

Oracle® Retail Markdown Optimization

Administration Guide

Release 13.0

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Preface

This guide enables you to perform the following administration tasks:

- Managing user accounts
- Managing business rules
- Manage seasonality overrides

Audience

This guide is intended for Markdown Optimization administrators and assumes that you are familiar with the following:

- Security (access control, permissions, and authorization)
- Retail domain metrics and terminology
- Any company-specific policies, such as your naming conventions for merchandise and location hierarchies, naming conventions, and business practices

Note: This guide describes the default implementation and default on screen labels. Your company may have customized the labels. In those situations, the screen labels on your user interface may not match the screen labels described in this guide.

Related Documents

For more information, the following documents are available in the Oracle Retail Markdown Optimization Release 13.0 documentation set:

- *Oracle Retail Markdown Optimization Installation Guide*
- *Oracle Retail Markdown Optimization Configuration Guide*
- *Oracle Retail Markdown Optimization Operations Guide*
- *Oracle Retail Markdown Optimization User Guide*

Customer Support

- <https://metalink.oracle.com>

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

Review Patch Documentation

For a base release ("0" release, such as 13.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site:

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

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

The following text conventions are used in this document:

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

Managing Users

Each person using the Oracle Retail application needs a user account with specific permissions, which determine what specific tasks that person can perform. This chapter includes the following sections:

- ["Overview of User Management" on page 1-1](#)
- ["User Account Roles" on page 1-3](#)
- ["Managing User Accounts" on page 1-4](#)
- ["Working with the User Management User Interface" on page 1-12](#)
- ["Troubleshooting User Management Errors" on page 1-14](#)

Overview of User Management

The User Management utility enables you to create, modify, and inactivate user accounts. User accounts enable you to provide user-specific access control permissions.

There are two ways to manage user accounts:

- If you need to manage **multiple** user accounts all at once, use the Bulk Loader as described in the application Configuration Guide. This guide assumes that most of your user accounts have already been created, by means of the Bulk Loader.
- If you need to add or modify **one or two** user accounts, use the User Management user interface as described in this chapter.

User account permissions consists of a combination of specific *roles* (the scope of actions a user can perform) and *hierarchy levels* (the scope of business data a user can access). You can assign as many roles and hierarchy levels to a user account as necessary.

About User Account Roles

A *role* specifies the scope of actions a user is allowed to perform. Each application comes with a set of default user account roles. If you need to add user account roles or modify the actions available for user account roles, use the Bulk Loader XML files as described in the application *Configuration Guide*.

About Hierarchy Levels

A *hierarchy level* defines the scope of business data a user has permissions to access. Hierarchy level consists of the combination of the following:

- Location Hierarchy
- Merchandise Hierarchy

About Assigning Roles and Hierarchies

If you assign the top level of both the merchandise and location hierarchies to a role, the user has access to **all** hierarchy levels for that role.

If you want the user to have access to a specific merchandise-location hierarchy combination, you do so by specifying the roles and their associated hierarchies. For example, to assign permissions to submit for **only** Departments 314 and 327 for **all** locations, you would add two "submit" roles to the user account and assign a specific merchandise hierarchy to each role, as shown below:

```
PRICE_SUBMITTER - Merchandise Department 314 and Location Chain  
PRICE_SUBMITTER - Merchandise Department 327 and Location Chain
```

User Account Roles

Along with the application user account roles, the Oracle Retail applications ship with the following types of user account roles:

- ["User Management Roles" on page 1-3](#)
- ["Business Rule Management Roles" on page 1-3](#)
- ["Markdown Optimization Roles" on page 1-4](#)

User Management Roles

User Management roles enable you to add, modify, and remove user accounts. Review the list below to determine which User Management roles to assign a user. For example, you may want to assign one user the ability to create user accounts but assign a different user the ability to assign roles to those accounts.

When a user who has been assigned User Management roles logs on, the User Management link on the main menu opens to the User Management utility.

When a user who has not been assigned User Management privileges logs on, the User Management link opens to a password management dialog box.

The application comes with the following User Management roles:

- **UM_USER_ADMIN** – This role allows creating new user accounts. It does not allow assigning roles.
- **UM_ROLE_ASSIGNER** – This role allows assigning roles to the existing user accounts. It does not allow creating or deleting user accounts. A person who uses this role must understand the available merchandise and location hierarchies as described in ["About Hierarchy Levels" on page 1-1](#).
- **UM_READ_ONLY_ADMIN** – This role has privileges to view the list of users and their access permissions. This role does not allow adding, modifying, or deleting user accounts.

Business Rule Management Roles

The application comes with the following Business Rule Management roles:

- **BRM_PRICE_VIEW** – This role allows read-only access to all business rules except for the maximum number of markdowns allowed over an item's lifecycle rule.
- **BRM_PRICE_EDIT** – This role allows a user to view and modify all business rules except for the maximum number of markdowns allowed over an item's lifecycle rule.
- **BRM_PROFITLOGIC_VIEW** – This role allows read-only access for the maximum number of markdowns allowed over an item's lifecycle rule, but no other business rules.
- **BRM_PROFITLOGIC_EDIT** – This role allows a user to view and modify the maximum number of markdowns allowed over an item's lifecycle rule, but no other business rules.

Markdown Optimization Roles

The Markdown Optimization application comes with the following default roles:

- **PRICE_USER** – This role provides access to the user interface, but not to any other function.
- **PRICE_VIEWER** – This role allows read-only access to worksheets.

A user can view, sort, filter and perform What-If calculations on data, but they cannot change the worksheet or take markdowns for it.

This role also gives access to the OBIEE Presentation Server. Users can run and edit default reports in the Shared Folders. The edited report can only be saved in the user's private folder. Users can run and save reports designed by them in their private folder only.

- **PRICE_SUBMITTER** – This role allows all of the actions listed above; in addition, a user can submit worksheets.

If you want a user to be able to change item properties (such as exit dates and exit inventory or sell-through percent) at the item or pricing group level, assigned the Business Rule Management edit role. See [Business Rule Management Roles](#) for details.

- **PRICE_APPROVER** – This role allows all of the actions listed above, except for submitting worksheets. However, this role allows a user to approve/decline submitted worksheets.

The following table describes the actions assigned to the initial set of roles:

Table 1–1 Actions Assigned to the Pre-defined Markdown Optimization Roles

Roles	View Worksheets	Submit Worksheets	Approve/Decline Worksheet
PRICE_VIEWER	Yes	–	–
PRICE_SUBMITTER	Yes	Yes	–
PRICE_APPROVER	Yes	–	Yes

Note: You must assign the PRICE_USER role to all user accounts that access Markdown Optimization.

Managing User Accounts

The User Management user interface enables you to add, modify, or remove user accounts. It also enables you to assign or modify the hierarchy levels assigned to a user account.

This section describes how you can effectively use the User Management user interface to manage the user accounts. It includes the following tasks:

- ["Starting User Management" on page 1-5](#)
- ["Changing the Password for the Default User Account" on page 1-5](#)
- ["Changing Your Password" on page 1-6](#)

- ["Creating a User Account" on page 1-6](#)
- ["Assigning Roles and Hierarchy Levels to a User Account" on page 1-7](#)
- ["Modifying User-Related Information" on page 1-9](#)
- ["Modifying Role and Hierarchy Assignments" on page 1-9](#)
- ["Removing User Accounts" on page 1-10](#)
- ["Locking and Unlocking User Accounts" on page 1-11](#)
- ["Expiring the User Accounts" on page 1-11](#)

Starting User Management

The User Management utility is available after you have installed the application, and it is accessible via the application main menu.

To access the User Management utility for the first time, use the default user name and the associated password to log on to the application. This user account is a special account that provides access to all the User Management functions, and provided to you during the implementation.

After you log on for the first time, you can create accounts for the additional users who need access to the User Management utility. In addition, you might want to change the *root* user account password. For more information, see ["Changing the Password for the Default User Account" on page 1-5](#).

