Oracle Commerce

Workbench User's Guide

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COMMERCE

Contents

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Preface

Oracle Commerce Guided Search is the most effective way for your customers to dynamically explore your storefront and find relevant and desired items quickly. An industry-leading faceted search and Guided Navigation solution, Guided Search enables businesses to influence customers in each step of their search experience. At the core of Guided Search is the MDEX Engine™, a hybrid search-analytical database specifically designed for high-performance exploration and discovery. The Oracle Commerce Content Acquisition System provides a set of extensible mechanisms to bring both structured data and unstructured content into the MDEX Engine from a variety of source systems. The Oracle Commerce Assembler dynamically assembles content from any resource and seamlessly combines it into results that can be rendered for display.

Oracle Commerce Experience Manager enables non-technical users to create, manage, and deliver targeted, relevant content to customers. With Experience Manager, you can combine unlimited variations of virtual product and customer data into personalized assortments of relevant products, promotions, and other content and display it to buyers in response to any search or facet refinement. Out-of-the-box templates and experience cartridges are provided for the most common use cases; technical teams can also use a software developer's kit to create custom cartridges.

About this guide

This guide describes what business users can do in Oracle Commerce Workbench to modify an Oracle Commerce Guided Search implementation.

Who should use this guide

This guide is intended for business users who are using Oracle Commerce Workbench to manage content in an Oracle Commerce implementation.

Conventions used in this guide

This guide uses the following typographical conventions:

Code examples, inline references to code elements, file names, and user input are set in `monospace` font. In the case of long lines of code, or when inline monospace text occurs at the end of a line, the following symbol is used to show that the content continues on to the next line: ¬

When copying and pasting such examples, ensure that any occurrences of the symbol and the corresponding line break are deleted and any remaining space is closed up.

Contacting Oracle Support

Oracle Support provides registered users with answers to implementation questions, product and solution help, and important news and updates about Guided Search software.

You can contact Oracle Support through the My Oracle Support site at *https://support.oracle.com*.

Chapter 1

Introduction

This chapter introduces Oracle Commerce Guided Search and provides an overview of how to use Oracle Commerce Workbench to manage application content.

What is Oracle Commerce Guided Search?

Oracle Commerce Guided Search enables users to explore data interactively in real time through an easy-to-use interface, regardless of the scale and complexity of the data.

An Oracle Commerce application is designed to provide follow-on navigation options in addition to the results of a user's current query. By progressively narrowing available selections based on currently selected refinements, the application naturally guides users towards data that interests them. This approach has the advantage of highlighting relevant information that users may not have been searching for when they began.

Oracle Commerce applications can bring together data from multiple, large data sources, without introducing additional complexity to the end user. This enables users to search, navigate, and analyze large volumes of information, while naturally revealing relationships between data.

Exploring data with Commerce applications

Oracle Commerce Guided Search is based on the Oracle Commerce MDEX Engine, a powerful platform that stores data as records with accompanying properties.

About Endeca records and properties

Endeca records are the entities in a data set that a user must be able to find. Products in a merchandising application, data for individual customers in a Customer Relationship Management (CRM) application, and mutual funds in a fund evaluator are all examples of items that can be represented as Endeca records.

A record consists of multiple properties, which are data values specific to that record. A product record likely includes properties for the product name and price, as well as additional properties for other useful information. An end user typically sees these properties after selecting a specific record from their search or navigation results.

About dimensions and dimension values

Each Endeca record has one or more associated dimensions. A dimension is a label that classifies a record into a navigable category. For each dimension that a record is tagged with, it also has a corresponding dimension value. This can be a discrete value or a range with an upper and lower bound.

For example, a camera in an electronics store may be labeled with a "product category" dimension of value "camera." It could also have a "price range" label with a value that classifies its price as ranging from $100-$200. The actual price of the camera would be a record property rather than a dimension value, since customers are unlikely to navigate to a category for "cameras priced at exactly $128 dollars."

Dimensions can be hierarchical; that is, a "wine type" dimension may contain values for "red" and "white" wines, and the "red" dimension value may itself contain "Merlot" and "Chianti" dimension values.

Dimensions form the core of the Guided Navigation experience, as they are the values an end user relies on to navigate through and refine a data set.

Example

For example, consider the following (partial) records from the Discover Electronics reference application dataset:

```
product.name="Zx1"
product.brand = "Brand_A"
product.price="1238.000000"
product.review.avg_rating="1.600000"
```

```
product.name="Digital IXUS 85 IS"
product.brand="Brand_B"
product.price="102.000000"
product.review.avg_rating="2.700000"
```

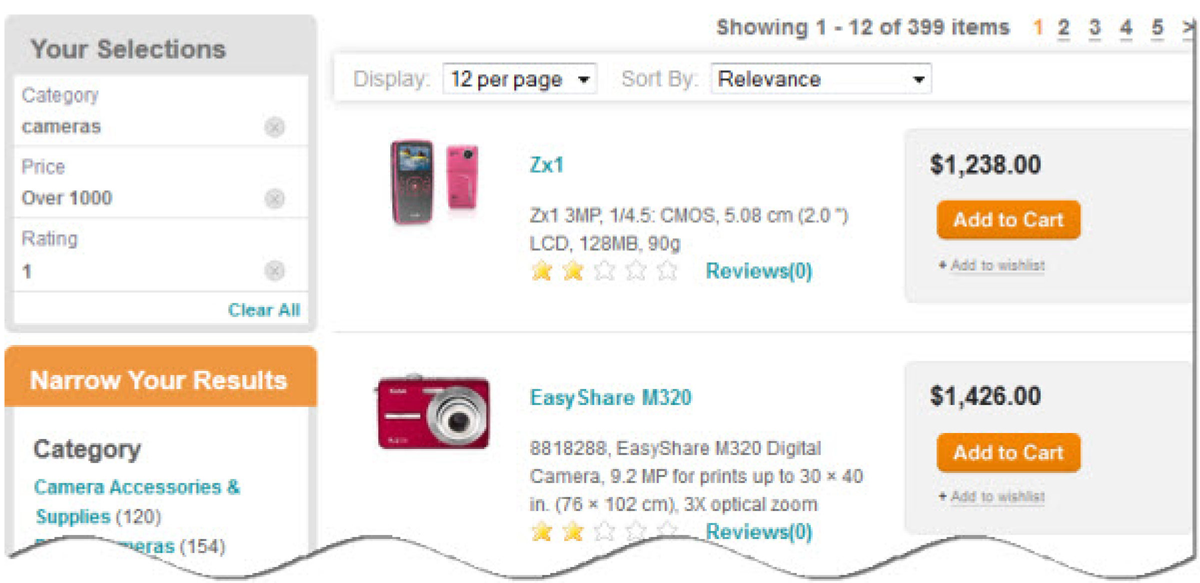
Each record represents a camera in an electronics store, and includes properties that contain data about that specific camera. Your application developer chooses how to assign dimensions to each record.

For the examples above, the

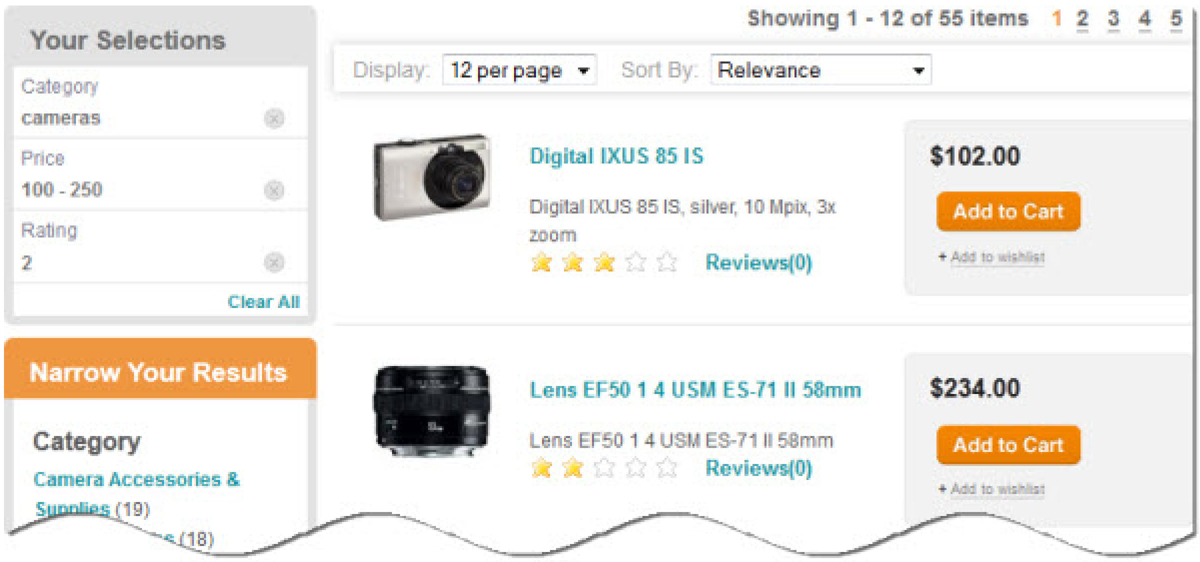
`product.brand` value becomes the value of the "Brand" dimension, but the `product.price` and `product.review.avg_rating`

values have to be converted into a corresponding range for "Price" and rounded down to a "Review Rating" category to make the application easy to navigate.

The "Zx1" camera is tagged with the **Price** > **Over 1000** dimension value, and the **Review Rating** > **1** dimension value:



The "Digital IXUS 85 IS" camera is tagged with the **Price** > **100 - 250** dimension value, and the **Review Rating** > **2** dimension value:



For in-depth information on the MDEX Engine and the data structures that make up an Oracle Commerce application, see the *Concepts Guide*.

Navigating data in an Oracle Commerce application

End users employ a combination of navigation and keyword search to naturally navigate to information that interests them. For example, a user can execute a keyword search query to retrieve a set of records, then use a follow-on navigation query to refine that set of records, or vice-versa. The set of search results and available navigation refinements is re-ranked and re-organized with each click, ensuring that the options displayed are as relevant as possible each step of the way.

The makeup of an Oracle Commerce Guided Search implementation

An Oracle Commerce Guided Search implementation consists of a back-end instance of the MDEX Engine and data pipeline, the front-end cross-channel Oracle Commerce application, and the infrastructure hosting the components.

Your technical team builds out your implementation. They configure and manage the data pipeline that processes source data into records with associated dimensions and properties. The technical team also writes the code that handles and renders data to create a useable front-end application.

You, as the business user, manage the presentation of data by configuring where it displays and under which conditions. For example, you can define triggers to dynamically spotlight content, as described later in this guide.

What is Oracle Commerce Workbench?

Oracle Commerce includes Oracle Commerce Workbench, a Web-based tool that provides access to all the business functions that you perform.

Your Oracle Commerce administrator sets up Workbench for your use, including:

- Defining you as a user with specified privileges
- Setting up Workbench to communicate with your Oracle Commerce implementation

Typically, Workbench is configured for use with a staging version of your application. When you make your changes, you are likely making them to the staging implementation, not the production version. Your changes do not impact the live implementation until a technical team publishes them to the production environment.

Workbench distribution

How you use Workbench depends on the license and accompanying software package you have purchased. Oracle Commerce distributes Workbench in two packages: Oracle Commerce Guided Search and Oracle Commerce Experience Manager. The Guided Search package includes Rule Manager, while the Experience Manager package replaces Rule Manager with the more robust Experience Manager.

- In Oracle Commerce Guided Search, Workbench includes:
  - EAC Admin Console
  - Keyword Redirects
  - Report Scheduler
  - Reports
  - Rule Manager
  - Thesaurus
  - Automatic Phrasing
  - Relevance Ranking Evaluator
  - User Segments

  Note: Rule Manager is deprecated in the Tools and Frameworks 11.0 release. Oracle recommends using Oracle Commerce Experience Manager for new projects.

- In Oracle Commerce Experience Manager, Workbench includes:
  - EAC Admin Console
  - Experience Manager
  - Keyword Redirects
  - Preview Settings
  - Report Scheduler
  - Reports
  - Thesaurus
  - Automatic Phrasing
  - Relevance Ranking Evaluator
  - User Segments

Logging in to Workbench

Your Oracle Commerce administrator should provide a user name and password for accessing Workbench.

To log in to Workbench:

1. Open a browser and access Workbench by supplying the URL provided by your administrator.

   By default, the login URL is `http://<Host_Name>:8006`, where `<Host_Name>` is the machine running your Workbench installation.

You should see the Oracle Commerce Workbench login page.

2. Enter the **Username** and **Password** provided by your administrator.

   Note: If you are logging in for the first time, the Change Password screen appears. Enter a new Password to replace the Password provided by your administrator. You cannot use Workbench until you create a new password.

3. Click **Log In**.

   For information about security requirements for passwords, refer to the *Oracle Commerce Guide Search Administrator's Guide*.

Logging out of Workbench

If you do not log out manually, Workbench logs you out automatically after a period of inactivity. The duration of the inactivity window is specified by your Oracle Commerce administrator.

To log out of Workbench:

1. Save any unsaved changes.
2. Click the **logout** link next to your user name in the upper-right corner of the screen.

Permissions in Workbench

Workbench includes several pages, each corresponding to a set of tasks. Permissions for these pages are set by your Oracle Commerce administrator.

Some pages include administrative functions, while others are intended for business users. Access to these pages is controlled through permissions. Your Oracle Commerce administrator may grant permission to some or all of the following pages:

- Rule Manager or Experience Manager
- Keyword Redirects
- Thesaurus
- Automatic Phrasing
- Reports

About configuring Workbench resource caching in a Web browser

If users are connecting to Workbench over a high-latency network, setting certain cache settings in the Web browser may improve performance.

Workbench pages reference a number of assets such as images, CSS files, and JavaScript files. These assets are relatively static and are typically cached by the browser. They are served with HTTP headers that instruct the browser not to check for new versions of these files for a period of six hours. This results in better page load performance for users who connect to Workbench over a high-latency network.

Oracle recommends setting your browser to check for new versions of pages automatically, and allocating 256MB or more of disk space to temporary files.

Managing rules

A rule consists of two parts: information (such as records in a data set), and the associated triggers that determine when that information is displayed in your application.

Rules are the heart of the Content Spotlighting feature in an Assembler application. Content Spotlighting is the process of identifying and promoting contextually relevant data to users as they navigate or search within a data set.

The MDEX Engine compares each end user query to the rules in an application to determine if the query matches any existing triggers. If an end user's search query, navigation state, user segment, or environment (such as the date) matches a rule trigger, the MDEX Engine returns the corresponding records. These can include the following:

- Record results for a search query or navigation state
- Static records configured by a merchandising user (such as selected records in a Record Spotlight cartridge)

How rule triggers shape the end user experience

Oracle Commerce applications are tailored to present contextually relevant content to the end user. You can use Workbench to trigger content based on an end user's individual characteristics, on their search queries and navigation selections within your application, or on external factors such as date and time.

Taken together, the combination of an end user's search and navigation state, the user segment they belong to, and any other external factors that trigger rules (such as the user's geographic position or the current date) can be considered the user's "location."

When planning your Content Spotlighting strategy, think of your application in terms of which location displays which content. For example:

- The main navigation sidebar and results list in your application page should remain fairly consistent. These should be triggered by default.
- You may wish to display a seasonal banner image. This should be configured as four separate banners, one for each season, each with a date-driven trigger.
- You might display a "featured products" sidebar that displays the highest-rated results in an end user's currently selected category. You could configure this item to appear whenever a user has a non-zero navigation state (that is, whenever they have selected any category in the navigation sidebar), and to show records with a high "product rating" value within the user's current navigation state.
- You might display a "selected specials" sidebar that only triggers for a certain search or navigation state, such as when the user enters "specials" as a search query.

This overview is meant as a high-level introduction to how triggers drive the behavior of your application. For more detailed information, see "About controlling the display of content" in this guide.

About thesaurus entries

Thesaurus entries allow you to broaden application search results to account for alternate forms of an end user's search query.

Thesaurus entries provide concept-level mappings between words and phrases. For example, if users enter the search term "cab" to search for "Cabernet Sauvignon," you can create a thesaurus entry to equate "cab" with "Cabernet Sauvignon."

You can add two kinds of entries to the Thesaurus:

- One-way thesaurus entries map a search term to an equivalent term, but not the reverse. For example, a one-way mapping of "silver" to "metal" returns results for "silver" any time an end user's search query includes the word "metal." It does not include results for "metal" when a user searches for "silver."
- Multi-way thesaurus entries establish a mutual equivalence between words or phrases, so the two become interchangeable.

You might find it useful to examine reporting data for your application when creating thesaurus entries. If you find that users frequently search for a term you had not expected, you can create a form equivalence mapping in your thesaurus.

About keyword redirects

Keyword redirects are used to redirect a user's search to a URL. This URL can represent a static page in your application (such as an "About Us" page) or a specific search or navigation state.

A keyword redirect triggers on one or more specified search terms. If an end user enters the specified term or terms, the application redirects them to the specified location.

Your technical team must modify the application code to properly handle keyword redirects and display the specified Web page when a redirect triggers.

About automatic phrasing

When a site visitor enters individual search terms in a query, the automatic phrasing feature groups specified individual terms into a single search phrase and returns search results for the phrase.

Automatic phrasing is similar to placing a single set of quotation marks around multiple search terms before submitting the query. For example, “my search terms” is the phrased version of the query my search terms. Automatic phrasing removes the need for application users to place quotation marks around search phrases to get phrased results.

About Content Spotlighting

Content Spotlighting in an Assembler application is based off the end user's state in the application, rather than on static content that does not respond to changes in context.

Content Spotlighting in Oracle Commerce applications works differently from traditional content management systems (CMS), where you select an individual record for promotion, place it on a template or page, and then publish it to a Web site. Oracle Commerce merchandising is dynamic. When a user's query triggers a rule, the rule specifies contextually relevant records to promote to a multichannel application. In some cases, triggers specify how to promote records, but do not necessarily determine what those specific records are. For example, a "Featured Products" rule may return the top-rated products in the user's current category.

This means that as users navigate or search, they continue to see relevant results because appropriate content triggers are in place. Even when the data set itself is updated and the records are altered, existing rules can continue to return relevant records. The trigger conditions remain the same, even though the promoted records may change.

Comparing typical CMS scenarios with Content Spotlighting

Instead of manually configuring static promotions, you can use rules to dynamically generate relevant promotions from your source data.

In a traditional CMS scenario, if Wine A is “recommended,” it is identified as such and published onto a static page. If you need to update the list of recommended wines to remove Wine A and add Wine B to the static page, you must manually remove Wine A, add Wine B, and publish the changes. With Oracle Commerce Content Spotlighting, the effect is much broader and requires much less maintenance. You can create a rule that promotes wines with a “recommended" value, and design the search results page to include that rule when available.

In this scenario, the recommended Wine A is promoted any time the trigger conditions for the rule are met, and the rule is included in the user's current page. Additionally, updating the spotlight to remove Wine A and add Wine B requires updating the source data to reflect that Wine B is now tagged as “recommended.” In this way, the application remains accurately data-driven.

After making the change, Wine B is promoted on any number of pages that specify recommended wines in the result set, without adjusting or modifying the rule triggers or the page layout.

Support for static spotlighting
Content Spotlighting provides the ability to specify featured records. When a user's location triggers a rule that specifies a featured record, that record is returned in addition to the normal search query or Guided Navigation results.

In addition to using content triggers to implement dynamic spotlights, Oracle Commerce provides support for static spotlighting in the more traditional CMS sense.

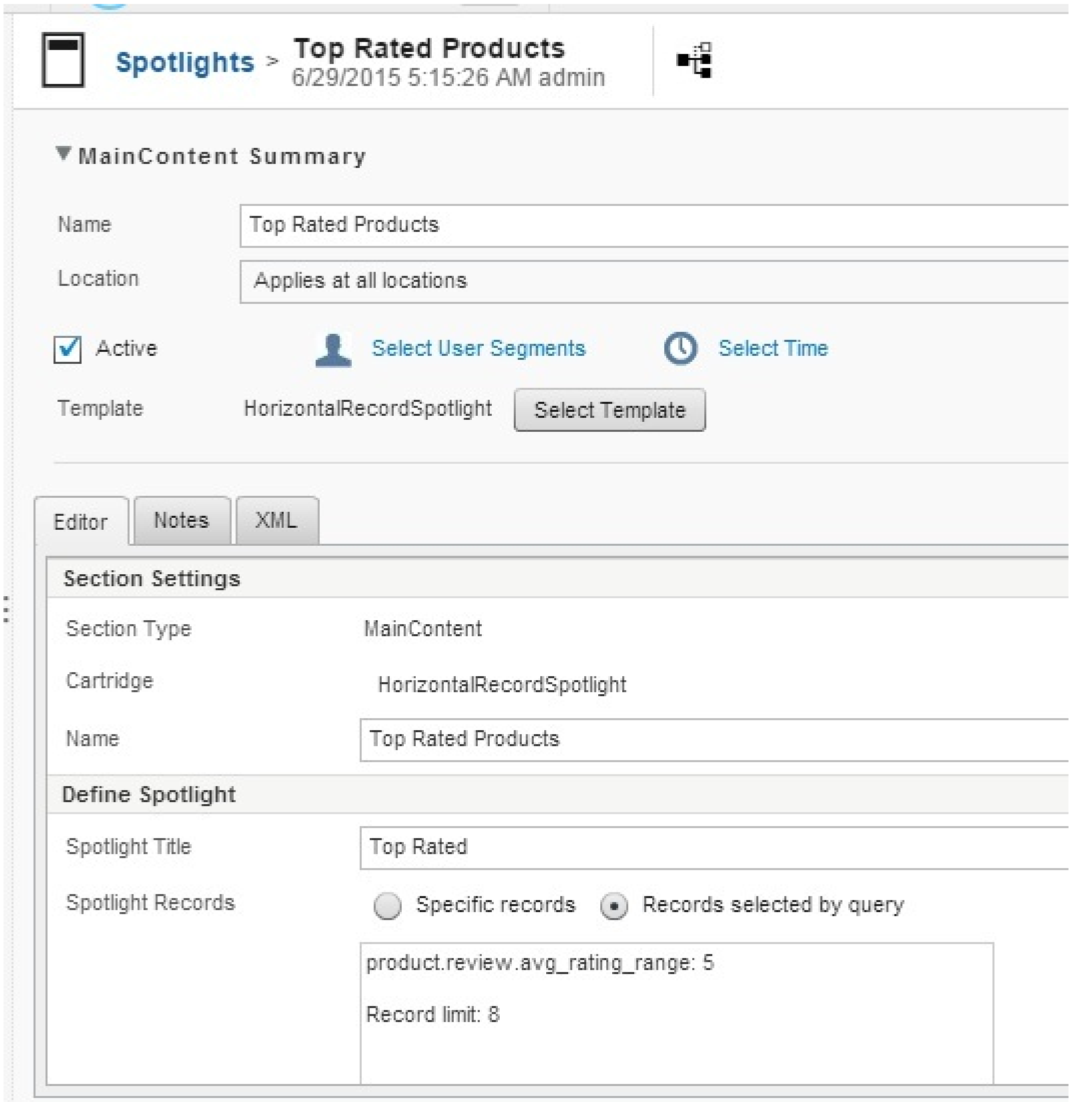
You can configure a rule to return a combination of featured static records, featured dynamic records, and a record list of dynamically generated results.

Typical merchandising uses

This section contains some typical merchandising scenarios. These examples use the Discover Electronics reference application to demonstrate how various cartridge configurations can fulfill strategies for promoting featured records. The configuration described in each example is not included in the reference application by default, though you may choose to reproduce it.

Dynamically promoting highly rated results
In this up-sell scenario, the strategy is to promote results that have been highly rated, and return a dynamically generated set of records that also take into account the user's location in the data set.

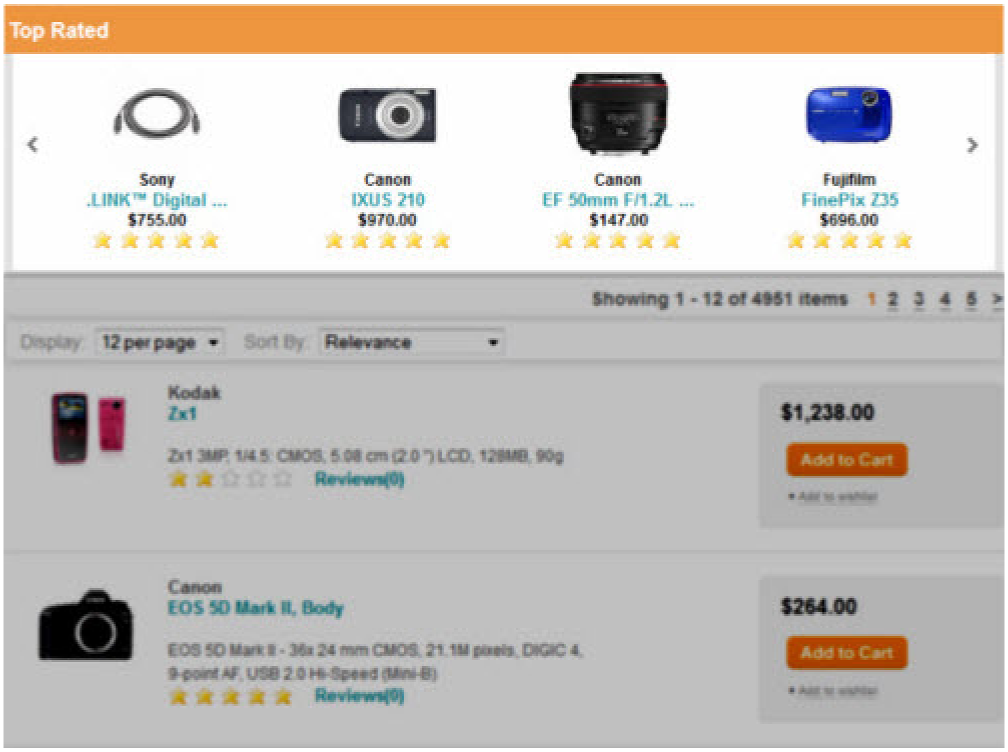
The rule for accomplishing this has the following configuration:



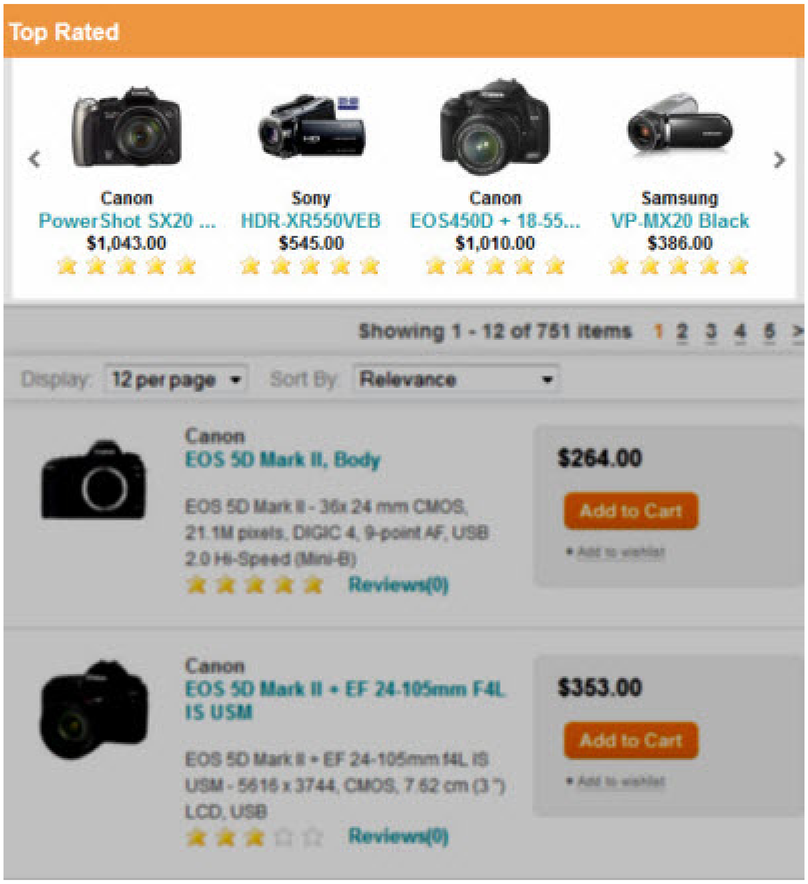
- It is configured as a Horizontal Record Spotlight cartridge that fills a corresponding slot in the "Default Guided Navigation Page" rule.
- It has the display title "Top Rated Products."
- It has a **Location** trigger that allows it to display at any location in the data set where there isn't a higher priority rule in the same slot; in other words, it always triggers, regardless of the user's location.
- It spotlights records based on a `product.review.avg_rating_range` value of 5 in the data set, indicating a high review score. Whenever the data is updated, the rule automatically returns the new records, without requiring changes to its cartridge configuration.

As a user searches or browses, the rule returns results with a high review rating. Any navigation state triggers the spotlight, because it triggers at all locations.

If a user navigates to the "Cameras" category, the application displays the regular navigation results, as well as 10 spotlighted records in the horizontal spotlight:



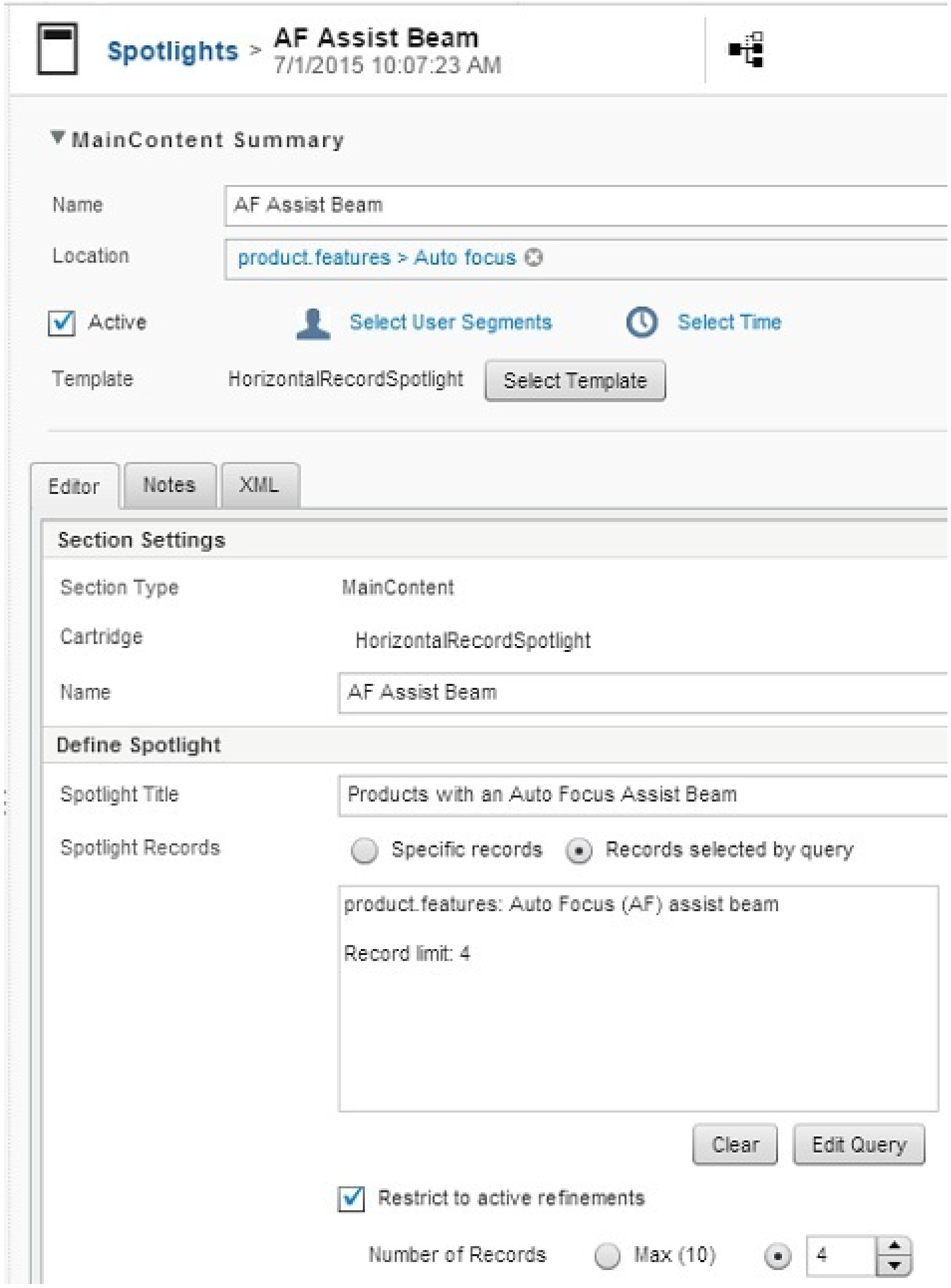
Because the trigger is restricted to the active navigation state, the results vary depending on the user's navigation location. For example, instead of navigating to **Category** > **Cameras**, suppose a user navigates to products that are black and feature manual focus. The MDEX Engine returns a different set of dynamically generated results for the Top Rated Products spotlight:



Promote a related category based on user location

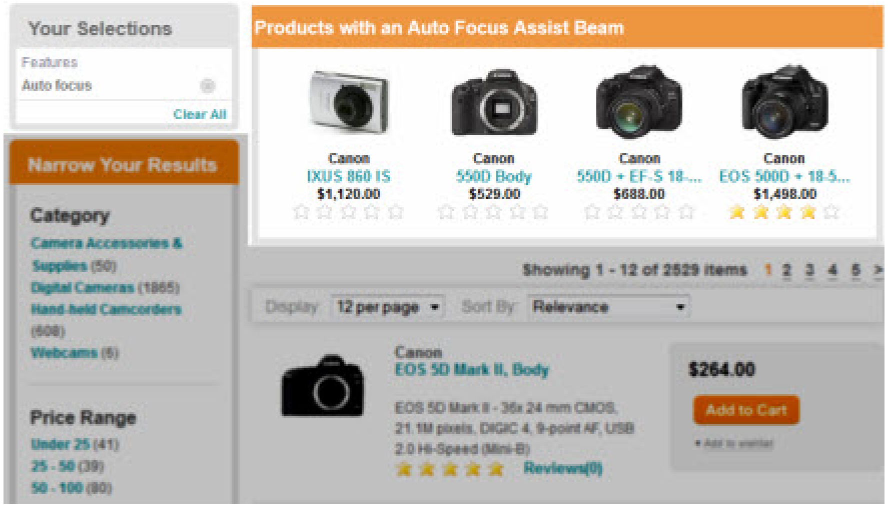
In this cross-sell scenario, the strategy is to promote results in a category that is similar to the one a user is currently browsing. In this example, when a user selects the **Features** > **Auto Focus** dimension value, a spotlight displays results that also include the Auto Focus (AF) Assist Beam feature.

The rule for accomplishing this has the following configuration:



- It is configured as a Horizontal Record Spotlight cartridge that fills a corresponding slot in the "Default Guided Navigation Page" rule.
- It has the display title “Products with an Auto Focus Assist Beam”
- It has a **Location** trigger that activates the rule when a user navigates to **Features** > **Auto Focus**.
- It spotlights records within the `product.features>Auto Focus (AF) assist beam` dimension value.
- It restricts spotlighted records to the current navigation state, so that they match any additional refinements the user has selected.

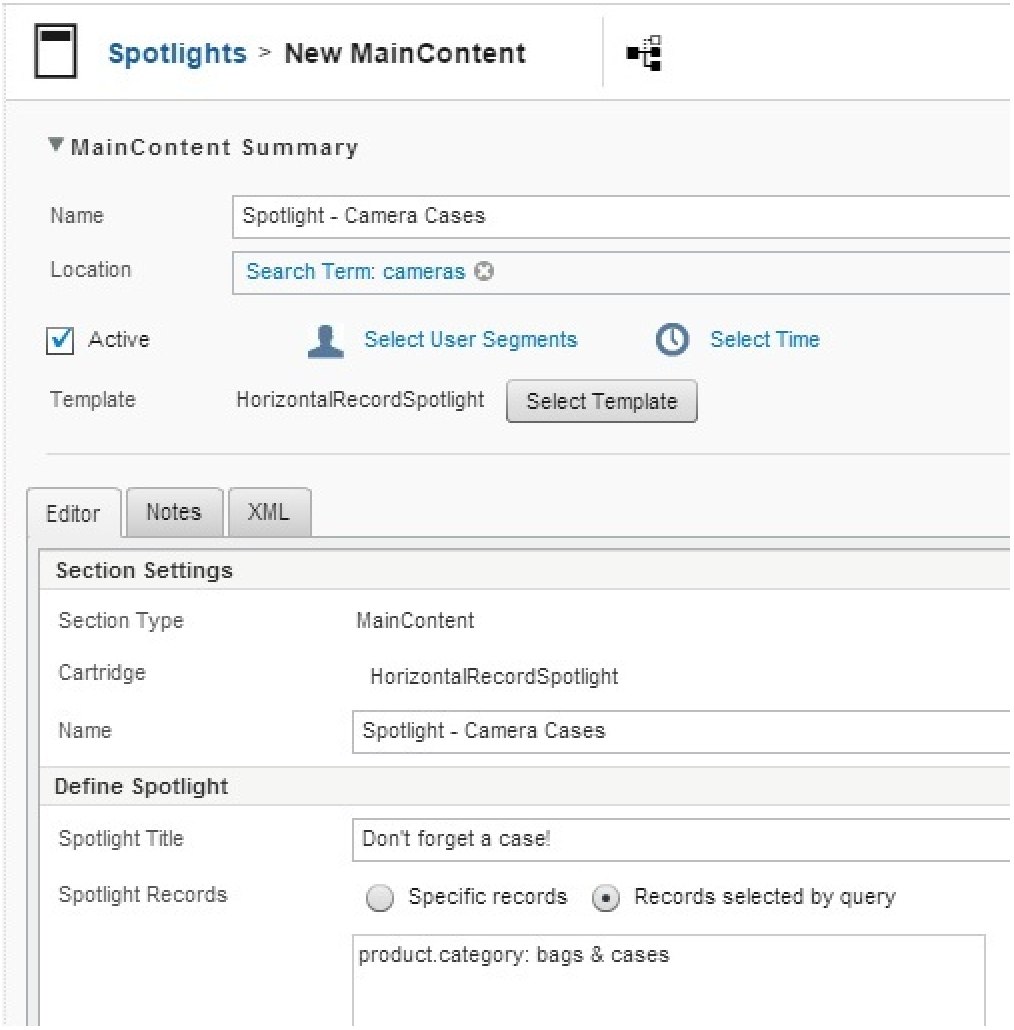
If a user navigates to **Features** > **Auto Focus**, the application displays the regular navigation results, as well as the spotlight for records for products with an Auto Focus Assist Beam:



Promote a related category based on a search term

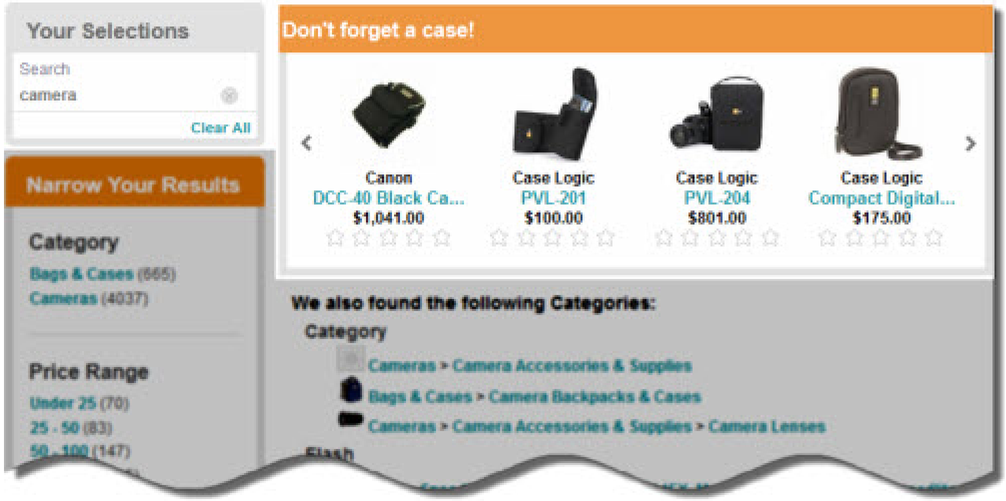
In this cross-sell scenario, the strategy is to promote results in a category that is linked to a user's search query. In this example, a spotlight displays camera cases when a user searches for "camera."

