine where data files reside
- ftp_user – FTP access username
- ftp_pass – FTP access password
- ftp_path – Path on remote machine to data files
- data_files – Data files names to fetch and process; These should be in the following order: "hierarchy.tgz dm.tgz wip.tgz store.tgz"
- max_retries – How many times to attempt to FTP each data file before skipping
- sleep_time – Number of seconds to sleep between FTP retries

Configuring export.sh

As with import.sh, all editable properties are stored in the top section of the script before the 'End of configurable section' comment. The parameters are commented in the file and also described below:

- integration_base – Base integration directory where hierarchy, dm, wip, and store_source directories reside
- tar_file_destination – Local location for gzipped tarred data files (batch FTPs from here)
- retl_config_file – RETL config file location

Appendix A – Interface file definitions

Hierarchy interface files

The following table summarizes the hierarchy input/output files to be passed between the DM batch piece and the DM online process.

File name	Description
loc.dat	Store Hierarchy
Default_wh.dat	Store Default Warehouse
hspl.dat	Supplier Hierarchy
dmx_shpto_.dat	Supplier Ship-To Value
whse.dat	Warehouse Hierarchy
wh_type.dat	Warehouse Type Value
hdgr.dat	Delivery Group Hierarchy
ntwg.dat	Network Hierarchy
prof.dat	Profile Hierarchy
prod.dat	Product Hierarchy
dmx_pcktyp.dat	SKU Pack Size Pack Type
item_attribute_type.dat	SKU Attribute Value
item_attribute.dat	SKU Attribute
oltc.dat	Warehouse Order Cycle Hierarchy
proc.dat	Store Order Cycle Hierarchy
hvhc.dat	Vehicle Hierarchy
hdus.dat	Delivery Units Hierarchy
ordg.dat	Order Group Hierarchy

DM interface files

The following table summarizes the input/output files to be passed from the DM online (DMo) piece to the DM batch (DMb) process.

File Name	Direction	Description
dmx_ndldt_.dat	DMo->DMb	Corporate Non-Delivery Date Data
dmx_nordt_.dat	DMo->DMb	Corporate Non-Order Date Data
Dm0_nrcdt_.dat	DMo->DMb	Corporate Stores/Non-Receipt Date Data
dm0_nrldt_.dat	DMo->DMb	Corporate Non-Release Date Data
dm1_nordt_exc.dat	DMo->DMb	Corporate Non-Order Date for Warehouses Exceptions Data
dm0_nrldt_exc.dat	DMo->DMb	Corporate Non-Release Date for Stores Exceptions
dm0_plnhzndef.dat	DMo->DMb	Store Planning Horizon Default
Dm1_plnhzndef.dat	DMo->DMb	Warehouse Planning Horizon Default
Dm1_plnhznexc.dat	DMo->DMb	Warehouse Planning Horizon Exceptions
Dm0_plnhznexc.dat	DMo->DMb	Store Planning Horizon Exceptions
dmx_dgrsrc.dat	DMo->DMb	Delivery Group Source Data
dmx_dlp.dat	DMo->DMb	Delivery Pattern Data
Dm1_og_asg.dat	DMo->DMb	Order Group Assignment Data
Dm1_dgrasg.dat	DMo->DMb	Delivery Group Assignment Data
Dm1_od_untpll.dat	DMo->DMb	Warehouse Orderable Unit Data
Dm1_stpdt_pll.dat	DMo->DMb	Warehouse Stop receiving Date Data
dm1_stlinddef.dat	DMo->DMb	Warehouse Stockless Indicator Default Data
dm1_stlind.dat	DMo->DMb	Warehouse Stockless Indicator Exception Data
Dm1_ravlt_pll_i.dat	DMo->DMb	Warehouse Receipt to Availability Lead Time Data
Dm0_recflg.dat	DMo->DMb	RDC-Store Reconciliation Flag Data
Dm0_recflgexc.dat	DMo->DMb	RDC-Store Reconciliation Flag Exceptions Data
dmx_ltcptnlen.dat	DMo->DMb	Order Lead Time Cycle Data
dmx_wk2ltcptn.dat	DMo->DMb	Fortnightly Order Lead Time Data