To manage user accounts:

1. Open a browser and enter the application URL, similar to the following:

For Markdown Optimization, <https://servername:portnumber/p4pgui>

The **login** screen appears.

2. Enter the root user name and password, and click **Login**.

The **main menu** appears with the **User Management** link.

3. Click the **User Management** link.

The Manage Users screen appears with a list of user accounts. For information about creating user accounts, see ["Creating a User Account" on page 1-6](#).

To quit User Management, click the **Close** link. The main menu appears.

Changing the Password for the Default User Account

When you first access the User Management utility, you must use the default user account already set up for you. For security reasons, you must change the password associated to this account.

To change the password for the root account:

1. On the **Manage Users** screen, select **Change Password** from the **Action** list, and then click **Apply**.

The **Set Root Password for user: root** dialog box appears.

2. In the **Old Password** text box, enter the existing password, and in the **New Password** and **Confirm New Password** text boxes, enter the new password you want.

Reminder: Passwords are case-sensitive.

3. When the dialog box is complete, click **Done**.

You must use the new password the next time you attempt to log on using the root account.

Changing Your Password

Once you log in to the application, you can change your password at any given time

To change your password:

1. From the **Main Menu**, click **User Profiles**. The **User Profile** screen appears.
2. Click **Change Password**.

The **Set Password for user: username** dialog box appears.

3. Complete the **Set Password for user: username** dialog box as follows:

Important: All passwords are case-sensitive. Make sure that the Caps Lock key is not selected.

- a. In the **Old Password** text box, type your existing password.
 - b. In the **New Password** text box, type your new password. You can use any combination of letters, numbers, and symbols, up to 50 characters.
 - c. In the **Confirm New Password** text box, type your new password again.
4. Click **Done**. Your password is changed to the new password. You must use this password the next time you want to log into the application.

Creating a User Account

You must create a user account for each user who needs access to the application. For each user account, you must then assign one or more roles that determine what products and features a user can access.

There are two ways to create user accounts:

- If you need to create multiple user accounts all at once, use the User Management Bulk Loader utility. For more information, see the section *Understanding the User Management Bulk Loader Utility* in the *Configuration Guide*.
- If you need to add or modify one or two user accounts, use the User Management user interface as described in this section.

To create a user account:

1. On the **Manage Users** screen, select **Add New User** from the **Action** list, and then click **Apply**.

The **Add New User** dialog box appears.

2. Complete the **Add New User** dialog box fields, as shown in the following table:

Table 1–2 *User Account Elements*

Field	Description
User Name	Required. The user name must be unique for each user. The user name is case-sensitive and can be up to 50 characters (letters, numbers, and symbols) long. For example, Buyer, buyer, and BUYER are all considered to be unique.

Table 1–2 (Cont.) User Account Elements

Field	Description
Password	Required. The password is associated with the user name, and both are required to log on. The password is case-sensitive and can be up to 50 characters (letters, numbers, and symbols) long. For example, Secret, secret, and SECRET are all considered to be unique.
First Name	Optional, up to 50 characters. Helps you to identify the person assigned to a user name. For example, if your user names are generic labels (such as WomensBuyer001 and MensBuyer300), this information enables you to identify which employee is assigned to a specific user name.
Last Name	Optional, up to 50 characters. Helps you to identify the person assigned to a user name.
MI	Optional, 1 character. Helps you to identify the person assigned to a user name.
Employee ID	Optional, up to 10 numbers. The employee ID is available for your internal use.
Title	Optional, up to 50 characters. Helps you to identify the person assigned to a user name.
Email	Optional. The e-mail address associated with the user account.

3. When the fields are complete, click **Done**.

The Manage Users screen appears with the user name and related identifiers added.

Now that you have created the user account, the next step is to assign the appropriate permissions as described in ["Assigning Roles and Hierarchy Levels to a User Account" on page 1-7](#).

Assigning Roles and Hierarchy Levels to a User Account

Each user account must have one or more role associated with the applicable hierarchies. For information about roles and hierarchies, see ["Overview of User Management" on page 1-1](#).

Note: You can only add user roles one at a time from the graphical user interface. For instructions on how to add multiple roles all at once, see information about the Bulk Loader as described in the *Configuration Guide*.

To assign roles to a user account:

1. From the **Manage Users** screen, select the user account to which you want to assign roles.
2. From the **Action** list, select **User Roles**, and then click **Apply**.
The **Role Assignment for username** screen appears.
3. From the **Action** list, select **Add Role Assignment**, and then click **Apply**.
The **Add Role Assignment** dialog box appears.

4. From the **Role** list box, select the role you want to assign to this user account. For details on the default roles supplied with Markdown Optimization, see ["User Account Roles" on page 1-3](#). Note that your implementation may have additional customized roles as well.
5. For any business-related role (any role except for User Management roles) specify the hierarchy levels you want this user to be able to access.

To navigate down the hierarchy, hover your mouse pointer over the right arrow in the hierarchy. Keep navigating until the target level appears, and then click it.

Figure 1–1 Edit/Role Assignment Screen

- To navigate down a hierarchy, use the right arrow.
- To navigate up a hierarchy, use the left arrow.

Role	Hierarchy
Business Rule Manager	The hierarchy levels determine the items and pricing groups for which a user can view/update business rules.
Markdown Optimization	The hierarchy levels determine which worksheets a user can access.

6. After you have selected the role and any applicable hierarchy levels, click **Done**.
The **Role Assignment for <username>** screen updates with the role and hierarchy levels added.
If an error message appears instead, see ["Troubleshooting User Management Errors" on page 1-14](#).
7. Repeat steps 3 through 6 to add as many roles as necessary. When you are finished adding roles, click **Done** to return to the Manage Users screen.

Note: If you assign different roles within the same hierarchy levels, the role with the most privileges takes precedence. For example, if you assign a read-only role **and** a power user role for the same hierarchy, the power user role for that hierarchy is used when the user logs on.

Modifying User-Related Information

Modifying user-related information involves changing the user name, password, first name, and last name. Typically, you would modify a user account in a situation where the required activities remain the same, but the employee has been reassigned to other tasks.

If you want to change the **permissions** associated with a user account, see "[Modifying Role and Hierarchy Assignments](#)" on page 1-9.

Note: You can only modify user accounts one at a time from the graphical user interface. For instructions on how to modify multiple accounts all at once, see information about the Bulk Loader as described in the *Configuration Guide*.

To modify a user account:

1. On the **Manage Users** screen, select the user account you want.
2. From the **Action** list, select **Edit Existing User**, and click **Apply**.
The **Edit User** screen appears.
3. Change the field values as necessary.
4. Click **Done**.

The Manage Users screen appears with the updated information. Changes to the user account are effective the next time the user attempts to log on.

Modifying Role and Hierarchy Assignments

For each user account, you can do the following:

- Add or remove roles
- Change the hierarchy levels associated with a specific role

Note: You can only modify roles and roles assignments one at a time from the graphical user interface. For instructions on how to add multiple roles all at once, see information about the Bulk Loader as described in the *Configuration Guide*.

To modify a role:

1. From the **Manage Users** screen, select the user account whose roles or hierarchy levels you want to modify.
2. From the **Action** list, select **User Roles**, and click **Apply**.
The **Role Assignment for <username>** screen appears.
3. From the **Action** list, select **User Roles**, and click **Apply**.
Do any of the following:

To	Do this
Assign a role	<ol style="list-style-type: none"> 1. From the Action list, select Add Role Assignment, and then click Apply. For a list of available roles, see "User Account Roles" on page 1-3. 2. On the Add Role Assignment dialog box, select a role and its associated hierarchy levels, and click Done.
Change the hierarchy levels	<ol style="list-style-type: none"> 1. Select the roles for which you want to change the hierarchy levels. For information about hierarchy levels, see "About Hierarchy Levels" on page 1-1. 2. From the Action list, select Edit Role Assignment, and then click Apply. 3. On the Edit Role Assignment dialog box, select the new hierarchy levels. (Alternatively, you could select a new role and keep the hierarchy levels.)
Remove a role	<ol style="list-style-type: none"> 1. Select the roles you want to remove. 2. From the Action list, select Delete Role Assignment, and then click Apply. The role is removed immediately. <p>Caution: There is no undo, and there is no confirmation dialog box.</p>

4. When the screen reflects the changes, click **Done**.

The change take effect the next time the user logs on.