The rule for accomplishing this has the following configuration:



- It is configured as a Horizontal Record Spotlight cartridge that fills a corresponding slot in the "Default Guided Navigation Page" rule.
- It has the display title “Don't Forget a Case!”
- It has a **Location** trigger of "Search Term: cameras" with a "Match Exact" match mode. This activates the rule when a user searches for "camera," with no additional search terms.
- It spotlights records within the `product.category>bags & cases` dimension value.

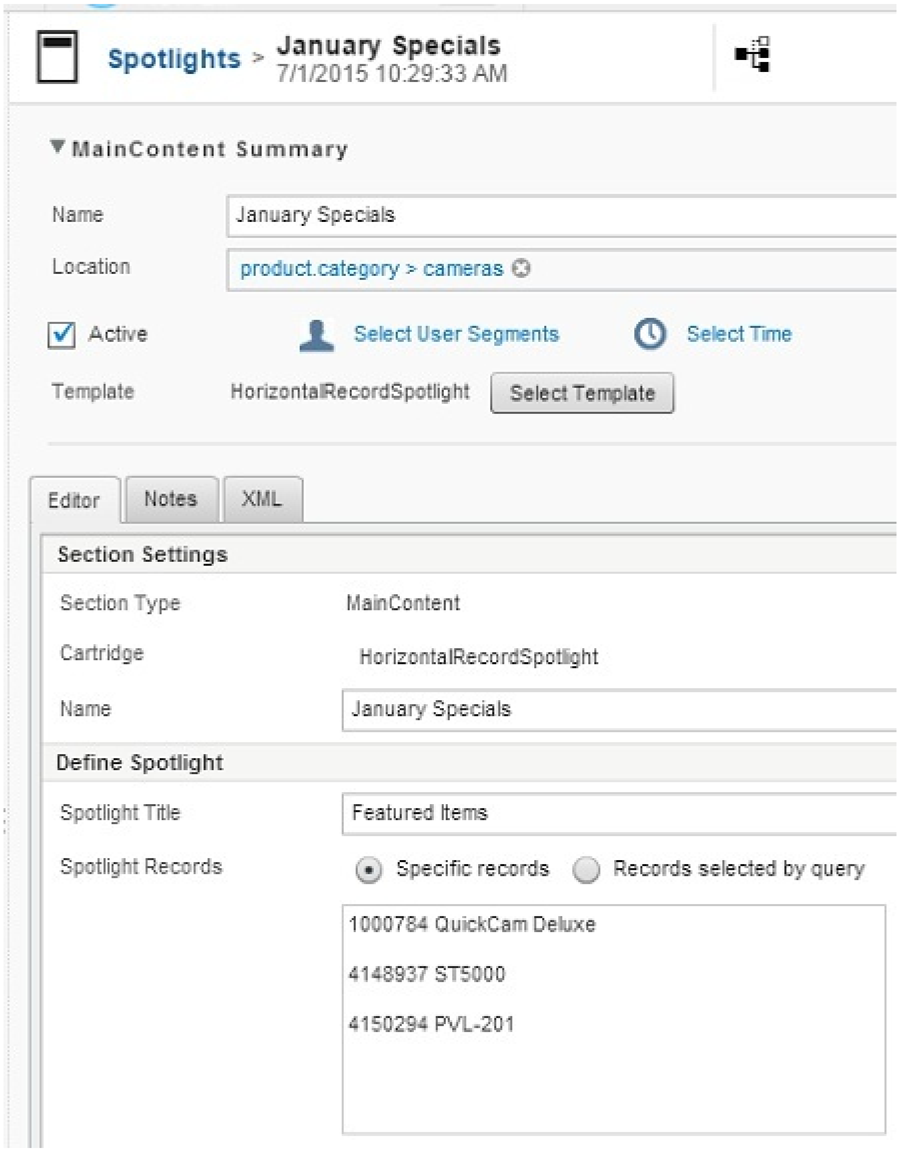
If a user searches for "camera," the application displays the regular navigation results and displays records for camera cases in the "Don't Forget a Case!" spotlight.



Promote specific featured results

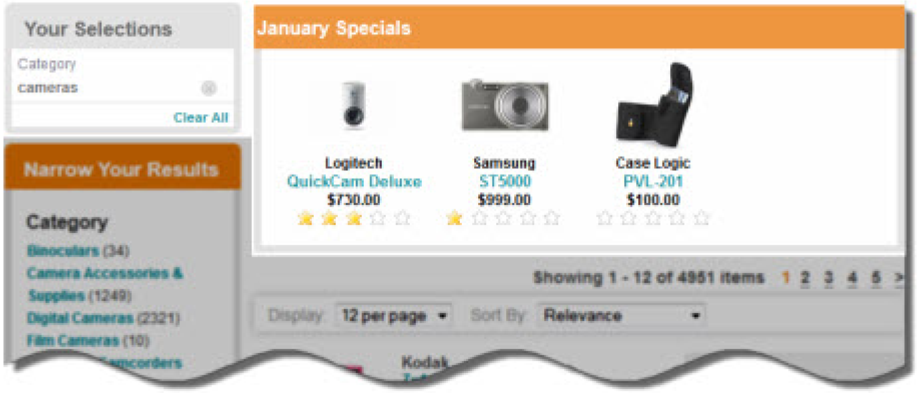
In this featured results scenario, the strategy is to promote three specific cameras as featured results when a user navigates to the "cameras" category in the month of January.

The rule for accomplishing this has the following configuration:



- It is configured as a Horizontal Record Spotlight cartridge that fills a corresponding slot in the "Default Guided Navigation Page" rule.
- It has the display title “January Specials”
- It has a **Location** trigger that activates the rule when a user navigates to **Category** > **Cameras**.
- It has a **Time** trigger spanning from midnight January 1, 2013 to midnight on January 31, 2013. This activates the rule when a user browses the site during the month of January.
- It spotlights three specific records. The order in which these results are added dictates the order in which they appear in the rule.

If a user navigates to **Category** > **Cameras** during January, the application displays the regular navigation results, as well as the spotlight for records:



Checking the status of publishing activities

Whenever you publish changes to an application using Workbench tools such as Experience Manager, Keyword Redirects, or the Thesaurus, you can check the status of the assemblers and MDEX publish operations in the Workbench Publishing Status console.

The console displays whether or not the update was successfully published to assemblers or MDEX and the time that it occurred. An update can have a status of *Running*, *Success*, or *Failure*. You can filter this status information by application or tool.

To open the Publishing Status console:

1. On any page in Workbench, click the status bar at the bottom of the page.
   The Publishing Status console appears.
2. In the **Choose Application** field, click a specific application or **All Applications**.

   Note: If an application is not live, **(Authoring)** displays after its name after you select it.

3. Click a status line in the console to show details about the publishing action that triggered the status, and if errors occurred during the publishing, possible causes and solutions. If you need help with an error, contact your Oracle Commerce Administrator.
4. Change the display format of the console:
   - To toggle between ascending and descending order for the contents of that column, click a column heading.
   - To switch the order of the columns, drag and drop the column heading to the new location.

Viewing reports

Reports display information that helps you interpret what has happened on your site in the past day or week.

Your technical team defines which data to generate reports for, and how often to generate those reports.

Depending on how reporting is configured, reports can help you answer questions like the following:

- How much traffic is my site getting?
- How are visitors searching and browsing the site?
- How effective are their searching and browsing techniques?

The Reports page can display a single daily or weekly report or allow you to browse and view archived reports.

Chapter 2

Content Spotlighting with Experience Manager

This section provides a comprehensive walkthrough of creating rich, data-driven content with the Oracle Commerce Experience Manager.

About Experience Manager

Oracle Commerce Experience Manager is a powerful spotlighting tool that enables merchandisers to control site content without IT intervention.

With Experience Manager, merchandisers and other business users work from custom templates and content folders to create data-driven pages easily. Experience Manager enables merchandisers to manage the placement and display of dimensions, promotions, rich media, and other forms of content spotlighting. Content can be used in any number of locations in a site, or across multiple sites within an application, decreasing the time and effort normally associated with creating and maintaining content. Experience Manager presents the most relevant content to visitors at each step of the online experience, based on their searches and site navigation.

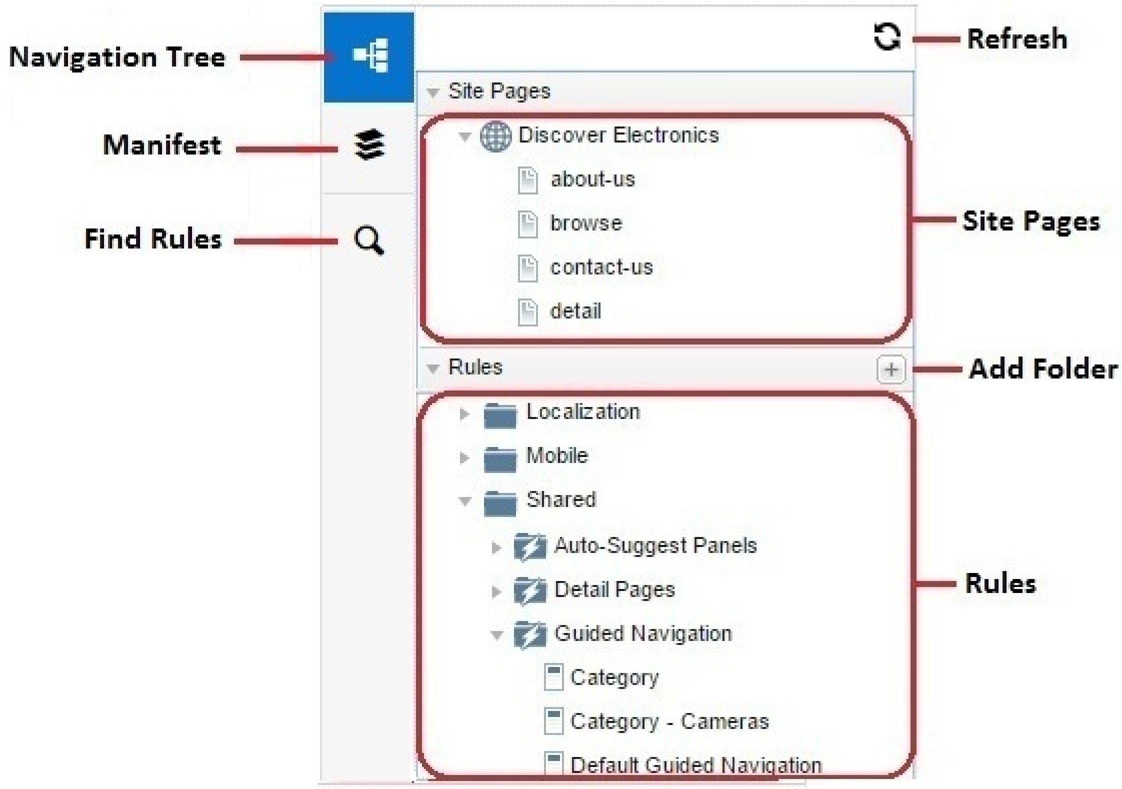
Pages and rules

On the left side of Experience Manager is a panel that displays the navigation tree by default. This tree contains the building blocks for creating your site content. The navigation tree is divided into a **Site Pages** section that contains the pages for all the sites in your application and a **Rules** section. The main difference between pages and rules is that pages are always available through URLs, but rule content appears only under specific conditions.

Pages are the basic containers that display all of your dynamic content. Your development team provides templates so you can create URL-accessible pages in a variety of layouts suitable for browsing, displaying detail, or simply presenting about-us or contact pages.

The Rules section contains all the content that you use to dynamically populate your pages. The items in this section are the key components for featuring and spotlighting records on your pages. Your development team provides mini-templates or *cartridges* for plugging this content into page sections. You can organize the **Rules** section into folders. There is a button in the Rules header for adding folders. For example, you can create separate folders for Web or mobile rules, and another folder for rules that you share across delivery devices.

Together, pages, rules, and the folders that contain rules are referred to as *assets*. The following picture shows how the assets are arranged in the Site Pages and Rules sections of the navigation tree.



When you click any of the assets in the Rules or Site Pages sections of the navigation tree, the assets open in the edit area. The edit area is where you configure how content is are displayed.

In the previous illustration, you can see a narrow sidebar that displays along the left side of the side panel. The sidebar that contains the following buttons for working in Experience Manager:

- Hide - Hides the side panel and expands the edit area.
- Navigation Tree - Shows the navigation tree in the side panel.
- Manifest - Shows the Manifest in the side panel instead of the navigation tree. Use the Manifest to inspect previewed content.
- Find Rules - Search and filter current application for rules.

About icons in the navigation tree

Use the following key to identify components in the navigation tree interface.

Icon	Component
	Site. This is the default site icon. Your development team can create custom icons for each site.
	Page
	Folder

Icon	Component
	Folder (Restricted to content that uses cartridges of a specific type)
	Rule
	Section
	Cartridge

About using pages in Experience Manager

As you create content with Experience Manager, you work with the familiar URL-accessible page as well as the dynamic page.

URL-accessible pages have static URLs that are specified when you create the pages. These pages are what you see in the **Site Pages** section in the navigation tree of Experience Manager. URL-accessible pages always appear when you enter the URL, and no conditions have to be met before a page displays. These pages are containers for featuring content. One type of content is the dynamic page.

Dynamic pages do not have static URLs, but they can display their content in URL-accessible pages that point to them. Dynamic pages only display content when one or more conditions have been met: when you want a specific set of visitors to find it, when a specific set of search terms are associated with it, or if you want content to display at a specific date and time. You can see your application's dynamic pages in the **Rules** section in the navigation tree of Experience Manager.

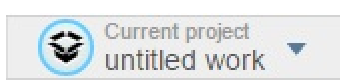
About projects

Experience Manager uses projects to track and control changes that you and other users make to a site.

Think of a project as a working copy of your site. You can work alone in this copy or work with others in the same copy. Your organization can have several projects under development at the same time; each being an isolated working copy of the site. Any changes that you make in your project are not committed to a site until you publish your project. This published project is written or merged into your site, and all your updates become part of the current site. As other projects are published, your own project reflects any updates the team members of these other projects have made.

Starting a project

A project is started the first time you log in to Workbench, and open Experience Manager. This initial project is named **untitled work**, and looks like the following image in the Workbench toolbar.



As you start to modify the project by either adding, deleting, or updating assets, the project tile in the toolbar displays a Project Contents button . Any assets that you change become part of your project. No one outside the project sees these changed assets until the project is published.

Project Contents button icons

You can click the Project Contents button to see a list of assets that have been updated in your project. The icon on the button can change due to the status of your project.

Icon	Project status
	Your project is not in conflict with any published projects.
	Since you started your project, the site has changed in such a way that it now conflicts with changes in your project. This happens because another project has been published that contains the same updated asset that is in your project. Even if the edits to the asset are identical to the edits in your project, a conflict occurs. A conflict can also indicate that a page or folder that contains your updated asset has been moved, deleted, or renamed. A conflict can also occur because an administrator has imported changes to the site that conflict with your project.

Renaming a project

When you begin a new project, Oracle Commerce recommends giving the project a name to distinguish it from **untitled work** projects that other users created. The name is not permanent; you can rename a project as many times as you want.

Follow these instructions to rename a project

1. Click the project tile of the toolbar.

   If this is a new project, the project is labeled **untitled work**.
2. Before you rename your project, scroll through the list of projects under **Unpublished Projects**. You want to be sure that you rename your project with a name that is unique enough that you can easily distinguish it from these other projects.
3. In the **Project Name** field of the project popover, enter a new name for the project.
4. Click the check next to the field.

   The new name appears in the project tile.

Switching projects

If you are working on two or more projects, you can switch between them in your current session in Experience Manager.

1. Verify that you have saved any work that you want to keep in the current project.
2. Click the project tile of the Workbench toolbar.
   The project popover appears listing your current project and all of the other active projects associated with your site that have not been published, yet. Projects that have unresolved conflicts in them are preceded by the Conflict icon . The name of the project creator follows the project name.

3. Click the project that you want to open.

Note: If your organization has a lot of projects that requires you to scroll through many rows, you can start typing the project name in **Filter this list...**. The list filters as you type.

You can switch between as many projects as you like. The next time that you log in to Workbench, Experience Manager opens with the last project in which you were working.

Creating a project

If you no longer want to work in any existing projects, you can create a new one.

When you open Experience Manager, the name of the last project that you worked on appears in the project tile of the toolbar. If none of the existing projects suit your needs, you can create a new project.

1. Verify that you have saved any work that you want to keep in the current project.
2. Click the project tile of the Workbench toolbar
3. Click **New project**.
   The new untitled project appears in the project tile of the toolbar.

Deleting a project

When you delete a project, all the modifications that you and others have made to assets in the project are lost. The project cannot be published.

1. In Workbench toolbar, verify that you are in the project that you want to delete.
2. Click the project.
3. Click **Delete**.
4. When the confirmation appears, click **Delete** again.

Displaying a list of modified assets

You can display a list of all the assets that you have created, moved, edited, and deleted in a project.

Every folder, page, or rule that you modify in a project is included in the project asset list.

1. Check the toolbar and verify that you are working in the correct project.
2. Click the Project Contents button .
   The button only appears if you have modified an asset in your project. If your project has conflicts with a published project, then the button displays a conflict image:
   The asset list displays the following information:

Column	Contents
Conflict indicator	If a published project also edited this asset then a conflict icon appears.
Asset	Name of the asset. An icon indicates the asset type: folder, page or rule.

Column	Contents
Type	The template for pages and rules. Folders display "folder."
Change	Indicates the type of modification: moved, edited, created, or deleted. Rows containing deleted assets use a light gray text.
Details	Messages about parent/child relationships, conflicts, or from where an asset was moved.
Modified	The timestamp that the asset was last modified, and the first and last name of the user that most recently modified the asset.
Path	The path of the asset in the Experience Manager navigation tree.
Remove	Remove from Project button. Removes the changes that you have made to the asset.

3. If the list is too long for you to easily find an asset, filter the list by typing in the **Filter this list...** box. You can filter assets by name, type, path, and user.
4. If you would like to make more modifications to an asset, click the asset name in the **Asset** column.

   Note that you cannot modify an asset that has been deleted. To modify a deleted asset you must first remove it from the project -- remove the deletion.

Publishing a project

When you and your team have finished updating assets in your project, you can publish it.

These instructions assume that you want to resolve any conflicts that occur between your project and published projects.

1. Verify that you have saved any work that you want to keep in the current project.
2. If your project has any conflicts with other projects that have already been published, the project tile displays a conflict indicator on the Project Contents button. Click it to find and resolve the conflicts.
3. If your project displays a no conflicts indicator on the Project Contents button, then all conflicts have been resolved and you can continue.
4. Click the project name.
5. Click **Publish**, and then click **Publish** again.

All the updates in your project are committed to the current site, and Experience Manager users outside of your project see your changes. If your changes have conflicts with open, unpublished projects, then these projects display conflict indicators. Your published project cannot be undone, these other projects must resolve the conflicts.

Conflicts between projects

A conflict occurs when two projects modify the same asset. Two different projects can hold different versions of the same asset, but this is not a conflict until one of the projects is published.

For example, Project A and Project B edit the same asset. Project A is published first, so now Project A's changes to that asset are part of the current site. Experience Manager recognizes that the unpublished Project B has an updated asset that is no longer current, so it flags Project B as having a conflict.

Even if different properties of the same asset are edited in two projects, and one project is published, a conflict occurs. For example, if Project A changes the query for boosting products on a results list and Project B changes the number of records per page, a conflict occurs.

Note that if another project deletes, renames, or moves the *parent* of your asset, then the projects are in conflict. A parent of your asset can be the folder or page where the asset resides. For example, if Project A changes the name of an asset in the Brands folder, and Project B moves or deletes the Brands folder and then publishes the project, Project A has a conflict.

You can also have conflicts involving the *children* of an asset that you have changed.

Conflict resolution

If there are assets with conflicts in your project, you can do one of the following actions:

- Override and force publish your project anyway. All of your changes are published and overwrite any existing versions of assets that were in conflict.
- Cancel your publishing action and remove any conflicting assets from your project. You can then edit your assets again, starting from the current version of the application that now contains the modifications of all published projects.

Conflict messages

The following messages appear in the **Details** column of the Asset List when your project has conflicts with a published project.

Message	Description
A published project added <*tree path and asset name*>. If you publish, your version will overwrite the other version.	Another project was published that • Deleted and then re-added an asset. • Added an asset with the same name and location in the navigation tree. • Moved an asset with the same name to that location. • Renamed an asset to the same name at that location. If you publish your project anyway, your version of the asset overwrites the other project's asset.
A published project deleted <*deleted ancestor path*>, which contains this asset. If you publish, a new <*folder/page*> will be created at <*deleted ancestor path*>.	Another project was published that deleted a folder or page that originally contained the asset. If you publish your project, only the updated assets in your project are included in that folder or page. None of the other assets in the deleted folder or page will be restored.
A published project moved or renamed <*source path*>, which contains this asset, to <*target path*>. If you publish, a new <*folder/page*> will be created at <*source path*>.	Another project was published that moved or renamed a folder or page that contains this asset. If you publish your project anyway, only the updated assets in your project are included in the original folder or page.

Message	Description
A published project modified <*tree path and asset name*>. If you publish, your version will overwrite the other version.	Another project was published that modified the same asset. If you publish your project anyway, your project's version overwrites the other project's version.
A published project deleted <*tree path and asset name*>. If you publish, your version will take precedence over the delete.	Another project was published that deleted this asset. If you publish your project anyway, your action takes precedence and the asset is not deleted.
A published project deleted <*deleted ancestor path*>, which contains this asset. If you publish, a new <*folder/page*> will be created at <*deleted ancestor path*>.	Another project was published that deleted a folder or page that contained this asset. If you publish your project anyway, you still see your asset, but all other assets contained in the deleted page or folder are gone.
A published project moved or renamed <*source path*> to <*target path*>. If you publish, both your version and the asset that was moved will exist.	Another project was published that moved or renamed a folder or page that contains this asset. If you publish your project anyway, both your version of the asset and the moved asset will exist.
A published project moved or renamed <*source path*>, which contains this asset, to <*target path*>. If you publish, a new <*folder/page*> will be created at <source path>.	Another project was published that moved or renamed a folder or page that contains this asset. If you publish your project anyway, a new folder or page will be created at the original location. Both versions of the asset will exist.
A published project added <*tree path and asset name*>. If you publish, <*tree path and asset name*> will be deleted.	Another project was published with a modified asset that your project is deleting. Someone in the published project • Added an asset with the same name and location in the navigation tree. • Moved an asset with the same name to that location. • Renamed an asset to the same name at that location.
A published project changed one or more children of <*tree path and asset name*>. If you publish, the other project's changes may be lost.	Another project was published with changes to assets in the page or folder that you renamed or deleted. Your action takes precedence, so the page or folder is renamed or deleted. Assets contained in the deleted page or folder are also deleted.
A published project added <*added path and asset name*>. If you publish, both <*moved-path*> and <*added path and asset name*> will exist.	Another project was published that deleted and then a re-added the asset at the original location. The re-added asset could have happened in any of the following ways: • Added an asset with the same pathname • Moved an asset to the same pathname • Renamed an asset to the same pathname If you publish your project anyway, both versions will exist.
A published project changed one or more children of <*tree path*>.	Another project was published with one or more changes (additions or updates) of one or more of the

Message	Description
	asset's children. If you publish your project anyway, the asset and its children are deleted.
A published project modified <*source path and asset*>. If you publish, your version will exist in its new location, and the other project's updates will be lost.	Another project was published with changes to an asset that you moved or renamed. If you publish your project anyway, the other project's modifications are lost.
A published project modified <*tree path and asset*>. If you publish, <tree path and asset> will be deleted.	Another project was published with changes to an asset that you deleted. If you publish your project anyway, the asset is deleted and the other project's modifications are lost.
A published project moved or renamed <*source path and asset*> to <*target path and asset*>. If you publish, your delete will take effect, but the asset that was moved will also still exist in its new location.	Another project was published that moved or renamed an asset. If you publish your project anyway, the asset is deleted at the original location and appears in the new location.
A published project moved or renamed <*source path*>, which contains this asset, to <*target path*>. If you publish, your delete will take effect, but the assets that were moved will also still exist in their new location.	Another project was published that moved or renamed a folder or page that contains this asset. If you publish your project anyway, the asset is deleted at the original location and appears in the new location.
A published project deleted <*tree path and asset name*>. If you publish, your version will exist in its new location.	Another project was published that deleted an asset that you moved or renamed. If you publish your project anyway, the asset still appears. or Another project was published that deleted the source folder or page that contained the asset that you moved or renamed. If you publish your project anyway, the asset still appears.
A published project deleted <*target ancestor's path*>, which contains the new location of this asset. If you publish, a new <*folder/page*> will be created at <*target ancestor's path*>.	Another project was published that deleted the folder or page that contains this renamed or relocated asset. If you publish your project anyway, your renamed or relocated asset becomes the only member of the folder or page. No other assets are there.
A published project moved or renamed <*source path*> to <*target path*>. If you publish, both your version and the one that was moved will exist.	Another project was published that moved or renamed an asset that you also moved or renamed. If you publish your project anyway, both your version and the other project's version will exist. or Another project was published that moved or renamed the source folder or page that contained this asset. If you publish your asset anyway, both your version and the other project's version will exist.
A published project moved or renamed <*move-to ancestor's source path*>, which contains the new location of this asset, to <*move-to ancestor's target path*>. If you publish, a new <*folder/page*> will be created at <*move-to ancestor's source path*>.	Another project was published that moved or renamed a page or folder in the asset's target location. If you publish your project anyway, your asset becomes the only member of the folder or page. All other assets are gone.

Message	Description
A published project narrowed the content type of <*parent path*>. If you publish, the type mismatch between <*asset path*> and <parent path> will need to be resolved before <*asset path*> can be edited again.	Another project was published that changed the content type of the parent folder of the asset that you are adding or updating. The new content type does not include the type for this asset. There is a mismatch. If you publish your project anyway, you need to resolve the mismatch before the asset can be edited, again.
A published project added or updated <*child path*>, whose type does not match that of <*parent path*>. If you publish, the type mismatch between <*child path*> and <*parent path*> will need to be resolved before <*child path*> can be edited again.	Your project changed the content type of a folder. Another project was published that added or updated an asset that no longer matches the content type of the folder. If you publish your project anyway, you need to resolve the mismatch before the asset can be edited, again.

Force publishing projects with conflicts

Even if your project has conflicts with published projects, you can still publish it. Assets modified in your project overwrite the assets in the published project that are in conflict with your project. Overwriting conflicts is called *force publishing*.

1. Verify that you have saved any work that you want to keep in the current project.
2. If your project has any conflicts with other projects that have already been published, the Project Contents button displays a conflict indicator .
3. Click the project name.
4. Click **Force Publish...**.
   A Conflicts Detected dialog appears. It lists the number of conflicts.
5. Click **Project Contents** if you want to see the assets with conflicts.
   You can resolve conflicts by removing assets from your project. Removing assets is like "undoing" your modifications. You do not need to fix all conflicts. Click **Close** when your are finished.
6. Click **Force Publish**.

All the updates in your project are committed to the current site, and Experience Manager users outside of your project see your changes. Remember that your assets with conflicts overwrite the assets of previously published projects. If your changes have conflicts with open, unpublished projects, then these projects display conflict indicators. Your published project cannot be undone, these other projects must resolve the conflicts or be force published.

Example of using projects

The project capabilities in Experience Manager let a team of business users update and test their application in isolation without fear of publishing content that is not ready. No changes in a project are committed to the application in Experience Manager until the project is published.

The following example shows how a merchandiser named Melanie can use Experience Manager to update and preview content without actually publishing the content. Melanie is a merchandiser for the reference Discover Electronics application. She wants to make a few changes for the Summer promotion:

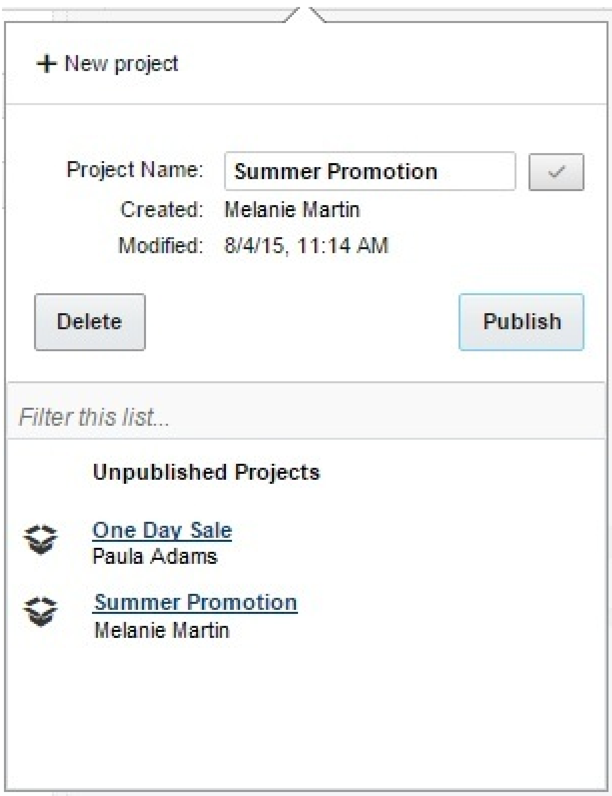
- Update the promotional text that displays on the Canon brand page
- Update the Camera Accessories & Supplies page.

She can make these changes in a single project so that she does not interfere with any other promotions or projects.

1. Melanie logs into Experience Manager and clicks the project tile of the Workbench toolbar.

She sees that there is one unpublished project named *One Day Sale* that Paula, another merchandiser, has created.

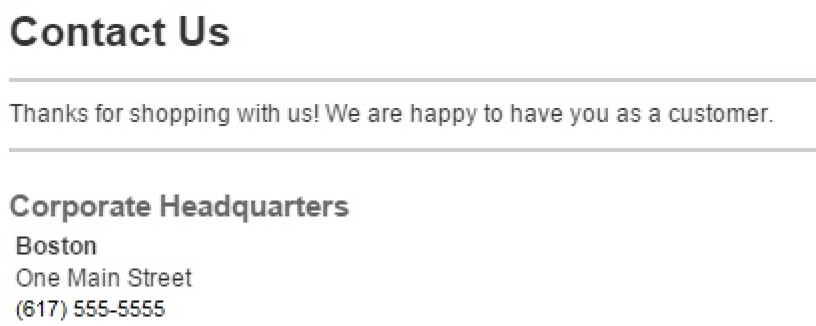
2. Melanie names her untitled project *Summer Promotion*.



3. Melanie's manager noticed that the Contact Us page needs to be updated as well, so she asks Melanie to include the update in her project. Melanie decides to make this simple update first.

   a. In the navigation tree, under **Site Pages** > **Discover Electronics**, she clicks **contact-us**.
   b. Melanie clicks **Preview** and sees that the corporate headquarters lists an old address.
   c. Melanie clicks **mainContent Rich Text** in the manifest so she can correct the entry for the corporate headquarters.
   d. She changes the address from *100 Main* to *One Main* and then clicks **OK**.
   e. She clicks the **Notes** tab and then enters a comment that she updated the corporate address.

      She clicks **Save and Preview** to see her changes.



f. Melanie also notices that the Project contents icon is displayed in the project tile because her project now contains a changed asset.

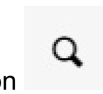
4. Pleased with her change to the Contact Us page, Melanie updates the promotional text on the Cannon brand page.
   a. In the navigation tree, Melanie navigates to and expands **Web** > **Brands** > **Pages**.
   b. She right-clicks **Brand Canon** and then clicks **Preview** in the menu.

      She sees the text that she needs to update "Canon offers best in class...."

   c. Melanie clicks **mainContent** > **Rich Text** in the manifest, and then clicks **Edit Text** in the preview area.
   d. Melanie updates the title to "Canon. Everyone's first choice" and then clicks **OK**.
   e. She clicks the **Notes** tab and then enters a comment that she updated the title.

      She clicks **Save and Preview** to see her changes.

5. Next, Melanie moves on to her last task in her assignment. She must update the Featured Lenses spotlight on the Camera Accessories & Supplies category page. It is currently sorted by average rating. Her manager asked her sort it by price.

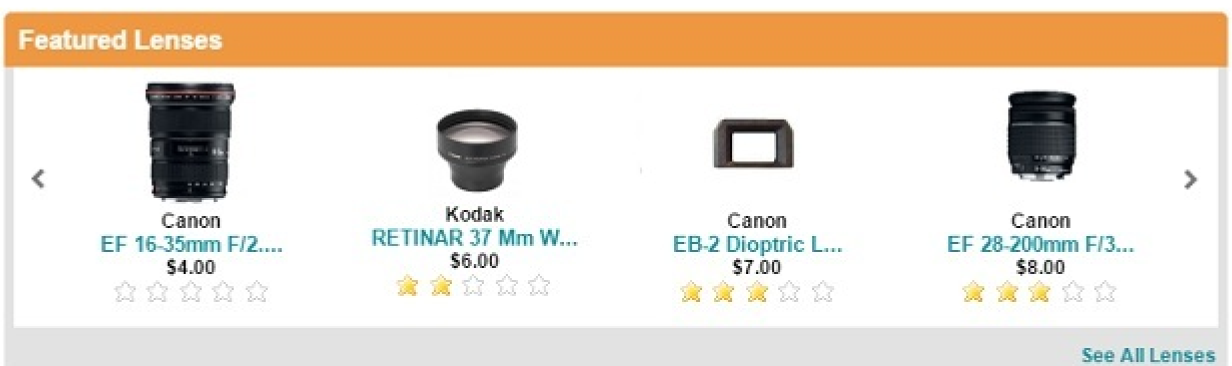
a. Unsure where this page is, Melanie clicks the Find Rules button .
b. She begins typing `Camera Access` in the **Filter this list...** field.

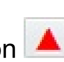
   She sees **Category - Camera Accessories & Supplies** in the Find Rules list and clicks it.
c. Melanie clicks the Show in Tree icon , so that she knows where this is located in the navigation tree.
d. She clicks Lenses Spotlight in the tree on the **Editor** tab.

   She sees **Sort by: product.review.avg_rating descending** in the query.
e. Melanie clicks **Edit Query**.

   She changes the **Sort by** field to **product.price ascending**, and clicks **OK**.
f. She clicks the **Notes** tab and then enters a comment that she changed the sort by parameter.

   She clicks **Save and Preview** to see her changes.



6. Melanie is prepared to publish the project. She sees a conflict icon  where the Project contents icon used to be.

a. She clicks the conflict icon and sees that the Contact Us page has a conflict with a recently published project.
b. She clicks the remove icon to remove the Contact Us page from her project.
c. In the navigation tree, she clicks Contact Us, so she can determine if another merchandiser updated the same contact information as she did.

   She contacts Paula, who is another merchandiser, and confirms that Paula had also updated the corporate headquarters address and published her project before Melanie attempted to publish her project.

7. Because Melanie's project is no longer in conflict with a published project, she decides that she can publish her project.
   a. Melanie clicks the project tile and then clicks **Publish**.
   b. When the confirmation dialog appears, she clicks **Publish** again.

Melanie's project has been published. All her updates are now part of the current Experience Manager application. If she want to make more changes, she must start a new project or open an unpublished project.

About multiple sites

Every application contains at least one site. For example, the Discover reference application contains the Discover Electronics web site. Experience Manager supports applications that can contain multiple web sites using a single index. Each web site in the application can have its own unique set of pages and data. These sites are sometimes known as storefronts or webshops.

Your development team creates sites in the application. These sites are collections of content and features that an end user experiences through a unique base URL. This URL might contain a unique domain or a unique path within a domain. Site filters can be used to limit the display of data to subset of the index for a particular site. You can create and manage specific pages for a site with Experience Manager while also sharing elements of the experience.

Filtering pages by site

If you have multiple sites in an application, you can filter pages by site so that only the pages for a specific site display in Experience Manager.

By default, all sites display in the navigation tree in Experience Manager. If you are only working on pages in a single site you can filter out all other sites.

To filter pages by site:

1. In the navigation tree, click the dropdown list in the **Site** field.

   If you have only one site in your application, this field does not appear in Experience Manager.
2. Click the name of the site that you want to display in Experience Manager.
   The **Site Pages** section of the navigation tree updates and displays only the pages of the site that you have chosen.

Finding summary information for a site

You can view the summary of a site that has been provided by your development team.

Your development team provides summary information that helps you to distinguish one site from another. This summary contains the site name and description as well as a URL pattern.

The URL pattern is the pattern used to match a URL to a specific site. The value defined for this property is based on the scheme used by the application to encode the site into the URL. When attempting to identify a site from a URL request, this pattern is matched against the URL. For example, the development team might specify `/DiscoverCamera` for a Discover Camera site. A pattern can be a domain, like `example.com`, or a URI, like `/DiscoverCamera`. A site can have multiple patterns. For example, `/DiscoverCamera`, `/Camera`, `example.com`.

To find summary information:

1. If your application has multiple sites, click the **Site** field and select either the **All sites**, or the individual site you are seeking.
2. In the **Site Pages** section of the navigation tree, click the site that has the summary information that you want to see.
   The summary page displays. You cannot change this information.

Managing site pages

You cannot share pages between sites, but you can move a page to another site or copy and paste a page into another site.

To move or copy and paste a page:

1. Check the toolbar and verify that you are working in the correct project.
2. If your application has more than one site, verify that **All Sites** displays in the **Sites** field above the navigation tree.
3. If you want to move a page between sites, follow these steps:
   a) Go to **Site Pages** and expand the source and target site nodes.
   b) In the source site, click the page and drag and drop it into the target site.
4. If you want a copy of an existing page in another site, follow these steps:
   a) Go to **Site Pages** and expand the source and target site nodes.
   b) In the source site, right-click the page that you want to copy and then click **Copy**.
   c) Right-click the target site, and then click **Paste**.
   A copy of the page displays in the target site.

Creating a page

You can create a URL-accessible page from **Site Pages** in the navigation tree of Experience Manager.

When you create a page, it is associated with a specific site. You cannot share pages between sites, but you can copy and paste a page into another site.

To create a page:

1. Check the toolbar and verify that you are working in the correct project.
2. If your application has more than one site, verify that the correct site or **All Sites** displays in the **Sites** field above the navigation tree.
3. In **Site Pages** in the navigation tree, go to the site where you want to add the page.

4. Right-click the site, and click **Add Page** to create a URL-accessible page.
   The **Add Page** dialog displays.
5. In the **Name/URL** text box, specify a name for your new page, and then click **Create**.
   The name you enter becomes part of the URL for the page.
6. Click **Select Template**.
   The Select Template dialog displays the templates that your development team created for your application.
7. Select a template appropriate for the page that you are building and click **OK**.
   If you want to build a dynamic page and set conditions under which the page displays, select a page slot template. If you want to build a page that is always accessible but where the page sections display dynamically, choose another type.
8. Click **Save**.

Next, you can create rules to dynamically populate your page.

Overview of creating a rule

With the Oracle Commerce Experience Manager, you create a rule, choose a template, and designate content for each section. You can specify when and where it is displayed.

The following describes the process for creating a rule with Experience Manager:

1. In **Rules** section of the navigation tree select the folder in which you want to create the rule.
2. Configure the rule:
   - Choose a template.
   - Set a location for your rule.
   - Specify active dates and times (optional).
   - Select a **User Segment** to restrict who sees your dynamic page (optional).
   - For each section, select and configure cartridges.
3. Save the rule.
4. Set the priority of the rule within the folder.

Creating rules

This section describes how to create a rule, choose a template, and add the rule to a folder.

About rules and folders

Rules can be organized into folders, which carry optional type restrictions and can be selected to populate sections of a page.

Rules

A rule describes the logic of how to promote content for display to application users. rules implement merchandising and content spotlighting features. Merchandising and spotlighting content is a process of identifying and promoting contextually relevant records to visitors as they navigate or search within a catalog.

Rules have several parts: the records in a data set, the conditions that must be met before those records are displayed, and the templates that determine how those records are rendered in the application. In short, the rule describes triggers as well as results. Dynamic pages and page sections are examples of rules. You can use rules to configure pages or sections to show global promotions, or to limit the display of featured products and categories to contextually relevant suggestions.