File Name	Direction	Description
dmx_wk4ltcptn.dat	DMo->DMb	Four-Weekly Order Lead Time Data
dmx_wk_ltcptn.dat	DMo->DMb	Weekly Order Lead Time Data
dmx_og_defltc.dat	DMo->DMb	OG Default Order LT Cycle Data
dmx_ocyptnlen.dat	DMo->DMb	Order Cycle Pattern Length Data
dmx_wk2ocyrpn.dat	DMo->DMb	Fortnightly Order Cycle Release Pattern Data
dmx_wk2ocyppn.dat	DMo->DMb	Fortnightly Order Cycle Placement Pattern Data
dmx_wk4ocyrpn.dat	DMo->DMb	Four-Weekly Order Cycle Release Pattern Data
dmx_wk4ocyppn.dat	DMo->DMb	Four-Weekly Order Cycle Placement Pattern Data
dmx_wk_ocyrpn.dat	DMo->DMb	Weekly Order Cycle Release Pattern Data
dmx_wk_ocyppn.dat	DMo->DMb	Weekly Order Cycle Placement Pattern Data
dmx_prfdefocy.dat	DMo<->DMb	Profile Default Order Cycle Data
Dm0_prfpscexc.dat	DMo->DMb	Profile Placement Schedule Exceptions Data
Dm1_prfhme.dat	DMo->DMb	Profile Home Warehouse Data
Dm0_prfocyexc.dat	DMo->DMb	Store/Profile Order Cycle Exceptions Data
Dm1_prfnwglks.dat	DMo->DMb	Profile Network Group Links Data
Dm1_prflks.dat	DMo->DMb	Warehouse-Profile Links Data
Dm1_dnrflg.dat	DMo->DMb	Do Not Reconcile Flag Data
Dm1_prdalwsts.dat	DMo<->DMb	SKU-Warehouse Allowable Status Data
Dm1_palmltrll_i.dat	DMo->DMb	Warehouse-Chamber Pallet Multiple
dmx_vadprdasc.dat	DMo<-DMb	Value Added SKU Association Data
dmx_dscdt_.dat	DMo<-DMb	Corporate Discontinuation Date Data
dmx_prdprflks.dat	DMo<->DMb	SKU Profile Links Data
dmx_prdocyexc.dat	DMo->DMb	SKU Order Cycle Exceptions
Dm0_splodgpsz_i.dat	DMo->DMb	Default Supplier Ordering Pack Size Data
Dm0_defodgpsz_i.dat	DMo->DMb	Default Warehouse to Store Ordering Pack Size Data

File Name	Direction	Description
Dm0_onseffdt_.dat	DMo<-DMb	On-Sale Effective Date Data
Dm0_ofseffdt_.dat	DMo<-DMb	Off-Sale Effective Date Data
Dm0_onpeffdt_.dat	DMo<->DMb	On-Supply Effective Date Data
Dm0_ofpeffdt_.dat	DMo<->DMb	Off-Supply Effective Date Data
Dm0_src_i.dat	DMo<->DMb	Store Source Data
Dm0_rscexc.dat	DMo->DMb	Release Schedule Exceptions Data
Dm0_pscexc.dat	DMo->DMb	Placement Schedule Exceptions Data
Dm0_prdocyexc.dat	DMo->DMb	SKU/ Store Order Cycle Exceptions Data
Dm0_sodpszexc.dat	DMo->DMb	Store Ordering Pack Size Exceptions Data
Dm0_sngenbprd.dat	DMo->DMb	Singles Enabled SKU/ Store Data
Dm0_pmsstasrc.dat	DMo<->DMb	Store Promotional Substitution Start Date for Warehouses Data
Dm0_pmsendsrc.dat	DMo<->DMb	Store Promotional Substitution End Date for Warehouses Data
Dm1_pshsngflg.dat	DMo->DMb	Push Singles Flag Data
Dm1_cplflg.dat	DMo->DMb	Warehouse Coupled Flag Data
Dm0_sch.dat	DMo->DMb	Store Schedule Data
Dm1_asgrll.dat	DMo->DMb	Assigned Chamber Data
dmx_dirspl.dat	DMo->DMb	Direct Suppliers Data
dmx_dirprfnum.dat	DMo->DMb	Direct Supplier Profile Number Data
dmx_dirdefocy.dat	DMo->DMb	Direct Supplier Default Order Cycle Data
Dm0_splrscexc.dat	DMo->DMb	Supplier Default Release Schedule Exceptions Data
Dm0_splpscexc.dat	DMo->DMb	Supplier Default Placement Schedule Exceptions Data
Dm0_pry.dat	DMo->DMb	Store Priority Data
Dm1_sngenb.dat	DMo->DMb	Singles Enabled Warehouse Data
Dm1_sch.dat	DMo->DMb	Warehouse Schedule Data
Dm1_ndldt_exc.dat	DMo->DMb	Corporate Non-Delivery Date Exceptions
Dm1_new.dat	DMo<-DMb	New Warehouses
dmx_defprf.dat	DMo->DMb	Default Class Profile