Removing User Accounts

Removing an user account enables you to remove the user from the list. You may want to remove an user account when the assigned user moves to a different position or no longer needs access. The removed users can not be re-activated.

When you remove a user account, that account is preserved in the database for reports and historical data. Use caution when removing a user account.

Important: Removing a user account is **permanent**. There is no undo function. If you decide later that you need this account, you must create a new one.

If you simply want to remove access to a product or to an area of the hierarchies for a specific user account, see ["Modifying Role and Hierarchy Assignments" on page 1-9](#). If you want to reassign a user account to another person, see ["Modifying User-Related Information" on page 1-9](#).

To remove a user account:

1. On the **Manage Users** screen, select the user accounts you want to remove.
2. From the **Action** list, select **Remove User**, and then click **Apply**.

A confirmation dialog box appears.

3. Click **Yes** to remove the user account.

The user account is removed from the list. If anyone attempts to use this account, the login will fail.

Locking and Unlocking User Accounts

Use the *Lock and Unlock Accounts* features to control user access to the application. Locking an user account restricts access to the software temporarily, and the account can be unlocked with all the access privileges assigned to the user restored.

To lock a user account:

1. On the **Main Menu**, click the **User Management** link.
2. On the **Manage User** screen, click the check box next to the user account you want.
3. From the **Action** list, select **Lock Account**, and then click **Apply**.

A confirmation dialog box appears.

4. Click **Yes**.

To unlock a user account:

1. On the **Main Menu**, click the **User Management** link.
2. On the **Manage User** screen, click the check box next to a locked user account you want.
3. From the **Action** list, select **Unlock Account**, and then click **Apply**.

A confirmation dialog box appears.

4. Click **Yes**.

Note: An user account gets locked after a specific number of attempts to log in to the software. Use the *Unlock Accounts* feature to unlock the accounts. Users will then need to change their passwords to log in to the software.

Expiring the User Accounts

Use the *Expire User Account* feature to force the user to reset the password associated with the user account. The user must now set up a new password, before logging on to the application.

The expired user account can be re-activated by the user by resetting the password associated with the user account.

To expire the user account:

1. On the **Manage User** screen, click the check box next to the user account you want.
2. From the **Action** list, select **Expire User Account**, and then click **Apply**.
A confirmation dialog box appears.
3. Click **OK** to expire the password for the user account.

Working with the User Management User Interface

The User Management user interface enables you work with the user accounts you have created as follows:

- ["Sorting Columns" on page 1-12](#)
- ["Rearranging Columns" on page 1-12](#)
- ["Hiding Columns" on page 1-13](#)
- ["Printing and Exporting User Account Information" on page 1-13](#)

Sorting Columns

You can sort the data displayed on the following User Management screens:

- Manage Users
- Role Assignments for username

To sort the user and user roles data displays:

1. From the **Action** list, select **Sort Table**, and then click **Apply**.

The **Customize Table** dialog box appears.

2. On the **Sort Table** tab, enter a sort criteria in the following manner:

- a. Select a column from the first list box.

This column becomes the primary sort column for the data display.

- b. For that column, select a sort order, either ascending order (A - Z or 1 - 10) or descending order (Z - A or 10 - 1).

- c. If you want to sort the data by additional columns, select a column and sort order for the remaining two list boxes.

Note: To remove one or more sort criteria, click ***Select*** from the list boxes.

3. When the list boxes and sort order reflect the way you want the data to be sorted, click **Done**.

The Customize Table dialog box closes, and the data display is updated to the sort order you selected. The sort order remains in effect until you next change it.

Rearranging Columns

You can rearrange the columns on the following User Management screens:

- Manage Users
- Role Assignments for username

To rearrange the columns:

1. From the **Action** list, click **Modify Columns**, and then click **Apply**.

The **Customize Table** dialog box appears.

2. On the **Change Columns** tab, in the **Visible Columns** list box, select the column whose position you want to change.

3. Click the up or down arrow until the column is in its target location.
4. Repeat steps 2 and 3 as many times as necessary.
5. When the **Customize Table** dialog box reflects your settings, click **Done**.
The Customize Table dialog box closes, and the screen updates with your modifications.

Hiding Columns

You can hide columns on the following User Management screens:

- Manage Users
- Role Assignments for username

To hide (or show) columns:

1. From the **Action** list, click **Modify Columns**, and then click **Apply**.
The **Customize Table** dialog box appears.
2. On the **Change Columns** tab, do one of the following:
 - To hide a column:
In the **Visible Columns** list box, select the column you want to hide.
Click the left arrow to move the column to the **Hidden Columns** list box.
 - To show a column:
In the **Hidden Columns** list box, select the column whose position you want to change.
Click the right arrow to move the column to the **Visible Columns** list box.
3. Repeat step 2 as many times as necessary.
4. When the **Customize Table** dialog box reflects your settings, click **Done**.
The Customize Table dialog box closes, and the screen updates with your modifications.

Printing and Exporting User Account Information

When you print or export information:

- Only **visible** columns are printed or exported.
For example, if you chose to hide some columns (see ["Hiding Columns" on page 1-13](#)), the data in those columns is not included in the print out or the Microsoft Excel file. (Likewise, data that is filtered out or hidden in a collapsed row is exported or printed.)
- Information is printed or exported in the current sort order. (To change the sort order, see ["Sorting Columns" on page 1-12](#)).

To print or export user account information:

1. From the **Action** list on the screen you want, select **Print or Export**, and then click **Apply**.
The Print or Export dialog box appears with a reminder that only the visible data will be printed or exported. The dialog box also indicate the number of rows and

the columns, which helps you to estimate how long the print or export process will take.

2. Do one of the following:

To	Do This
Print the user data on the screen (not the screen itself)	Click Print and complete the resulting print dialog box as you normally would.
Export the data to a Microsoft Excel spreadsheet	<ol style="list-style-type: none"> 1. Click Send to Excel. 2. On the resulting Save As dialog box, enter a file name and click Save. An Export Complete message appears along with the path and file name of the Excel file, and the Excel file opens.

Troubleshooting User Management Errors

This section enables you to troubleshoot the following user account management errors:

- ["Unable To Perform Request: System Error" on page 1-14](#)
- ["User Cannot Log In" on page 1-14](#)

Unable To Perform Request: System Error

The following error message can occur in a variety of circumstances:

Unable to perform request due to system error

Solution

Perform the following:

- Verify that the network is not having problems.
- Verify that the User Management database is available.

User Cannot Log In

A user reports that their username and password combination is no longer working.

Solution

Log in problems are usually due to case-sensitivity issues. To solve this problem, perform the following:

- Make sure that the user has not selected the Caps Lock key.
- If you have recently changed their Markdown Optimization password or username, it is possible that Internet Explorer is storing the former password. This can occur when the only change in the user name or password is case.

Managing Business Rules

Business rules specify the constraints that an application uses when performing calculations, forecasts, and other automated processing.

This chapter contains the following sections:

- ["About Business Rules" on page 2-1](#)
- ["Markdown Optimization Business Rules" on page 2-1](#)
- ["Understanding the Business Rule Management User Interface" on page 2-5](#)
- ["Locating Your Business Rules" on page 2-8](#)
- ["Modifying the Business Rule Settings" on page 2-11](#)
- ["Copying the Business Rule Settings" on page 2-12](#)
- ["Removing the Business Rule Settings" on page 2-13](#)
- ["Viewing the History of All the Business Rule Modifications" on page 2-13](#)

About Business Rules

Business rules are applied to items, not to the pricing groups. Instead, business rules apply for each item regardless of membership in a pricing group. When items in the same pricing group have differing out dates, target sell-thrus, salvage values, and so on, the final value is derived by rules set during the implementation.