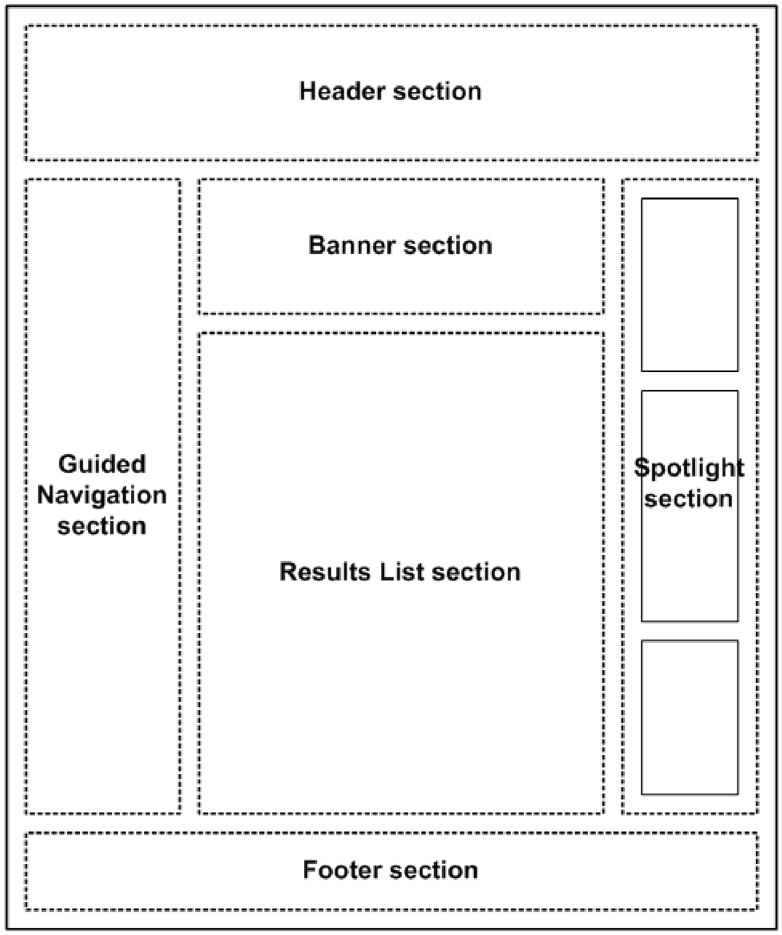
Folders

A folder is an organizational structure that contains one or more rules. Each folder can optionally include a restriction on the type of content that it contains. For example, to restrict a folder for "Product Spotlighting," you might restrict the folder to only allow cartridges of type SecondaryContent. Each rule in the folder is then configured with conditions that determine when that item displays in the application. To configure the section of the application page to populated with this content, you select a slot cartridge that references the Product Spotlighting folder. Slots let you populate content in the section based on triggers in the folder, independent of the page triggers.

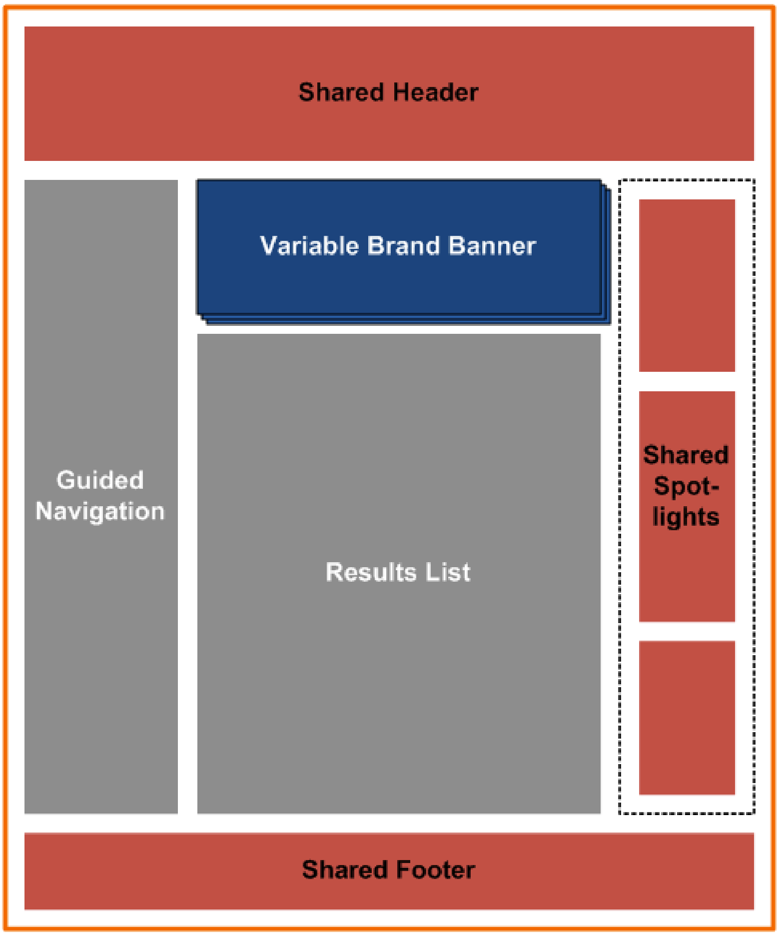
Folders can be created in the navigation tree either at the root of the **Rules** section or inside another folder. Oracle recommends that you create at least one folder for pages and one for each slot on the page that can contain either shared or variable content. This provides a logical organization of content. It lets content be triggered independently of the pages that contain them and also enables content in one slot to be triggered independently of content in another slot. If you work with multiple sites in Experience Manager, you can organize content by site. For example. you can create folders for content that is only triggered in a specific site as well as folders that contain content that is shared among sites.

Folder example

Suppose you have a site where a typical structure for a search and navigation page looks like the following template:

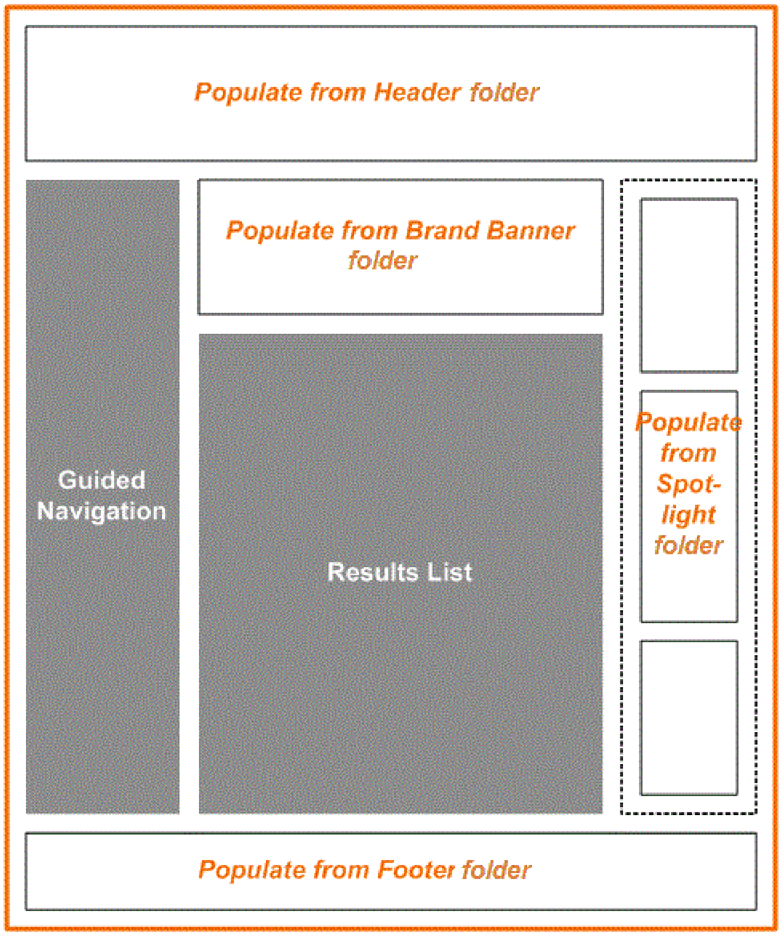


Based on this template, you want to configure a page for a specific trigger using contextual, shared, and variable content, for example, Category > Cameras > Digital Cameras.



- The header and footer are populated from a folder to avoid defining them multiple times for a large number of pages.
- The Guided Navigation and Results List cartridges are configured specifically for this page and do not need to vary based on criteria other than the page triggers.
- The Banner area is configured to display a different image depending on the brand that the visitor selects.
- The Spotlight area displays a mix of promotions based on triggers that are independent of the triggering criteria for the page itself. For example, a "Holiday Specials" spotlight might display for the date range between November 1 and January 2.

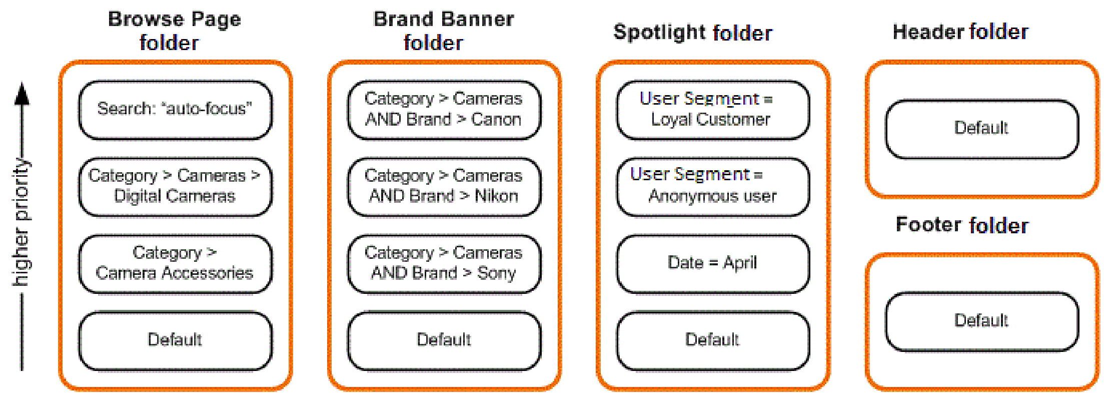
The configuration for the page looks like this picture:



The configuration for Guided Navigation, including which dimensions to display and which dimension values to boost or bury within those dimensions, and for the Results List, including default sort options and record boost and bury, are specified as part of the page configuration. The other sections of the page only contain placeholders. The actual Header, Footer, Banner, and Spotlight rules that display when someone visits the site are defined in their respective folders.

The mechanism for populating these page sections is the same regardless of whether the content that should display in each section is shared or variable content. The only difference between the two kinds of content is in the trigger criteria in the rules within the folders. Variable content, such as the Spotlight, has triggers that are more specific than the page trigger. Reusable content, such as the generic header and footer, has triggers that are more general than the page trigger.

When you create all the content needed to populate this page and other pages, the application might include the following rules in the following folders:

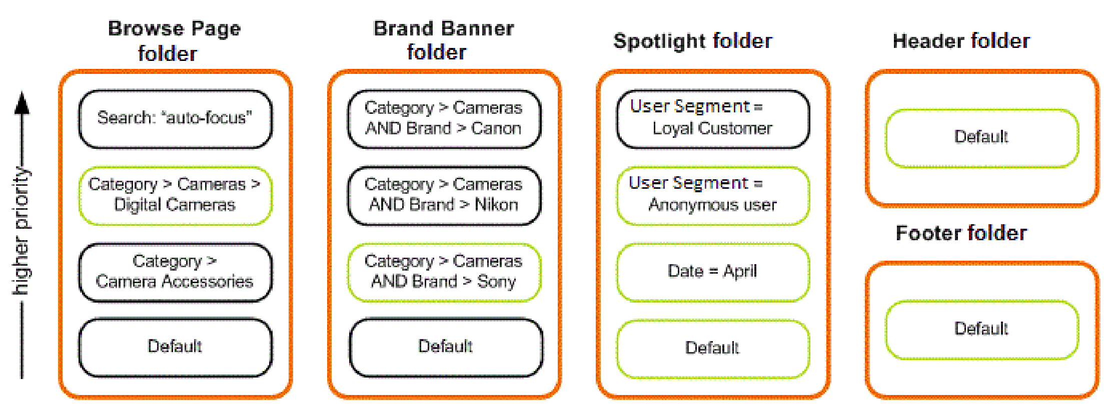


The folders are configured in the following ways:

- The Browse Page folder contains all the rules representing search and navigation pages in the site.
- The Brand Banner folder contains cartridges of type `MediumBanner` that are appropriate to display in the Banner section.
- The Spotlight folder contains cartridges of type `SidebarItem` because items created in this folder are intended to display in the Spotlight slot in the right column.
- The Header and Footer folders each contain cartridges of type `FullWidthContent`.

Each page or rule within these folders has an associated trigger and priority that you specify.

When a visitor refines on Category > Cameras > Digital Cameras and Brand > Sony, the following content displays. Green indicates that the rule has fired.

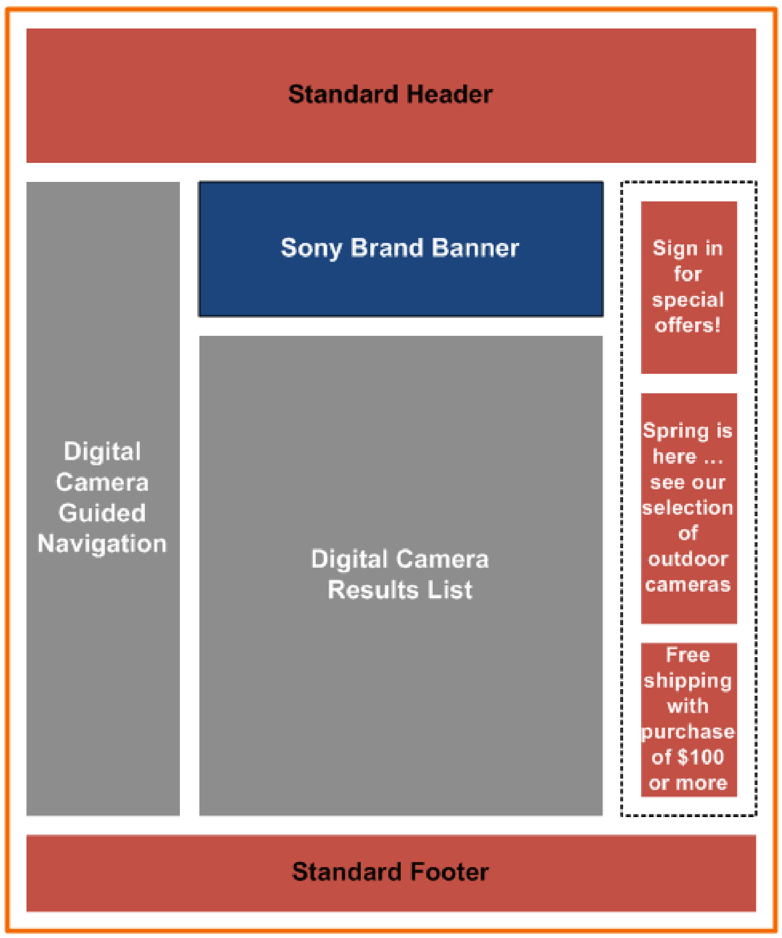


- The Digital Cameras page is returned from the Browse Page folder, which includes your configuration for Guided Navigation and for Results List. The Default page, containing a trigger of `Applies at all locations`, can also fire, but the Browse Page folder is limited to one rule and the Digital Cameras page has a higher priority, therefore it takes precedence and the Default page does not fire.
- The Banner slot is populated by the highest priority rule that matches the user's navigation state in the Brand Banner folder. In this case, it is the Sony cameras banner. Again, there is a Default banner but it does not fire because it has a lower priority.
- The Spotlight slot is populated by the highest priority rules that match the visitor's navigation state in the Spotlight folder. In this case, the Default spotlight does fire because there is room for three spotlights in this slot and that item has a high enough priority to be included. These three rules display in the Spotlight area in order of priority.

- The Header and Footer folders have only one rule each, which is set to display at all locations, therefore the same content is returned for this page as for all pages.

In this example, content is returned from five folders including the Browse Page folder. Priority between items is specified within each folder. It does not make sense to prioritize the Sony cameras banner against the April spotlight cartridge, for example, because they are not competing against each other to be displayed on the page. In general, rules with more specific trigger criteria should have a higher priority than those with more general criteria.

The final result for the site visitor who is looking at Sony cameras looks like the following picture:



Components of rules

Templates, sections, and cartridges are the core components of the rules that you create.

Templates

Templates define overall layout and style for a rule. In general, templates are created by developers to reflect samples designed by the creative team. The team creates templates for pages and sections of pages. The resulting documents are uploaded into Oracle Commerce Guided Search Rule Manager or Experience Manager and serve as a framework for you to build upon and customize.

Sections

Templates contain sections that serve as placeholders for the display of products, dimensions, promotions, rich media, and other forms of content. Developers configure each section to accept certain types of content in the form of a cartridge.

Cartridges

Cartridges are essentially mini-templates that you plug into sections and then configure to contain the content you want to display on your page. Each cartridge might have several fields to configure, and might contain additional cartridges. Depending on the cartridge you have selected, you might be asked to specify a path to an image or flash file, a title, rollover text, or additional cartridges. The simplest cartridges might need no configuration.

Templates and cartridges are custom-built by developers, so each might have a unique set of options for configuration.

Creating a rule

You can create rules in the root folder of Experience Manager, or within a content folder.

Rules determine the content that displays in a page or page section as well as any conditions that must be met before the content displays. Your application can reference the rule directly or dynamically by referencing the content folder that contains the item.

To create a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the folder and select **Add Rule**.
3. In the **Name** text box, specify a name for your new rule.
4. Click **Save**.
   The rule that you created only appears in the project. This allows you to edit and test your content until you have determined it is ready to publish to the site.

You still need to choose a template, determine when and where the content displays, and designate content.

Choosing a template

Templates are the starting point for building your rules.

To choose a template for a rule, or to change the template of an existing one:

1. Click the rule that you want to edit in the **Rules** section of the navigation tree.
2. Click **Select Template**.
3. From the **Select Template** menu choose a template appropriate for your rule.

   Note: If you change the template for an existing rule, any content configured prior to the change is lost.

4. Click **OK**.
5. Click **Save**.

Next, you can choose cartridges and designate content for each section in your template.

About configuring sections

Templates consist of configurable sections that serve as placeholders for the display of dimensions, promotions, rich media, and other forms of content. Typically, these sections are empty until you designate rules for them.

About slots

You can use a slot to control a page or page section and configure the slot to reference folders.

Instead of containing a single rule, a slot is configured to pull content from one or more folders. The slot dynamically populates the page or section based on the triggers and priority of the rules within the folders.

Using slots in page sections

Slots allow you to manage and trigger different sections of a page independently from the rest of the page. A page section can have multiple cartridges, but most cartridges can only point to a single rule. The exception is the slot cartridge. Page sections can display content using a different set of triggers from those used in the rest of the page. In this way slot sections are like dynamic mini-pages. See *About controlling the display of content* for more information on triggers.

Slots let you:

- Reuse content.

  Once a set of conditions has been created to manage a specific page section, slots let you share the page section across multiple pages.

- Vary your content.

  Page sections can display using a different set of triggers from those used in the rest of the page.

- Limit access to rules.

  When different sections of a page are managed in separate folders, a business user can make changes to just the triggers within a single folder and update all pages that reference that folder. The business user does not need access to the individual pages in order to update them.

Example uses of slots

Use slots for the following activities:

- Control the brand banner images that display throughout the site.
- Specify the images that display at a particular navigation state (for example, Digital Cameras > Kodak) even if there is no specific landing page for that navigation state.
- Display promotions in the menu area based on more specific trigger criteria than those that apply to the page as a whole. For example, you could create a page to use as a base for all "Digital Cameras" pages, and populate the menu sections with more specific content based on the brand, price range, or other dimensions.
- Display promotions in the menu area based on trigger criteria that are simply different from those on the page as a whole. For example, there might be a "Back to School" special for a particular time frame that applies to all pages within a category or even the entire site. This model lets you reuse content for individual sections across a variety of pages. The reusable sections are managed in a central location so that updates immediately take effect across all the pages that include the reused content. You do not need to edit each one manually.

Creating a folder

You can create folders to manage the content within slots.

A folder contains one or more rules, and can optionally be restricted by template type. You first create the folder, then add rules. Slots can reference this folder and other folders, using the trigger criteria on the rules within to determine the content to display.

To add a folder:

1. Right-click the folder and click **Add Folder**, or click the **Add Folder** button in the**Rules** header of the navigation tree, .
2. Enter a **Name**.

   Enter a name that describes the page or section where the content is likely to be used, for example, `Guided Navigation` or `Detail Pages`.
3. Select a content type from the **Content Type Allowed** drop-down list.

   Your folder is limited to rules of this type.
4. Click **Add**.

The folder displays in the **Rules** section of the navigation tree.

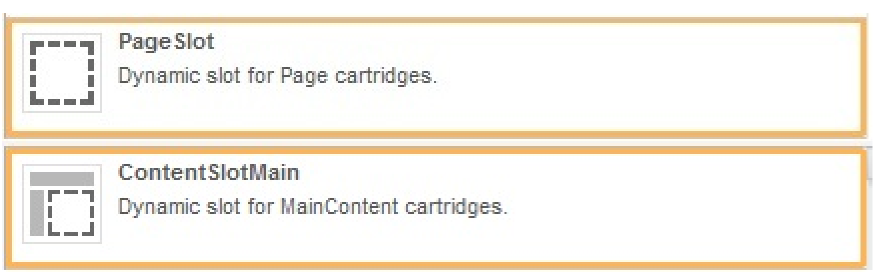
Creating a slot

You can create a slot for pages or page sections.

Slot cartridges control content in a page or a page section such as a sidebar. You configure the slot to reference one or more folders. If you are creating a slot for a page section, it populates the section with content using a different set of triggers from those used in the rest of the page.

1. In the **Rules** section of the navigation, right-click the folder where you want to add a rule with a slot and then click **Add Rule**.

   Alternatively, if you only want to create a page slot, hover the mouse pointer over **Pages** in the navigation, and then click **Add Page**.
2. Give the item a meaningful name.
3. Click **Select Template**.
   The dialog displays.
4. Choose a slot template from the list.
   For example, in the Discover Electronics reference application, PageSlot and ContentSlotMain are slots.

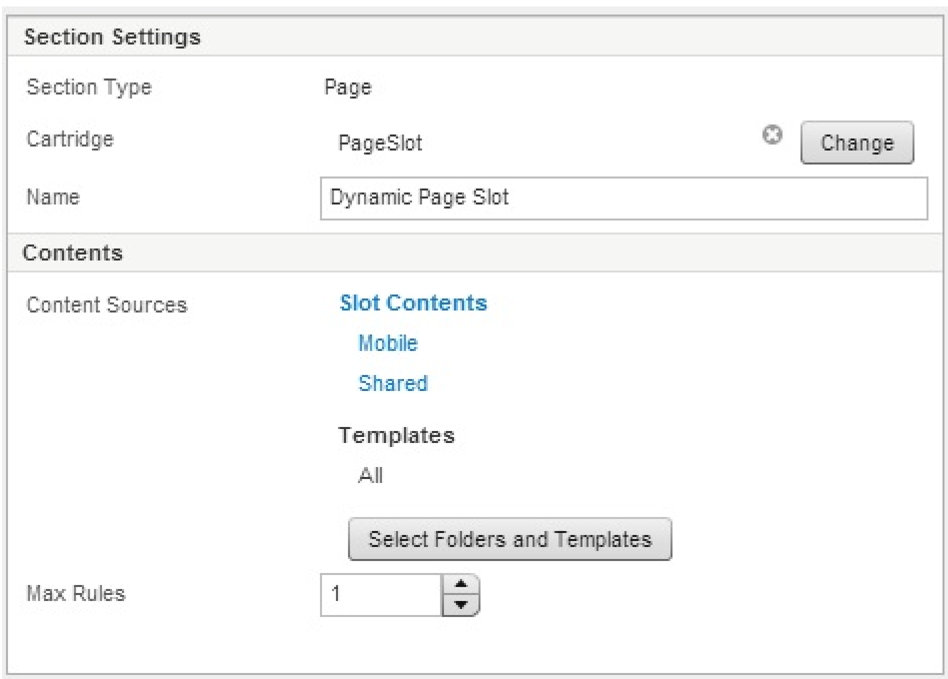


5. Enter a name for the slot.

6. In the **Contents** section, click **Select Folders and Templates** to select the folder or folders that contain rules for populating the slot.

   The list of available folders is restricted to the content type of the slot cartridge that you selected in Step 4.
7. Optionally, limit the folders that you can choose from by selecting templates that you want to use for the slot. Otherwise, all templates can be used in the slot.
   a) Click **Templates (All)**.
   b) Click **Include only selected**.
   c) Select the templates that you want to include.
8. Set the **Max Rules** toggle box to the maximum number of rules you wish to return for the slot.

   For example, a Page Slot cartridge should only return a single rule (an application page), while a Record Spotlight sidebar may return multiple featured records.
9. Click **OK**.
   The folders and templates that you have selected are listed under the **Contents** and heading.



10. Click the **Notes** tab and enter a comment that describes the slot or the update that you made to the slot.
11. Click **Save**.

Viewing content in slots

You can view and modify the rules that can appear within a slot.

As the list of content that can dynamically display in a slot grows, it becomes harder to manage the content and troubleshoot issues with content displaying according to specific triggered conditions. Experience Manager provides a slot view list that displays all of the rules that can potentially appear within a slot all in one place. You can use this list to see:

- The item name and the template that was used to create it. Hover the mouse over the item name to see the full path in the Experience Manager content tree.

- The visitor's location that triggers an item. The location is composed of the visitor's search queries and navigation selections within the application.
- The current state of an item: active or inactive. An active item can fire, an inactive item cannot.
- The last time that an item was modified and who modified it.

You can also use this list to delete, activate, or deactivate items

Note: Any change that you make to a rule in this slot is not just unique to this slot. The change is global and affects the rule no matter where it appears in your application.

1. To see the content within a slot, use one of these methods:
   - In the **Rules** section of the navigation tree, click the folder with the slot that you want to view.
   - For a page slot, in th **Site Pages** section of the navigation tree, click the page with the slot that you want to view or edit and then click **Slot Contents**.
   - If you are previewing the application, click **Hotspot** in the manifest, navigate to the slot in the edit area and then hover the mouse pointer over the slot menu in the upper right corner of the slot. Select **Edit** and then click **Slot Contents**.
2. If there are many items and you cannot see one that you are looking for, try one of these actions:
   - In the **Find** box, enter the full or partial rule name, location, template, or the name of another Experience Manager user.
   - Click a column head to resort the list.
   - Use the pagination controls at the bottom of dialog to page through the list.
3. Change the behavior of rules in the slot:
   - In the **Name** column, click a rule to open and edit an individual item.
   - In the **Locations** column, click the location to edit the location trigger that activates the rule when a user navigates.
   - In the **Active** column, deselect the check box to prevent the rule from displaying in your application.
   - In the **Priority** column, change the priority of the rule. By increasing the priority of a rule, you increase the likelihood that content displays if there are other rules with overlapping trigger criteria.
   - In the last column, click the Duplicate icon to create a copy of the rule in this slot.
   - In the last column, click the Delete icon to remove the rule from Experience Manager.
4. Click **Save**.

About applying one rule to multiple locations

Typically, there will be many locations deep within your catalog that do not have, or do not need, highly specialized dynamic experiences. These lower-traffic locations can still benefit from a common, stylized design and data-driven content and product spotlighting.

These deep low-traffic locations are called "long tails" because they represent the tail of a demand curve. While the more popular, high-traffic locations tend to see higher conversion rates individually, the long tails of catalogs have been shown to be worth more collectively. Because of this, creating dynamic experiences to cover the long tail products of your catalog can significantly boost overall conversion rates for your Web site.

You can create one rule, populate it with dynamic cartridges, and apply it to many different locations in your application. This simultaneously decreases the investment of time and effort, and increases the value of each of the long tails.

For example, you realize that your television category is performing poorly, and you decide to address the issue by creating a dynamic experience to help guide customers to the right television. It would take an enormous amount of time and effort to individually create unique rules for every possible location in a category, so instead you choose to create a single rule that will update and adjust as a user navigates through the application.

For this new rule, you choose a cartridge called "BestSellers." You click **Select Records** to choose products for that cartridge, but instead of selecting records by ID, you want to populate the cartridge with a dynamic set of records that will update and adjust as the user navigates through the application. In order to do that, you select the **Dynamic Records** option from the **Select Records** dialog box, and then choose refinements:

- Select the refinement Televisions > Best Sellers
- Select the **Restrict to Refinement State** checkbox

By restricting the results to the user's refinement state, you create a product spotlight that updates with relevant results every time a user navigates to a new location. This means that when the user is at Televisions > HDTV, the products that display in the spotlight are best-selling HDTVs. Then, if the user navigates to Televisions > HDTV > Sony, the products that display in the spotlight are best-selling Sony HDTVs.

By populating a rule dynamically instead of using static content, you create a relevant, engaging experience for all of the locations in your television category.

Note: You can only choose refinements that exist in your application. If your application developer has not defined the refinement set "Best Sellers," it does not display as an option.

Controlling the display of content

This section describes triggers and how to use them to control the display of content.

About controlling the display of content

Your application displays content only if a specified set of search and navigation conditions exist in the rule. These conditions are known as triggers.

When you have created a rule, you can set it to display content at a specific location in your application. The location is defined by a particular set of refinements or search terms that trigger the content to appear.

There are also triggers to control who sees the content, as well as triggers to specify the times and dates when content is active.

By default, a new rule has no trigger until you add one. You can choose not to add any specific location and instead allow the content to appear at every location in your Web application. This means that relevant content appears with any query a user makes—with any search term or refinement state. It also means that anyone can see it, and it is not constrained by a time frame.

If you choose not to add any locations to your rule, assign it a low priority. If you don't assign it a low priority, it will take precedence over rules in the same folder that are designed specifically for certain locations and prevent them from appearing.

Refinement trigger

One or more refinements that trigger content if a user navigates to a location that contains any of those refinement states.

For example, if your location is set to trigger on the refinement state Cameras > Digital Cameras > Canon, and a user navigates to Cameras > Digital Cameras and then to Canon, your content appears. The content does not appear if the user navigates only to Cameras > Digital Cameras.

Search term trigger

One or more search terms can trigger content to appear if a user's query includes the terms. You can specify one or more search terms and the match mode for the search terms. While you can only specify one search term or search term phrase per location, you can specify several locations for a single rule.

For example, if your location is set to trigger on the search term "Kodak," and a user searches for "Kodak," your content appears.

Combination triggers

You can specify both a search term trigger and a refinement trigger for a rule. If a location contains both a search term and a refinement state, both sets of criteria must be met in order for the content to appear.

For example, if your location is set to trigger on the refinement state Cameras > Digital Cameras and the search term "Ricoh," a user must search for the term "Ricoh" from the Cameras > Digital Cameras refinement state in order for the content to display.

User segment triggers

You can control who sees your content by associating the rule with a user segment. User segments enable Oracle Commerce applications to display content to an end user based on that user's identity.

For example, if you have a "Free Shipping" promotion but only "Members" are eligible, you would select the "Members" segment so that users identified as non-members would never see the promotion.

Date and time triggers

You can configure rules to be displayed only during specified periods of time by specifying start and end dates and, optionally, start and end times. The content will be displayed to users of your application only during the period of time that you specify.

For example, if you create a rule for a Digital Camera promotion that only runs between April 3 and May 6, you can set the promotion to automatically activate and deactivate on those dates.

Note that the Start Time, Start Date, End Time, and End Date values of rules are always evaluated with reference to the timezone of the Assembler. The timezone cannot be configured to any other time zone. This rule applies in Preview and in authoring and production environments.

If the timezone of your target audience is different from the timezone of the Assembler, you must take this difference into account when you set the Start Time, Start Date, End Time, and End Date values for content-items.

For example, if the Assembler is in a timezone three hours behind the timezone of the targeted audience for the web site, the start, end time of the content-items can be set to three hours earlier than the time when they are intended to be displayed. Thus, to cause these content-items to be displayed at 9:00 AM in the timezone of the web site's target audience, set their start time to 6:00 AM.

Similarly, if you preview your site in the context of a specific time - whether a time that you select in the Preview toolbar or the default preview date/time (which is the "current time" of your computer), that time will be interpreted in the timezone of the Assembler.

You can modify the current time in UserState using the `setDate()` method of the UserState class (in the `com.endeca.infront.content` package). For a description of the UserState class, refer to the Javadoc for the Assembler core API jar.

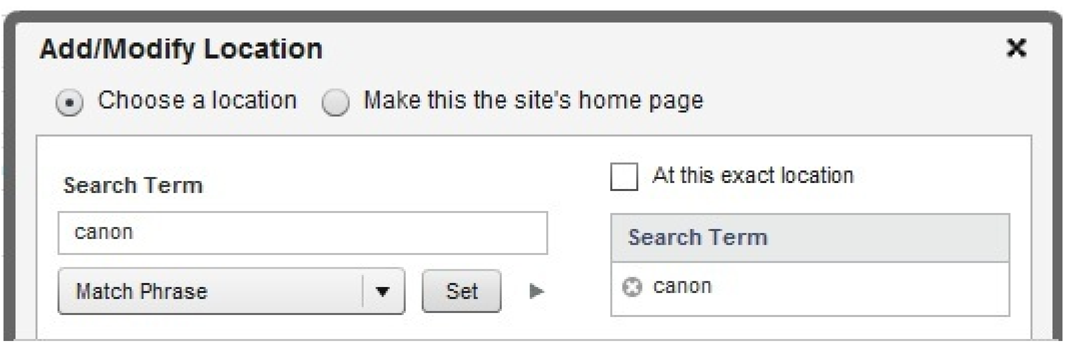
Triggering based on search terms

You can set a rule to be displayed when a user searches for specific terms.

For example, if you create a dynamic page for Canon cameras, you might want it to be displayed when a user searches for the term "Canon." You can accomplish this by setting the term "Canon" as a search term trigger.

To trigger based on a search term:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Add Location**.
   The **Add/Modify Location** dialog box sppears.
4. In the **Search Term** text box, type a search term or phrase.
5. Select a match mode from the drop-down list:
   - In **Match Phrase** mode (the default), all of the words in the user's query must match in the same order as the search term location for the rule to be displayed.
   - In **Match All** mode, all of the words of the user's query must match (without regard for order) the search term location for the rule to be displayed.
   - In **Match Exact** mode, all the words of the user's query must exactly match a the search term location for the rule to be displayed. Unlike the other two modes, a user's query must exactly match the search term location in the number of words and cannot include any extra words.
6. Click **Set** to copy the search term location to the **Search Term** list.



7. Click **OK**.
8. Click **Save**.

To specify multiple search term locations, repeat the previous steps. To add a refinement trigger, follow the steps for triggering based on refinements.

Triggering based on refinements

You can set a rule to display when a user navigates to a specific set of refinements in your application.

For example, if you create a rule for Canon cameras, you might want it to display when a user navigates to Cameras > Digital Cameras > Canon. You can set the content to display at that location by specifying a trigger based on the refinement state Cameras > Digital Cameras > Canon.

To trigger based on a refinement state:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Add Location**.
   The **Add/Modify Location** dialog box appears.

   Note: The Autosuggest feature in the Add Location dialog does not populate the results for languages (such as Greek and Russian) for which the default language analyzer is OLT, because OLT language analysis does not support wild card searches. For information about OLT language analysis and languages to which OLT is applied by default, refer to the Oracle Commerce Guided Search Internationalization Guide.
4. From the dimension tree under **Refinements** on the left, select the location where you want your rule to appear.
5. Click **Add** to copy the location into the **Refinements** list on the right.
6. Select a location option for where the content displays:
   - Select **At this exact location** to display the rule only at the exact location you specified. If a user submits a query from any other location, the content does not display. For example, if the refinement state you specify is Cameras > Digital Cameras, the content only displays at Cameras > Digital Cameras and not at Cameras > Digital Cameras > Canon or anywhere else that Cameras > Digital Cameras appears.
   - De-select **At this exact location** to display the rule at any location in the data set that matches the refinements specified. For example, if you specify the refinement state Cameras > Digital Cameras, the content also displays at Cameras > Digital Cameras > Canon and anywhere else that Cameras > Digital Cameras appears.
7. Click **OK**.
8. Click **Save**.

To specify more refinement triggers, repeat the previous steps. To add a search term trigger, follow the steps for triggering based on search terms.

Setting a home page location

You can create a rule that displays at the root location of your application. Typically, the root location for an application is the home page.

To set a rule as a home page:

1. Click the rule that you want to edit in the **Rules** section of the navigation tree.
2. Click **Add Location**.
   The **Add/Modify Location** dialog box displays.
3. Select **Make this page the site's home page**.
4. Click **OK**.
5. Click **Save**.

Controlling who sees content

You can restrict who sees your content by associating the rule with a user segment.

User segments allow Oracle Commerce applications to display content to a subset of users. When you associate a rule with a user segment, that user segment becomes another trigger for your rule. For example, if you have two user segments, "members" and "non-members," and you create a rule that contains a membership promotion, you might only want "non-members" to view it. In order to ensure that only users segmented as "non-members" view the content, you must associate that rule with the "non-member" user segment.

To associate a rule with a user segment:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Select User Segments**.
   The **Add/Modify User Segments** dialog box displays.
4. From the user segment tree on the left, select the user segment that you want to see the rule display.
5. Click **Add** to copy the user segment into the **User Segments** list on the right.
6. Click **OK**.
7. Click **Save**.

Triggering based on time

If you want a rule to appear only within a specific period of time, you can specify a date range, consisting of a start date and time, and, optionally, an expiration date and time.

For example, if you create a rule for a Back to School promotion, you can set the item to automatically activate on August 15 and automatically deactivate on September 8.

To specify rule activation dates:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Select Time**.
   The **Schedule** dialog box appears.
4. Select the **Activate this content only during a specific time** checkbox.
5. Select a start date and start time for the rule.
6. Optionally, you can set an expiration date.

   Note: If you choose not to specify an expiration date, the rule remains active until manually deactivated.

   a) Select the **Content Expires** checkbox.
   b) Specify an expiration date and time.
7. Click **OK**.
8. Click **Save**.

Note: The dates and times that you specify for a rule are evaluated with reference to the time zone of the machine hosting the Assembler. For information about how to specify dates and times that will cause the rule to be displayed at the times that you want, see *About controlling the display of content* on page 88.

About multiple triggers

If you want a rule to display in more than one location in an application, you can specify multiple triggers.

For a single trigger to display a rule, the user's query must meet all of the trigger's criteria. This means that all of the search terms and refinement states that you specified for the location must be present in the query. For example, if a rule is set to the location Cameras > Digital Cameras with the search term "Canon," then the user must specify both the search term and the refinement state in order for the content to display.

If your rule has more than one location, it displays at each of those locations as long as the conditions for the individual location are met. For example, if you have two locations:

- Cameras > Digital Cameras with the search term "Canon"
- Search term "Canon"

both display the rule as long as all of their individual criteria are met. The content displays at the location "Canon" as well as at Cameras > Digital Cameras with the search term "Canon."

To specify multiple locations, repeat the steps provided for triggering based on refinements and triggering based on search terms as many times as necessary.

If you have specified a date range for a rule or associated an item with a user segment, those conditions must also be met for the content to display.

Adding cartridges to rules

This section describes how to select and configure cartridges for your rules. If you have purchased Oracle Commerce Guided Search only and do not have Oracle Commerce Experience Manager, most of the core cartridges are not available in Workbench. Of the core cartridges, only the Record Spotlight cartridge is available in Rule Manager. Custom cartridges developed by your team can also be found in Rule Manager.

Selecting a cartridge

You designate the content of each rule section by selecting and configuring cartridges.

Every section is designed to accept a certain type of content in the form of a cartridge. For each section, you are presented with a set of cartridges from which to choose. Once you select a cartridge, you can configure it to include the content you need to display within that section.

To select a cartridge for a section:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Identify the section you want to add the cartridge to by using the navigation tree in the **Editor** and open it for editing.
4. Click **Add**.
   The **Select Cartridge** dialog displays.
5. Choose a cartridge from the list.
6. Click **OK**.
7. Click **Save**.

Once you have selected a cartridge for a section, you must configure it to display content appropriate for your section.

Configuring a cartridge

You can configure cartridges to contain information appropriate for each section of a rule.

Cartridges are the pieces of your page that contain the information displayed to users. By configuring cartridges, you can control the placement and display of dimensions, promotions, rich media and other forms of content.

To configure a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Identify the cartridge that you need to configure by using the navigation tree in the **Editor** and open it for editing.
4. Complete all required fields.

   Depending on the cartridge you have selected, you might be asked to specify a path to an image or flash file, a title, featured records, rollover text, or additional cartridges.
5. Click **Save**.

The simplest cartridges might need no configuration or only require that you enter text in fields. Other cartridges might need additional configuration.

About customizing dimension display

Refinements consist of dimensions and dimension values. Some cartridges allow you to change the order in which dimensions appear on a page.