File Name	Direction	Description
dmx_dmgsz_.dat	DMo->DMb	Demand Group Size
dmx_dmgtyp.dat	DMo->DMb	Demand Group Type
dm0_new.dat	DMo<-DMb	New Stores
dm0_srchmeflg.dat	DMo<-DMb	Store Source Assigned Home Warehouse Flag
dm1_msgdat.dat	DMo<-DMb	Missing Data
dm1_no_hme.dat	DMo<-DMb	No Home Warehouse
dm1_nasdgrwd_.dat	DMo<-DMb	No Delivery Group for Warehouse with Demand
dm1_nasdgrwnd.dat	DMo<-DMb	No Delivery Group for Warehouse with No Demand
dm1_nasog_wd_.dat	DMo<-DMb	No Order Group for Warehouse with Demand
dmx_nasprf.dat	DMo<-DMb	Not Assigned to Profile
dmx_newprd.dat	DMo<-DMb	New Commodities
dmx_newprdnas.dat	DMo<-DMb	New SKU Not Assigned to Profile
dmx_newpsz.dat	DMo<-DMb	New SKU-Pack Sizes
dm1_nasog_wnd.dat	DMo<-DMb	No Order Group for Warehouse with No Demand
dmx_no_pszacs.dat	DMo<-DMb	No Pack Size for Active Store
dmx_no_pszadp.dat	DMo<-DMb	No Pack Size for Active Store with Demand on Warehouse
dmx_no_sodpsz.dat	DMo<-DMb	No Store Ordering Pack Size
dmx_no_src.dat	DMo<-DMb	No Source
dmx_prdspllks.dat	DMo<-DMb	SKU-Supplier Links
dmx_pszmap.dat	DMo<-DMb	Pack Size Map
dmx_dsc.dat	DMo<-DMb	Discontinuation
dm1_tmbadj.dat	DMo<-DMb	Warehouse Time Balanced Source Split Adjustment Alert
dm0_prfrscexc.dat	DMo->DMb	Profile Default Release Schedule Exceptions
dm1_splordmlt_i.dat	DMo->DMb	Warehouse Supplier Order Multiples Data
dmx_plnhzninx.dat	DMo<-DMb	Planning Horizon Inconsistencies
dm1_rltsts.dat	DMo->DMb	Warehouse Rollout Status

File Name	Direction	Description
dmx_plnhznmin.dat	DMo<-DMb	Minimum Planning Horizon
dm0_newspl.dat	DMo<-DMb	New Supplier
dmx_bndprdasc.dat	DMo<-DMb	Banded SKU
dm1_csewgt.dat	DMo->DMb	Case Weight
dmx_pprstschg.dat	DMo<-DMb	Prepriced Value
dm1_kts.dat	DMo->DMb	Keep Together SKUs
store_format_pack_size.dat	DMo<-DMb	Warehouse to Store Format Pack Size Initial Default
store_pack_size.dat	DMo<-DMb	Warehouse to Store Ordering Pack Size Initial Exception
direct_store_format_pack_size.dat	DMo<-DMb	Supplier to Store Format Initial Default
direct_store_pack_size.dat	DMo<-DMb	Supplier to Store Initial Exception
dmn_tmb.dat	DMo<->DMb	Time Balanced Source Split
sister_store.dat	DMo<-DMb	Sister Store Association
sister_store.dat	DMo->DMb	Sister Store Copy Date
sister_wh.dat	DMo<-DMb	Sister Warehouse Association
sister_wh.dat	DMo->DMb	Sister Warehouse Copy Date
dmx_vlkwk_.dat	DMo->DMb	Vender Lock Weeks
today_retek.int	DMo->DMb	Virtual Date
max_store_planning_horizon.int	DMo->DMb	Maximum Planning Horizon for Stores
max_tier1_planning_horizon.int	DMo->DMb	Maximum Planning Horizon for Warehouses

Order Management

The following table summarizes the input files to be passed between DM online (DMo) and DM batch (DMb) process. These files pass through DMb from an external source.