Note: Although business rules are applied to items instead of pricing groups, typically business rules are set at higher levels in the merchandise hierarchy than the item level.

Markdown Optimization Business Rules

The following table describes the business rules shipped along with the application:

Table 2-1 *Markdown Optimization Business Rules*

Rule	Description
No Touch Between	Applies to <i>markdown timing</i> . After the first markdown has been taken for the item, the minimum number of weeks that can pass between each subsequent markdown

Table 2–1 (Cont.) Markdown Optimization Business Rules

Rule	Description
Max #	Applies to <i>markdown timing</i> . The maximum number of markdowns the item can receive during its life cycle
Max initial	Applies to <i>markdown depth</i> . The maximum amount of the first markdown, which is the highest percentage drop allowed from the current ticket price at the time of the initial markdown
Max Other	Applies to <i>markdown depth</i> . After the first markdown, the maximum amount of any subsequent markdown, which is the highest percentage drop allowed from the current ticket price at the time of the markdown
Min Initial	Applies to <i>markdown depth</i> . The minimum amount of the first markdown, which is the lowest percentage drop allowed from the current ticket price at the time of the initial markdown
Min Other	Applies to <i>markdown depth</i> . After the first markdown, the minimum amount of any subsequent markdown, which is the lowest percentage drop allowed from the current ticket price at the time of the markdown
No Touch 1st	Applies to <i>markdown timing</i> . The minimum number of weeks that must pass after the first optimization run date before the item is eligible for a markdown
Out Date	Applies to <i>Exit Target</i> . Note: You can still change exit dates for individual items via worksheets, and those changes will automatically be reflected in the Business Rules Manager. However, to set exit dates at or above the worksheet level you must use the Business Rules Manager. The date by which you plan to be out of inventory or by which you want to reach a specified sell-through target
Salv Above	Applies to <i>Exit Target</i> . The salvage value of the items if the inventory is above the target inventory level
Salv Within	Applies to <i>Exit Target</i> . The salvage value of the items if the inventory equals or is below the target inventory level
Sell Thru %	Applies to <i>Exit Target</i> . The percentage sell-through planned for the item by the exit date, which is also known as the inventory target
Start Date	Applies to <i>planning</i> . The date on which your stores plan to start selling the item
No Touch EOL	The number of weeks before the outdate when markdowns are no longer permitted.
Min % of Full	The minimum markdown, expressed as a percentage of the original full retail price. Used to narrow the list of possible prices for optimization.
Max from Full	The maximum markdown, expressed as a percentage of the original full retail price. Used to narrow the list of possible prices for optimization.
Day of Week	A global setting for the day of the week on which markdowns occur. (Sunday = 1, Monday = 2, Tuesday = 3,...).
Temp Markdown	Defines whether TEMP markdowns are counted during the enforcement of the MinMarkdownInterval and MaxNumber-Markdowns (IR_BUSINESS_POLICY). When value is 1, TEMP markdowns count.
POS Markdown	Defines whether POS markdowns are counted during the enforcement of the MinMarkdownInterval and MaxNumber-Markdowns (IR_BUSINESS_POLICY). When value is 1, POS markdowns count.
Forced Model Start Date	This is only used if the MODEL_START_OPTION in IR_MODEL_START_OPTION is set to sellThru. (See the Inference Rule chapter for more information.) The value is an override date that forces the Model Start Date to be the first fiscal day of the week of the Forced Model Start Date.

Table 2–1 (Cont.) Markdown Optimization Business Rules

Rule	Description
Model Start Sell Through Pct	This is only used if the MODEL_START_OPTION in IR_MODEL_START_OPTION is set to sellThru. (See the Inference Rule chapter for more information.) The value is a threshold that triggers the assignment based on a ratio of sold units to total inventory.
Max Model Start Delay	This is only used if the MODEL_START_OPTION in IR_MODEL_START_OPTION is set to sellThru. (See the Inference Rule chapter for more information.) The value is the maximum number of weeks to wait before automatically assigning the Model Start Date.

Markdown Optimization Business Rules Considerations

This section describes the various metrics, such as exit date constraints, markdown accounting, and so on, considered in the business rules shipped with the application.

What are exit date constraints?

An exit date signifies the end of the selling period for an item. At the exit date, it is assumed that any remaining inventory will be removed from the selling floor and is to be packed away, shipped to outlets, sold to a jobber, or otherwise disposed of. Items that do not have an exit date are assumed to be basic items that are sold year round.

Markdown Optimization provides permanent markdown recommendations for items with exit dates. Recommendations are aligned with the specified exit date goal. Given an amount of inventory, the sooner the exit date is (and therefore the shorter the selling period is) the more aggressive the markdown recommendations are and vice versa.

For the best forecasting and recommendations, set exit date values far in advance of the exit date. The earlier an exit date is set, the more accurate the recommendations are. If the exit date is changed mid-season, markdown recommendations made prior to that change will not be consistent with the new exit date. All new recommendations made beginning the following week are consistent with the new exit date.

You can make new items eligible for markdown recommendations by providing an exit date for those items.

Note that in order to recommend markdowns for a particular item, Markdown Optimization requires that the item has an exit date. Also, the application does not provide recommendations for any item that is past its exit date.

How do exit date constraints relate to target inventory?

A target inventory level (units or sell-through percent) at the exit date must be set for each item. Markdown Optimization provides permanent markdown recommendations, which drive the merchandise to meet the exit date and inventory goals. Given an amount of inventory, the lower the target exit date inventory, the more aggressive the markdown recommendations are and vice versa.

You must specify remaining inventory level targets in advance of the exit date. The earlier that target level is set, the more accurate the recommendations are. If the target level is changed mid-season, markdown recommendations made prior to that change would not be consistent with the new target. Beginning the following week, all new recommendations made are consistent with the new inventory target.

If no inventory level is provided, Markdown Optimization sets the target inventory level at the exit date to be zero.

Residual Value of Inventory

Residual values can be set in the beginning of the season for each item and represent the most accurate valuation of inventory at the end of season. If an item is not assigned a residual value, Markdown Optimization assumes that it is zero; that is, by default Markdown Optimization assumes the inventory is worthless after the exit date.

Markdown Optimization considers this value of inventory when driving to end of season gross margin and inventory goals. A higher residual value results in a less aggressive markdown recommendation in season and a lower residual value results in a more aggressive markdown recommendation in season.

How does Markdown Optimization deal with markdown accounting?

Markdown Optimization assumes all markdowns are permanent, and its recommendations are based upon the assumption that prices cannot go back up.

Nonetheless, for accounting purposes, you can indicate that you want a markdown to be taken as a temporary markdown. Typically you would do this because the markdown is expensive, and you want to evaluate the financial impact of spreading the cost over the remainder of the item's selling life. Except for this difference in accounting, taking a markdown recommendation as a temporary markdown is the same as a permanent markdown.

Return to Vendor Items

Sometimes you can send items back to a vendor at a negotiated price. In effect, this return price (minus any identified handling costs) can serve as the residual price for these items. In this case, Markdown Optimization uses the same logic as for residual values: a higher residual value results in a less aggressive markdown recommendation in season and a lower residual value results in a more aggressive markdown recommendation in season.

Inventory Transfers

Markdown Optimization assumes clearance inventory will not be transferred between stores. When transfers do occur, Markdown Optimization becomes aware of them via the changes in a store's inventory position that is not attributable to sales/returns or additional deliveries.

Consolidation of inventory between stores is common practice today and can be included in the business model implemented by Markdown Optimization. For instance, if transfers occur, Markdown Optimization can receive the revised inventory amounts in the weekly data update and use that updated inventory information in all future markdown recommendations.