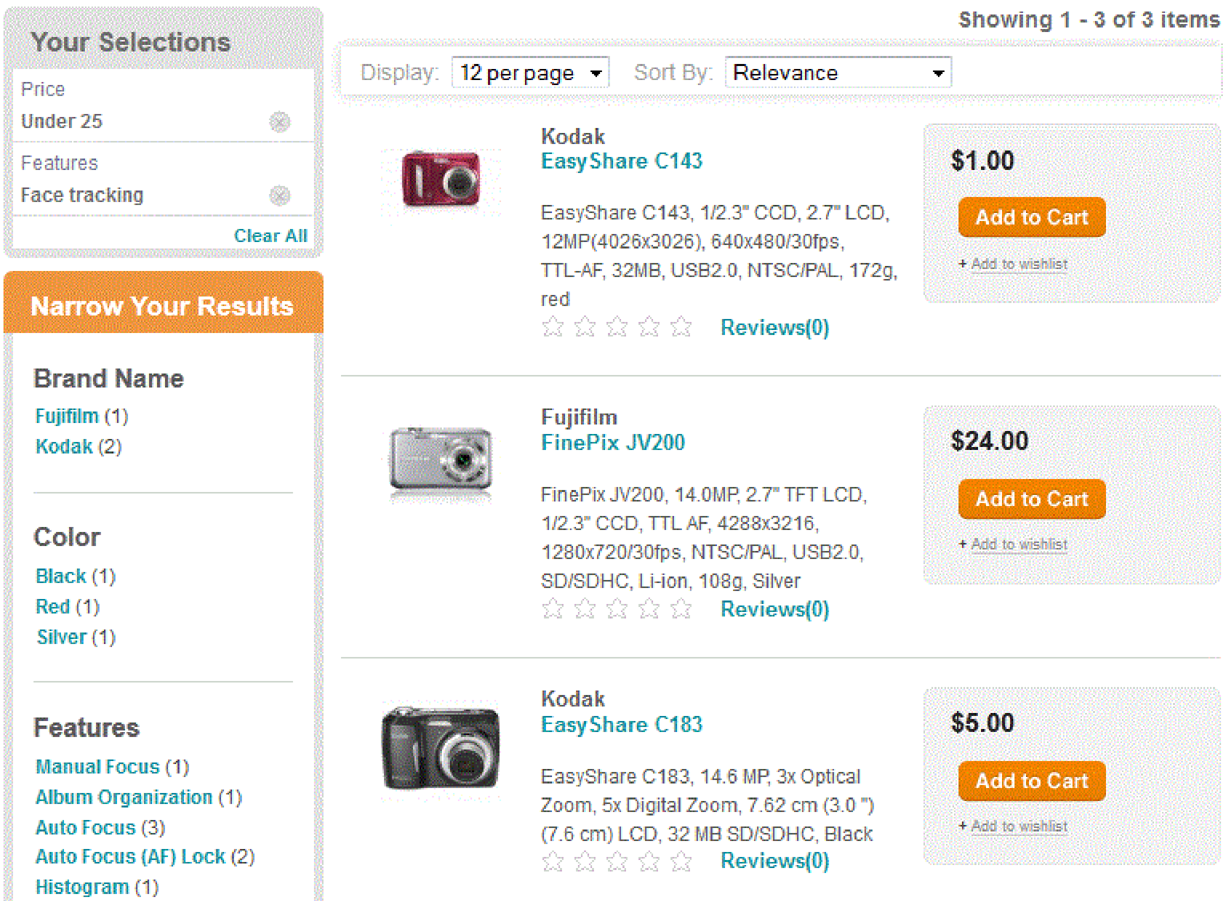
Dimensions are the top-level refinements. For example, a Camera application might use the following dimensions, among others:

- Brand Name
- Rating
- Price Range
- Color
- Features

Each dimension can have one or more dimension values. For example, Features can have the following values:

- Face Tracking
- Flash Exposure Lock
- USB Required

Visitors to your Web site can navigate using dimensions and dimension values. In the following example, the user has navigated to cameras under 25 dollars with face tracking.



Ordering of dimensions

By default, the Web site displays dimensions in an order that is specified by your technical team.

What you can do

With certain cartridges, you can override the default ordering of dimensions with Experience Manager. You can choose which dimensions display and in what order they display.

Customizing dimension display

Some cartridges allow you to choose which dimensions display and in what order they display.

To customize dimension order:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule that controls Guided Navigation from the **Rules** section of the navigation tree.
3. Click **Generate Guided Navigation**.

   The **Guided Navigation** dialog box displays.

4. Determine if you want to reuse the existing dimension list.
   - If you want to add dimensions to the current list, then click **No** in the **Remove existing cartridges** field.

- If you want your selections to replace the current list, then click **Yes** in the **Remove existing cartridges** field.

5. Select the dimensions that you want to display.

   The **Dimensions** tab contains all the dimensions that are available for this rule. You do not have to use all available dimensions. The **Selected** tab contains the dimensions that display.

   You can click **Select All** to add all the dimensions to the list.

6. Drag and drop the dimensions in the **Selected** box to order them.
7. Click **Generate Cartridges**.
   The new dimension list displays in the Guided Navigation rule.

About customizing the appearance of results lists

You can customize the results lists that appear for a rule by configuring the sort order, relevance ranking strategy, and number of records per page.

The following sections describe how you can customize each aspect of how results are presented:

Sort order

You can choose an order in which to sort the results, for example, **by Name (A-Z)**, **by Price (low to high)**, or **by Price, then Name**. The sort options are specified by your application developer for each cartridge.

If your application developer enables the functionality, a visitor to your Web site can specify a different way to sort results.

Relevance ranking

You can choose a relevance ranking strategy to apply to the results lists, including relevance ranking modules such as **Interpreted** or **Phrase**, or more complex strategies that use multiple modules together. The relevance ranking options are specified by your application developer for each cartridge.

Relevance ranking is only used when a visitor arrives at a location as the result of a search.

Records per page

You can specify how many records should appear on each page. Your application developer specifies a minimum and maximum number of records that can appear on a page.

Customizing the presentation of results lists

Some cartridges allow you to customize how results lists are presented.

Some of the options described here might not be available for customization in certain cartridges. You do not have to specify a choice for each option.

To customize the display of results:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule that controls results lists in the **Rules** section of the navigation tree.

Because your technical team controls the content of this configuration, it might have custom labeling. For example, if the cartridge is used for a grid layout, the label for the **Records per page** field might have additional information such as **Records (multiple of 4)**.

3. Enter a number of records to display per page.

   To use the site default, 10 records, leave the field blank.
4. Select a relevance ranking strategy.

   Your application developer specifies the names of the relevance ranking options that are available in the drop-down list. For details about how each option affects the order of results, contact your technical team.

   The relevance ranking strategy is used when a visitor arrives at a location as the result of a search. Otherwise, the sort order is used to determine the order of the results.
5. Select a default sort order for the results.

   To use the default sorting behavior for the Web site, select the **Default** option in the drop-down list.

Specifying spotlight records for a cartridge

Some types of cartridges let you specify records to spotlight on your rule.

To spotlight specific records from your catalog, select the **Specific records** radio button in the **Spotlight Records** area of the cartridge. To dynamically spotlight a set of records, select the **By query** radio button.

Note: Not all templates and cartridges are designed to spotlight records.

To add a spotlight record to a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule in the **Rules** section of the navigation tree.
3. In the **Spotlight Records** pane, select the **Specific Records** radio button.
4. Click **Edit List**.
   The **Select Records** dialog box displays.
5. Select a record in the product list by clicking the corresponding checkbox.
   The record is added to the **Selected Records** tab.
6. Optionally, repeat the previous step to add additional records to the cartridge.

   Cartridges are configured to spotlight only a certain number of records. You can add additional records until you reach this maximum value.
7. Optionally, navigate to the **Selected Records** tab to change the order in which records display.
   a) Enter a priority value in the **Order** column to assign a new priority to the corresponding record.

      Records with a lower priority value appear before those with a higher priority value.
8. Click **OK**.
9. Click **Save**.

To add dynamic spotlight records to a cartridge, follow the steps for specifying dynamic spotlight records for a cartridge.

Specifying dynamic spotlight records for a cartridge

Some types of cartridges let you spotlight a set of records that are contextually relevant to your rule. You can configure a cartridge to display records based on specified refinements.

To dynamically spotlight a set of records, select the **By query** radio button in the **Spotlight Records** area of the cartridge. To spotlight specific records from your catalog, select the **Specific records** radio button.

For example, if you create a page for camera bags, you can configure a cartridge to display a dynamic set of top rated bags without having to pick specific records.

Note: Not all templates and cartridges are designed to spotlight records.

To specify dynamic spotlight records for a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a cartridge in the **Rules** section of the navigation tree.
3. In the **Spotlight Records** pane, select the **Records selected by query** radio button.
4. Click **Edit Query**.
   The **Select Records** dialog displays.
5. Select one or more refinements in the **Narrow Your Results** pane.
   The refinements appear in the **Filtered State** box.
6. Click **OK**.
7. Optionally, set a maximum number of records to display using the **Number of Records:** drop-down.
8. Optionally, restrict the record results to the current refinement state by selecting **Restrict to active refinements**.
   - Selecting **Restrict to active refinements** uses a combination of the specified refinements and a user's current refinement state to determine which records to display. For example, if you are promoting highly rated camera bags, the record results will vary based on a user's refinement state. If the user has browsed to Bags & Cases> Case Logic, then only top rated bags from Case Logic display. If the user is viewing Bags & Cases > Ricoh, then only top rated bags from Ricoh display.
   - De-selecting **Restrict to active refinements** uses only the specified refinements to determine which records display. The user's current refinement state is ignored. For example, if you are promoting top rated camera bags, the record results display the same set of top rated camera bags no matter what the user's refinement state is.
9. Click **Save**.

To add specific records to a cartridge, follow the steps for specifying spotlight records for a cartridge.

Boosting and burying records

Some types of cartridges let you define what products you want to boost or put on top of the search results list. You can also define products to bury or place deeper in your results.

To boost or bury specific records from your catalog, select the **Specific records** radio button in the **Spotlight Records** area of the cartridge. To dynamically boost or bury a set of records, select the **By query** radio button.

Note: Not all templates and cartridges are designed to boost or bury records.

To boost or bury records in a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule from the **Rules** section of the navigation of the navigation tree.
3. In a the cartridge, select the records to boost. In the **Boosted Records** pane, select the **Specific Records** radio button.
4. Click **Edit List**.
   The **Select Records** dialog box displays.
5. Select a record in the product list by clicking the corresponding checkbox.
   The record is added to the **Selected Records** tab.
6. Optionally, repeat the previous step to add additional records to the cartridge.

   Cartridges are configured to spotlight only a certain number of records. You can add additional records until you reach this maximum value.
7. Optionally, navigate to the **Selected Records** tab to change the order in which records display.
   a) Enter a priority value in the **Order** column to assign a new priority to the corresponding record.

      Records with a lower priority value appear before those with a higher priority value.
8. Click **OK**.
9. Select the records to bury. In the **Buried Records** pane, select the **Specific Records** radio button.
10. Repeat Steps 5-9.
11. Click **Save**.

Boosting and burying records dynamically

Some types of cartridges enable you to boost or bury a set of records that are contextually relevant to your search results list. You can configure a cartridge to boost or bury records based on specified refinements.

To dynamically boost or bury a set of records, select the **By query** radio button in the **Spotlight Records** area of the cartridge. To boost or bury specific records from your catalog, select the **Specific records** radio button.

Note: Not all templates and cartridges are designed to boost or bury records.

To boost or bury records dynamically:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule from the **Rules** section of the navigation tree.
3. Within the rule, select the cartridge.
4. In the **Boosted Records** pane, select the **By Query** radio button.
5. Click **Edit Query**.
   The **Select Records** dialog displays.
6. Select one or more refinements in the **Narrow Your Results** pane.
   The refinements appear in the **Filtered State** box.
7. Click **OK**.
8. Optionally, set a maximum number of records to display using the **Number of Records:** drop-down.
9. Optionally, restrict the record results to the current refinement state by selecting **Restrict to active refinements**.

   - Selecting **Restrict to active refinements** uses a combination of the specified refinements and a user's current refinement state to determine which records to display. For example, if you are promoting highly rated camera bags, the record results will vary based on a user's refinement state. If the user has

browsed to Bags & Cases> Case Logic, then only top rated bags from Case Logic display. If the user is viewing Bags & Cases > Ricoh, then only top rated bags from Ricoh display.
- De-selecting **Restrict to active refinements** uses only the specified refinements to determine which records display. The user's current refinement state is ignored. For example, if you are promoting top rated camera bags, the record results display the same set of top rated camera bags no matter what the user's refinement state is.

10. Repeat Steps 6-9.
11. Click **Save**.

About the image preview feature

For cartridges that are designed to display images, your application developer may have enabled image preview to help you confirm that you have entered the correct image URL.

If a cartridge includes more than one field to define an image URL, you must fill in all fields before the image preview displays. Once the preview has loaded, you can click on the preview image to see a full-size version of the image.

Prioritizing rules

This section explains the concept of rule priority and describes how to prioritize content.

About rule priority

Rules within a folder are prioritized numerically, with the lowest numbers given the highest priority. By increasing the priority of a rule, you increase the likelihood that content displays if there are other rules with overlapping trigger criteria.

For example, you have two rules in a folder with these settings:

- A "Digital Cameras" page that is set to trigger at the refinement state Cameras > Digital Cameras and allowed to display at any location that matches Cameras > Digital Cameras
- A "Digital Cameras from Canon" page that is set to trigger at the refinement state Cameras > Digital Cameras> Canon and restricted to display at only that exact location

If you prioritize "Digital Cameras from Canon" as a "1," and "Digital Cameras" as a "2," then"Digital Cameras from Canon" will always be evaluated first. That means that even though both pages *could* display to a user who navigated to Cameras > Digital Cameras> Canon, only "Digital Cameras from Canon" will display. The Digital Cameras" page still displays at any other location where a user navigates to Cameras > Digital Cameras, but it will always be evaluated after the more specific "Digital Cameras from Canon" page.

If, however, you were to prioritize "Digital Cameras" before "Digital Cameras from Canon," then the page "Digital Cameras from Canon" would never display in your application. It is important to make sure that more specific pages (pages with more complex triggering criteria) are given high priority to prevent them from being blocked by more general pages.

Prioritizing rules

New rules are automatically listed in the folder with the lowest priority. You need to manually assign the appropriate priority number to each rule that you create.

The **Priority** column of the folder allows you to increase or decrease the priority of a rule.

To assign or change the priority of a rule:

1. In the **Rules** section of the navigation tree, click the folder with the rules that you need to prioritize.
2. In the **Priority** column, highlight the number in the text box of the rule that you want to re-prioritize and replace it with the new priority number. For example, if you want a rule to have the highest priority, type `1`.
3. Click **Save**.

Tips and troubleshooting for rule priority

It is important to make sure that more specific rules with more complex triggering criteria are given high priority to prevent them from being blocked by more generic items.

- If you have a home page dynamic page, or dynamic pages that are not constrained by the **At this exact location** setting in the **Add/Modify Location** dialog, make sure that they are prioritized near the bottom of the folder list. They might block other pages from displaying.
- Make sure that rules with more complex triggering criteria are placed higher on the list. For example, you should place a dynamic page set to the location Cameras > Digital Cameras > Canon higher than a dynamic page set to the location Cameras > Digital Cameras.
- Other folders might affect the results of the folder that you are viewing.

Previewing content

This section provides instructions for previewing content.

About previewing content

Previewing allows you to edit and test the content in your project until you have determined that it is ready for use in the application.

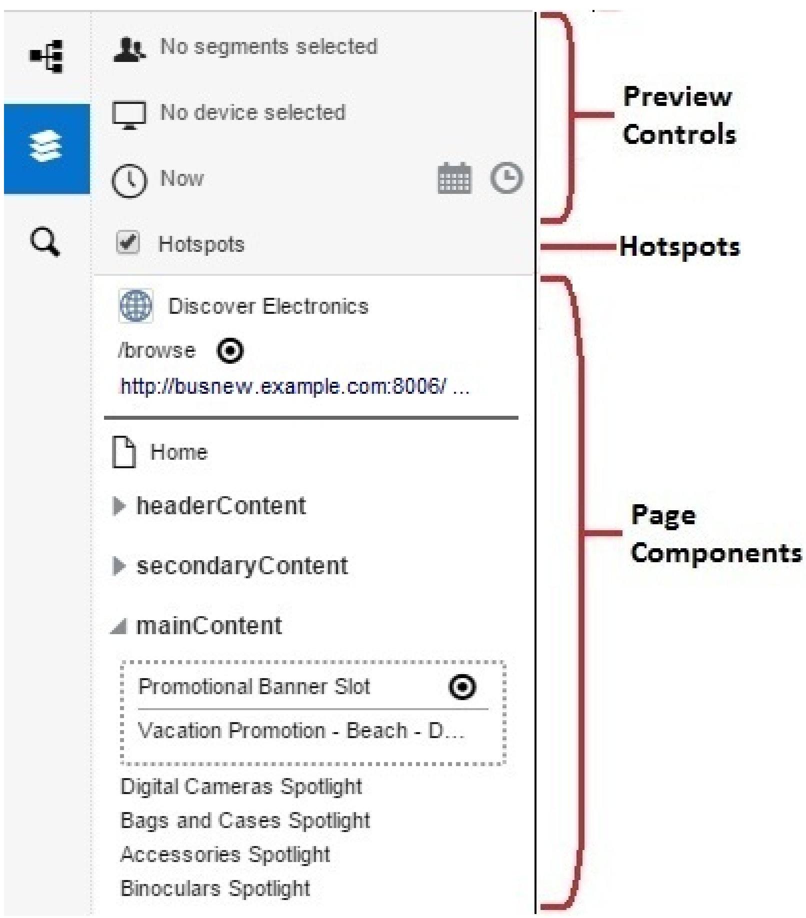
Previewing your project lets you determine why each rule does or does not display when you search and navigate in the preview application. With the preview information, you can better understand how rules behave by testing them in your project before publishing them. Only active rules can be previewed; inactive rules cannot be previewed.

Manifest

When you preview project content, a manifest opens in the side panel of Experience Manager. The manifest lets you interact with the components of the page that you are previewing, as well as control preview behavior. The manifest provides a means to analyze and modify the rules and content used in page assembly. The manifest refreshes whenever the preview page is updated, so the manifest is always current.

The manifest is divided into the following sections:

- **Preview controls** are in the top panel. This panel provides controls for selecting different parameters of the shopper experience such as output device, user segment, and date and time of viewing. This helps to determine how those parameters impact the rules selected and display on the page.
- **Hotspots** is also in the top panel. Use this checkbox for turning on hotspots in your preview panel so that action menus appear in the slot components of your page. Hotspots aid you in auditing and editing slots.
- **Page components** is the bottom panel. This panel displays information about the current page that you are previewing:
  - Site in which the page appears
  - Page path
  - Shareable preview URL
  - For page slots, the rule that fired in the slot.
  - Sections in the page
  - Slots and inline cartridges in the section.
  - Rules that fired in the slots.



Previewing content

While you are creating rules in your project, it is important to test them and ensure that they render and behave as you intended.

You can test rules using the preview feature available in Experience Manager. Content appears as you search and navigate through the preview application.

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the rule that you want to preview.
3. Click **Preview**.

   If the rule that you are previewing appears on more than one page, a selection dialog appears. Select a page that you want to preview.

   If the layout of the page is not quite what you expected, note that hotspot mode includes extra padding between some components. Try turning off hotspots by clicking the **Hotspot** checkbox in the manifest.
4. Change how the content displays for different users, devices, dates and time in the Preview Controls section of the manifest:
   a) Select the user segments that you want to be in use when previewing.
   b) Select a time frame in which you want to see the content.
   c) Select the type of device that you want to simulate when previewing.

   The preview application automatically refreshes, and the **Manifest** icon in the sidebar displays a dot to indicate that a device has been set. This dot appears whenever you set a user segment, a time, or a device type. If you clear the settings, preview refreshes and the dot disappears.

   
5. Repeat the previous steps until you achieve the intended results.

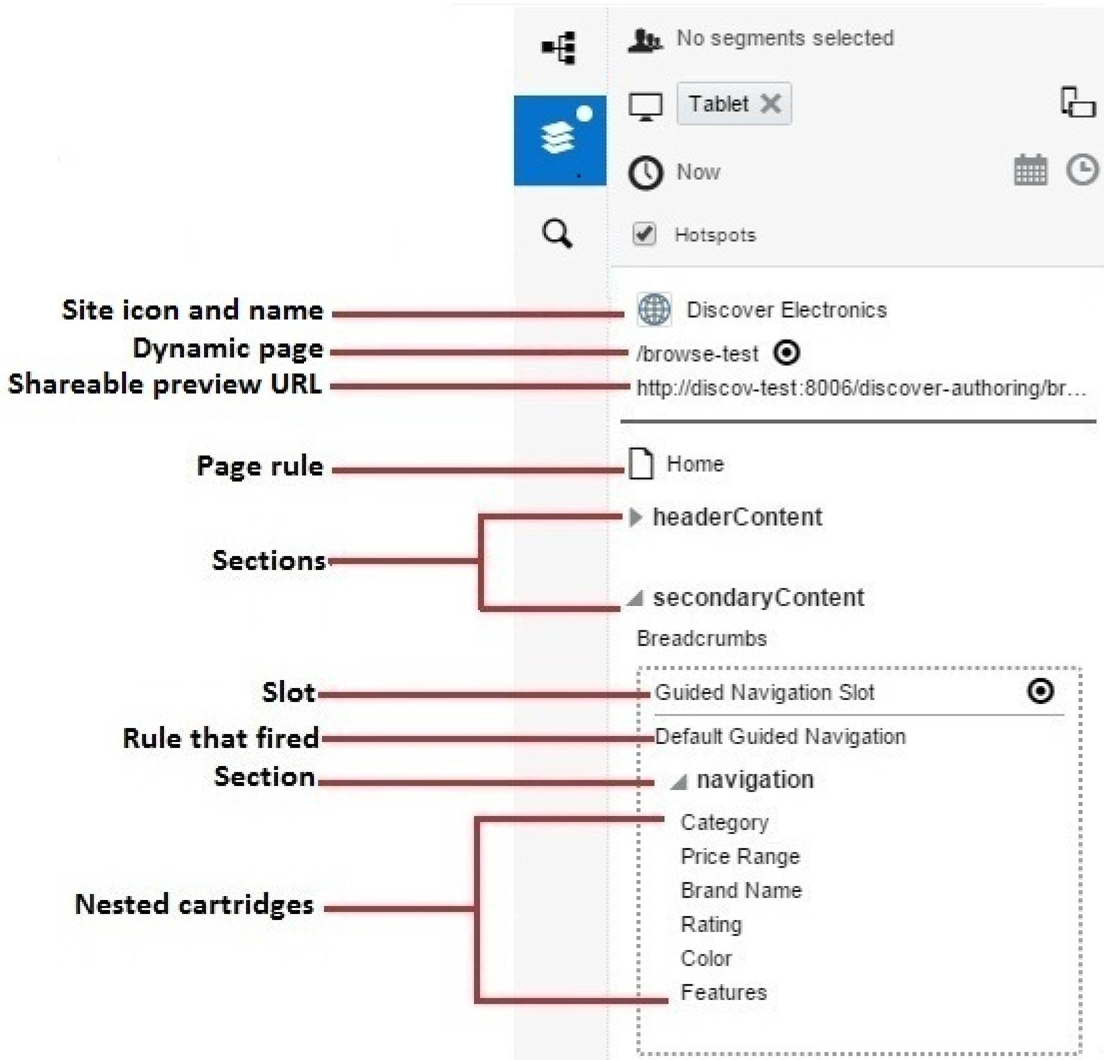
Working with page components in the manifest

The manifest lets you access components of the page that you are previewing. The manifest helps to interpret how this complex dynamic system came to assemble to the current shopper's page. The page can be either a static, URL-accessible page that contains cartridges and slots, or a dynamic page in which a page rule has fired.

Dynamic pages have an Audit button next to the page path. URL-accessible pages do not have the Audit button. Following the page path in the manifest, is the preview URL that can be shared with co-workers so they can view the preview page of in the context of your project. Following the preview URL is the page rule that fired if the page is a dynamic page. The page rule is identified by the page icon in front of it.

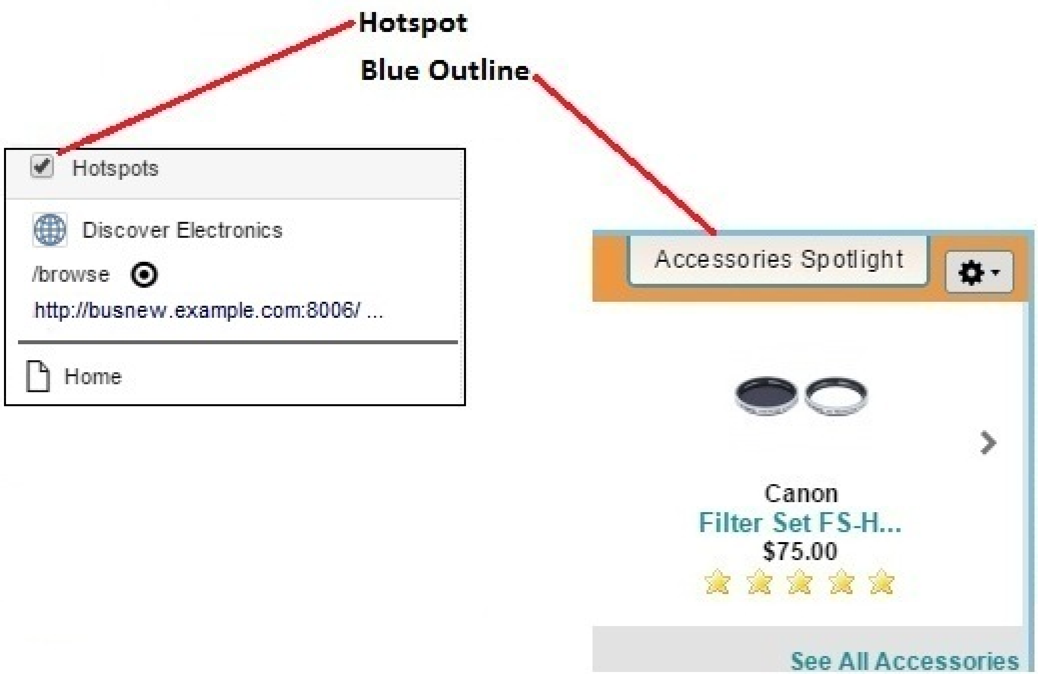
Pages are composed of sections. Page sections in the manifest are identified by the twisty icon that expands and collapses the section. You can expand the section to see a list of the in-line cartridges and slots within the section. Similar to a dynamic page, a slot has an Audit button next the slot name, while an in-line cartridge does not. In addition, the slot is outlined by a blue box when you hover the mouse over it.

The rules that fired in the slot appear under the slot name in the manifest. If a rule that fires in the slot contains cartridges or more slots, then these components are nested under the rule.



Moving around the manifest and the preview page

Click the **Hotspots** check box in the toolbar above the page components section to enable hotspots. As you hover your mouse around different areas of the page components section of the manifest, the corresponding hotspot on the preview page in the edit area gets outlined by a blue box. The opposite action behaves similarly: when you move your mouse to a menu  in a component on the preview page, then the corresponding component in the manifest gets highlighted or outlined in a blue box.



Interacting with page components

You can use the manifest to initiate the following actions:

- **Editing**

  Click a rule, slot or cartridge to open an editor for that item. You do not need to return to the navigation tree to open an editor.

- **Auditing**

  Click an Audit icon ⦿ next to the slot name to see an audit list and troubleshoot unexpected rule behavior.

- **Showing content in the navigation tree**

  Right-click an item and click **Show in Tree** to see where content appears in the navigation tree.

Copying the preview URL

You can share the preview URL that appears in the manifest so that you can point a co-worker to a specific preview context of interest.

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the rule that you want to preview.
3. Click **Preview**.

   If the rule that you are previewing appears on more than one page, a selection dialog appears. Select a page that you want to preview.
4. In the Page Components section of the manifest, locate the preview URL. Note that there are two URLs. The first one is a relative page URL that is a link, for example `/browse`. The second one is the preview URL which is text-only. It is a fully qualified URL. See the following example.

5. Right-click the preview URL, and select **Copy**.
   The copy is ready for sharing with others.

Changing device orientation

If you want to see how your application displays in a mobile device like a tablet or a smartphone, you can switch between portrait and landscape orientations.

The devices that the application can appear in must be configured before you can use the device control. See the *Oracle Commerce Guided Search Assembler Application Developer's Guide*.

Follow these steps to switch your devices orientation

1. In the **Rules** section of the navigation tree, right-click the rule that you want to preview.
2. Click **Preview**.

   If the rule that you are previewing appears on more than one page, a selection dialog appears. Select a page that you want to preview.
3. In the preview controls section of the manifest, select the device and then click the Rotate icon.

When you click the Rotate icon, the previewed page refreshes and switches between portrait and landscape mode. If the page does not fit in the device's screen, you see a horizontal line -- a *fold*. This fold shows where the page is divided between areas that need to be scrolled to. The end user would need to scroll through the areas to see the contents of the whole page.

You can interact with elements above and below the fold.

Expanding the preview panel

The preview panel appears in the edit area of Experience Manager. You can expand this area by hiding the side panel that holds the navigation tree and the manifest. This reduces the amount of horizontal scrolling you need to do to see your previewed application.

To hide the side panel, click the Hide icon « in the lower part of the sidebar.

Auditing a slot

You can audit a slot to determine the rule that is firing and troubleshoot unexpected behavior.

To determine which rule fires in a slot in the preview of your project, follow these steps.

1. In the navigation tree, click the rule or page that you want to preview.

2. Click **Preview** in the rule editor that appears in the edit area.

   If a rule that you are previewing appears on more than one page, a selection dialog appears. Select a page that you want to preview.

   Information about the previewed page appears in the manifest.

3. In the manifest, click the Audit button for the slot that you want to audit.

   The rule that fired has a status of **Fired** in the first column of the Audit list. See the following table for additional information about the list.

Column	Description
Status	Indicates if a rule has fired.
Name	Displays the rule name. Click the name to open and edit the rule.
Template	Displays the template name. Templates define the overall style and layout of a rule.
Path	Displays the path in the navigation tree. Click the Show in Tree icon to show the rule location in the navigation tree.
Locations	Displays the location criteria that triggers the rule. Location is a combination of the end user's search and navigation state. Click location to load preview based on this rule's location.
User Segments	Displays the user segment criteria that fires the rule.
Schedule	Displays the start date and end date that fires the rule.
Active	Indicates if a rule is active and can potentially fire. Inactive rules can never fire.
Priority	Displays the priority of the rule. Rules are prioritized numerically. The lowest numbers have the highest priority. Increase the priority of a rule to increase the likelihood that content displays if there are other rules with overlapping trigger criteria.
Modified	Displays the timestamp for the last time that the rule was edited and the name of the last user to edit the rule.
Duplicate/Delete	Click to duplicate the rule. Click to remove the rule.

4. If there are many rules and you cannot see one that you are looking for, try one of these actions:
   - In the **Find** box, enter the full or partial rule name, location, template, or the name of another Workbench user.
   - Click a column head to re-sort the list.
   - Use the pagination controls at the bottom of the dialog to page through the list.

5. Change the firing behavior of rules in the slot:
   - In the **Action** column, click the checkbox of an active rule to prevent it from ever firing in your application.
   - In the **Priority** column, highlight the number in the text box of the item that you want to re-prioritize and replace it with the new priority number. For example, if you want a rule to have the highest priority, type `1`.
   - In the Duplicate/Delete column, click the Delete icon to remove the rule from Experience Manager.

When you click the Delete icon, that row's contents are marked for deletion and an **Undo** link displays. Clicking this link restores the contents of the row to the state just before you clicked the Delete icon.

- In the Duplicate column, click the Duplicate icon to add a duplicate copy of the rule in this list. Duplicating a rule provides a convenient starting point for creating similar rules.

6. Click **Save and Preview**.
   The preview application displays any changes that you have made to your project in audit mode. If you are not satisfied with the results, click **Keep Editing** to make more changes.

Editing content in preview

You can edit project content while you are in the preview panel without having to return to the edit view of your application.

Follow these steps to edit your content:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the rule that you want to preview.
3. Click **Preview**.

   If the rule that you are previewing appears on more than one page, a selection dialog appears. Select a page that you want to preview.

   The information about the previewed page appears in the manifest. If the layout of the page is not quite what you expect, note that hotspot mode includes extra padding between some components. Try turning off hotspot mode by clicking the **Hotspots** checkbox.

   During your preview session, if you want to return to the place where you started in the **Rules** navigation, click **Keep Editing**.
4. Hover the mouse over the menu in the section of the preview application that you want to edit and click **Edit**.

   Alternatively, in the manifest you can right-click the item you want to edit and click **Edit**.
5. Once you have finished editing your project, click **Save**.
   Any changes that you made are reflected in the preview application.
6. Once you have finished editing, click **Save and Preview** to see your changes.
   If you are not satisfied with the results, click **Keep Editing** to make more changes.

If you need to see the navigation tree that displays along the left side of Experience Manager while you edit, hover the mouse over the menu in the section of the preview that you want to edit and click **Show in tree**.

Managing rules

This section contains instructions for modifying existing rules.

Searching for a rule

If you know the name of a rule and you are not sure which folder it is in, you can search for it from the navigation tree.

Follow these instructions to search for a rule.

1. Check the toolbar and verify that you are working in the correct project.
2. In the navigation tree, click the Find All button.
   The **Find All** panel appears, listing every rule in your application.
3. Enter the name of the rule you are trying to find in the **Filter this list...** box.
   The list displays the rules that match your entry.

If you know the specific folder that holds the rule that you are trying to find, you can click the folder. Only the rules in that folder appear in the edit panel.

Duplicating an existing rule

Duplicating a rule provides a convenient starting point for creating similar ones.

To duplicate a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the rule that you want to copy, and then click **Duplicate**.
   A duplicate copy of the rule opens with **- copy** appended to the name.
3. Modify the rule as necessary.
4. Click **Save**.
   The duplicate rule is saved in the same folder as the original one.

Annotating rule updates

As you update your rules, you can enter descriptions or justifications for your changes in the comment field on the **Information** tab of the rule.

You can also read previous comments to find out why other users have made updates to the rule. The **Information** tab also lists when the rule was created and the last time that the rule was modified, as well as who created and modified it.

To modify and annotate a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule that you want to modify.
   The rule appears in the edit area.
3. Make the necessary modifications.
4. Click the **Information** tab and enter a comment that describes the update that you made to the item.
5. Click **Save**.

Modifying a rule location

If necessary, you can change the location of a rule.

To modify a rule location:

1. Click the rule you need to edit in the **Rules** section of the navigation tree.
2. In the **Location** field of the **Summary**, click the location that you want to modify.

   The **Add/Modify Location** dialog box displays.

3. Modify the location.
4. Click **OK**.
5. Click the **Information** tab and enter a comment that describes the update that you made to the item.
6. Click **Save**.

Deleting a rule location

If necessary, you can remove locations from rules.

To delete a location:

1. In the **Rules** section of the navigation tree, select the rule with the location that you need to delete.
2. In the **Location** field of the rule **Summary**, click the **X** icon next to the location that you need to remove.
3. Click **Save**.

The rule no longer displays content at that location.

Changing a cartridge

You can rearrange or replace an existing cartridge.

To change a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule with the cartridge that you need to change.
3. Use the **Editor** to select a cartridge and open it for editing.
4. Change or reorder the cartridge.
   - From the **Editor**, drag and drop the cartridge to a new location in the tree. You can only drop a cartridge into a list that is designed for that type of cartridge.
   - In the **Editor** click a cartridge and then click the **Change** button associated with the cartridge you need to replace.

   If you chose to change a cartridge, the **Select Cartridge** dialog displays.
5. Select a new cartridge.
6. Click **OK**.
7. Click the **Notes** tab and enter a comment that describes the update that you made to the item.
8. Click **Save**.

Removing a cartridge

To remove a cartridge from a section:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule with the cartridge that you want to remove.
3. In the **Editor**, right-click the cartridge and choose **Remove <Type>**.
4. When the warning displays, click **Yes**.
5. Click **Save**.

Deleting a rule

You can delete a rule that you no longer need.

Before you delete a rule, you might want to click the **Information** tab and find out who last updated the rule and read comments that other users have made. Afterwards, if you still feel that you can safely delete the rule, then continue.

To delete a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the folder that contains the rule that you want to delete.
3. Click the **Delete** icon in the row for the item.
   The row turns gray.
4. Click **Save**.

   The rule is not deleted until you click **Save**.

Chapter 3

Content Spotlighting with Rule Manager

This section provides an overview for creating and spotllighting content with the Oracle Commerce Guided Search Rule Manager.

About Rule Manager

If you have purchased Oracle Commerce Guided Search only and do not have Oracle Commerce Experience Manager, you can spotlight content with Rule Manager.

Note: Rule Manager is deprecated in the Tools and Frameworks 11.0 release. Oracle recommends using Oracle Commerce Experience Manager for new projects.

Rule Manager is a merchandising and spotlighting tool that lets you create and modify content, activate and deactivate content, and change their priority in an authoring application. Merchandising and spotlighting records is a process of identifying and promoting contextually relevant records, based on Rule Manager specifications, to users as they navigate or search within a data set. Rule Manager lets you define the conditions for promoting these records for display to application users.

With Rule Manager, you work from custom templates and content folders to create rich, data-driven content easily. Rule Manager lets you manage the placement and display of catalog records, promotions, and other forms of content spotlighting. Content can be used in any number of locations across a site, decreasing the time for creating and maintaining content. Rule Manager presents the relevant content to visitors at each step of the online experience based on their searches and site navigation.

Whether your visitors are directed from an external search engine or from on-site search and navigation, well-designed content is integral to an engaging user experience. Presenting content in a targeted, relevant manner has been shown to significantly boost conversion rates and can increase the effectiveness of both paid and natural search campaigns.

License restrictions

You can use Rule Manager to create business rules to control content spotlighting. Using the record spotlight cartridge to spotlight records and spotlighting content such as promotional images is supported.

You cannot use Rule Manager to provide business user control over contextual, rules-driven dimensions or dimension values (for example, functionality similar to the guided navigation cartridges). You cannot provide contextual business user control over results lists (for example. the search results cartridge). In short, if you use Rule Manager, guided navigation and results lists must be configured globally or through APIs. Business user tooling for rules-driven control of either of these aspects requires an Experience Manager license.

About rules and folders

Rules can be organized into folders, which carry optional type restrictions and can be selected to populate sections of a page.

Rules

A rule describes the logic of how to promote content for display to application users. rules implement merchandising and content spotlighting features. Merchandising and spotlighting content is a process of identifying and promoting contextually relevant records to visitors as they navigate or search within a catalog.

Rules have several parts: the records in a data set, the conditions that must be met before those records are displayed, and the templates that determine how those records are rendered in the application. In short, the rule describes triggers as well as results. Dynamic pages and page sections are examples of rules. You can use rules to configure pages or sections to show global promotions, or to limit the display of featured products and categories to contextually relevant suggestions.