No.	File Name	Direction	Description
1	Closed_order.dat	DMo<-DMb	Orders that have been closed in the merchandising system
2	received_qty.dat	DMo<-DMb	Received quantity of each open order line item.

Inputs to WIP batch

The following table summarizes the export files to be passed from the online piece to the WIP batch process.

File summary	File name	File content
Vehicle Plan Tier 1	wi1_vhc.dat	All committed vehicles within the current plan
Delivery Unit Plan Tier 1	wi1_dus.dat	All committed delivery units within the current plan
Shift Data Tier 1	wi1_shfcpc.dat	All shifts for future receiving days
Slot Data Tier 1	wi1_sltshfasc.dat wi1_sltvhccpc.dat wi1_sltpalcpc.dat	All slots for future receiving days
Receiving Capacity Type Data Tier 1	wi1_cpctyp.dat	Capacity type for all scheduling locations for all future scheduling days
Delivery Group Type Data Tier 1	wi1_dgrtyp.dat	Specified type for all Delivery Groups
Delivery Group Vehicle Preference Hours	wi1_vhcpfc.dat	All delivery group preferences for future scheduling days
Vehicle Delivery Group Data Tier 1	wi1_proordind.dat	Vehicle Delivery Group data for Warehouse Chamber
Vehicle Delivery Group Minimum Drop	wi1_vhcmindrp.dat	Minimum Pallets that must be put on a truck before it can be released for delivery to a chamber.
Vehicle Delivery Group Maximum Footprint	wi1_vhcfpt.dat	Maximum number of pallets that fit in the bed of the truck for delivery to the delivery group chamber.

File summary	File name	File content
Vehicle Delivery Group Maximum Height	wi1_vhchgt.dat	Maximum height that FPEs can be stacked in the truck.
Vehicle Delivery Group Maximum Weight	wi1_vhcmaxwgt.dat	Maximum weight of the FPEs that can be loaded onto one truck.
Delivery Group Capacity Tier 1	wi1_dgrcpc.dat	Outbound delivery group capacity for the day in number of vehicles
Keep Together Groups Tier 1	wi1_ktg.dat	The supplier keep together group the supplier is in
Warehouse Transportation Lead Time Tier 1	tnslt1.dat	Transportation lead time; The number of days prior to delivery that the vehicle must be confirmed.
Warehouse Committed Orders	wi1_po_cfmdt_.dat	All committed orders.
Warehouse Committed Order Quantity Tier 1	wi1_cmtordqty.dat	All committed order quantity for non-contents
Vehicle Smoothing Flag	wi1_dgrsmtflg.dat	Flag to indicate vehicle smoothing should occur for a delivery group.

Outputs from WIP batch

The table below summarizes the output files to be passed from WIP batch to the online piece.

File Summary	File name	File Content
Vehicle Plan Tier 1	vehicle1.dat	All vehicles (both committed and forecast) within the current plan
Delivery Unit Plan Tier 1	du1.dat	All delivery units (both committed and forecast) within the current plan
Purchase Order Plan Tier 1	po1.dat	All committed orders for today's plan
Warehouse Committed Order Quantity Tier 1	cmtord1.dat	Committed order quantity for non-contents
Warehouse Forecasted Non-contents Purchase Orders	wi1_frcpo_.dat	Forecast, non zero, Non-contents purchase orders for the entire planning horizon
Contents Delivery Units	wi1_dus.dat	Commited DUs
Contents Vehicles	wi1_vhc.dat	Commited Vehicles

Outputs from SRP batch

File Summary	File name	File Content
Store Purchase Orders	strsplrord.dat	All store purchase orders for release today
Into Store Transfers	strwhord.dat	All into store transfers to be released today.