There is a risk that if a significant amount of inventory transfers from one store to a sister-store, the optimum price strategy to date has been compromised for both stores.

Minimum and Maximum Markdown Levels

Recommended permanent markdowns can follow a tiered minimum and maximum markdown strategy. Typically your company defines the increments (in price or in percent off) that can be taken off the current ticket price.

For example, you might define a rule that items with an original ticket price greater than \$20.00 must be marked down at least 10% less than the original ticket price. No

markdown recommendations would be given below the thresholds of the current price set by the price tier (also called price ladder).

Pricing Groups

Pricing groups are groups of merchandise that can be priced at the same level at the same time. Typically, items in pricing groups are from the same style or class, and they share common attributes such as color or vendor.

Markdown Effective Date

The markdown effective date is the day that a markdown decision will actually be in effect in the stores. This is tied to a particular run cycle; the same effective date is used for all the items in the system. For example, you may make markdown decisions for some items on Tuesday of this week, and some more on Wednesday. The effective date may be such that those markdowns will first appear on the floor a week from the coming Saturday.

Each week, Markdown Optimization shows the recommendations (based on the most current data) for the next eligible markdown time period. There can also be a “week-ahead” report, which suggests markdowns to be taken on a different date.

Blackout Periods

A blackout period is period of time when you prohibit markdowns for some reason (holiday, other store activities, etc.). Markdown Optimization can incorporate blackout periods (if any) as constraints in the optimization scenarios it evaluates.

Scan-Down Credits

Scan-down credits are cost breaks on merchandise that a vendor gives to a retailer. If a price change is made to pass the scan-down savings to the consumer, Markdown Optimization can recognize the change in the weekly data feed and adjust future pricing strategy.

What are the rules about business operations?

Business rules include the specifics about your weekly process, timing, and availability. For instance, here are some typical rules:

- You can review your pricing strategies on a weekly basis to determine which items need markdowns.
- Markdown Optimization executes markdowns once a week with an effective date in the stores of Friday.
- Business data needed for updates can be current at close of business on Monday.
- Data is loaded Tuesday afternoon and the optimization model is run Tuesday evening and Wednesday.

Understanding the Business Rule Management User Interface

This section provides an overview of the Business Rule Management user interface.

To access the Business Rule Management utility:

- From the main menu, click **Business Rule Management**.
The Business Rules screen appears.

In the Markdown Optimization application, you can also access the Business Rule Management utility in the following manner:

- From any worksheet, select **Edit Worksheet Rules** in the **Action** list, and then click **Apply**.
- In the **Item Info** dialog box, select the **Edit Business Rules** button.

This opens the Business Rules screen at the item level in the merchandise and location hierarchy.

Figure 2–1 Business Rules Screen

The Business Rules Manager screen has the following panels:

- **Filters Panel** – enables you to quickly navigate to any hierarchy level. See ["Business Rules Filters Panel" on page 2-7](#).
- **Grid Panel** – displays the business rules. See ["Business Rules Grid Panel" on page 2-7](#).

Business Rules Filters Panel

The Filters panel enables you to quickly navigate to any hierarchy. The Filters panel is collapsible; once you find the hierarchy you want, you can close the Filters panel to make more room for the display of your business rules.

To close the Filters panel, click the double left-arrow (<<) button. To later display the Filters panel, click the double right-arrow (>>) button.

The following table describes the fields that appear in the Filters panel:

Table 2–2 Business Rules Filters Panel Fields

Field	Description
Merchandise and Location Sections	
Browse	Use the Browse button to navigate to the hierarchy level you want.
Find	Specify the hierarchy level you want, and click Filter.
Attributes Section	<p>Select the attributes that you want to use to filter within the current hierarchy levels.</p> <ul style="list-style-type: none"> To filter using no attributes, select the blank line. To filter using all the attributes, select Any.
Show Rules Section	
Higher levels with rules	Select this filtering rule to display inherited business rules (rules, set at the higher levels in the hierarchy, inherited by an item at a lower level).
Only filtered level	Select this filtering rule to display the business rules at a specific level. The Business Rules screen displays the rules at the item level in the Merchandise and Location hierarchy. Rows that precede this level do not appear.
Set the table levels in the View option	Select this filtering rule to display the levels at which rule values can be updated.

Business Rules Grid Panel

The Business Rules Grid panel displays the business rules based on the filters that you have set up in the Filters panel. The panel displays a grid that provides information from the top level of both the Merchandise and Location hierarchy, including all the attributes. The following table describes the border and shading features used in the grid:

Feature	Description	Indicates
Border	Black border	You can edit the value.
	Gray border	You cannot edit the value.
Cell color	Green cell	The rule value has been edited.
	Normal cell	The rule value has not been edited.
Text color	Black text	The rule value has been set at this level.
	Gray text	The rule value has been inherited.

Locating Your Business Rules

Business rules may be set on one or more levels in the hierarchies. There are several ways to locate your business rules:

- ["Browsing Through the Hierarchies" on page 2-8](#)
- ["Expanding the Hierarchies Within the Grid" on page 2-9](#)
- ["Finding a Hierarchy Entity" on page 2-10](#)

Browsing Through the Hierarchies

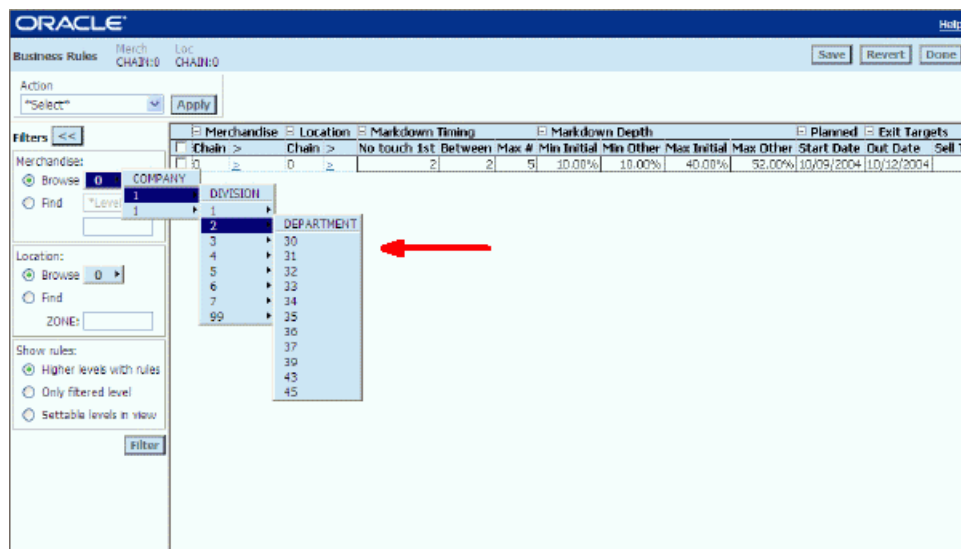
The Business Rule Management user interface enables you to select a node in the Merchandise and Location hierarchies by using expandable menus. This section helps you to use the expandable menus to effectively navigate through the hierarchies.

To navigate through the hierarchies:

1. On the Filters panel, under **Merchandise** or **Location**, click **Browse**.
2. Move the mouse pointer over the right arrow, next to Browse, to navigate through the hierarchy levels.
3. Move the mouse pointer through each successive right arrow till you reach the hierarchy level you want.

The following figure shows an example of an expanded Merchandise hierarchy level:

Figure 2–2 Browsing through Hierarchies



4. Once you reach the level and node you want, click it.
5. Click the **Filter** button.

The Business Rules Grid panel (right pane) updates to reflect the hierarchy level you selected.

To traverse back up the hierarchy, move the mouse pointer over the left arrow of the selected hierarchy level, and navigate back to the hierarchy level you want.