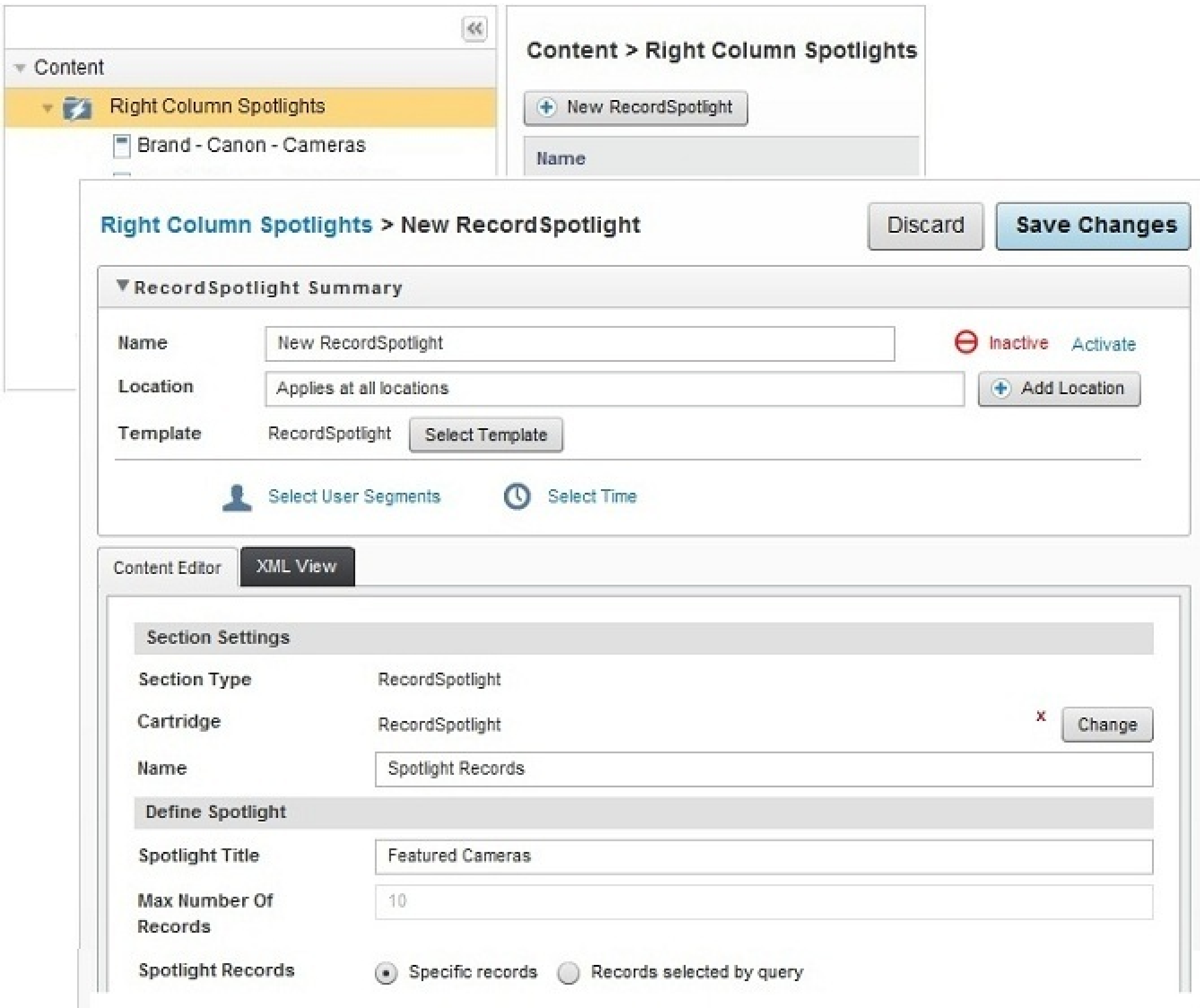
Folders

A folder is an organizational structure that contains one or more rules. Each folder can optionally include a restriction on the type of content that it contains. For example, to restrict a folder for "Product Spotlighting," you might restrict the folder to only allow cartridges of type SecondaryContent. Each rule in the folder is then configured with conditions that determine when that item displays in the application. To configure the section of the application page to populated with this content, you select a slot cartridge that references the Product Spotlighting folder. Slots let you populate content in the section based on triggers in the folder, independent of the page triggers.

Folders can be created in the navigation tree either at the root of the **Rules** section or inside another folder. Oracle recommends that you create at least one folder for pages and one for each slot on the page that can contain either shared or variable content. This provides a logical organization of content. It lets content be triggered independently of the pages that contain them and also enables content in one slot to be triggered independently of content in another slot. If you work with multiple sites in Experience Manager, you can organize content by site. For example. you can create folders for content that is only triggered in a specific site as well as folders that contain content that is shared among sites.

Rule example

The following picture shows a New RecordSpotlight rule being added to the Right Column Spotlights folder in the Discover application.



Components of rules

Templates, sections, and cartridges are the core components of the rules that you create.

Templates

Templates define overall layout and style for a rule. In general, templates are created by developers to reflect samples designed by the creative team. The team creates templates for pages and sections of pages. The resulting documents are uploaded into Oracle Commerce Guided Search Rule Manager or Experience Manager and serve as a framework for you to build upon and customize.

Sections

Templates contain sections that serve as placeholders for the display of products, dimensions, promotions, rich media, and other forms of content. Developers configure each section to accept certain types of content in the form of a cartridge.

Cartridges

Cartridges are essentially mini-templates that you plug into sections and then configure to contain the content you want to display on your page. Each cartridge might have several fields to configure, and might contain additional cartridges. Depending on the cartridge you have selected, you might be asked to specify a path to an image or flash file, a title, rollover text, or additional cartridges. The simplest cartridges might need no configuration.

Templates and cartridges are custom-built by developers, so each might have a unique set of options for configuration.

Overview of creating a rule

With the Oracle Commerce Guided Search Rule Manager, you create a rule, choose a template, and designate content. You can specify when and where it is displayed.

The following describes the process for creating a rule with Rule Manager:

1. In the **Rules** navigation in Rule Manager, select the content folder in which you want to create the rule.
2. Configure the rule:
   - Choose a template.
   - Set a location for your rule.
   - Specify active dates and times (optional).
   - Select a **User Segment** to restrict who sees your dynamic page (optional).
   - For each section, select and configure cartridges.
3. Activate and save the rule.
4. Set the priority of the rule within the folder.

Creating rules

This section describes how to create a rule, choose a template, and add the rule to a folder.

Creating a rule

You can create rules in the root folder of Experience Manager, or within a content folder.

Rules determine the content that displays in a page or page section as well as any conditions that must be met before the content displays. Your application can reference the rule directly or dynamically by referencing the content folder that contains the item.

To create a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the folder and select **Add Rule**.

3. In the **Name** text box, specify a name for your new rule.
4. Click **Save**.
   The rule that you created only appears in the project. This allows you to edit and test your content until you have determined it is ready to publish to the site.

You still need to choose a template, determine when and where the content displays, and designate content.

Choosing a template

Templates are the starting point for building your rules.

To choose a template for a rule, or to change the template of an existing one:

1. Click the rule that you want to edit in the **Rules** section of the navigation tree.
2. Click **Select Template**.
3. From the **Select Template** menu choose a template appropriate for your rule.

   Note: If you change the template for an existing rule, any content configured prior to the change is lost.

4. Click **OK**.
5. Click **Save**.

Next, you can choose cartridges and designate content for each section in your template.

About configuring sections

Templates consist of configurable sections that serve as placeholders for the display of dimensions, promotions, rich media, and other forms of content. Typically, these sections are empty until you designate rules for them.

About slots

You can use a slot to control a page or page section and configure the slot to reference folders.

Instead of containing a single rule, a slot is configured to pull content from one or more folders. The slot dynamically populates the page or section based on the triggers and priority of the rules within the folders.

Using slots in page sections

Slots allow you to manage and trigger different sections of a page independently from the rest of the page. A page section can have multiple cartridges, but most cartridges can only point to a single rule. The exception is the slot cartridge. Page sections can display content using a different set of triggers from those used in the rest of the page. In this way slot sections are like dynamic mini-pages. See *About controlling the display of content* for more information on triggers.

Slots let you:

- Reuse content.

  Once a set of conditions has been created to manage a specific page section, slots let you share the page section across multiple pages.

- Vary your content.

Page sections can display using a different set of triggers from those used in the rest of the page.

- Limit access to rules.

  When different sections of a page are managed in separate folders, a business user can make changes to just the triggers within a single folder and update all pages that reference that folder. The business user does not need access to the individual pages in order to update them.

Example uses of slots

Use slots for the following activities:

- Control the brand banner images that display throughout the site.
- Specify the images that display at a particular navigation state (for example, Digital Cameras > Kodak) even if there is no specific landing page for that navigation state.
- Display promotions in the menu area based on more specific trigger criteria than those that apply to the page as a whole. For example, you could create a page to use as a base for all "Digital Cameras" pages, and populate the menu sections with more specific content based on the brand, price range, or other dimensions.
- Display promotions in the menu area based on trigger criteria that are simply different from those on the page as a whole. For example, there might be a "Back to School" special for a particular time frame that applies to all pages within a category or even the entire site. This model lets you reuse content for individual sections across a variety of pages. The reusable sections are managed in a central location so that updates immediately take effect across all the pages that include the reused content. You do not need to edit each one manually.

Creating a folder

You can create folders to manage the content within slots.

A folder contains one or more rules, and can optionally be restricted by template type. You first create the folder, then add rules. Slots can reference this folder and other folders, using the trigger criteria on the rules within to determine the content to display.

To add a folder:

1. Right-click the folder and click **Add Folder**, or click the **Add Folder** button [+] in the**Rules** header of the navigation tree, .
2. Enter a **Name**.

   Enter a name that describes the page or section where the content is likely to be used, for example, `Guided Navigation` or `Detail Pages`.
3. Select a content type from the **Content Type Allowed** drop-down list.

   Your folder is limited to rules of this type.
4. Click **Add**.

The folder displays in the **Rules** section of the navigation tree.

Creating a dynamic slot

You can create a dynamic slot for your content.

Dynamic slot cartridges control the display of content. You configure the slot to reference one or more content folders. If you are creating a dynamic slot for a page section, it populates the section with content using a different set of triggers from those used in the rest of the page.

1. In the **Rules** navigation, right-click the folder where you want to add a rule with a dynamic slot. Select **Add Rule**.
2. Give the item a meaningful name.
3. Click **Select Template**.
   The dialog displays.
4. Choose a dynamic slot template from the list.
   For example, in the Discover Electronics reference application, ContentSlotMain is a dynamic slot.
5. Enter a name for the slot.
6. In the **Contents** section, click **Select Folders and Templates** to select the folder or folders that contain rules for populating the slot.

   The list of available folders is restricted to the content type of the slot cartridge that you selected in Step 4.
7. Optionally, limit the folders that you can choose from by selecting templates that you want to use for the slot. Otherwise, all templates can be used in the slot.
   a) Click **Templates (All)**.
   b) Click **Include only selected**.
   c) Select the templates that you want to include.
8. Set the **Max Rules** toggle box to the maximum number of rules you wish to return for the slot.

   For example, a Record Spotlight sidebar might return multiple featured records.
9. Click **OK**.
   The folders and templates that you have selected are listed under the **Contents** and heading.
10. Click the **Notes** tab and enter a comment that describes the slot or the update that you made to the slot.
11. Click **Save**.

About applying one rule to multiple locations

Typically, there will be many locations deep within your catalog that do not have, or do not need, highly specialized dynamic experiences. These lower-traffic locations can still benefit from a common, stylized design and data-driven content and product spotlighting.

These deep low-traffic locations are called "long tails" because they represent the tail of a demand curve. While the more popular, high-traffic locations tend to see higher conversion rates individually, the long tails of catalogs have been shown to be worth more collectively. Because of this, creating dynamic experiences to cover the long tail products of your catalog can significantly boost overall conversion rates for your Web site.

You can create one rule, populate it with dynamic cartridges, and apply it to many different locations in your application. This simultaneously decreases the investment of time and effort, and increases the value of each of the long tails.

For example, you realize that your television category is performing poorly, and you decide to address the issue by creating a dynamic experience to help guide customers to the right television. It would take an enormous amount of time and effort to individually create unique rules for every possible location in a category, so instead you choose to create a single rule that will update and adjust as a user navigates through the application.

For this new rule, you choose a cartridge called "BestSellers." You click **Select Records** to choose products for that cartridge, but instead of selecting records by ID, you want to populate the cartridge with a dynamic set of records that will update and adjust as the user navigates through the application. In order to do that, you select the **Dynamic Records** option from the **Select Records** dialog box, and then choose refinements:

- Select the refinement Televisions > Best Sellers
- Select the **Restrict to Refinement State** checkbox

By restricting the results to the user's refinement state, you create a product spotlight that updates with relevant results every time a user navigates to a new location. This means that when the user is at Televisions > HDTV, the products that display in the spotlight are best-selling HDTVs. Then, if the user navigates to Televisions > HDTV > Sony, the products that display in the spotlight are best-selling Sony HDTVs.

By populating a rule dynamically instead of using static content, you create a relevant, engaging experience for all of the locations in your television category.

Note: You can only choose refinements that exist in your application. If your application developer has not defined the refinement set "Best Sellers," it does not display as an option.

Controlling the display of content

This section describes triggers and how to use them to control the display of content.

About controlling the display of content

Your application displays content only if a specified set of search and navigation conditions exist in the rule. These conditions are known as triggers.

When you have created a rule, you can set it to display content at a specific location in your application. The location is defined by a particular set of refinements or search terms that trigger the content to appear.

There are also triggers to control who sees the content, as well as triggers to specify the times and dates when content is active.

By default, a new rule has no trigger until you add one. You can choose not to add any specific location and instead allow the content to appear at every location in your Web application. This means that relevant content appears with any query a user makes—with any search term or refinement state. It also means that anyone can see it, and it is not constrained by a time frame.

If you choose not to add any locations to your rule, assign it a low priority. If you don't assign it a low priority, it will take precedence over rules in the same folder that are designed specifically for certain locations and prevent them from appearing.

Refinement trigger

One or more refinements that trigger content if a user navigates to a location that contains any of those refinement states.

For example, if your location is set to trigger on the refinement state Cameras > Digital Cameras > Canon, and a user navigates to Cameras > Digital Cameras and then to Canon, your content appears. The content does not appear if the user navigates only to Cameras > Digital Cameras.

Search term trigger

One or more search terms can trigger content to appear if a user's query includes the terms. You can specify one or more search terms and the match mode for the search terms. While you can only specify one search term or search term phrase per location, you can specify several locations for a single rule.

For example, if your location is set to trigger on the search term "Kodak," and a user searches for "Kodak," your content appears.

Combination triggers

You can specify both a search term trigger and a refinement trigger for a rule. If a location contains both a search term and a refinement state, both sets of criteria must be met in order for the content to appear.

For example, if your location is set to trigger on the refinement state Cameras > Digital Cameras and the search term "Ricoh," a user must search for the term "Ricoh" from the Cameras > Digital Cameras refinement state in order for the content to display.

User segment triggers

You can control who sees your content by associating the rule with a user segment. User segments enable Oracle Commerce applications to display content to an end user based on that user's identity.

For example, if you have a "Free Shipping" promotion but only "Members" are eligible, you would select the "Members" segment so that users identified as non-members would never see the promotion.

Date and time triggers

You can configure rules to be displayed only during specified periods of time by specifying start and end dates and, optionally, start and end times. The content will be displayed to users of your application only during the period of time that you specify.

For example, if you create a rule for a Digital Camera promotion that only runs between April 3 and May 6, you can set the promotion to automatically activate and deactivate on those dates.

Note that the Start Time, Start Date, End Time, and End Date values of rules are always evaluated with reference to the timezone of the Assembler. The timezone cannot be configured to any other time zone. This rule applies in Preview and in authoring and production environments.

If the timezone of your target audience is different from the timezone of the Assembler, you must take this difference into account when you set the Start Time, Start Date, End Time, and End Date values for content-items.

For example, if the Assembler is in a timezone three hours behind the timezone of the targeted audience for the web site, the start, end time of the content-items can be set to three hours earlier than the time when they are intended to be displayed. Thus, to cause these content-items to be displayed at 9:00 AM in the timezone of the web site's target audience, set their start time to 6:00 AM.

Similarly, if you preview your site in the context of a specific time - whether a time that you select in the Preview toolbar or the default preview date/time (which is the "current time" of your computer), that time will be interpreted in the timezone of the Assembler.

You can modify the current time in UserState using the `setDate()` method of the UserState class (in the `com.endeca.infront.content` package). For a description of the UserState class, refer to the Javadoc for the Assembler core API jar.

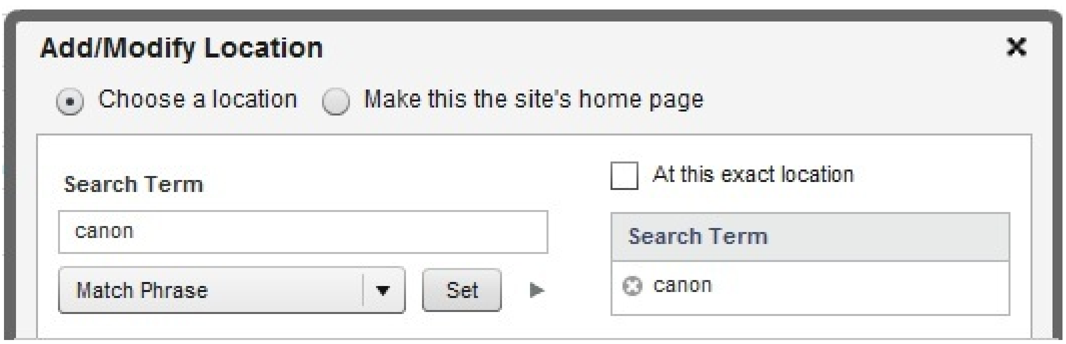
Triggering based on search terms

You can set a rule to be displayed when a user searches for specific terms.

For example, if you create a dynamic page for Canon cameras, you might want it to be displayed when a user searches for the term "Canon." You can accomplish this by setting the term "Canon" as a search term trigger.

To trigger based on a search term:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Add Location**.
   The **Add/Modify Location** dialog box sppears.
4. In the **Search Term** text box, type a search term or phrase.
5. Select a match mode from the drop-down list:
   - In **Match Phrase** mode (the default), all of the words in the user's query must match in the same order as the search term location for the rule to be displayed.
   - In **Match All** mode, all of the words of the user's query must match (without regard for order) the search term location for the rule to be displayed.
   - In **Match Exact** mode, all the words of the user's query must exactly match a the search term location for the rule to be displayed. Unlike the other two modes, a user's query must exactly match the search term location in the number of words and cannot include any extra words.
6. Click **Set** to copy the search term location to the **Search Term** list.



7. Click **OK**.
8. Click **Save**.

To specify multiple search term locations, repeat the previous steps. To add a refinement trigger, follow the steps for triggering based on refinements.

Triggering based on refinements

You can set a rule to display when a user navigates to a specific set of refinements in your application.

For example, if you create a rule for Canon cameras, you might want it to display when a user navigates to Cameras > Digital Cameras > Canon. You can set the content to display at that location by specifying a trigger based on the refinement state Cameras > Digital Cameras > Canon.

To trigger based on a refinement state:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.

3. Click **Add Location**.
   The **Add/Modify Location** dialog box appears.

   Note: The Autosuggest feature in the Add Location dialog does not populate the results for languages (such as Greek and Russian) for which the default language analyzer is OLT, because OLT language analysis does not support wild card searches. For information about OLT language analysis and languages to which OLT is applied by default, refer to the Oracle Commerce Guided Search Internationalization Guide.

4. From the dimension tree under **Refinements** on the left, select the location where you want your rule to appear.
5. Click **Add** to copy the location into the **Refinements** list on the right.
6. Select a location option for where the content displays:
   - Select **At this exact location** to display the rule only at the exact location you specified. If a user submits a query from any other location, the content does not display. For example, if the refinement state you specify is Cameras > Digital Cameras, the content only displays at Cameras > Digital Cameras and not at Cameras > Digital Cameras > Canon or anywhere else that Cameras > Digital Cameras appears.
   - De-select **At this exact location** to display the rule at any location in the data set that matches the refinements specified. For example, if you specify the refinement state Cameras > Digital Cameras, the content also displays at Cameras > Digital Cameras > Canon and anywhere else that Cameras > Digital Cameras appears.
7. Click **OK**.
8. Click **Save**.

To specify more refinement triggers, repeat the previous steps. To add a search term trigger, follow the steps for triggering based on search terms.

Setting a home page location
You can create a rule that displays at the root location of your application. Typically, the root location for an application is the home page.

To set a rule as a home page:

1. Click the rule that you want to edit in the **Rules** section of the navigation tree.
2. Click **Add Location**.
   The **Add/Modify Location** dialog box displays.
3. Select **Make this page the site's home page**.
4. Click **OK**.
5. Click **Save**.

Controlling who sees content

You can restrict who sees your content by associating the rule with a user segment.

User segments allow Oracle Commerce applications to display content to a subset of users. When you associate a rule with a user segment, that user segment becomes another trigger for your rule. For example, if you have two user segments, "members" and "non-members," and you create a rule that contains a membership promotion, you might only want "non-members" to view it. In order to ensure that only users segmented as "non-members" view the content, you must associate that rule with the "non-member" user segment.

To associate a rule with a user segment:

1. Check the toolbar and verify that you are working in the correct project.

2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Select User Segments**.
   The **Add/Modify User Segments** dialog box displays.
4. From the user segment tree on the left, select the user segment that you want to see the rule display.
5. Click **Add** to copy the user segment into the **User Segments** list on the right.
6. Click **OK**.
7. Click **Save**.

Triggering based on time

If you want a rule to appear only within a specific period of time, you can specify a date range, consisting of a start date and time, and, optionally, an expiration date and time.

For example, if you create a rule for a Back to School promotion, you can set the item to automatically activate on August 15 and automatically deactivate on September 8.

To specify rule activation dates:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Click **Select Time**.
   The **Schedule** dialog box appears.
4. Select the **Activate this content only during a specific time** checkbox.
5. Select a start date and start time for the rule.
6. Optionally, you can set an expiration date.

   Note: If you choose not to specify an expiration date, the rule remains active until manually deactivated.

   a) Select the **Content Expires** checkbox.
   b) Specify an expiration date and time.
7. Click **OK**.
8. Click **Save**.

Note: The dates and times that you specify for a rule are evaluated with reference to the time zone of the machine hosting the Assembler. For information about how to specify dates and times that will cause the rule to be displayed at the times that you want, see *About controlling the display of content* on page 88.

About multiple triggers

If you want a rule to display in more than one location in an application, you can specify multiple triggers.

For a single trigger to display a rule, the user's query must meet all of the trigger's criteria. This means that all of the search terms and refinement states that you specified for the location must be present in the query. For example, if a rule is set to the location Cameras > Digital Cameras with the search term "Canon," then the user must specify both the search term and the refinement state in order for the content to display.

If your rule has more than one location, it displays at each of those locations as long as the conditions for the individual location are met. For example, if you have two locations:

- Cameras > Digital Cameras with the search term "Canon"

- Search term "Canon"

both display the rule as long as all of their individual criteria are met. The content displays at the location "Canon" as well as at Cameras > Digital Cameras with the search term "Canon."

To specify multiple locations, repeat the steps provided for triggering based on refinements and triggering based on search terms as many times as necessary.

If you have specified a date range for a rule or associated an item with a user segment, those conditions must also be met for the content to display.

Adding cartridges to rules

This section describes how to select and configure cartridges for your rules. If you have purchased Oracle Commerce Guided Search only and do not have Oracle Commerce Experience Manager, most of the core cartridges are not available in Workbench. Of the core cartridges, only the Record Spotlight cartridge is available in Rule Manager. Custom cartridges developed by your team can also be found in Rule Manager.

Selecting a cartridge

You designate the content of each rule section by selecting and configuring cartridges.

Every section is designed to accept a certain type of content in the form of a cartridge. For each section, you are presented with a set of cartridges from which to choose. Once you select a cartridge, you can configure it to include the content you need to display within that section.

To select a cartridge for a section:

1. Check the toolbar and verify that you are working in the correct project.
2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Identify the section you want to add the cartridge to by using the navigation tree in the **Editor** and open it for editing.
4. Click **Add**.
   The **Select Cartridge** dialog displays.
5. Choose a cartridge from the list.
6. Click **OK**.
7. Click **Save**.

Once you have selected a cartridge for a section, you must configure it to display content appropriate for your section.

Configuring a cartridge

You can configure cartridges to contain information appropriate for each section of a rule.

Cartridges are the pieces of your page that contain the information displayed to users. By configuring cartridges, you can control the placement and display of dimensions, promotions, rich media and other forms of content.

To configure a cartridge:

1. Check the toolbar and verify that you are working in the correct project.

2. Click the rule that you want to edit in the **Rules** section of the navigation tree.
3. Identify the cartridge that you need to configure by using the navigation tree in the **Editor** and open it for editing.
4. Complete all required fields.

   Depending on the cartridge you have selected, you might be asked to specify a path to an image or flash file, a title, featured records, rollover text, or additional cartridges.
5. Click **Save**.

The simplest cartridges might need no configuration or only require that you enter text in fields. Other cartridges might need additional configuration.

Specifying spotlight records for a cartridge

Some types of cartridges let you specify records to spotlight on your rule.

To spotlight specific records from your catalog, select the **Specific records** radio button in the **Spotlight Records** area of the cartridge. To dynamically spotlight a set of records, select the **By query** radio button.

Note: Not all templates and cartridges are designed to spotlight records.

To add a spotlight record to a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a rule in the **Rules** section of the navigation tree.
3. In the **Spotlight Records** pane, select the **Specific Records** radio button.
4. Click **Edit List**.
   The **Select Records** dialog box displays.
5. Select a record in the product list by clicking the corresponding checkbox.
   The record is added to the **Selected Records** tab.
6. Optionally, repeat the previous step to add additional records to the cartridge.

   Cartridges are configured to spotlight only a certain number of records. You can add additional records until you reach this maximum value.
7. Optionally, navigate to the **Selected Records** tab to change the order in which records display.
   a) Enter a priority value in the **Order** column to assign a new priority to the corresponding record.

      Records with a lower priority value appear before those with a higher priority value.
8. Click **OK**.
9. Click **Save**.

To add dynamic spotlight records to a cartridge, follow the steps for specifying dynamic spotlight records for a cartridge.

Specifying dynamic spotlight records for a cartridge

Some types of cartridges let you spotlight a set of records that are contextually relevant to your rule. You can configure a cartridge to display records based on specified refinements.

To dynamically spotlight a set of records, select the **By query** radio button in the **Spotlight Records** area of the cartridge. To spotlight specific records from your catalog, select the **Specific records** radio button.

For example, if you create a page for camera bags, you can configure a cartridge to display a dynamic set of top rated bags without having to pick specific records.

Note: Not all templates and cartridges are designed to spotlight records.

To specify dynamic spotlight records for a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. Select a cartridge in the **Rules** section of the navigation tree.
3. In the **Spotlight Records** pane, select the **Records selected by query** radio button.
4. Click **Edit Query**.
   The **Select Records** dialog displays.
5. Select one or more refinements in the **Narrow Your Results** pane.
   The refinements appear in the **Filtered State** box.
6. Click **OK**.
7. Optionally, set a maximum number of records to display using the **Number of Records:** drop-down.
8. Optionally, restrict the record results to the current refinement state by selecting **Restrict to active refinements**.
   - Selecting **Restrict to active refinements** uses a combination of the specified refinements and a user's current refinement state to determine which records to display. For example, if you are promoting highly rated camera bags, the record results will vary based on a user's refinement state. If the user has browsed to Bags & Cases> Case Logic, then only top rated bags from Case Logic display. If the user is viewing Bags & Cases > Ricoh, then only top rated bags from Ricoh display.
   - De-selecting **Restrict to active refinements** uses only the specified refinements to determine which records display. The user's current refinement state is ignored. For example, if you are promoting top rated camera bags, the record results display the same set of top rated camera bags no matter what the user's refinement state is.
9. Click **Save**.

To add specific records to a cartridge, follow the steps for specifying spotlight records for a cartridge.

Prioritizing rules

This section explains the concept of rule priority and describes how to prioritize content.

About rule priority

Rules within a folder are prioritized numerically, with the lowest numbers given the highest priority. By increasing the priority of a rule, you increase the likelihood that content displays if there are other rules with overlapping trigger criteria.

For example, you have two rules in a folder with these settings:

- A "Digital Cameras" page that is set to trigger at the refinement state Cameras > Digital Cameras and allowed to display at any location that matches Cameras > Digital Cameras
- A "Digital Cameras from Canon" page that is set to trigger at the refinement state Cameras > Digital Cameras> Canon and restricted to display at only that exact location

If you prioritize "Digital Cameras from Canon" as a "1," and "Digital Cameras" as a "2," then"Digital Cameras from Canon" will always be evaluated first. That means that even though both pages *could* display to a user who navigated to Cameras > Digital Cameras> Canon, only "Digital Cameras from Canon" will display. The Digital Cameras" page still displays at any other location where a user navigates to Cameras > Digital Cameras, but it will always be evaluated after the more specific "Digital Cameras from Canon" page.

If, however, you were to prioritize "Digital Cameras" before "Digital Cameras from Canon," then the page "Digital Cameras from Canon" would never display in your application. It is important to make sure that more specific pages (pages with more complex triggering criteria) are given high priority to prevent them from being blocked by more general pages.

Prioritizing rules

New rules are automatically listed in the folder with the lowest priority. You need to manually assign the appropriate priority number to each rule that you create.

The **Priority** column of the folder allows you to increase or decrease the priority of a rule.

To assign or change the priority of a rule:

1. In the **Rules** section of the navigation tree, click the folder with the rules that you need to prioritize.
2. In the **Priority** column, highlight the number in the text box of the rule that you want to re-prioritize and replace it with the new priority number. For example, if you want a rule to have the highest priority, type `1`.
3. Click **Save**.

Managing rules

This section contains instructions for modifying existing rules.

Duplicating an existing rule

Duplicating a rule provides a convenient starting point for creating similar ones.

To duplicate a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, right-click the rule that you want to copy, and then click **Duplicate**. A duplicate copy of the rule opens with **- copy** appended to the name.
3. Modify the rule as necessary.
4. Click **Save**. The duplicate rule is saved in the same folder as the original one.

Annotating rule updates

As you update your rules, you can enter descriptions or justifications for your changes in the comment field on the **Information** tab of the rule.

You can also read previous comments to find out why other users have made updates to the rule. The **Information** tab also lists when the rule was created and the last time that the rule was modified, as well as who created and modified it.

To modify and annotate a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule that you want to modify.
   The rule appears in the edit area.
3. Make the necessary modifications.
4. Click the **Information** tab and enter a comment that describes the update that you made to the item.
5. Click **Save**.

Modifying a rule location

If necessary, you can change the location of a rule.

To modify a rule location:

1. Click the rule you need to edit in the **Rules** section of the navigation tree.
2. In the **Location** field of the **Summary**, click the location that you want to modify.
   The **Add/Modify Location** dialog box displays.
3. Modify the location.
4. Click **OK**.
5. Click the **Information** tab and enter a comment that describes the update that you made to the item.
6. Click **Save**.

Deleting a rule location

If necessary, you can remove locations from rules.

To delete a location:

1. In the **Rules** section of the navigation tree, select the rule with the location that you need to delete.
2. In the **Location** field of the rule **Summary**, click the **X** icon next to the location that you need to remove.
3. Click **Save**.

The rule no longer displays content at that location.

Changing a cartridge

You can rearrange or replace an existing cartridge.

To change a cartridge:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule with the cartridge that you need to change.
3. Use the **Editor** to select a cartridge and open it for editing.
4. Change or reorder the cartridge.
   - From the **Editor**, drag and drop the cartridge to a new location in the tree. You can only drop a cartridge into a list that is designed for that type of cartridge.

- In the **Editor** click a cartridge and then click the **Change** button associated with the cartridge you need to replace.

If you chose to change a cartridge, the **Select Cartridge** dialog displays.

5. Select a new cartridge.
6. Click **OK**.
7. Click the **Notes** tab and enter a comment that describes the update that you made to the item.
8. Click **Save**.

Removing a cartridge

To remove a cartridge from a section:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the rule with the cartridge that you want to remove.
3. In the **Editor**, right-click the cartridge and choose **Remove <Type>**.
4. When the warning displays, click **Yes**.
5. Click **Save**.

Deleting a rule

You can delete a rule that you no longer need.

Before you delete a rule, you might want to click the **Information** tab and find out who last updated the rule and read comments that other users have made. Afterwards, if you still feel that you can safely delete the rule, then continue.

To delete a rule:

1. Check the toolbar and verify that you are working in the correct project.
2. In the **Rules** section of the navigation tree, click the folder that contains the rule that you want to delete.
3. Click the **Delete** icon in the row for the item.
   The row turns gray.
4. Click **Save**.

   The rule is not deleted until you click **Save**.

Chapter 4

Working with Keyword Redirects

This section introduces keyword redirects and explains how to create, modify, delete, and view them from the **Keyword Redirects** page in Oracle Commerce Workbench.

About keyword redirects

You can configure a keyword redirect to direct end users to a specified location in an application when they enter a specified search term or terms. This enables you to display a relevant promotional page or product category page instead of a typical list of search results.

A keyword redirect triggers on one or more search terms; the target of a keyword redirect is a URL in your application. For example, a keyword redirect with the search term "delivery" and the URL `http://shipping.example.com` redirects an end user to `http://shipping.example.com` if they use "delivery" as a search term.

Note: If you create a search term trigger for a page that corresponds to a search term trigger for a keyword redirect, the keyword redirect takes priority over the search trigger. For example, if your "About Us" page is configured to fire for a search that includes the term "information," and you also create a keyword redirect that takes the user to the "Contact Us" page when they enter the search term "information," the "Contact Us" page takes precedence.

Multiple keyword entries

You can set multiple sets of keyword triggers for the same destination URL in your application. Each set of trigger terms has an associated match mode that determines what is a "match" for that specific trigger. If an end user's search query qualifies as a match for any of the keyword triggers for a URL, the user is redirected to that URL.

For a description of the different match modes, see "Adding a keyword redirect to your application."

Keyword groups

If your application has multiple sites, your development team can configure a keyword redirect group for each site. End users experience different redirect behavior depending on the site-specific page they are entering search terms. For example, you might have two sites each with its own "contact us" page: `/discovercameras/contact_us` and `/discoverprinters/contact_us`. If your development team has created a keyword redirect group for each of these sites, Discover Cameras Redirects and Discover Printers Redirects, then you can redirect users to the correct page depending on what site they are using.

Keyword redirects and projects

The **Keyword Redirects** page in Workbench is not project-aware. When you open Keyword Redirects, you see a message in the projects box of the toolbar indicating that you are not working in a project. Therefore, any updates that you make and save on the **Keyword Redirects** page are not isolated in a project. The updates are immediately committed to the current site. You do not have to publish a project to commit these changes as you would if you were updating a site in Experience Manager.

Projects can, however, have an effect on keyword redirect behavior if you change a page's location. If you have configured a keyword to redirect users to a specific page, and that page is moved or deleted in a project, the move or deletion is not committed until that project is published.

Creating a keyword redirect

You can add keyword redirects to your application in the **Keyword Redirects** page in Workbench.

You can configure multiple keywords that trigger a redirect to the same location.

To create a keyword redirect:

1. Log in to Workbench.
2. Select **Keyword Redirects**.
3. If your application has multiple sites or uses more than one keyword redirects group, select a **Keyword Redirect Group** from the drop-down list.
4. Click **Add Redirect**.
   The **Add Keyword Redirect** panel appears.
5. Enter a search term or terms in the **User Search Terms** field.
6. Select a match mode from the drop-down list:
   - **Match Phrase** — Default. A search query triggers a redirect if the search terms match in the specified trigger terms in the same order. The search query may include additional terms before or after the trigger terms.
   - **Match All** — A search query triggers a redirect if the search terms include all of the specified trigger terms, but not necessarily in the same order.
   - **Match Exact** — A search query triggers a redirect only if the search terms exactly match the specified trigger terms, in the same order, with no additional terms.
7. (Optional) Click the **Add Another** button and repeat the previous two steps to create additional search term triggers.
8. Enter an absolute or relative link in the **Redirect Link** field.

   Depending on your match mode, the search terms that you entered get redirected to this location.
9. Click **Save**.
   Each search term trigger appears in its own row in the **Keyword Redirects** table.

Modifying keyword redirects

You can modify existing keyword redirects to change the keyword trigger(s) or destination URL.

To modify a keyword redirect:

1. Log in to Workbench.

2. Select **Keyword Redirects**.
3. To modify a keyword redirect:
   a) If your application has multiple sites or uses more than one keyword redirects group, select a **Keyword Redirect Group** from the drop-down list.
   b) Locate the keyword redirect entry. You can use the **Find:** field to search for a specific set of user search terms or a destination URL.
   c) Click the keyword trigger or the URL that you wish to modify.
   The **Edit Keyword Redirects** dialog appears.
   d) Modify the **User Search Terms** or **Redirect Link**.

   Note: When you select a keyword trigger in the table rather than a destination URL, the **Edit Keyword Redirects** dialog is limited to options that modify the selected keyword.

4. Click **Save**.

Deleting a keyword redirect

You can sort, search, and delete keyword redirects from the **Keyword Redirects** table.

You can sort keyword redirects in ascending or descending order according to the specified User Search Terms, Match Mode, Redirect Link, or Last Modified Date by clicking the corresponding column header in the **Keyword Redirects** table. Paging controls are located at the bottom of the page.

To delete a keyword redirect entry:

1. Log in to Workbench.
2. Select **Keyword Redirects**.
3. If your application has multiple sites or uses more than one keyword redirects group, select a **Keyword Redirect Group** from the drop-down list.
4. To delete a specific keyword redirect:
   a) Locate the entry you wish to remove. You can use the **Find:** field to search for a specific set of user search terms or a destination URL.
   b) Click the **X** in the **Delete** column.
   A confirmation dialog appears.
   c) Click **Delete**.
   The keyword redirect entry is removed.
5. To delete a keyword trigger from a URL with multiple keyword triggers:
   a) Locate the URL you wish to remove. You can use the **Find:** field to search for it.
   b) Click the URL in the **Redirect Link** column.
   The **Edit Keyword Redirects** dialog appears.
   c) In the **User Search Terms** list, scroll to the keyword trigger you wish to remove and click the **X**.
   The keyword trigger is removed.
   d) Click **Save**.
6. To delete all keyword redirects to a specific URL:
   a) Locate the URL you wish to remove. You can use the **Find:** field to search for it.
   b) Click the URL in the **Redirect Link** column.
   The **Edit Keyword Redirects** dialog appears.
   c) Click **Delete All**.

A confirmation dialog appears.

d) Click **Delete All**.
All entries for the specified URL are removed.

Chapter 5

Working with Thesaurus Entries

This section introduces the **Thesaurus** page of Oracle Commerce Workbench and describes how to create, manage, and troubleshoot thesaurus entries.

About the Thesaurus

Thesaurus entries provide a means to account for alternate forms of a user's query.

You can open the **Thesaurus** page from **Search Tools** on the application **Home** page. On the **Thesaurus** page, you create the synonyms that capture other ways of expressing queries relevant to your application. These entries provide concept-level mappings between words and phrases.

You can add two kinds of entries to your thesaurus:

- One-way thesaurus entries establish an equivalence between words or phrases that applies in a single direction only. For example, you could define a one-way mapping so that all queries for computer would also return matches containing laptop, but queries for laptop would not return results for the more general computer. You can add an unlimited number of synonyms to a one-way entry, and the application expands the query to search for each search term with the same one-way relationship.
- Multi-way thesaurus entries establish a mutual equivalence relationship between words or phrases. For example, an equivalence might specify that the phrase notebook is interchangeable with the phrase laptop.

Creating one-way thesaurus entries

You create one-way thesaurus entries on the **Thesaurus** page of Oracle Commerce Workbench.

To create a one-way thesaurus entry:

1. On **Thesaurus** page, select **One-Way** in the **Type** field of the top entry row.
2. In the **Source** field, type the source term in the first field.
3. Enter a synonym for the source term in the **Synonyms** text box. Separate multiple synonyms with commas.
4. Click **Add Entry**.

Creating multi-way thesaurus entries

You create multi-way thesaurus entries on the **Thesaurus** page of Oracle Commerce Workbench.

To create a multi-way thesaurus entry:

1. On **Thesaurus** page, select **Multi-Way** in the **Type** field of the top entry row.
2. Leave **User Search Terms** blank.
3. Enter a word or phrase in the **Synonyms** field. Separate multiple synonyms with commas.

   You can create an unlimited number of synonyms for a single thesaurus entry.
4. Click **Add Entry**.

Editing thesaurus entries

You can revise your thesaurus entries as you gain a better understanding of the search terms that users are entering.

To edit an entry:

1. On the **Thesaurus** page, click the synonyms for the entry that you want to modify.
2. Change the entry type or the search term, or add, remove, or change synonyms.
3. Click **Save**.

Searching for thesaurus entries

You can search for thesaurus entries by entering all or part of an entry.

For example, suppose you want to locate synonyms you previously associated with "US." You search for "us" and see an entry with the synonyms "american, united states, us." You can search by word, partial word, or letter. Oracle Commerce Workbench uses an implied wildcard to find entries. For example, searching for "u" is equivalent to searching for "*u*". All entries containing "u" display. Oracle Commerce Workbench is case insensitive when finding thesaurus entries.

To find thesaurus entries:

1. On the **Thesaurus** page, enter a term or character in the **Find** field.
2. Click **Find**.
3. To clear your results, click **Show All** on the **Thesaurus** page.

Deleting thesaurus entries

You can delete thesaurus entries that are no longer needed.

To delete thesaurus entries:

1. On the **Thesaurus** page, click the **Delete** box for the entry you want to remove. You can select multiple entires to delete.
2. Click **Delete Selected**.

Thesaurus tips

The thesaurus feature is very powerful, but poorly conceived entries can tax your application without providing additional utility.