Expanding the Hierarchies Within the Grid

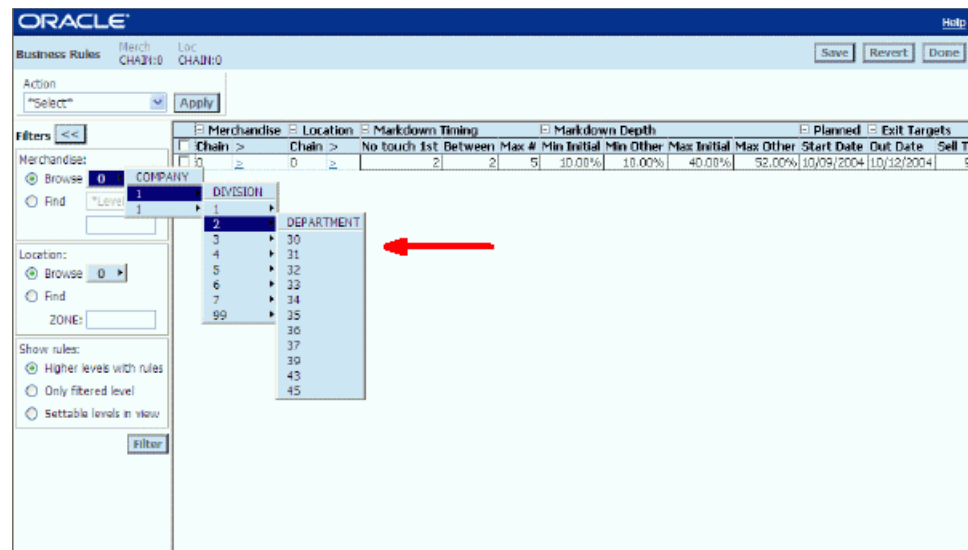
To expand the hierarchies within the grid:

- In the hierarchy grid, click the blue angle bracket next to the hierarchy level.

The grid now displays an additional column that contains the next level (for example, Department and all of its nodes Dept. 001, Dept. 002, Dept. 003, and so on). Repeat this step until you expand the hierarchy to the levels you want.

The following figure shows an example of an expanded merchandise hierarchy using this method:

Figure 2–3 Expanding the Hierarchies



Finding a Hierarchy Entity

You can use the Find feature to navigate to a node (an entity on a hierarchy). Common examples of node identifiers are style, product, or store code, and so on.

For example, on the Department level of the Merchandise hierarchy, some nodes might be Men's Dept., Women's Dept., Children's Dept., Housewares Dept., Sporting Goods Dept., and so on.

To find a hierarchy entity:

1. On the Filters panel, under **Merchandise** or **Location**, click **Find**.
2. From the **Find** list box, select the level you want. For example, the Find list box for *merchandise* may include Style and Product. The Find list box for *stores* may include Region and Store.

Figure 2–4 Finding a Hierarchy Entity

The screenshot shows a 'Filters' panel with a '<<' button at the top. It is divided into three sections: 'Merchandise:', 'Location:', and 'Show rules:'. In the 'Merchandise:' section, the 'Find' radio button is selected, and a dropdown menu is open showing the following options: '*Level*', '*Level*', 'CLASS', and 'STYLE'. The 'Location:' section has the 'Browse' radio button selected, and a 'ZONE:' text box is visible. The 'Show rules:' section has three radio buttons: 'Higher levels with rules' (selected), 'Only filtered level', and 'Settable levels in view'. A 'Filter' button is located at the bottom right of the panel.

3. In the text box, enter the identifier for the node (for example, style, product, region, store, and so on).
4. Click **Filter**.

If the node exists, it appears in the grid pane. Otherwise, a message appears indicating that the node could not be found.

Modifying the Business Rule Settings

To modify the business rules:

1. Access the **Business Rule Management** utility. For more information, see ["Understanding the Business Rule Management User Interface" on page 2-5](#).
2. On the **Business Rules** screen, scroll horizontally to find the business rule you want.

Figure 2–5 *Changing a value in a category*

3. Modify the business rule value.
4. When you have changed the business rule values as necessary, click **Save**.

When you modify the business rule settings and the changes are not at the lowest intersection level, you are prompted to confirm if the changes should apply to the child levels of the hierarchy. If you click **Yes**, then the changes apply to the child levels. If you click **No**, then the changes do not apply to the child levels.

Note: The rule values may be null only if that was set as the default value during implementation. To specify a null value, enter NONE.

Modifying Planned Start Date or Out Date

To set the Planned Start Date or the Out Date to a value of NULL at the item level:

1. Access the **Business Rule Management** utility. For more information, see ["Understanding the Business Rule Management User Interface" on page 2-5](#).
2. On the **Business Rules** screen, scroll horizontally to find the Planned Start Date or Out Date that you want to change.
3. Delete the existing date for the Planned Start Date or Out Date.
4. Type NONE (all caps) in the field.
5. When you have changed the business rule values as necessary, click **Save**.

To set the Planned Start Date or the Out Date to a value of NULL at the CHAIN CHAIN level:

1. Access the **Business Rule Management** utility. For more information, see ["Understanding the Business Rule Management User Interface" on page 2-5](#).
2. On the **Business Rules** screen, scroll horizontally to find the Planned Start Date or Out Date that you want to change.
3. Delete the existing date for the Planned Start Date or Out Date.
4. When you have changed the business rule values as necessary, click **Save**.

When you modify the business rule settings and the changes are not at the lowest intersection level, you are prompted to confirm if the changes should apply to the child levels of the hierarchy. If you click **Yes**, then the changes apply to the child levels. If you click **No**, then the changes do not apply to the child levels.

Copying the Business Rule Settings

You can copy the business rules settings from one (or more) hierarchy level/ attribute combination to another.

Note: Any changes that you make are inherited by the lower levels in the Merchandise and Location hierarchies. There may be some restrictions on the rules that you can copy or paste.

To copy the business rule settings:

1. On the Business Rules screen grid, use the check box next to each rule to select one or more rule sets that you want to copy.
2. From the **Action** list, select **Copy rule values**, and click **Apply**.
The **Copy Business Rules** dialog box appears.
3. On the **Copy Business Rules** dialog box, clear the check boxes for the rule values you do not want to copy, and then click **Copy**.
4. On the Business Rules screen grid, locate and select the rule set you want to update with the copied values.
5. From the **Action** list, select **Paste rule values**, and click **Apply**.

The new business rule settings take effect immediately.

Removing the Business Rule Settings

When you delete a business rule setting,

- The rule is not deleted from the Business Rule Management utility. Only the specified values (for a particular level) are removed.
- The values in the inherited levels are replaced with the default values that were set during implementation.

Note: To remove the rule values, you must have the appropriate access privileges to edit the rule values. The following border shades indicate the access privileges for a rule:

- A black cell border indicates that the rule value can be modified.
 - A gray cell border indicates that the rule value cannot be modified.
-

To delete a business rule setting:

1. On the Business Rules screen grid, navigate to the rules that you want to delete.
2. To delete a single rule, select the rule you want, and click **Delete**.

Or

To delete multiple rules, select the rules you want.

From the **Action** list, select **Delete selected rules**, and click **Apply**.

Note: A pale green shade in the cell indicate that the rule values were removed.

3. Click **Save**.

Viewing the History of All the Business Rule Modifications

At any time, you can review the history of all the modifications made to a business rule. The number of prior weeks of history available in the application is determined during the implementation.

To view the business rule history:

1. Access the Business Rules Management utility. For more information, see ["Understanding the Business Rule Management User Interface" on page 2-5](#).
2. On the Business Rules screen grid, select the levels you want to review.
3. From the **Action** list, select **View rule history**, and click **Apply**.

The Business Rule History dialog box appears.

4. From the **Rules list** box, select the rule you want, and in the **Changes between** text boxes, enter the dates for which you want to view the history.

To view a business rule value that was in effect on a particular date, enter the date you want in both the text boxes.

5. Click **View**.

The Business Rule History screen appears with the history for the specified rule at the hierarchy levels.

6. If you want to print or export the rule history, select **Print or Export** from the **Action** list, and then click **Apply**.
7. When you are finished, click **Done** to return to the Business Rules screen.

About the Business Rule History Screen

The Business Rule History screen is organized by Merchandise and Location hierarchy levels and then by date, with the newest date at the top of each merchandise or location grouping and the oldest date at the bottom of each merchandise or location grouping. This enables you to view how a value was modified over time.

On this screen,

- The Start Dt and End Dt columns show the time period for which the business rule and its value are effective. This can help you to determine if one or more weekly optimizations that have been affected by a particular business rule.
- The User column displays the user name of the person who made the change.

Seasonality Manager

This chapter contains:

- ["Overview of the Seasonality Manager"](#) on page 3-1
- ["Seasonality Manager Screen"](#) on page 3-2
- ["Selecting Current Curves"](#) on page 3-3
- ["Selecting New Curves"](#) on page 3-4
- ["The Override Process"](#) on page 3-4
- ["Removing Overrides"](#) on page 3-6
- ["Working with Graphs"](#) on page 3-6
- ["The Analytical Refresh and Purges"](#) on page 3-7
- ["Archives and Reporting"](#) on page 3-7

Overview of the Seasonality Manager

Seasonality curves, which are produced by the APC, are a set of weekly demand parameters that represent seasonal variations in the demand for merchandise. They represent effects that are not accounted for in the application general forecasting model. Seasonality curves are mapped to specific items based on merchandise, location, and season code. The APC generates flat files for the demand parameters and mappings of those parameters that are loaded into the application as part of the standard load.

The Seasonality Manager allows users with appropriate permissions to override the mappings of seasonality curves assigned to a specified node (merchandise/location/season code). The override mapping replaces the mapping provided by the APC. The override mapping affects present and future items at or below the level of the override. Overrides can only be performed by users with PRICE_SEASONALITY_EDIT permission. Users with PRICE_SEASONALITY_VIEW permission can view but not override seasonality curves.

The two general situations in which a user might decide to override a seasonality curve are:

- A user from past experience knows that some seasonality curve assignments are in error. For example, the user may have noticed that last year certain merchandise was recommended for a markdown too early because the seasonality curve was not correct.
- A user sees that an item has been unexpectedly marked down. The user goes to What-If and looks at the Base Forecast Profile and sees that the underlying

seasonality shows a level of seasonal demand that is not warranted. In this case, the user may choose a new seasonality curve for a single item or a smaller subset of items.

The seasonality override persists until the next analytical refresh, at which point the override is purged from the system. The override information is archived in SEASONALITY_MAPS_OVR_ARCH_TBL. Custom reports can be written against this table to show users which nodes have over-ridden seasonality curves.

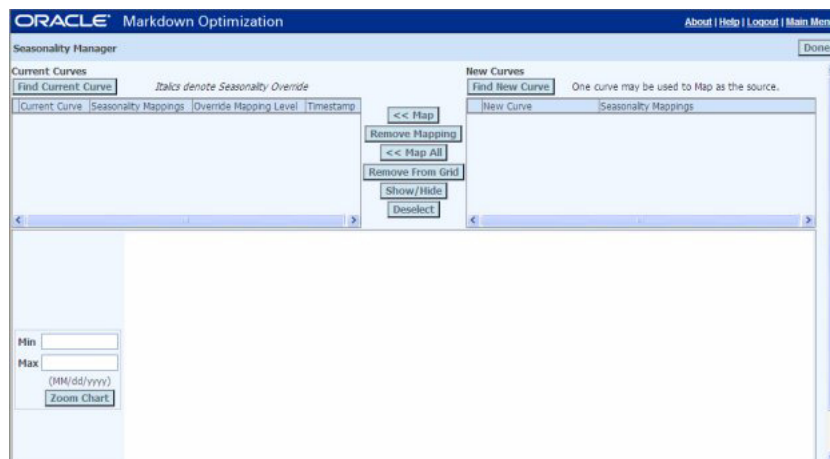
Seasonality Manager Screen

This section provides an overview of the Seasonality Manager user interface.

To access the Seasonality Manager utility:

From the Main Menu, click **Seasonality Manager**.

Figure 3–1 The Seasonality Manager Screen



The Seasonality Manager screen allows users to browse and override the mappings of seasonality curves to any node specified by the merchandise and location hierarchies and the season code. The Seasonality Manager screen consists of three main areas: Current Curves, New Curves, and Chart. Nodes (each row in the grid represents a node) selected in the Current Curves grid display the current seasonality curve associated with the node. Nodes in the New Curve grid can be used to override the seasonality curve of selected nodes in the Current Curves grid.

The Current Curves grid displays descriptive information about the current seasonality curves for each specified node. For each node, the grid displays the descriptive name of the node itself, the name of the seasonality mapping for the curve, and, if a new seasonality curve has been mapped to the current curve, the grid also contains the override level of the new mapping and the timestamp for the mapping event. Each seasonality curve has a unique color associated with it, which is displayed in the left-most column. This color is the color that is used in the chart to graph the seasonality curve. Once an overriding seasonality is mapped to the selected node, the text of the seasonality mapping, override level, and timestamp changes from a plain font to an italic font to indicate that an overriding seasonality is in force.

The New Curves grid displays descriptive information about new seasonality curves for specific nodes that can be used to override the current curves. For each node, the grid displays the name of the curve and the name of the seasonality mapping for the curve. The seasonality mappings displayed in this grid always reflect the original

mappings provided by the APC. Each seasonality curve has a color associated with it, which is displayed in the left-most column. This color is the color that is used in the chart to graph the seasonality curve. These colors are assigned randomly to particular seasonality curves. Any nodes in either grid that share the same seasonality curve will display the same color, but those colors may vary within or between sessions.

The Chart area provides a visual representation of selected seasonality curves. Each curve is the same color as the color associated with that curve in the grids. The curves are graphed using the Seasonality Index as the y axis and Time as the x axis. The Zoom feature allows you to define the time span that is used in the chart.

Here is a list of the Seasonality Manager screen buttons and their functionality:

Table 3–1 Seasonality Manager UI Buttons

Button Name	Button Functionality
Find Current Curve	Use to access the Select Nodes hierarchy selector that is used to select the nodes that may require a seasonality override.
Find New Curve	Use to access the Select Nodes hierarchy selector that is used to select the nodes with seasonality curves that may be suitable for overriding nodes in the Current Curve grid.
Map	Use to map or override the seasonality curve of the selected node in the New Curves grid to the selected node or nodes in the Current Curves.
Remove Mapping	Use to remove the seasonality curve override mapping from the selected node or nodes in the Current Curves grid.
Map All	Use for bulk overrides that match according to season code.
Remove From Grid	Use to remove the selected nodes from the Seasonality Manager display.
Show/Hide	Use to either show or hide (toggle) the selected curve or curves in the chart.
Deselect	Use to remove the highlighting from a selected node in the grid.
Zoom Chart	Use to inspect a portion of the chart for a different period of time.
Done	Leaves the Seasonality Manager to return to the Main Menu.

Selecting Current Curves

A user may want to view the seasonality curves for a group of merchandise at a specific location. Using the hierarchy selector, it is possible to select a merchandise/location/season code node at any level of the hierarchy. In practice, the node selected will be the node that represents a group of merchandise that a user is concerned about the performance of.

The hierarchy selector interface has the following features:

- The user selections in the hierarchy tree are saved between screen sessions.
- The Season Code list does not display if a client does not use multiple season codes.
- Use **Clear All** to clear all the selected nodes in either hierarchy.

To select a node to view in the grid:

1. Click **Find Current Curve**.

2. In the Select Nodes screen, select one or more nodes from the merchandise hierarchy level, the location hierarchy level, and the season code at the level of the hierarchy you are interested in.
3. Click **Done**.
4. The curves selected are listed in the Current Curves grid.
5. To remove a curve from the grid, select it and click **Remove From Grid**.
6. Additional curves can be selected and displayed.