To maximize the potential of this feature, keep the following suggestions in mind:

- Do not create a multi-way thesaurus entry for a word with multiple meanings.

  For example, khaki can refer to a color as well as to a style of pants. If you create a multi-way thesaurus entry for khaki = pants, then a user's search for khaki towels could return irrelevant results for pants.

- Do not create a multi-way thesaurus entry between a general and several more-specific terms, such as top = shirt = sweater = vest. This increases the number of results the user has to go through while reducing the overall accuracy of the items returned.

  In this instance, better results are attained by creating individual one-way thesaurus entries between the general term top and each of the more-specific terms.

- A thesaurus entry should never include a term that is a substring of another term in the entry. For example, consider a multi-way equivalency between "tackle" and "bait and tackle."

  If users type "tackle," they get results for "tackle" or "bait and tackle" (that is, the same results they would have gotten for "tackle" without the thesaurus). If users type "bait and tackle," they get results for "bait and tackle" or "tackle," causing the "bait and" part of the query to be ignored.

- Stop words such as "and" or "the" should not be used in single-word thesaurus forms.

  For example, if "the" has been configured as a stop word, an equivalency between "thee" and "the" is not useful.

  You can use stop words in multi-word thesaurus forms, because multi-word thesaurus forms are handled as phrases. In phrases, a stop word is treated as a literal word and not a stop word.

- Avoid multi-word thesaurus forms where single-word forms are appropriate.

  In particular, avoid multi-word forms that are not phrases that users are likely to type, or to which phrase expansion is likely to provide relevant additional results. For example, the multi-way thesaurus entry "Aethelstan, King Of England (D. 939)" = "Athelstan, King Of England (D. 939)" should be replaced with the single-word form "Aethelstan" = "Athelstan."

- Thesaurus forms should not use non-searchable characters.

  For example, the multi-way thesaurus entry Pikes Peak = Pike's Peak should only be used if apostrophe (‘) is enabled as a search character. To add a search character, contact an Oracle Commerce Developer Studio user at your site.

- Avoid using thesaurus entries for common spelling corrections. The software fixes misspellings automatically.

Chapter 6

Working with Automatic Phrasing

This section introduces the Automatic Phrasing page of Oracle Commerce Workbench and describes how to add and manage phrase entries.

About automatic phrasing

When a site visitor enters individual search terms in a query, the automatic phrasing feature groups specified individual terms into a single search phrase and returns search results for the phrase.

Automatic phrasing is similar to placing a single set of quotation marks around multiple search terms before submitting the query. For example, “my search terms” is the phrased version of the query my search terms. Automatic phrasing removes the need for application users to place quotation marks around search phrases to get phrased results.

Note: For languages that use non-latin character sets, site visitors cannot search for phrases unless you have specified the phrase on the **Automatic Phrasing** page.

In Oracle Commerce Workbench, you can create, modify, and remove phrases. Open the **Automatic Phrasing** page from **Search Tools** on the application **Home** page. Site visitors are not affected by any phrases that you add or change until an administrator runs the `promote_content` script to promote content from the authoring to the live environment.

Creating automatic phrases

The Automatic Phrasing page lets you add multi-word terms to your application that are treated as phrases in search queries.

To add an automatic phrase:

1. On the **Automatic Phrasing** page, click **Add Entry**.
2. Enter a multi-term phrase in the **Phrase** box.
3. Click **Save** if you are finished adding phrases or click **Save and Add More** if you have more phrases that you want to add.

Modifying automatic phrases

You can revise your automatic phrasing entries as you gain a better understanding of the search terms that site visitors are entering.

To modify an entry:

1. On the **Automatic Phrasing** page, click the phrase that you want to edit.
2. Modify the phrase.
3. Click **Save**.

The modified phrase is committed to your application immediately.

Searching for automatic phrases

You can search for automatic phrases by entering all or part of an entry.

You can search by word, partial word, or letter. Oracle Commerce Workbench uses an implied wildcard to find entries. For example, searching for "u" is equivalent to searching for "*u*". All entries containing "u" display. Oracle Commerce Workbench is not case sensitive when finding automatic phrases.

To find automatic phrases:

1. On the **Automatic Phrasing** page, enter a term or character in the **Find** field.
   The list of entries filters your results as you type.
2. To clear your results, delete or backspace over your entry in the **Find** field.

Deleting automatic phrases

You can delete automatic phrasing entries that are no longer needed.

To delete automatic phrase entries:

1. On the **Automatic Phrasing** page, click the **Delete** box for the entry you want to remove.
2. When the confirmation dialog appears, click **Delete**.
3. If you want to delete more entries, repeat the previous steps.

Chapter 7

Working with Relevance Ranking Evaluator

This section introduces Relevance Ranking Evaluator and describes how to use it to develop strategies for relevance ranking.

About Relevance Ranking Evaluator

Relevance ranking arranges your search results so that the retrieved records that are most likely to be relevant to your search request display first.

You can use Relevance Ranking Evaluator to test and experiment with relevance ranking strategies. It uses your own data and MDEX Engine to model how different strategies produce results.

The Relevance Ranking Evaluator can run multiple searches simultaneously, using different relevance ranking modules and other search parameters so you can compare the order and quality of returned results. It compares search results and their relevance ranking strategies side-by-side, highlighting the location of records in each strategy. Relevance Ranking Evaluator also provides performance metrics for each query that helps you evaluate the run-time performance in some of the more complex relevance ranking modules.

Relevance ranking strategies

Relevance ranking modules are the building blocks from which you build the relevance ranking strategies that you apply to your search interfaces. A set of relevance ranking modules combined with the order in which they are evaluated is a relevance ranking strategy.

The order in which you specify relevance ranking modules affects the order of displayed search results. Relevance ranking modules act in combination by functioning as a series of tie-breakers. The first module groups results into a number of different strata based on its rules. Then, within each stratum produced by the first module, the second module further subdivides results into follow-on strata based on its own rules, and so on, until there are no further ties or there are no more modules to apply.

Pre-defined and stored strategies

Relevance Ranking Evaluator provides pre-defined relevance ranking strategies that are useful starting points for specific application types.

The Retail strategy is a specific set of relevance ranking modules that provide a result order that is favored by retail sites that contain only short text fields, while the Document strategy is useful for sites that contain larger text documents. Do not use these strategies as your own in production. These strategies are considered starting points from which you can modify for your application’s needs. As soon as you make modifications to a strategy, it becomes a Custom strategy.

Both the Retail and Document strategies are examples of stored strategies, which are set and configured in the application’s `evaluator.properties` file. The administrator has the ability to set an arbitrary number of stored strategies and can modify or delete the default Retail and Document strategies. Once defined, these stored strategies are made available to you. Typically, stored strategies are defined when the application is deployed, or after an initial amount of testing is done to warrant their inclusion. For more information on the `evaluator.properties` file and on administering Relevance Ranking Evaluator, see *Oracle Commerce Guided Search Administrator's Guide*.

Relevance ranking modules

This section describes the available set of relevance ranking modules and their scoring behaviors. For more information on these modules, see the *MDEX Engine Development Guide*.

Exact

The Exact module provides a finer grained but more computationally expensive alternative to the Phrase module. The Exact module groups the results into three strata, based on how well they match the query string:

- The highest stratum contains results whose complete text matches the user’s query exactly.
- The middle stratum contains results that contain the user’s query as a subphrase.
- The lowest stratum contains other match types such as normal conjunctive matches. Any match that would not be a match without query expansion lands in the lowest stratum. Records that do not contain relevance ranking terms such as those specified in the `Nrr` query parameter are also in this stratum.

The Exact module is intended for use only on small text fields such as dimension values or small property values like part IDs. Do not use it with large or offline documents. Using this module in these cases results in poor performance or application failures due to request timeouts. The Phrase module, with and without approximation turned on, does similar but less sophisticated ranking that can be used as a better performance substitute.

Field

The Field module ranks documents based on the search interface field with the highest priority in which it matched.

Only the best field in which a match occurs is considered. The Field module is useful in relevance ranking strategies for catalog applications, because the category or product name is typically a good match. Field assigns a score to each result based on the static rank of the dimension or property member or members of the search interface that caused the document to match the query.

The Field module is valid only for record search operations. This module assigns a score of zero to all results for other types of search requests. In addition, Field treats all matches the same, whether or not they are due to query expansion.

First

The First module is designed primarily for use with unstructured data. The First module ranks documents by how close the query terms are to the beginning of the document.

The First module groups its results into variably-sized strata. The strata are not the same size, because while the first word is probably more relevant than the tenth word, the 301st is probably not much more relevant than the 310th word. This module takes advantage of the fact that the closer something is to the beginning of a document, the more likely it is to be relevant.

The First module works in the following way:

- When the query has a single term, First's behavior is straight-forward: it retrieves the first absolute position of the word in the document, then calculates which stratum contains that position. The score for this document is based upon that stratum; earlier strata are better than later strata.
- When the query has multiple terms, First behaves as follows: the first absolute position for each of the query terms is determined, and then the median position of these positions is calculated. This median is treated as the position of this query in the document and can be used with stratification as described in the single word case.
- With query expansion using stemming, spelling correction, or the thesaurus, the First module treats expanded terms as if they occurred in the source query. For example, the phrase *glucose intolerence* would be corrected to *glucose intolerance* with *intolerence* spell-corrected to *intolerance*. First then continues as it does in the non-expansion case. The first position of each term is computed and the median of these is taken.
- In a partially matched query, where only some of the query terms cause a document to match, First behaves as if the intersection of terms that occur in the document and terms that occur in the original query were the entire query. For example, if the query *cat bird dog* is partially matched to a document on the terms *cat* and *bird*, then the document is scored as if the query were *cat bird*. If no terms match, then the document is scored in the lowest strata.
- The First relevance ranking module supports wildcard queries.

The First module does not work with Boolean searches and cross-field matching. It assigns all such matches a score of zero.

Freq

The Freq module provides result scoring based on the frequency of the user's query terms in the result text. The score produced by the Freq module for a result record is the sum of the frequencies of all user search terms in all fields that match a sufficient number of terms. The number of terms depends on the match mode, such as all terms in a Match All query, a sufficient number of terms in a Match Partial query, and so on. Cross-field match records are assigned a score of zero. Total scores are capped at 1024; in other words, if the sum of frequencies of the user search terms in all matching fields is greater than or equal to 1024, the record gets a score of 1024 from the Freq module.

For example, suppose we have the following record:

```
{Title="test record", Abstract="this is a test", Text="one test this is"}
```

A Match All search for *test this* would cause Freq to assign a score of 4, since *this* and *test* occur a total of 4 times in the fields that match all search terms (Abstract and Text, in this case). The number of phrase occurrences does not matter, only the sum of the individual word occurrences. Note that the occurrence of *test* in the Title field does not contribute to the score, since that field did not match all of the terms.

A Match All search for *one record* would hit this record, assuming that cross field matching was enabled. The record would get a score of zero from Freq, because no single field matches all of the terms. Freq ignores matches due to query expansion. Such matches are given a rank of zero.

Glom

The Glom module ranks single-field matches ahead of cross-field matches and also ahead of records that do not contain the search term at all. This module serves as a useful tie-breaker function in combination with the Maxfield module. It is only useful with record search operations. If you want a strategy that ranks single-field matches first, cross-field matches second, and no matches third, then use the Glom module followed by the Nterms module.

Glom treats all matches the same, whether or not they are due to query expansion.

Interp

Interp is a general-purpose module that assigns a score to each result record based on the query processing techniques used to obtain the match. Matching techniques considered include partial matching, cross-attribute matching, spelling correction, thesaurus, and stemming matching.

Specifically, the Interp module ranks results as follows:

1. All non-partial matches are ranked ahead of all partial matches.
2. Within the above strata, all single-field matches are ranked ahead of all cross-field matches.
3. Within the above strata, all non-spelling-corrected matches are ranked above all spelling-corrected matches.
4. Within the above strata, all thesaurus matches are ranked below all non-thesaurus matches.
5. Within the above strata, all stemming matches are ranked below all non-stemming matches.

Because the Interp module comprises the matching techniques of the Spell, Glom, Stem, and Thesaurus modules, there is no need to add them to your strategy individually.

Maxfield

The Maxfield module behaves like the Field module, except in how it scores cross-field matches. Unlike Field, which assigns a static score to cross-field matches, Maxfield selects the score of the highest-ranked field that contributed to the match. Maxfield is valid only for record search operations. This module assigns a score of zero to all results for other types of search requests. Maxfield treats all matches the same, whether or not they are due to query expansion.

Nterms

The Nterms module ranks matches according to how many query terms they match. For example, in a three-word query, results that match all three words are ranked above results that match only two, which are ranked above results that match only one, which are ranked above results that had no matches.

The Nterms module is only applicable to search modes where results can vary in how many query terms they match. These include Match Any, Match Partial, Match All Any, and Match All Partial. Note also that Nterms treats all matches the same, whether or not they are due to query expansion.

Numfields

The Numfields module ranks results based on the number of fields in the associated search interface in which a match occurs. This ranking includes whole-field rather than cross-field matches. Therefore, a result that matches two fields matches each field completely, while a cross-field match typically does not match any field completely. Numfields treats all matches the same, whether or not they are due to query expansion. The Numfields module is only useful with record search operations.

Phrase

The Phrase module ranks results containing the user's query as an exact phrase, or a subset of the exact phrase, more relevant than matches simply containing the user's search terms scattered throughout the text. Records that have the phrase are ranked higher than records which do not contain the phrase. Records that have the phrase are ranked higher than records which do not contain the phrase.

The Phrase module has three options that you can use to customize its behavior:

- Rank based on length of subphrases

- Use approximate subphrase/phrase matching
- Apply spell correction, thesaurus, and stemming

Proximity

Designed primarily for use with unstructured data, the Proximity module ranks how close the query terms are to each other in a document by counting the number of intervening words.

Like the First module, this module groups its results into variable sized strata, because the difference in significance of an interval of one word and one of two words is usually greater than the difference in significance of an interval of 21 words and 22. If no terms match, the document is placed in the lowest stratum.

Single words and phrases get assigned to the best stratum because there are no intervening words. When the query has multiple terms, Proximity behaves as follows:

1. All of the absolute positions for each of the query terms are computed.
2. The smallest range that includes at least one instance of each of the query terms is calculated. This range's length is given in number of words. The score for each document is the strata that contains the difference of the range's length and the number of terms in the query; smaller differences are better than larger differences.

Under stemming, spelling correction, and the thesaurus, the expanded terms are treated as if they were in the query, so the proximity metric is computed using the locations of the expanded terms in the matching document.

For example, if a user searches for *big cats* and a document contains the sentence, "Big dog likes his cat" (stemming takes *cats* to *cat*), then the proximity metric is computed just as if the sentence were, "Big dog likes his cats."

Proximity scores partially matched queries as if the query only contained the matching terms. For example, if a user searches for *cat dog fish* and a document is partially matched that contains only *cat* and *fish*, then the document is scored as if the query *cat fish* had been entered.

Proximity does not work with Boolean searches, cross-field matching, or wildcard searches. It assigns all such matches a score of zero.

Spell

The Spell module ranks spelling-corrected matches below other kinds of matches. Spell assigns a rank of zero to matches from spelling correction, and a rank of one from all other sources. It ignores all other sorts of query expansion.

Static

The Static module assigns a static or constant data-specific value to each search result, depending on the type of search operation performed and depending on optional parameters that can be passed to the module.

For record search operations, the first parameter to the module specifies a property, which defines the sort order assigned by the module. The second parameter can be specified as ascending or descending to indicate the sort order to use for the specified property.

For example, `Static(Availability,descending)` sorts result records in descending order with respect to their assignments from the Availability property. `Static(Title,ascending)` sorts result records in ascending order by their `Title` property assignments. In a catalog application, setting the static module by `Price, descending` leads to more expensive products being displayed first.

For dimension search, the first parameter can be specified as `nbins`, `depth`, or `rank`:

- Specifying `nbins` causes the static module to sort result dimension values by the number of associated records in the full data set.

- Specifying `depth` causes the static module to sort result dimension values by their depth in the dimension hierarchy.
- Specifying `rank` causes dimension values to be sorted by the ranks assigned to them for the application.

Stem

The Stem module ranks stemming matches below other kinds of matches. Stem assigns a rank of zero to matches from stemming, and a rank of one from all other sources. It ignores all other sorts of query expansion.

Stratify

The Stratify module is used to boost or bury records in the result set. It takes one or more Endeca Query Language (EQL) expressions and groups results into strata. Records are placed in the stratum associated with the first EQL expression they match. The first stratum is the highest ranked, the next stratum is next-highest ranked, and so forth. If an asterisk is specified instead of an EQL expression, unmatched records are placed in the corresponding stratum.

The Stratify module is the basic component of the record boost and bury feature, which is described in the *MDEX Engine Development Guide*.

Thesaurus

The Thesaurus module ranks thesaurus matches due to below other sorts of matches. Thesaurus assigns a rank of zero to matches from the thesaurus, and a rank of one from all other sources. It ignores all other sorts of query expansion.

Wfreq

Like the Freq module, the Wfreq module scores results based on the frequency of user query terms in the result. Additionally, the Wfreq module weights the individual query term frequencies for each result by the overall frequency in the complete data set of each query term. Terms that would result in fewer search results are weighted more heavily than more frequently occurring terms. The Wfreq module ignores matches due to query expansion. Such matches are given a rank of zero.

Changing the MDEX Engine

You can change the MDEX Engine to which Relevance Ranking Evaluator connects.

Changing the MDEX Engine used by Relevance Ranking Evaluator only affects your current browser session and it does not affect other users of the application. In future browser sessions, the evaluator displays the default MDEX Engine specified by your administrator.

To change the MDEX Engine, follow these steps:

1. Open **Relevance Ranking Evaluator** from **Search Tools** on the application **Home** page.
2. Click **Change MDEX Engine** near the top of the page.
   The **Specify MDEX Engine** dialog appears.
3. Enter the **Host** and **Port** of the MDEX Engine that you want to use.
4. Click **Submit**.

Evaluating relevance ranking strategies

Relevance Ranking Evaluator displays multiple search results side-by-side so you can compare and evaluate different test strategies.

Oracle recommends using an MDEX Engine that is in your staging or test environment so that the evaluation is not competing for resources in your production environment.

Relevance Ranking Evaluator can be used by more than one user simultaneously. Each user sees his or her own searches, and changes made by one user are not visible to others. Evaluations performed in the application are not stored outside of a user's browser session. If the browser is closed or if the session is allowed to time out due to inactivity, the evaluations are cleared and the application is reset to its initial state.

You should try a variety of common search terms in your evaluations. A relevance ranking strategy that seems to be perfect for one particular search term might not be appropriate for others, so it is important to evaluate several different types of searches.

To evaluate relevance ranking strategies:

1. Open **Relevance Ranking Evaluator** from **Search Tools** on the application **Home** page.
2. Enter a unique name for the strategy that you are evaluating in the **Search Name** field.
3. In the **Search Criteria** area, choose a search interface, match mode, and enter your search terms.

   Each defined search allows for individual specification of the search criteria. While the most common use of Relevance Ranking Evaluator is to compare different relevance ranking strategies for the same search criteria, you can also use it to compare different combinations of search configuration options.

   For instance, you can:

   - Ensure that spelling correction is behaving as expected, by comparing the results of searching for a correctly-entered term such as "camera" with the results of a search for a misspelled term such as "cammera."
   - Compare the behavior of different match modes, such as **All** > **Partial** and **All** > **Any**.
   - Compare results from searching with slightly different search interfaces, such as one search interface that contains only short text properties like **Name** and **Keywords**, and another interface that contains the same short text properties and an additional longer **Description** field.
4. Select a **Rollup Key** to submit the search as an aggregated record navigation query. For more information on rollup keys, see the *MDEX Engine Development Guide*.
5. Click the plus sign next to **Search Filters**, and optionally configure a query-based filter.

   - **Record Filters** You can enter a record filter that limits the records returned and restricts the scope of the search results. For example, you can restrict searches to just those products that are in stock or when a data set contains multiple types of records like both products and reviews.

     Here are some examples of record filters:

     - **AND(Rating:5)** – Show/search only those records that have a Rating of 5
     - **AND(6031)** – Show/search only those records that are tagged with the dimension value ID 6031
     - **AND(6031,Rating:5)** – Show/search only those records that are tagged with the dimension value ID 6031 and which have a Rating of 5
   - **Range Filter** You can apply a range filter to numeric attributes to restrict the records returned. Only one range filter can be applied.
   - **Endeca Query Language (EQL) Filter** You can apply an EQL filter to limit the records returned. An EQL filter can use multiple criteria, so it can be used in lieu of multiple range filters. Properties used in EQL must be enabled for record filters. In addition, the attribute names must be NC_NAME compliant:

they must not contain spaces. The power of EQL is the ability to include complex Boolean logic across various filter types.

6. In the **Relevance Ranking** area, select the relevance ranking modules that you want to apply for the search. For descriptions of the modules, see *Relevance ranking modules* on page 110

   A set of relevance ranking modules, combined with the order in which they are evaluated, is referred to as a relevance ranking *strategy*. You can select one of the predefined or stored strategies, or create your own custom strategy. Follow these steps:

   a) Click a module in the **Available Modules** list.
   A description of the module appears in the status bar at the bottom of the **Relevance Ranking** area.

      Note: Some modules might require you to set additional configuration options. Set these options before you continue to the next step.

   b) Click the right arrow to move the module to the **Selected Modules** list.

      If you change your mind, click the left arrow to move the module out of the **Selected Modules** list.

   c) Repeat the previous two steps until you have defined your relevance ranking strategy.

      Strategies that contain four or five modules are unlikely to produce results that are significantly different from strategies containing fewer modules.

   d) Click the up and down arrows next to the **Selected Modules** list to re-order your list of modules.

      This order determines the precedence of the modules when the evaluator orders search results.

7. Select the number of records that you want to display in your results in the **Show** drop-down list at the top of the evaluator page.
8. If you want to create more strategies to compare your initial one with, click the plus (**+**) tab next to the **Search** tab at the top of the evaluator page.

   Results for the current search strategy display, and a new search displays already populated with the values from the first strategy.

   a) Modify this new search using the same controls and options described in the previous steps.

   Note: Try not to click the plus (**+**) tab next to the **Search** tab until you have finished configuring each strategy because this action causes Evaluator to run and display results.

9. After you have finished configuring your strategies, click **Go** next to the **Search Name** field.

Each set of search results displays in its own column in the **Search Results Comparison** section at the bottom of the page. The header lists the name of the search and the number of records matched. To help you better understand the results, each search results header provides detailed information about the search that was performed. Click the plus sign to the right of the search name and results count to see this information.

The Relevance Ranking Score property does not represent a percentage score. It is an internal calculation that the MDEX Engine uses to determine ranking. A higher number equates to greater relevancy based on the applied strategy. To display additional attributes for each record, click **Show All Properties And Dimensions**. If you have deleted any attributes that display, you can redisplay them by clicking **Hide All Properties And Dimensions**, and then clicking **Show All Properties And Dimensions** again.

You can compare search results, including where a given record is ranked in each set. Place your mouse over the displayed properties for the record. When your mouse is placed over the record properties, the record is highlighted in any search in which it is displayed. A tooltip appears that provides the location of the record in each set of search results

Deleting strategies

You can either delete a single relevance ranking strategy or all strategies in your current browser session.

The search configurations defined in Relevance Ranking Evaluator are not stored outside of the your browser session. If the browser is closed or if the session is allowed to time out due to inactivity, the tests are automatically cleared and the evaluator resets to its initial state.

Choose one of these methods to delete strategies:

- If there are multiple search tabs, you can remove an existing search by clicking the **X** next to the search name in its tab. You must keep at least one search tab.
- If you want to delete all configured searches and start over, click **Clear All**. This action prompts you for a confirmation before removing all search tabs.

Deploying a relevance ranking strategy

The Relevance Ranking Evaluator does not provide an automatic method for deploying a selected relevance ranking strategy within an application. You deploy a relevance ranking strategy by specifying it as the default strategy for your MDEX Engine's search interface. For information about search interfaces, refer to the *Oracle Commerce Guided Search MDEX Developer's Guide*.

To deploy a relevance ranking strategy, manually record which modules were selected and in which order. Be sure to include any optional configuration information for modules such as **Stratify**, **Phrase**, and **Static**.

Chapter 8

Working with Reports

This section introduces Oracle Commerce Workbench reports and explains how to view them.

About reports

The **Reports** tool allows you to look at what has happened on your site over the last day or week.

Depending on how **Reports** is configured, you can answer questions like these:

- How much traffic is my site getting?
- How are visitors searching and browsing the site?
- How effective are their searching and browsing techniques?

Depending upon how **Reports** is configured, it can display today's report, a single daily or weekly report, or allow you to browse and view historical report archives.

Scheduling reports

In order to enable Workbench to display reports on the **Reports** page, you must configure report generation.

Daily reports run from 12 a.m. to 11:59:59 p.m. Weekly reports also begin at 12 a.m. You can specify the day that begins a weekly report. For example, your weekly report can run from 12 a.m. on Monday to 11:59:59 p.m. on the following Sunday.

To enable Workbench to display reports on the **Reports** page:

1. Open the **Report Scheduler** page from **Applications Settings** on the application **Home** page.
2. Check one or both of the following:
   - Check **Schedule Daily Reports** if you want reports generated once a day.
   - Check **Schedule Weekly Reports** if you want reports generated weekly. Then select the day of the week from the drop-down list, to indicate on which day of the week you want your reports to be generated.
3. Click **Save Changes**.

Viewing reports

The reports that are visible to you depend upon how Oracle Commerce Workbench is configured. If you need to include or exclude different reports or reporting information, or if reporting information does not appear, contact your technical team.

You need permission to access the **Reports** tool.

To view reports in Oracle Commerce Workbench:

1. Locate the **Reports** tool on your application **Home** page in Workbench.
2. Click one of the following links:
    - **Today's Reports** displays the latest information available.
    - **Daily Reports** displays a list of archived daily reports. Click any date in the list to display the corresponding report.
    - **Weekly Reports** displays a list of archived weekly reports by date. Click any date in the list to display the corresponding report.

Appendix A

About the Reference Application Cartridges

The Discover Electronics reference application is provided as an example of an Assembler application that displays content to users across multiple channels. This chapter provides a list of the available cartridges and describes how to configure them in Experience Manager.

About the included cartridges

The Tools and Frameworks package installs with a set of Experience Manager cartridges for use with the Discover Electronics reference application.

An Experience Manager cartridge provides an editing interface that allows a content administrator to configure how and where content displays to users.

Content can be configured within a page section, or within a standalone unit that displays in an available slot on a page when trigger conditions are met. The triggers and content for a dynamic slot are managed independently of the rule that contains them.

Search cartridges

- Search Box
- Dimension Search Auto-Suggest
- Dimension Search Results
- Search Adjustments

Guided Navigation cartridges

- Breadcrumbs
- Dimension Navigation
- Navigation Container

Results cartridges

- Results List

Record details cartridges

- Record Details Page

Content and spotlighting cartridges

- Media Banner
- Record Spotlight
- Horizontal Record Spotlight

- Rich Text Main
- Rich Text Secondary

Experience Manager supports the development of custom cartridges for extending the functionality available to business users. For more information, see the *Assembler Application Developer's Guide*.

About cartridge dialogs

Several of the core cartridges included with Tools and Frameworks launch dialog boxes as a configuration interface. This section describes dialogs common to multiple core cartridges.

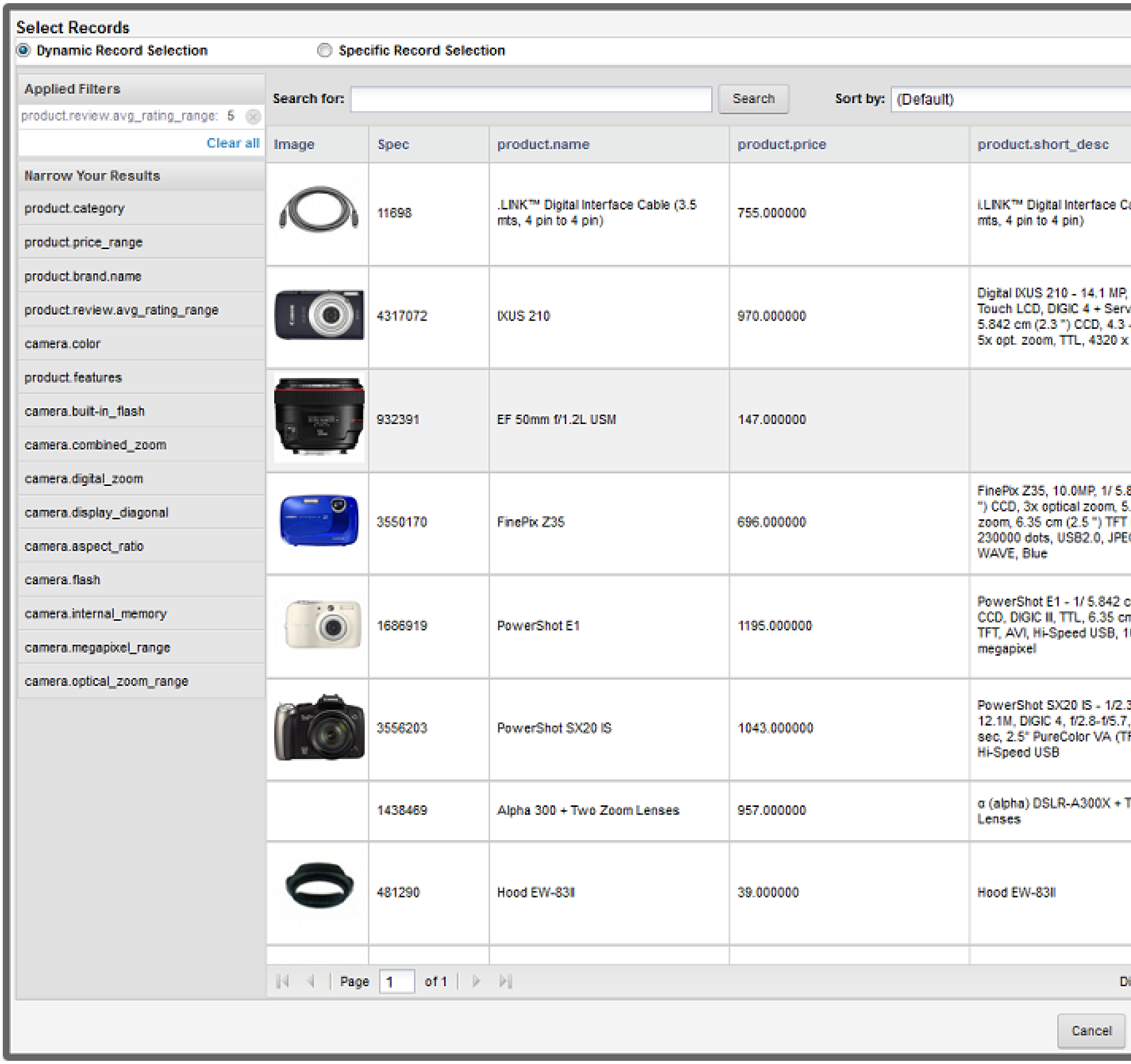
About the Select Records dialog

The **Select Records** dialog provides traditional search and Guided Navigation within Experience Manager. Several cartridges, such as the Results List and Record Spotlight cartridges, use it as a means of selecting featured or dynamic records.

You can use the dialog to specify a navigation state within your application, or a list of specific records, without needing to know the record IDs within your application data set.

Dynamic Record Selection

In **Dynamic Record Selection** mode, you select dimension refinements and search terms that correspond to the navigation state you wish to highlight. For example, if you are creating a "Top-Rated Products" banner that specifically highlights compact cameras, you might enter the search term "compact" and limit results to those tagged with the `product.review.avg_rating_range 5` dimension:



The user interface includes the following controls:

- **Search for** field – The **Search for:** field lets you enter search terms to either define a navigation state or just to browse through the data set. Selected search terms display in the **Applied Filters** pane.

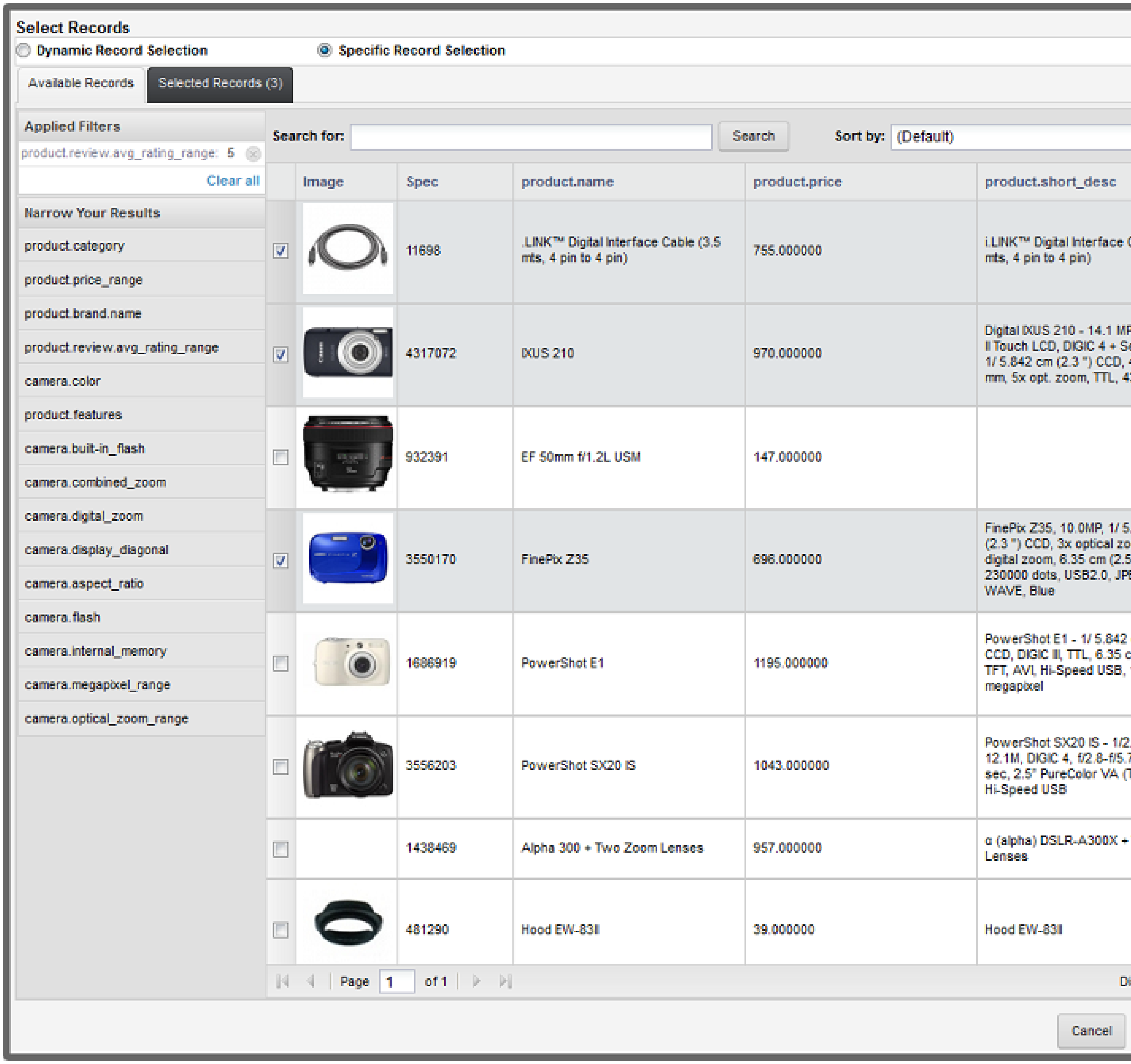
  Note: The **Search for:** field is typeahead enabled.

- **Narrow Your Results** pane – You can select dimension refinements in addition to or instead of search terms to define a navigation state. Selected refinements display in the **Applied Filters** pane.

- **Applied Filters** pane – Once selected, dimension refinements and search terms are displayed here. You can click the **X** beside each refinement or term to remove it individually, or click the **Clear all** link to clear all refinements.
- **Sort by:** drop-down – You can sort results based on an MDEX Engine dimension or property value.
- **Filtered State** pane – This pane provides a preview of the records that match the selected filter state, although the exact records that display to the end user may change due to updates in the data set.
- Pagination controls – The pagination controls in the lower-right allow you to browse matching records page by page.

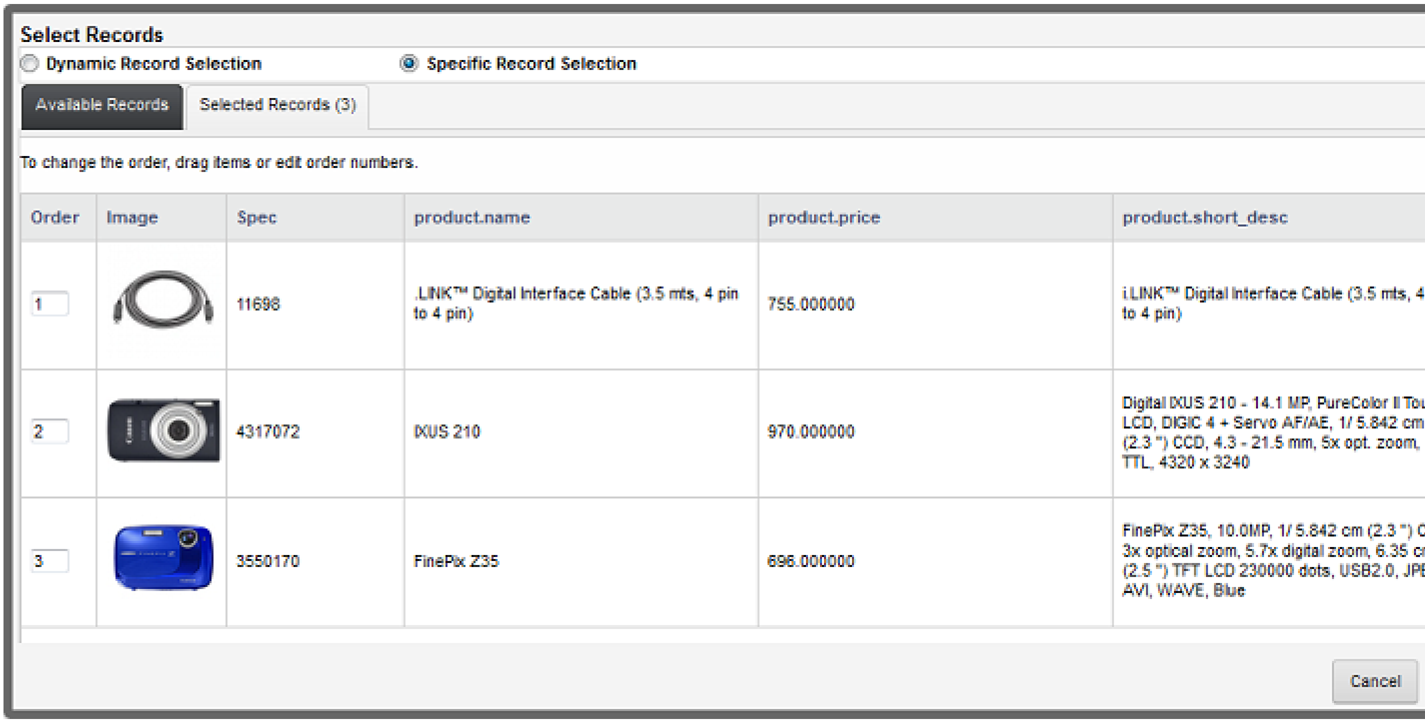
Specific Record Selection

In **Specific Record Selection** mode, the **Filtered State** pane becomes the **Records** pane, which features checkboxes that allow you to select specific records from your navigation state:



Note: In the Link Builder editor, the checkboxes are replaced with radio buttons since you can only link to a single record.

You can view selected records by switching to the **Selected Records** tab:



To re-order these results, enter a new value in the **Order** column for the corresponding records. Results are ordered lowest to highest; a record with an **Order** value of 1 will show up before a record with an **Order** value of 2.

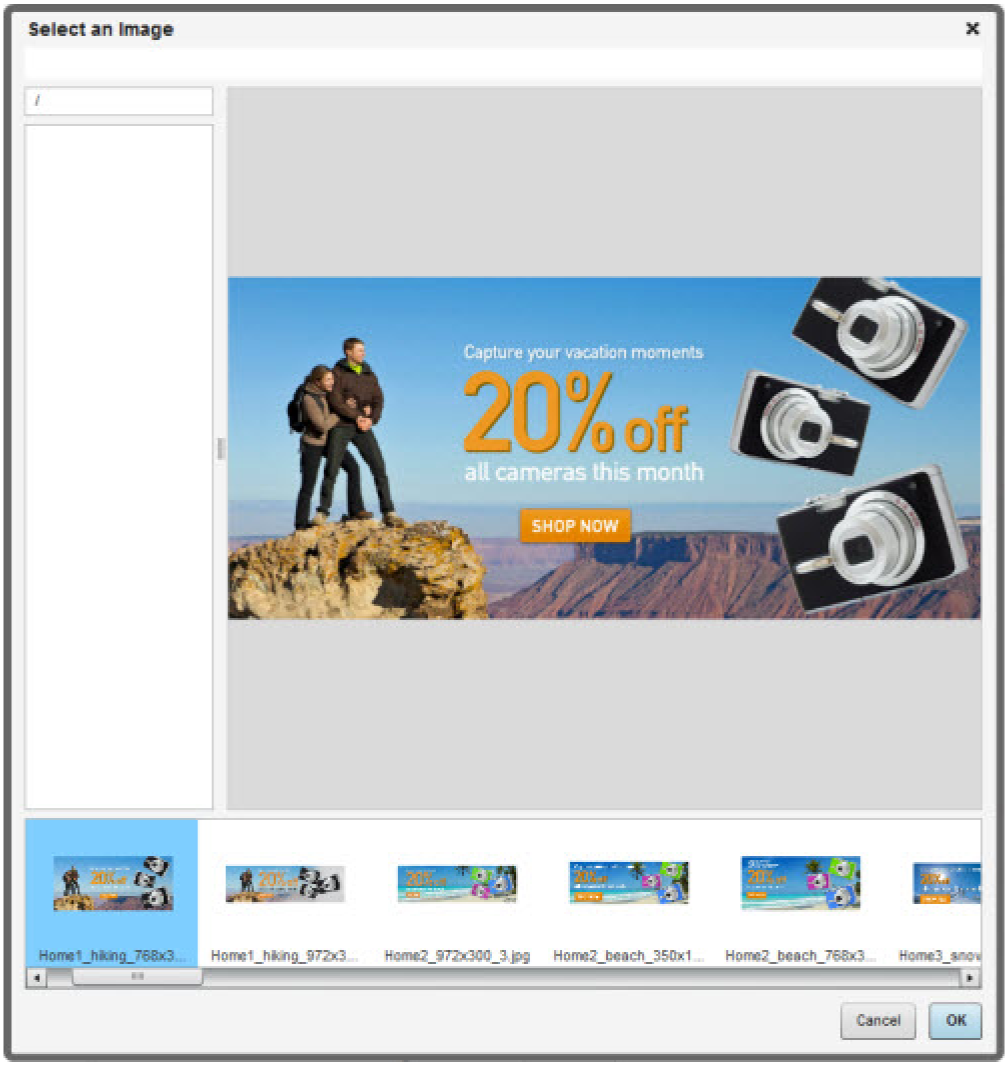
You can remove selected records by clicking the corresponding **X** in the **Remove** column, or you can click the **Clear All** button to remove all selected records.

About the Select an Image dialog

The **Select an Image** dialog allows you to link media resources into your cartridges.

You can preview images and video in the dialog before adding the associated resource to a cartridge.

The dialog is shown below in Experience Manager:



The Experience Manager editor that launches the **Select an Image** dialog is shown below:

Search cartridges

Search cartridges enable basic and advanced keyword search functionality in an application.

The Search Box cartridge

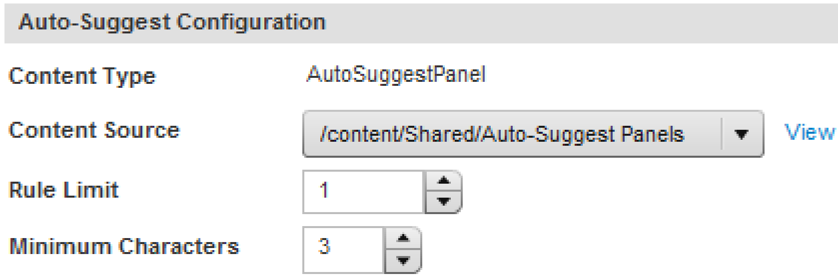
The Search Box cartridge provides site visitors with an interface for using keyword search in an application. You can also configure the cartridge to display auto-suggest results.

The Search Box cartridge for the Discover Electronics reference application is shown below:

If you have enabled auto-suggest search results, they display when the keyword search reaches the specified minimum number of matching characters. These auto-suggest results provide potential search matches that assist site users in rapidly navigating your application and finding the content they need.

Configuring the Search Box cartridge

The Search Box cartridge includes configuration options for triggering an auto-suggest panel:



Note: You must create and configure the auto-suggest panel separately.

Content Source — A content folder that is either unrestricted, or restricted to rules of type `AutoSuggestPanel`. Click the **View** link to navigate away from the current cartridge and view the selected folder.

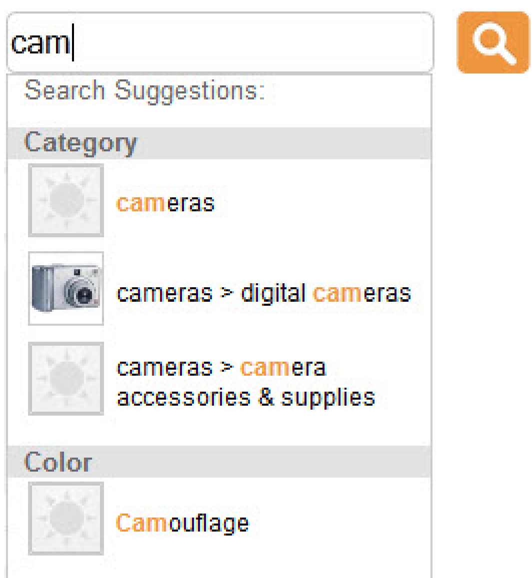
Rule Limit — The number of `AutoSuggestPanel` rules to return.

Minimum Characters — The number of characters the end user must enter before the auto-suggest panel appears. The minimum and maximum acceptable values are set by your Application Developer in the cartridge template.

Adding an auto-suggest panel

Auto-suggest results display in a drop-down panel on the current page, rather than as a separate page. You must create an auto-suggest panel before you can add any auto-suggest cartridges to it.

The Search Box cartridge triggers an auto-suggest panel when the end user's search query reaches a specific character length. Auto-suggest results display as a drop-down list beneath the Search Box on the current page, as shown in the example below:



To add an auto-suggest panel:

1. In the Experience Manager **Content** panel, select the content folder that contains your auto-suggest content.

In the Discover Electronics reference application, this is the **Shared** > **Auto-Suggest Panels** folder.

2. Click **New AutoSuggestPanel**.
3. Set the page template:
   a) Click **Select Template**.
   b) Select the **AutoSuggestPanel** template.
   c) Click **OK**.
4. In the Content Tree, select **autoSuggest**.
5. In the Content Details Panel, **Add** an auto-suggest cartridge, such as **DimensionSearchAutoSuggestItem**.
6. Click **OK** to save your changes and return to the **Rule List View**.

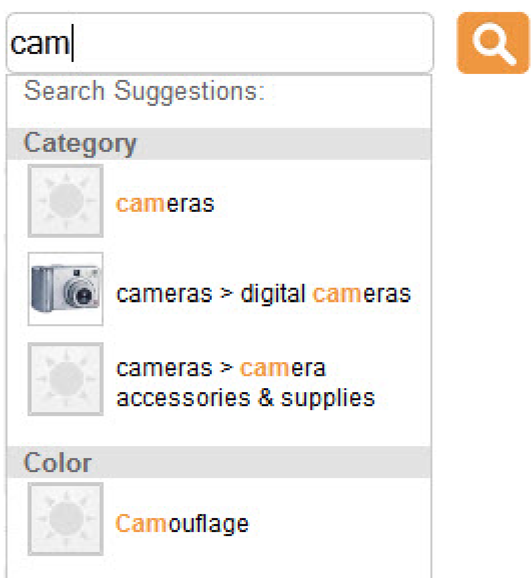
After adding the cartridge, configure it as desired.

The Dimension Search Auto-Suggest cartridge

The Dimension Search Auto-Suggest cartridge populates the auto-suggest panel with a list of dimension values based on the current search query.

Auto-suggest dimension results display dimension values related to an end user's search query. This allows the user to quickly narrow a search to dimensions most likely to return the desired results.

An example of the Dimension Search Auto-Suggest cartridge is shown below in the Discover Electronics sample application:



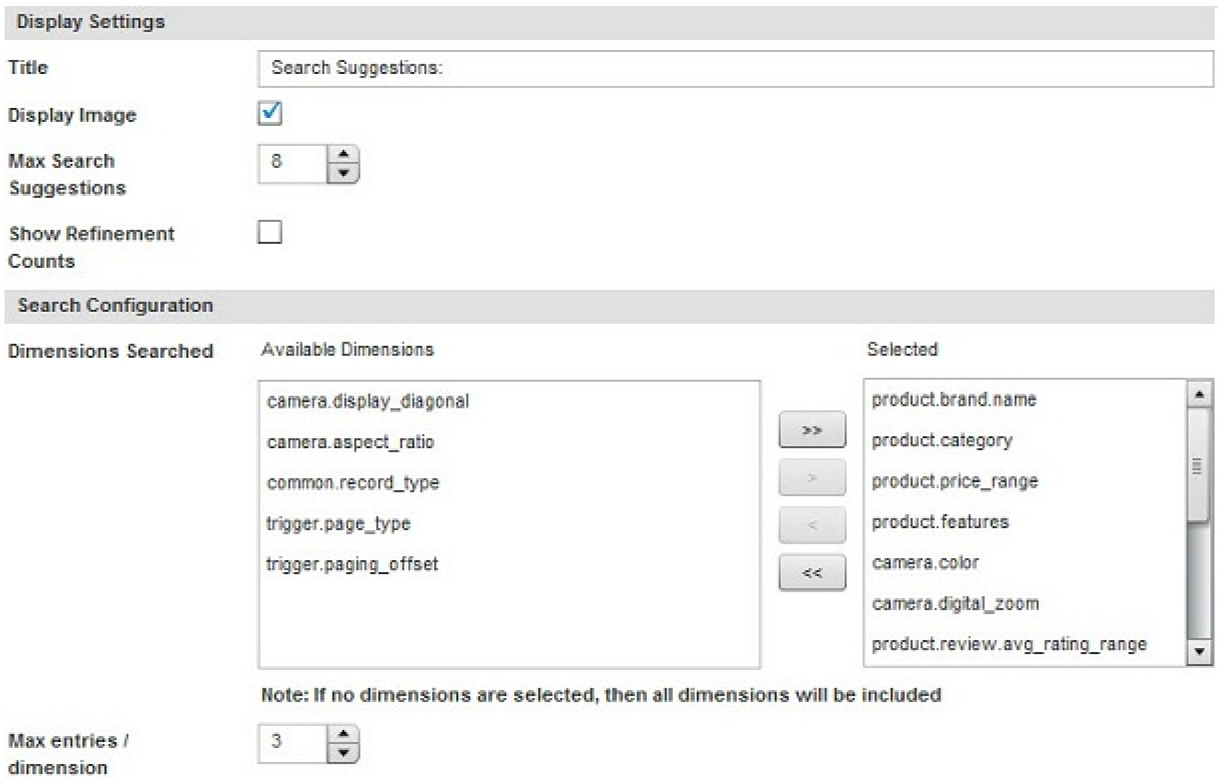
Related Links

The Dimension Search Results cartridge on page 132
The Dimension Search Results cartridge displays dimension values that match the site visitor's keyword search query. Unlike the Dimension Search Auto-Suggest cartridge, these results display as part of a page after the site visitor presses ENTER in the Search Box or clicks the search button.

About configuring the Dimension Search Auto-Suggest cartridge

You can configure the appearance of the auto-suggest panel by selecting which dimensions to check for matching dimension values, and what order they display in.

The cartridge configuration interface is shown below in the Content Details Panel in Experience Manager:



The **Display Settings** controls affect how auto-suggest dimension results are displayed to the site user:

- **Title** — (Optional) You can add a title to the dimension search section of the auto-suggest panel.
- **Display Image** — Specify whether the image associated with a dimension value displays next to the name of the dimension search result. The application developer configures the scaling and positioning of these images.
- **Max Search Suggestions** — Limit the total number of dimension results displayed in the auto-suggest panel.
- **Show Refinement Counts** — Specify whether to display the number of records associated with each dimension search result.

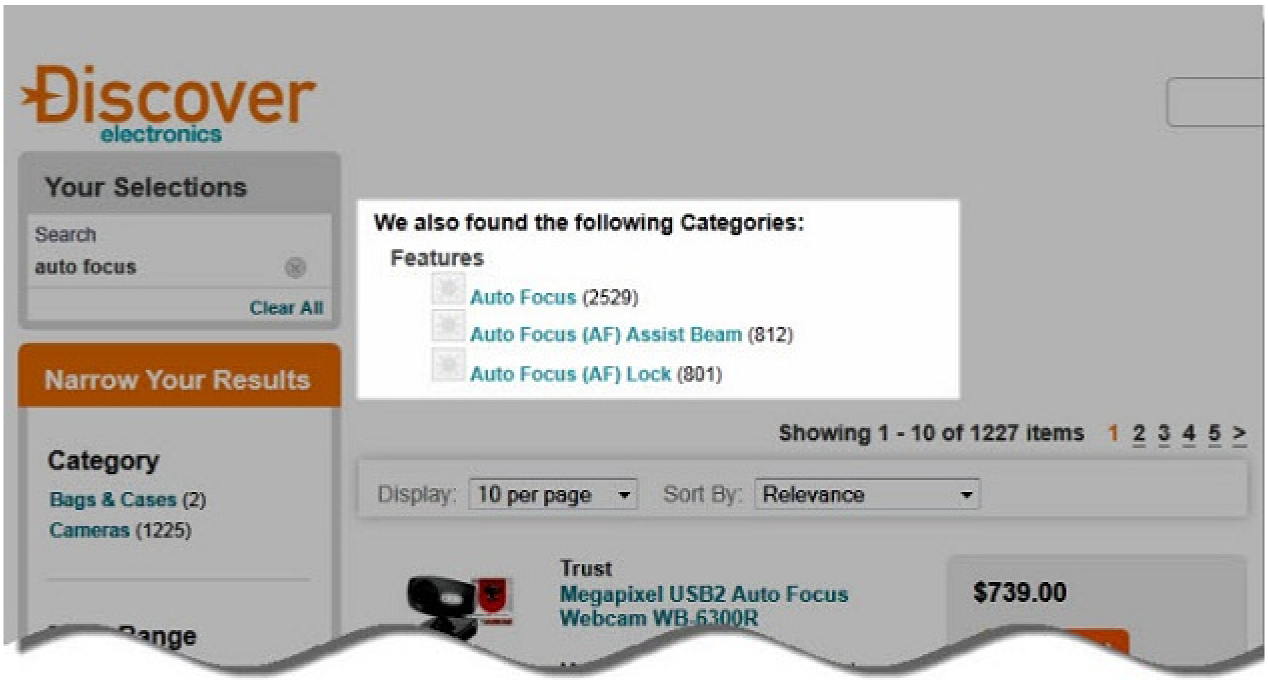
Use the **Search Configuration** controls to configure which dimensions to check for dimension values that match the user's current keyword search:

- **Dimensions Searched** — Drag dimensions from the **Available Dimensions** pane to the **Selected** pane to include them in auto-suggest results. The **Remove All** link clears the list of selected dimensions.
- **Selected** — Displays selected dimensions. Re-order the list to adjust the order in which auto-suggest results display to the user.
- **Max entries / dimension** — Limit the number of search results returned for each dimension.

The Dimension Search Results cartridge

The Dimension Search Results cartridge displays dimension values that match the site visitor's keyword search query. Unlike the Dimension Search Auto-Suggest cartridge, these results display as part of a page after the site visitor presses ENTER in the Search Box or clicks the search button.

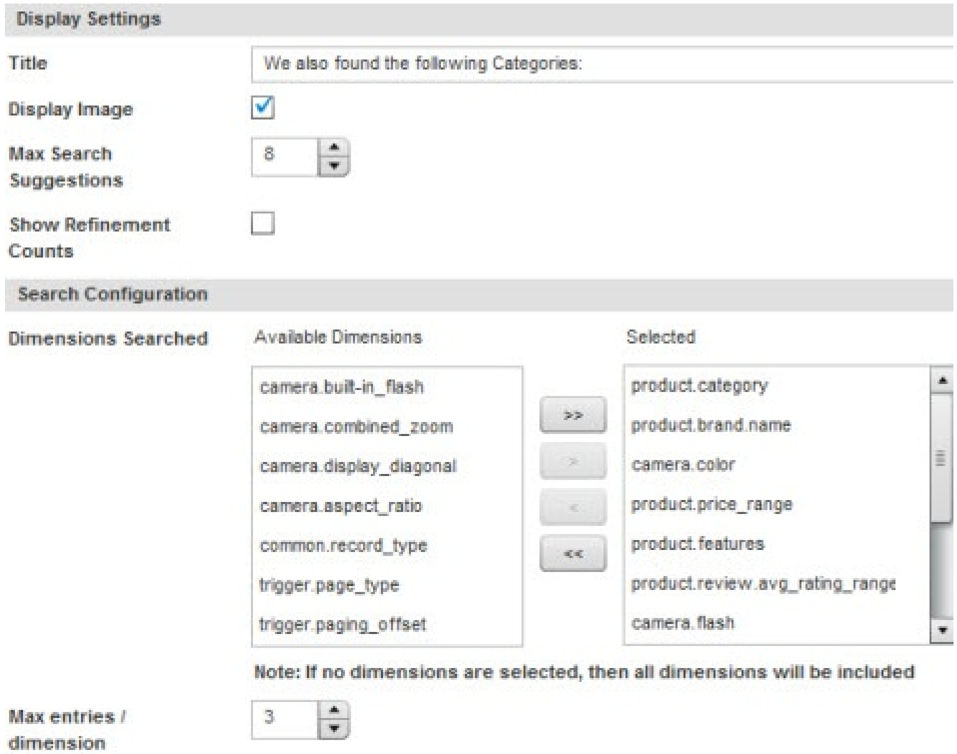
Dimension search results are shown below in the Discover Electronics reference application:



Note that the cartridge does not display in the application if the site visitor never uses keyword search. Additionally, if the visitor refines a keyword search by selecting navigation refinements, dimension search matches no longer display.

Configuring the Dimension Search Results cartridge

The cartridge configuration interface is shown below in the Content Details Panel in Experience Manager:



The cartridge configuration options are similar to those used in the Dimension Search Auto-Suggest cartridge.

The **Display Settings** controls affect how auto-suggest dimension results are displayed to the site visitor:

- **Title** — Enter the text string that should appear above the list of dimension search results.
- **Display Image** — Specify whether the image associated with a dimension value displays next to the name of the dimension search result. Your application developer configures the scaling and positioning of these images.
- **Max Search Suggestions** — Limit the total number of dimension results displayed in the list of results.
- **Show Refinement Counts** — Specify whether to display the number of records associated with each dimension search result.

Use the **Search Configuration** controls to configure which dimensions to check for dimension values that match the current keyword search:

- **Dimensions Searched** — Drag dimensions from the **Available Dimensions** pane to the **Selected** pane to include them in auto-suggest results. The **Remove All** link clears the list of selected dimensions.
- **Selected** — Displays selected dimensions. Re-order the list to adjust the order in which auto-suggest results display to the user.
- **Max entries / dimension** — Limit the number of search results returned for each dimension.

Best Practices

Dimension search results provide an alternative to the Dimension Search Auto-Suggest cartridge when displaying related dimension values to a site user. Oracle recommends selecting one of the two approaches and maintaining that selection consistently across your application. The Discover Electronics reference application enables both the Dimension Search Results cartridge and the Dimension Search Auto-Suggest cartridge for demonstration purposes.

Related Links

The Dimension Search Auto-Suggest cartridge on page 130
The Dimension Search Auto-Suggest cartridge populates the auto-suggest panel with a list of dimension values based on the current search query.

The Search Adjustments cartridge

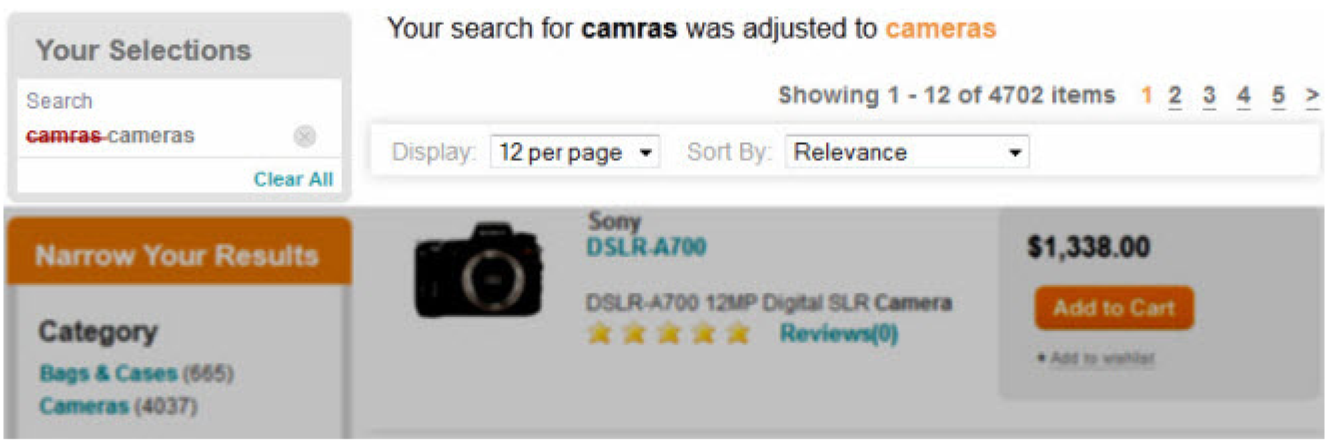
The Search Adjustments cartridge can be added to a results page to notify the site visitor when a keyword search is automatically corrected, or to offer alternative search suggestions.

Search adjustments help site visitors quickly locate the content they are searching for. They provide alternate navigation to what would otherwise result in a limited or empty set of results. Search adjustments include:

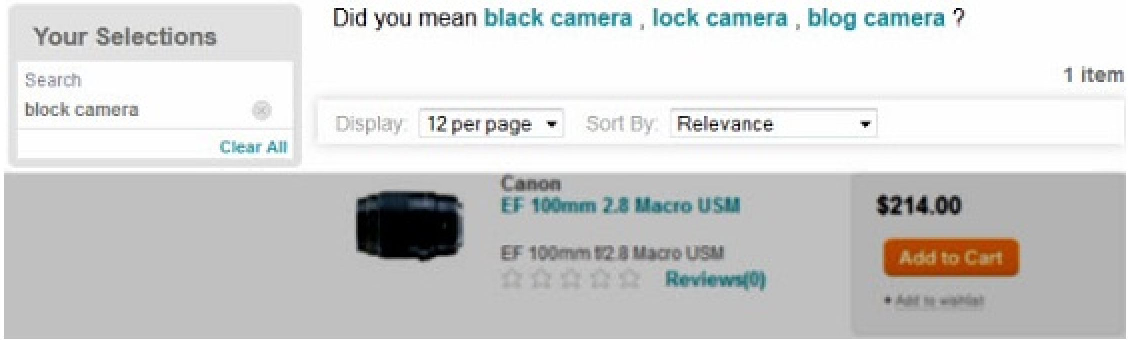
- **Auto-correct** takes effect when there are few or no results for the user's keyword search and a similar term exists in the data.
- **Automatic phrasing** treats certain predefined combinations of search terms as a phrase search instead of individual keywords.
- **Did You Mean (DYM)** displays either when results exist for the user's keyword search, but an alternative keyword search produces significantly more search results. Did You Mean can also be used in conjunction with automatic phrasing (to offer the site visitor the choice of using either the phrased or unphrased version of the search).

The exact threshold at which auto-correct or DYM results display depends on configuration set by your application developer.

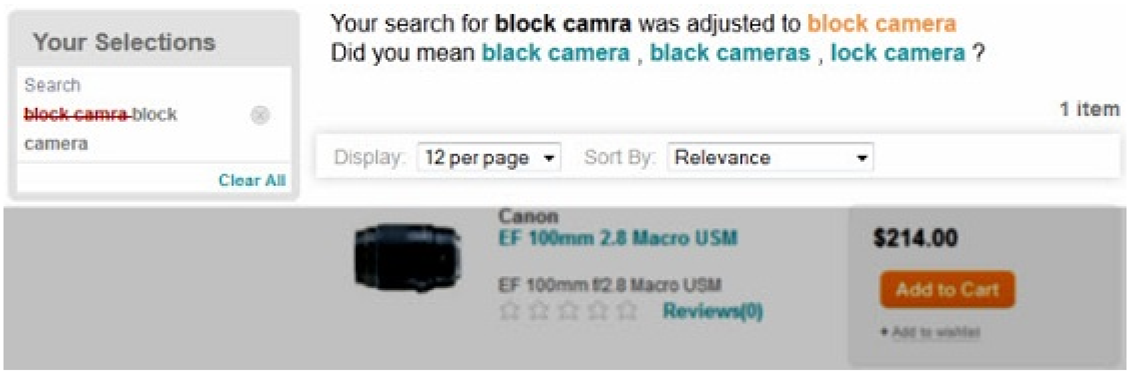
For example, if the site visitor searches for "camras," the search term is auto-corrected to "cameras." A message displays that the search was corrected to "cameras," and keyword search results display for "cameras":



If the site visitor searches for "block camera," they receive a message asking if they meant "black camera," "lock camera," or "blog camera." Each option is presented as a link to the keyword search results for the relevant phrase:



If the site visitor searches for "block camra," "camra" is auto-corrected and "Did You Mean" suggestions display for "block." A message displays that the search was corrected, and keyword search results display for "block camera":



Note: The spelling correction and Did You Mean features are enabled and configured by your application developer; these application settings apply to all pages on your site regardless of whether you have added the Search Adjustments cartridge. You should work with your technical team to ensure the proper behavior of search adjustments.

Configuring the Search Adjustments cartridge

Except for naming the cartridge in Experience Manager, the presentation and wording of messages in the Search Adjustments cartridge is configured by your application developer.

Guided Navigation cartridges

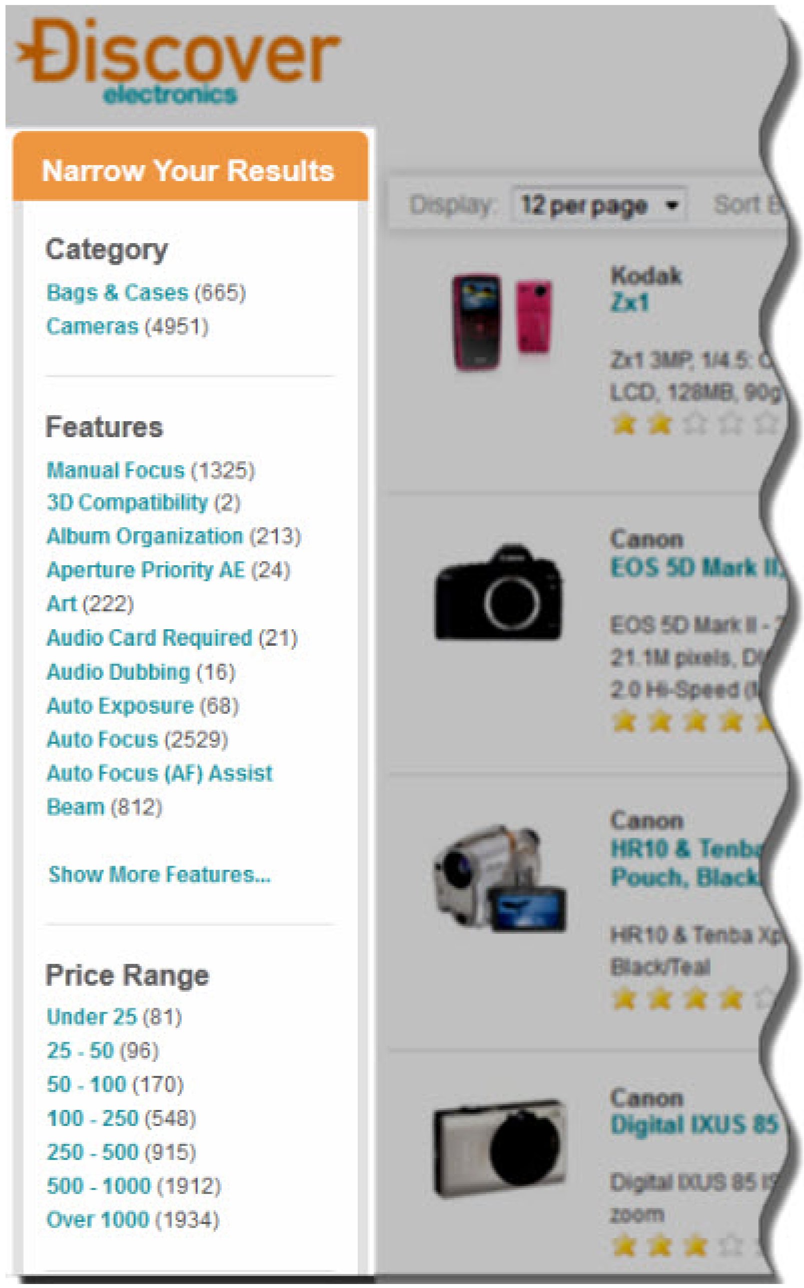
Guided Navigation cartridges provide a means of configuring Guided Navigation in an application.

The Dimension Navigation cartridge

The Dimension Navigation cartridge displays dimension refinements for Guided Navigation. Additionally, you can configure it to boost or bury selected refinements.

As the name implies, the Dimension Navigation cartridge displays dimension refinements for non-hierarchical dimensions. These results can be ordered by sorting, relevance ranking, or through explicitly boosting or burying selected dimension refinements.

An example of the Dimension Navigation cartridge is shown below in the Discover Electronics reference application:

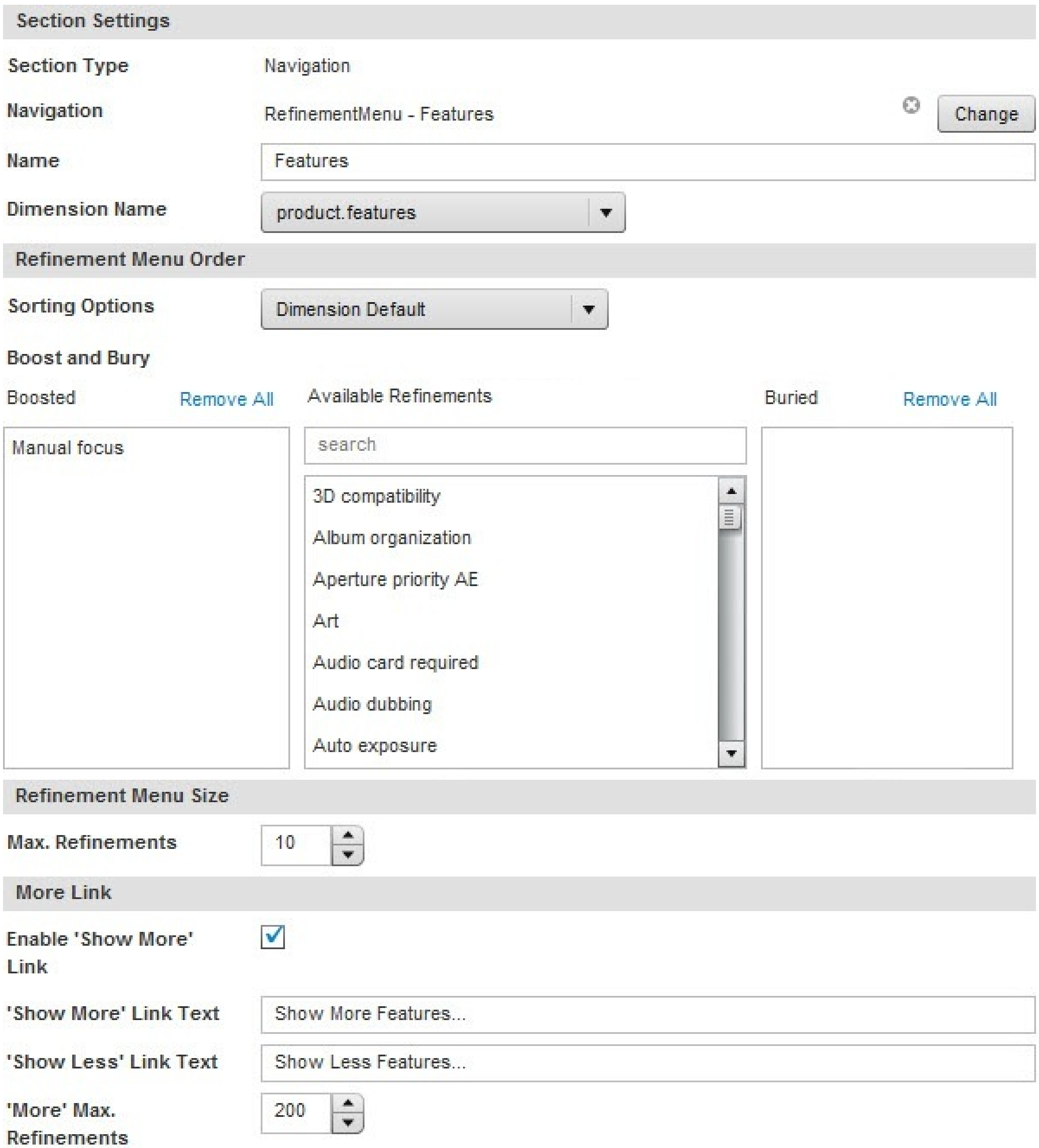


This layout uses multiple Dimension Navigation cartridges for the left column Guided Navigation interface. Note that the **Features** dimension has the **'More'** link enabled, while the **Price Range** dimension does not require it.

Note: The Dimension Navigation cartridge does not support hierarchical dimensions.

Configuring the Dimension Navigation cartridge

The cartridge configuration interface is shown below in the Content Details Panel in Experience Manager:



The **Section Settings** controls affect general settings for the cartridge. In addition to modifying the cartridge name in Experience Manager, you must use the **Dimension Name** drop-down to set the dimension for navigation.

The **Refinement Menu Order** controls determine the order in which results display to the end user.

- **Sorting Options** — Select how dimension refinements are sorted. By default, this is set to **Dimension Default**, the configuration defined for the application by your application developer.
- **Boost and Bury** — Once you have selected a dimension, you can drag dimension refinements to the **Boosted** or **Buried** lists to override their default position in the sorting order. For more details, see "Configuring dimension boost and bury in the Dimension Navigation cartridge."

The **Refinement Menu Size** controls determine size of the refinement menu.

- **Max. Refinements** — Select how many dimension refinements should display.

The **More Link** controls let you set the text of the "More results" link and the maximum number of refinements that should display when it is clicked.

- **Enable 'Show More' link** — Enable or disable the **'Show More'** link in the application. This enables you to limit the number of results initially shown to the end user, while still allowing them to display additional dimension refinements if they so choose.

  If the total number of dimension refinements is less than the value specified in **'More' Max. Refinements**, the **'Show More'** link does not display.

- **'Show More' Link Text** — Specify the text of the **'Show More'** link here.
- **'Show Less' Link Text** — Specify the text of the **'Show Less'** link here.
- **'More' Max. Refinements** — Set the maximum number of refinements displayed after the **'More'** link is selected in the Web application.

Best practices for the Dimension Navigation cartridge

If a cartridge requires a "Show More" link, consider setting the **Sorting Options** to **Frequency (Dynamic Ranking)** so that the most common dimension refinements are displayed first.

Related Links

Configuring dimension boost and bury in the Dimension Navigation cartridge on page 138
You can configure the Dimension Navigation cartridge to boost or bury selected dimension refinements in the displayed results set. This overrides their default position in the sorting order.

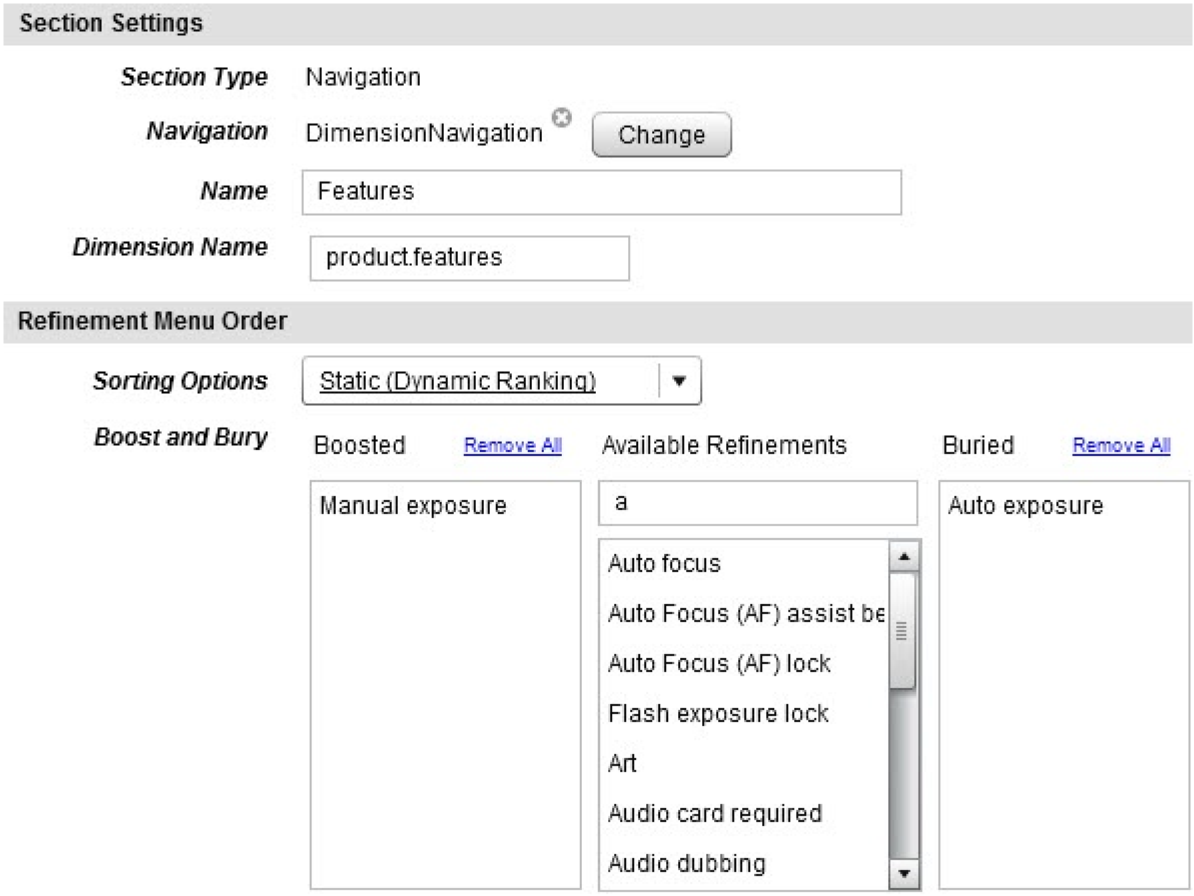
Configuring dimension boost and bury in the Dimension Navigation cartridge

You can configure the Dimension Navigation cartridge to boost or bury selected dimension refinements in the displayed results set. This overrides their default position in the sorting order.

To boost or bury dimensions in the Dimension Navigation cartridge in Experience Manager:

1. In the Experience Manager **Rules** pane, select your Guided Navigation folder.

   In the Discover Electronics reference application, this is the **Shared** > **Guided Navigation** folder.
2. Select the rule you wish to edit.
3. In the Content Tree, select the section where you wish to add or edit a Dimension Navigation cartridge.
4. In the Content Details Panel, **Add** a Dimension Navigation cartridge or select the Dimension Navigation cartridge you wish to edit.
5. Select the dimension that you wish to search for:
   a) Click the **Dimension Name** field to see the drop-down list of available dimensions.
   b) Type in the name of the desired dimension or select it from the drop-down list.
   The **Boost and Bury** fields are enabled when a dimension is selected:



6. Select a sort type in the **Sorting Options** drop-down.

   By default, it is set to **Dimension Default**, the configuration defined in Oracle Commerce Developer Studio.

   The out-of-the-box template also allows you to sort dimensions in **Alphanumeric** order or **By frequency**. Additional drop-down options can be specified by your Application Developer in the cartridge template.

7. Configure boosted and buried refinements:
   a) Select the dimension refinement that you wish to boost or bury from the **Available Refinements** list.