Selecting New Curves

New curves are used to override existing curves. You use the New Curve functionality to select and view candidate nodes and their seasonality curves. If you find an appropriate curve, you can select it as the override curve.

To select a node to view:

1. Click **Find New Curve**.
2. In the Select Nodes screen, select the merchandise hierarchy level, the location hierarchy level, and the season code at the level of the hierarchy you are interested in.
3. Click **Done**.
4. The curves selected are listed in the New Curves grid.
5. To remove a curve from the grid, select it and click **Remove From Grid**.
6. Additional curves can be selected and displayed.

The Override Process

Once the seasonality curves you have selected are displayed in the grid, you can select the appropriate override curve.

The choice of override curve is based on the assignment level of existing seasonality curves and on an assessment of which node is badly mapped. By looking at particular items, you can see the level of the merchandise/location hierarchies that seasonalities are assigned. The Seasonality Mapping node shows how high the APC assignment for seasonality curves is made. Depending on the scope of nodes that are assigned a specific seasonality curve, you may choose to override at the topmost level or at a lower level in the hierarchy. For example, if seasonalities are assigned at the class level but only one sub-class does not fit that assigned curve, you might map (override) seasonalities for the specific sub-class.

When evaluating seasonality curves, use the following criteria:

Shape. Choose the curve that best represents the seasonal demand for a class of merchandise and region.

Assignment level. Choose a curve that is associated with a specific class of merchandise in a specific region instead of a more general curve at the Chain or Division level. The decision should be based on a determination of where in the hierarchy the assigned seasonality curve does not fit, and which new seasonality curve would most reflect the actual cadence of the node.

Proper time frame. Clients have seasonality curves that can span particular time frames, such as two years or five years.

Overrides apply to the parent node selected and any children of that parent node. If new items are added to a node after the override is applied, the new items also have the new seasonality curve. Overrides can be nested, and the override that applies to a node is the most specific one. Only one curve can be selected to override, but the override can be mapped to more than one curve at a time.

There are two types of overrides: Map, which maps one override to one or many nodes, and Map All, which is used for bulk overrides between nodes that have the same season code.

Season codes are retailer-specific codes that can be used to help map an item's seasonality. For example, a retailer may have four season codes (Spring, Summer, Fall, and Winter) and the seasonality assignment may be based on the merchandise class, location, and season code.

Map. The Map functionality is used to map a single seasonality curve you have selected in the New Curve grid as an override to the existing seasonality curves of selected nodes in the Current Grid.

To map an override:

1. Highlight the node or nodes you want to override in the Current Curve grid. To select or deselect all the nodes displayed in the grid, click the upper left corner.
2. Highlight the single node you want to use as the override in the New Curve grid. To select or deselect all the nodes displayed in the grid, click the upper left corner.
3. Click **Map**.
4. The node in the Current Curve grid now has entries for Seasonality Mappings and Timestamp, and these two entries to the grid appear in italics. The color identifying the seasonality curve is now the color of the node selected in the New Curve grid.

Map All. The Map All functionality involves the mapping of each node in the Current Curve grid entirely on the basis of the season codes. Each curve to be overridden must map uniquely to one new curve for each season code. Use this feature when you want to map one class of merchandise to another class without mapping each season code one at a time.

In the following example, Map All is successful because there is a one to many relationship between the season codes. Each curve to be overridden on the left can be mapped to only one curve on the right, based on the season code.

Merchandise	Location	Season Code		Merchandise	Location	Season Code
Slacks	Southeast	SPRING		Capri	Northwest	SPRING
Slacks	Southeast	SUMMER		Capri	Northwest	SUMMER
Slacks	Southeast	AUTUMN	<<Map All	Capri	Northwest	AUTUMN
Slacks	Southeast	WINTER		Capri	Northwest	WINTER

In the next example, Map All is *not* successful because there is a one to many relationship between the season codes. Each curve to be overridden on the left can be mapped to more than one curve on the right, based on the season code.

Merchandise	Location	Season Code		Merchandise	Location	Season Code
Slacks	Northwest	2004-01		Capri	Northwest	2004-01
Slacks	Northwest	2004-04		Capri	Northwest	2004-04
Slacks	Northwest	2004-08	<<Map All	Capri	Northwest	2004-08
Slacks	Northwest	2004-12		Capri	Northwest	2004-12
Slacks	Southeast	2004-01		Capri	Southeast	2004-01
Slacks	Southeast	2004-04		Capri	Southeast	2004-04
Slacks	Southeast	2004-08		Capri	Southeast	2004-08
Slacks	Southeast	2004-12		Capri	Southeast	2004-12

To map all:

1. Map All attempts to map each node in the Current Curve grid, whether or not it is selected, to one in the New Curve grid, based on season code alone. Typically, you click **Find Current Curves** and select a merchandise node, a location node, and the **All** season code selector to populate the Current Curve grid.
2. Click **Find New Curves** and select a merchandise node, a location node, and the **All** season code selector to populate the New curve grid with items that have preferable seasonality curves.

Now you have an equal number of rows in each grid – one row for each season code.

3. Click **Map All**.
4. All curves in the Current Curve grid now have entries for Seasonality Mappings and Timestamp, and these two entries to the grid appear in italics. The Seasonality Mapping identifies the curve that the user selected as the override curve. The Timestamp identifies the date of the override. The color identifying the seasonality curve is now the color of the new seasonality curve.

Removing Overrides

An override must be removed at the same node that the override was originally assigned to. The override cannot be removed at a lower level than the level it was set at. If you want to keep a override at a child node, you must first remove the override from the parent node to which it was originally assigned and then map the override to the child node.

To remove an override:

1. In the Current Curve grid, highlight the curve or curves whose override you want to remove.
2. Click **Remove Mapping**. The override is removed and the UI no longer displays the Seasonality Mapping or Timestamp for the selected curves.

Working with Graphs

The seasonality curves listed in the grids can be displayed in the Chart. The Zoom feature can be used to select a specific period of time to view.

Note that the number of curves you choose to display at the same time in the graph impacts both the performance of the chart and your ability to distinguish specific curves. If you choose to display a large number of curves at the same time, performance will slow and curves may overlap.

To display a curve or curves in the chart:

1. Select the curve or curves in either or both grids that you want to view.
2. Click **Show/Hide** to display the selected curves in the graph.

An eye graphic appears in the grid next to any curve that is displayed in the grid.

The curve of the same color as the color associated with that curve in the grid appears in chart.

3. Click **Show/Hide** to remove the selected curves from the grid. The selected curves are removed from the graph and the eye graphic disappears.

To use the zoom feature:

1. Display the curve or curves you want to see in the chart, as described in the previous procedure.
2. In the Min field, enter the beginning date in the locale-appropriate format for the portion of the curve you want to see.
3. In the Max field, enter the ending date in the locale-appropriate format for the portion of the curve you want to see.
4. Click **Zoom Chart**. The new curves appear in the graph. Note that the time scale has changed.
5. To return to the original time scale and see the entire curve, blank out the Min field and the Max field and click **Zoom Chart**.

The Analytical Refresh and Purges

When analytical refreshes of the analytical data produced by the APC occur, they are provided to the application as part of the weekly data feed. Not every data feeds contains updates to the seasonality curves. Seasonality curves are generally updated once a year. When an analytical refresh does occur, any seasonality curve overrides that users have implemented through the Seasonality Manager are purged from the system. This is necessary in order to prevent problems that might occur as a result of changes (additions, deletions, or modifications) that Analytical Services has made to the seasonality curve. Users are informed that an analytical refresh and purge has occurred during the login procedure via the following message:

Since you last logged in, Analytical Parameters have been refreshed. In particular, Seasonalities have been refreshed, and any existing Seasonality Mapping Overrides that have been set via Seasonality Manager have been removed from the system.

Archives and Reporting

If the Seasonality Override table is purged as a result of an analytical refresh, the data from this table is written to SEASONALITY_MAPS_OVR_ARCH_TBL in order to archive it. Custom reports can be written using this table.