      You can filter the displayed refinements by entering partial or full words in the above text box.

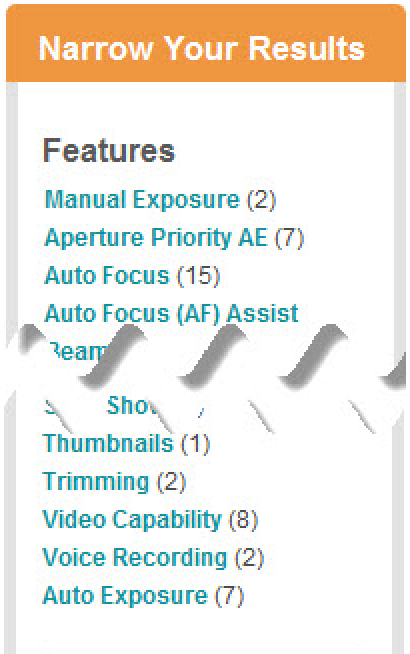
   b) Drag the selected refinement to the **Boosted** or **Buried** list.

      You can remove refinements from either list individually, or remove all refinements by clicking the associated **Remove All** link.

   c) Repeat Steps 7a and 7b for each refinement that you wish to boost or bury.
   d) (Optional) Drag and drop refinements in the **Boosted** and **Buried** lists to the exact order in which they should display in the application.

8. Click **OK** to save your changes and return to the **Rule List View**.

Verify that your change took effect by navigating to the Discover Electronics reference application at `http://localhost:8006/discover-authoring`. Following the example configuration shown in Step 5b, Manual Exposure is boosted as a refinement, while Auto exposure is buried:



Related Links

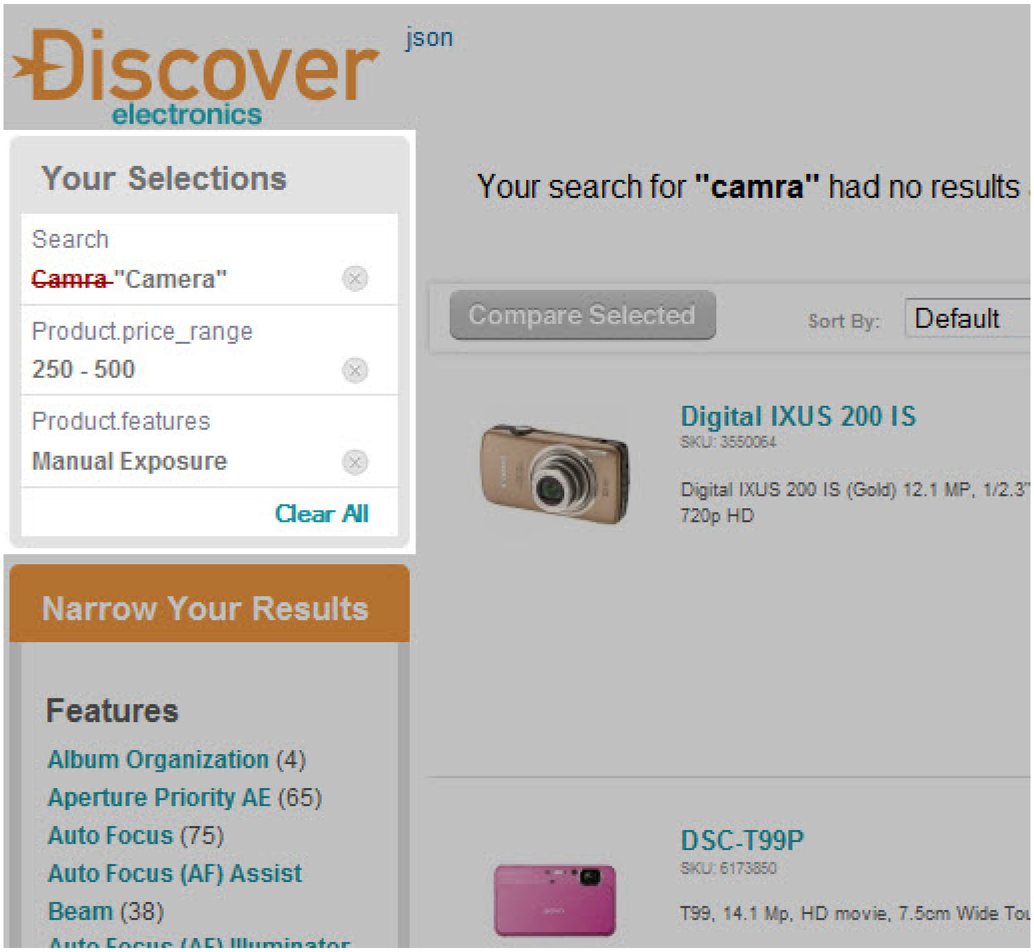
The Dimension Navigation cartridge on page 135

The Dimension Navigation cartridge displays dimension refinements for Guided Navigation. Additionally, you can configure it to boost or bury selected refinements.

The Breadcrumbs cartridge

The Breadcrumbs cartridge allows you to add navigation breadcrumbs to the sidebar of a page, so that the current navigation state is clearly visible to the end user. Users can clear refinements from the breadcrumbs individually or all at once.

The Breadcrumbs cartridge is highlighted below in the Discover Electronics reference application:



The cartridge displays selected dimensions and search terms. If your application supports auto-correct search results, they are shown with the initial term in strikethrough text and the auto-correct result beside it.

The end user can use the Breadcrumbs display to monitor their navigation state and can remove an individual refinement by clicking the associated **x** button. This sends a new query to the MDEX Engine with the updated navigation state.

Additionally, the end user can clear the navigation state entirely by clicking **Clear All**.

Configuring the Breadcrumbs cartridge

The Breadcrumbs cartridge does not require any configuration; only the display name in Experience Manager can be changed.

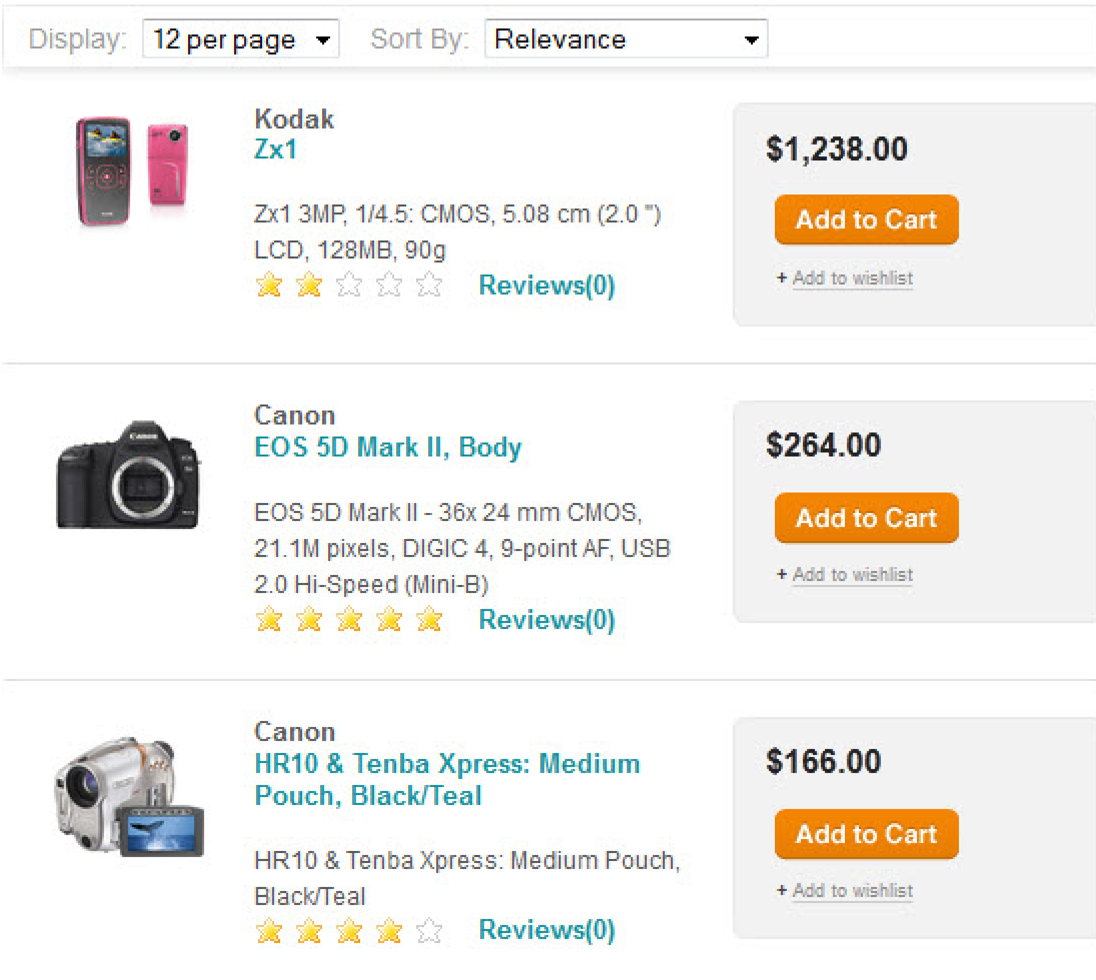
Results cartridges

Results cartridges allow you to configure how search and navigation results are displayed to users of your application.

The Results List cartridge

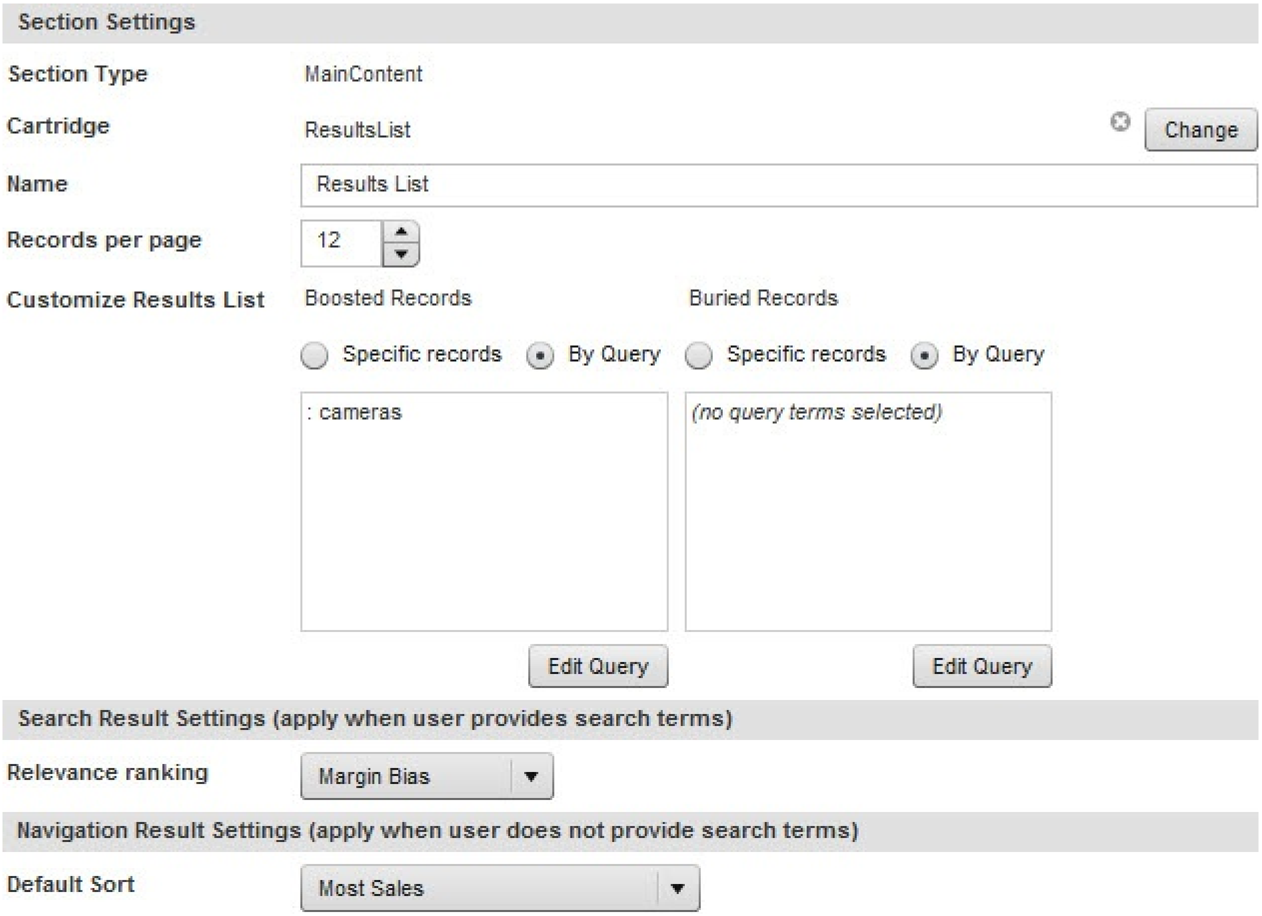
The Results List cartridge displays search and navigation results to site users. You can configure it to boost or bury selected records.

The results list is shown below in the Discover Electronics reference application:



Configuring the Results List cartridge

The cartridge configuration interface is shown below in the Content Details Panel in Experience Manager:



The **Section Settings** controls affect general settings for the cartridge. The following are configurable:

- **Records per page** — Set the number of records displayed per page.

  The Application Developer configures the default value, increment, minimum value, and maximum value in the cartridge template.

- **Customize Results List** — You can use the Edit buttons to configure the **Boosted Records** or **Buried Records** by specifying selected records or a search state in the record selector. These options override the default position of the selected records in the sorting order. For more details, see "Configuring record boost and bury in the Results List cartridge."

The **Search Results Settings** controls include one configurable option:

- **Relevance ranking** — Select the relevance ranking on search results.

  The template included with Discover Electronics features the following Relevance Ranking options:

  - Margin Bias
  - Inventory Bias
  - First
  - By Price (Static)
  - Frequency

  Additional drop-down options can be specified by your Application Developer in the cartridge template.

The **Navigation Result Settings** controls include one configurable option:

- **Default Sort** — This drop-down allows you to select how navigation results are sorted. By default, it is set to **Default**, the configuration defined in Oracel Commerce Developer Studio.

  The template included with Discover Electronics features the following Sort options:

  - Most Sales
  - Best Conversion Rate
  - Price (Ascending or Descending)

  Additional drop-down options can be specified by your Application Developer in the cartridge template.

Related Links

Configuring record boost and bury in the Results List cartridge on page 144
You can configure the Results List cartridge to boost or bury selected records or dynamic search states. This overrides their default position in the sorting order.

About the Select Records dialog on page 122
The **Select Records** dialog provides traditional search and Guided Navigation within Experience Manager. Several cartridges, such as the Results List and Record Spotlight cartridges, use it as a means of selecting featured or dynamic records.

About ordering search and navigation results

The order in which results are displayed to the end user is determined by the presence of boosted or buried results and the sorting and relevance ranking options within cartridges.

Keyword search and Guided Navigation results display according to the following rules:

- If an end user triggers results from a text search, the result set is ordered by relevance ranking. If the end user reaches a results set using Guided Navigation and has not entered any search terms, the set is ordered according to the sort settings. In addition to sorting or relevance ranking, any boosted or buried results are moved to the top or bottom of the results.
- The end user can then manually select a sorting option, which overrides all of the boost, bury, sort, and relevance ranking configuration in the cartridge. The sort options that are available to the end user are specified by your application developer.

When configuring the sort and relevance ranking options on a rule, keep in mind that if it triggers only on a keyword search query, it will always use the selected relevance ranking instead of the sort order.

Configuring record boost and bury in the Results List cartridge

You can configure the Results List cartridge to boost or bury selected records or dynamic search states. This overrides their default position in the sorting order.

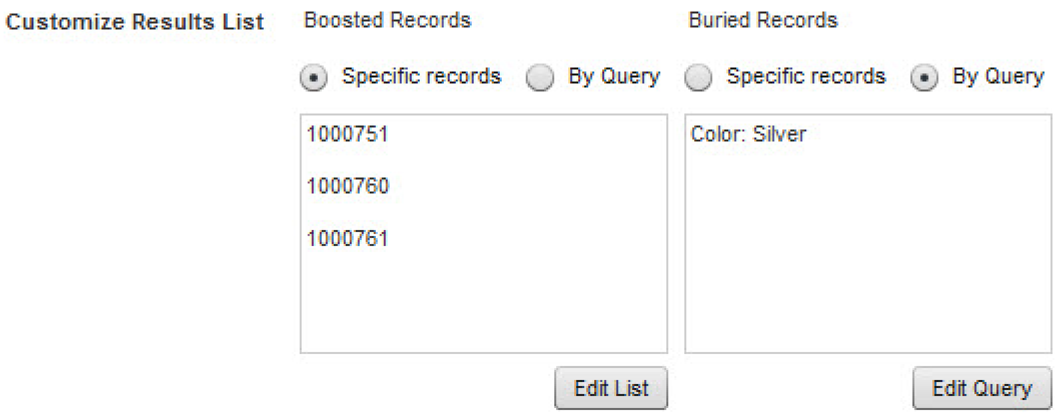
To boost or bury record results in the Results List cartridge in Experience Manager:

1. In the Experience Manager **Content** pane, select the group that contains your Results List pages.

   In the Discover Electronics reference application, this is the **Shared** > **Results List** folder.
2. In the **Rule List View**, select the rule you wish to edit.
3. In the Content Tree, select the section where you wish to add or edit a Results List cartridge.
4. In the Content Details Panel, **Add** a Results List cartridge or select the Results List cartridge you wish to edit.
5. Configure boosted and buried refinements:
   a) Select the **Specific records** radio button to specify individual records, or the **By Query** radio button to select a dynamic search state.

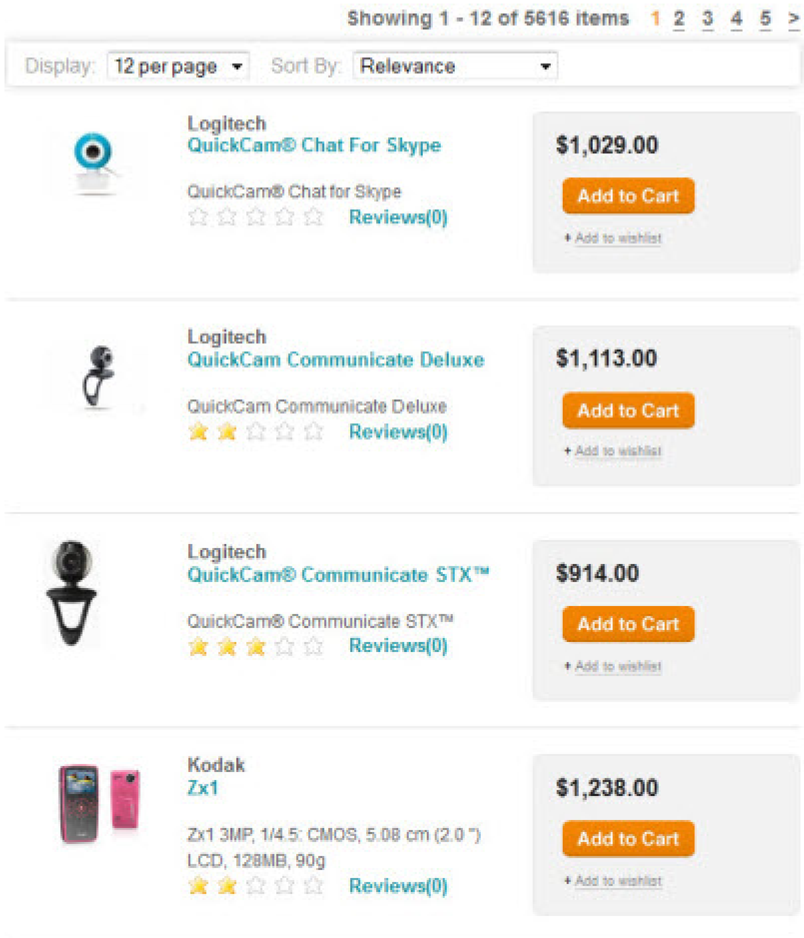
b) Click the **Edit List** or **Edit Query** button to edit your selection.
c) Use the **Select Records** dialog to select featured records or a search state.
d) Click the **Save Selection** button to save your selection.
e) (Optional) Repeat Steps 5a-5c for both boosted and buried records.

You can boost specific records and bury a dynamic search state, or vice-versa, as shown below:

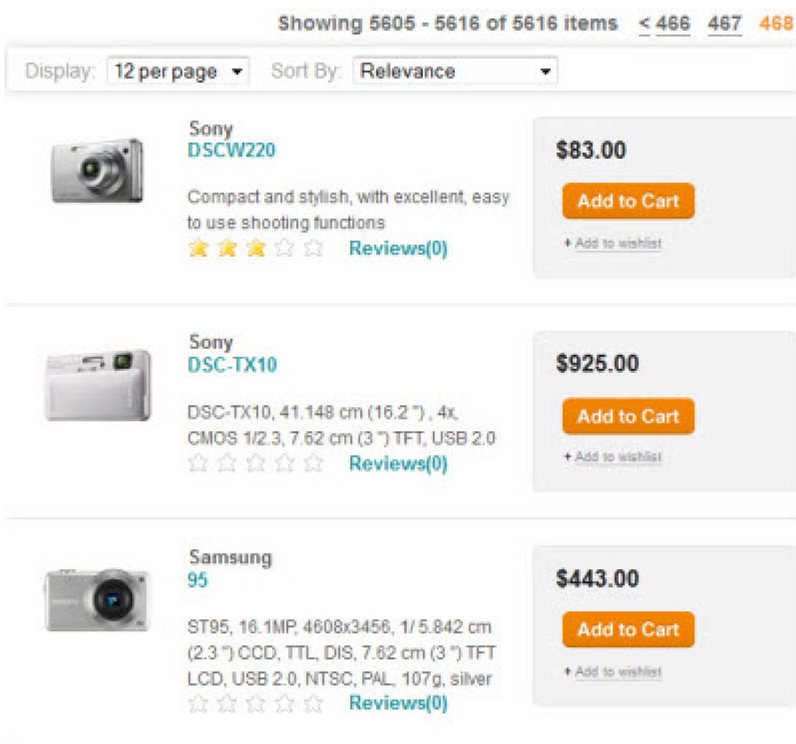


6. Click **Save Changes** to save your changes and return to the **Rule List View**.

Verify that your change took effect by navigating to the reference application at `http://localhost:8006/discover-authoring`. Following the example configuration shown in Step 5e, several QuickCam records have been boosted:



Silver cameras have been buried:



Related Links

The Results List cartridge on page 142

The Results List cartridge displays search and navigation results to site users. You can configure it to boost or bury selected records.

Record details cartridges

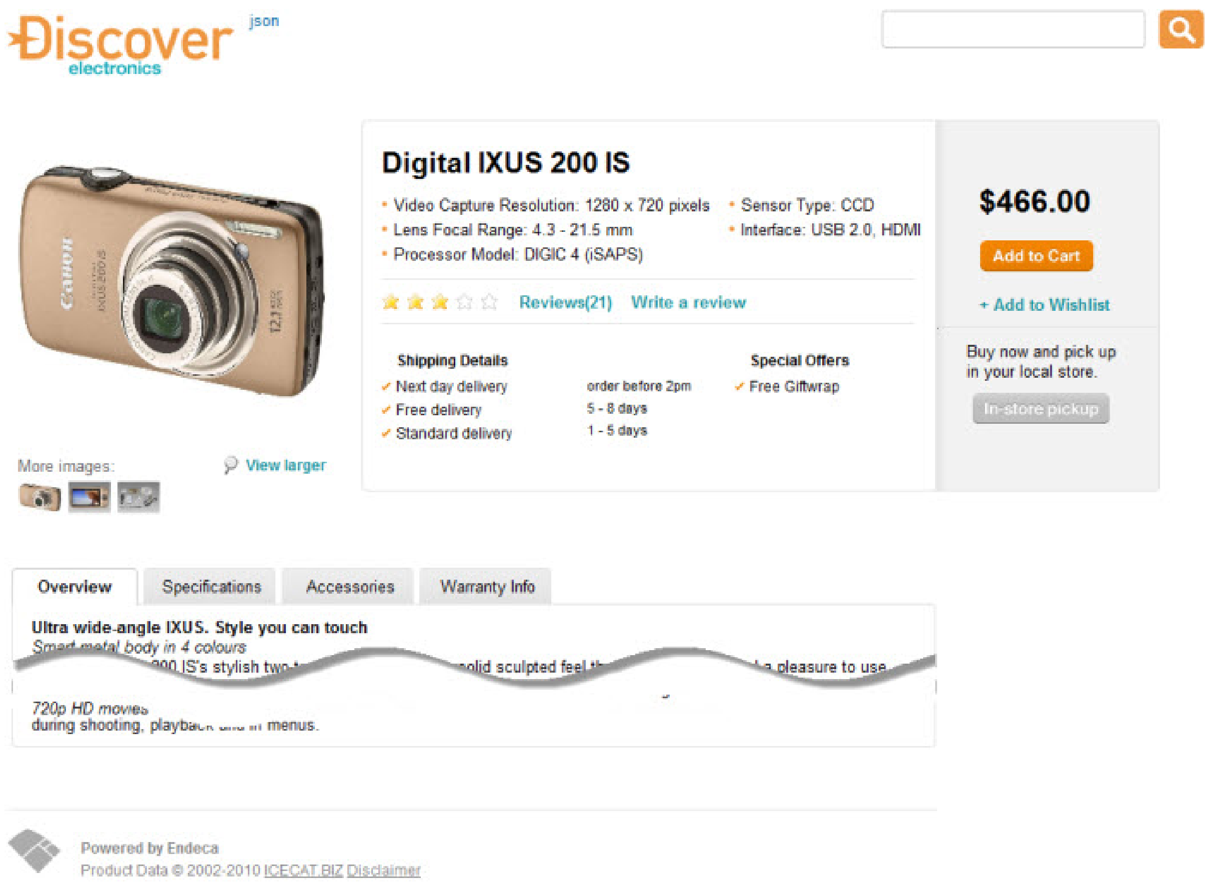
Record details cartridges provide a container for configuring individual record information pages in your application. These cartridges provide an interface for configuring how record content displays.

The triggering conditions on a Record details cartridge can include navigation state triggers, so that different page styles display for different result categories or for individual results.

The Record Details Page cartridge

The Record Details cartridge is configured within a container Record Details page.

The exact layout and presentation of the resulting page depends on how the cartridge is rendered in your application. An example Record Details page with an included Record Details cartridge is shown below in the Discover Electronics reference application:



Configuring the Record Details cartridge

Except for naming the cartridge in Experience Manager, the presentation of the Record Details cartridge is configured by your application developer. This includes selecting which record information is displayed on the page and how it is presented.

Content and spotlighting cartridges

Content and spotlight cartridges enable you to highlight and display static or dynamic content to the user in order to provide greater exposure to certain products or information.

The Media Banner cartridge

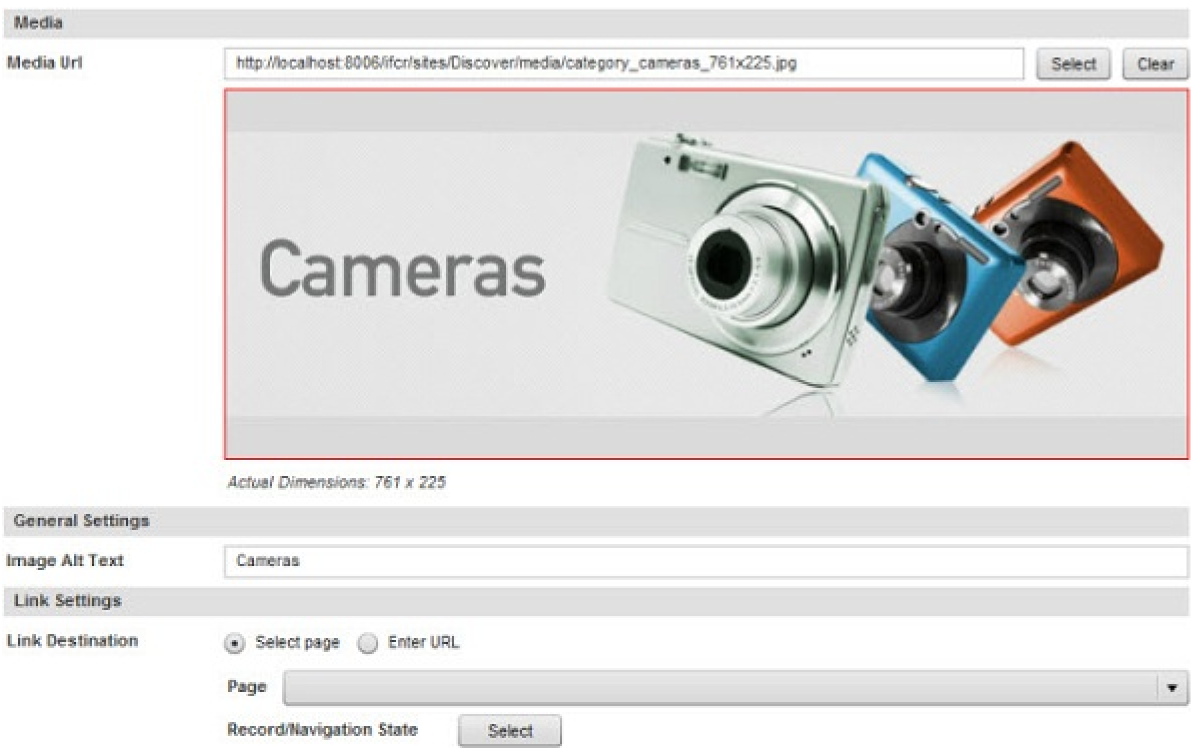
The Media Banner cartridge displays video or images to the site user and can be configured to link to a static page or specified navigation state within your application.

The cartridge is highlighted below in the Discover Electronics reference application:

Configuring the Media Banner cartridge

You can display media assets that your application developer has uploaded to the Endeca Configuration Repository. Additionally, you can select a static URL, a set of specified records, or a dynamic navigation state as a destination link for the media banner.

The cartridge configuration interface is shown below in the Content Details Panel in Experience Manager:

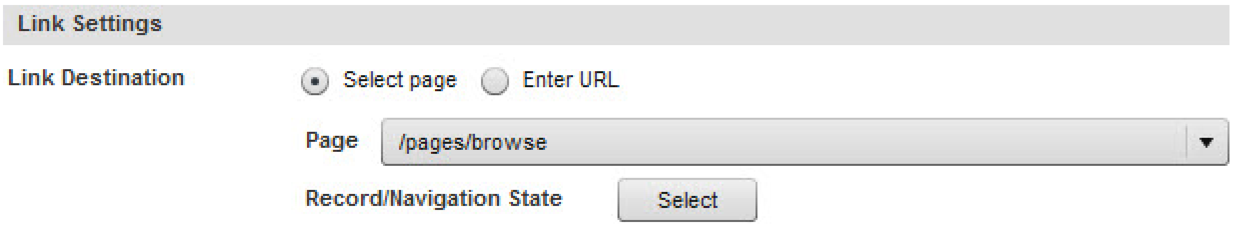


The **Media** controls allow you to launch the media selector by clicking the **Select** button.

The **General Settings** controls include an **Image Alt Text** field that allows you to specify mouseover text for the media banner.

The **Link Settings** controls change based on whether you are specifying a link to a page or navigation state within your application, or a destination URL:

For links to a location within the application, use the **Page** dropdown to select the appropriate servlet, and the **Select** button to launch the link selector:



For external links, use the **Path** field to enter the link location:

Related Links

About the Select an Image dialog on page 126

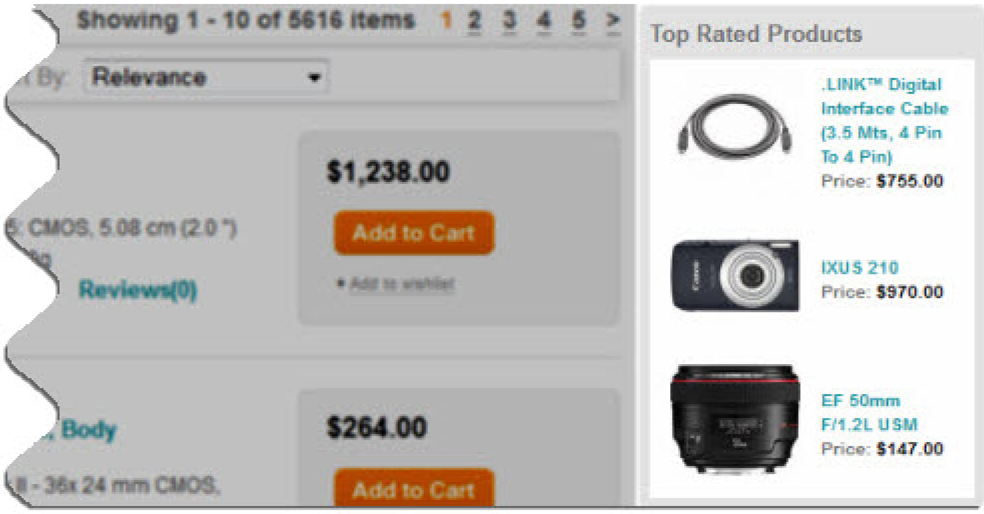
The **Select an Image** dialog allows you to link media resources into your cartridges.

The Record Spotlight cartridges

The Record Spotlight and Horizontal Record Spotlight cartridges highlight featured or dynamic records to the site user. The Record Spotlight cartridge displays results in a vertical layout suitable for placement in a sidebar, while the Horizontal Record Spotlight cartridge displays them in a banner.

The Record Spotlight cartridge

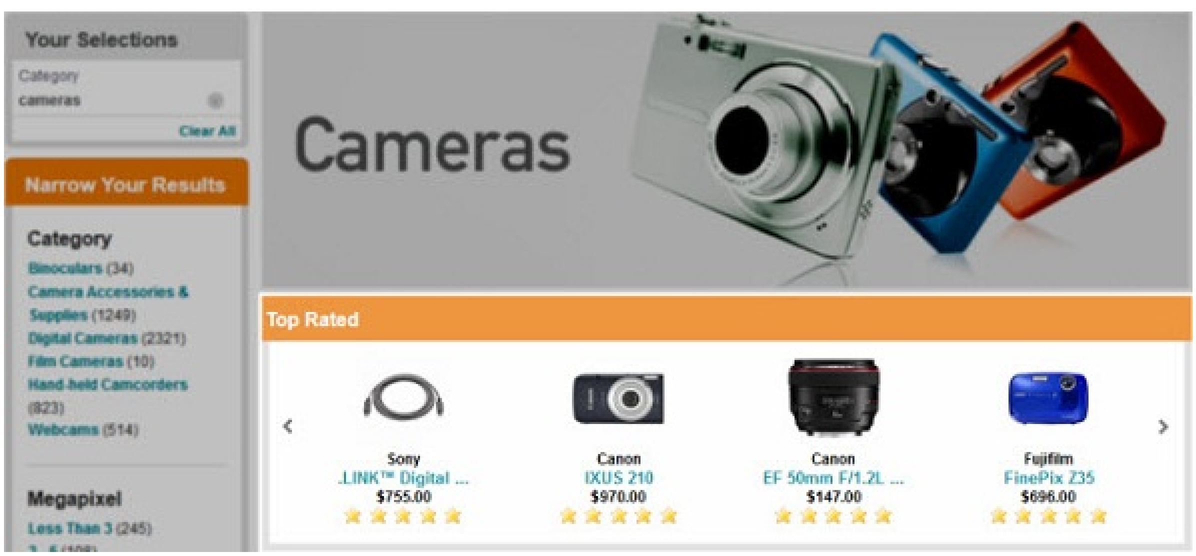
The Record Spotlight cartridge is highlighted below in the Discover Electronics reference application:



The Record Spotlight cartridge can be placed in the sidebar to show special deals, highly-rated products, or any other category of featured record results. It can be configured to display the same items across the entire site by including it in a dynamic slot cartridge, or set to restrict results to the current navigation state by tailoring the list of featured records based on the landing page that the cartridge appears on.

The Horizontal Record Spotlight cartridge

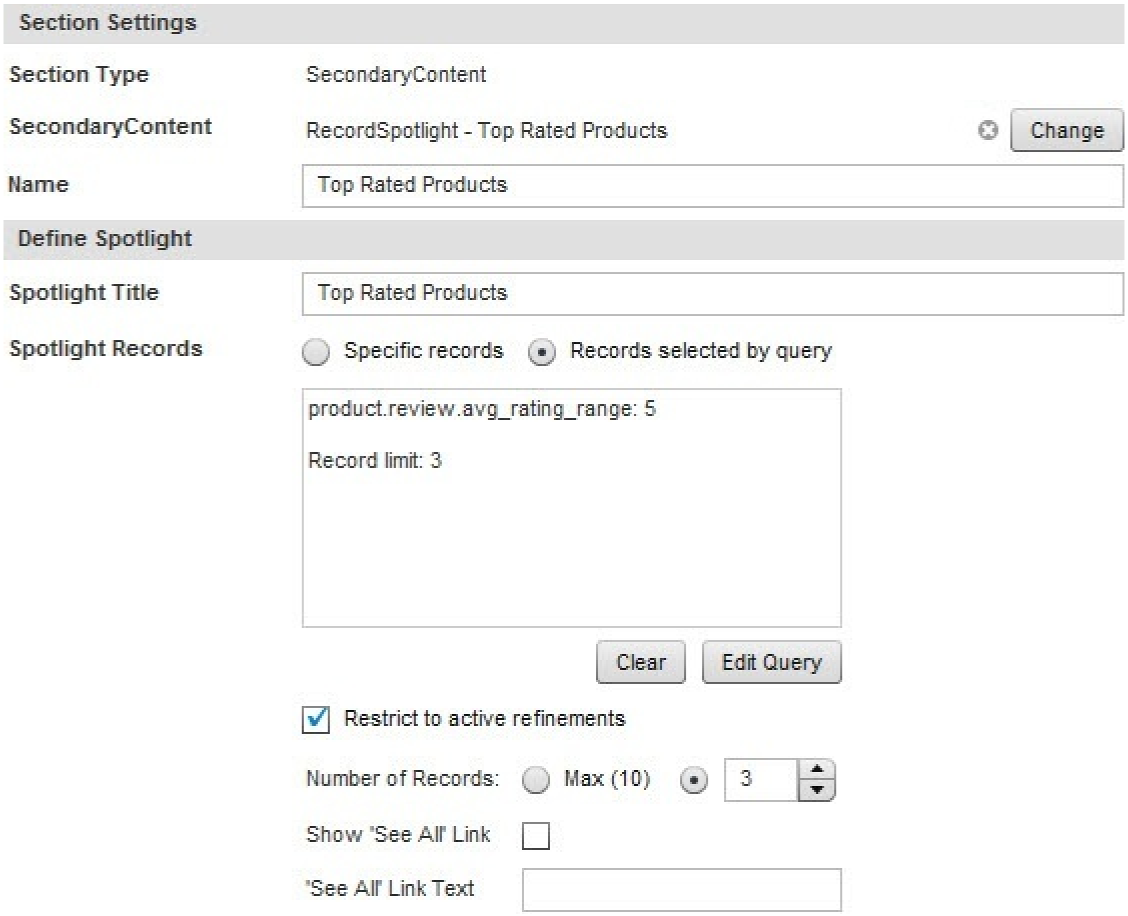
The cartridge is highlighted below in the Discover Electronics reference application:



Similar to the Record Spotlight cartridge, the Horizontal Record Spotlight is a rule that can display dynamic or static featured records. You can configure the cartridge to display results based on the end user's navigation state, or to display a set of records independently of it.

Configuring the Record Spotlight cartridges

Both spotlighting cartridges use the **Select Records** dialog as an interface for specifying featured or dynamic records. The cartridge configuration interface is shown below:



The **Define Spotlight** controls contain all of the configurable options:

- **Spotlight Title** — Enter the title to display in the application.
- **Spotlight Records** — Specify selected records or a dynamic search state using the **Select Records** dialog.

When spotlighting records based on a query, the following additional options are available:

- **Restrict to active refinements** — Restrict the result set to a combination of the end user's current navigation state and the specified query.
- **Number of Records** — Specify the number of records to display. This is limited to the maximum value that the application developer specifies in the cartridge template based on the capabilities of the application.
- **Show 'See All' Link** — Enable the display of a "See All" link. The end user can click this to display all results, instead of limiting the displayed results to the number specified under **Number of Records**.
- **'See All' Link Text** — Enter text for the a "See All" link.

Related Links

About the Select Records dialog on page 122

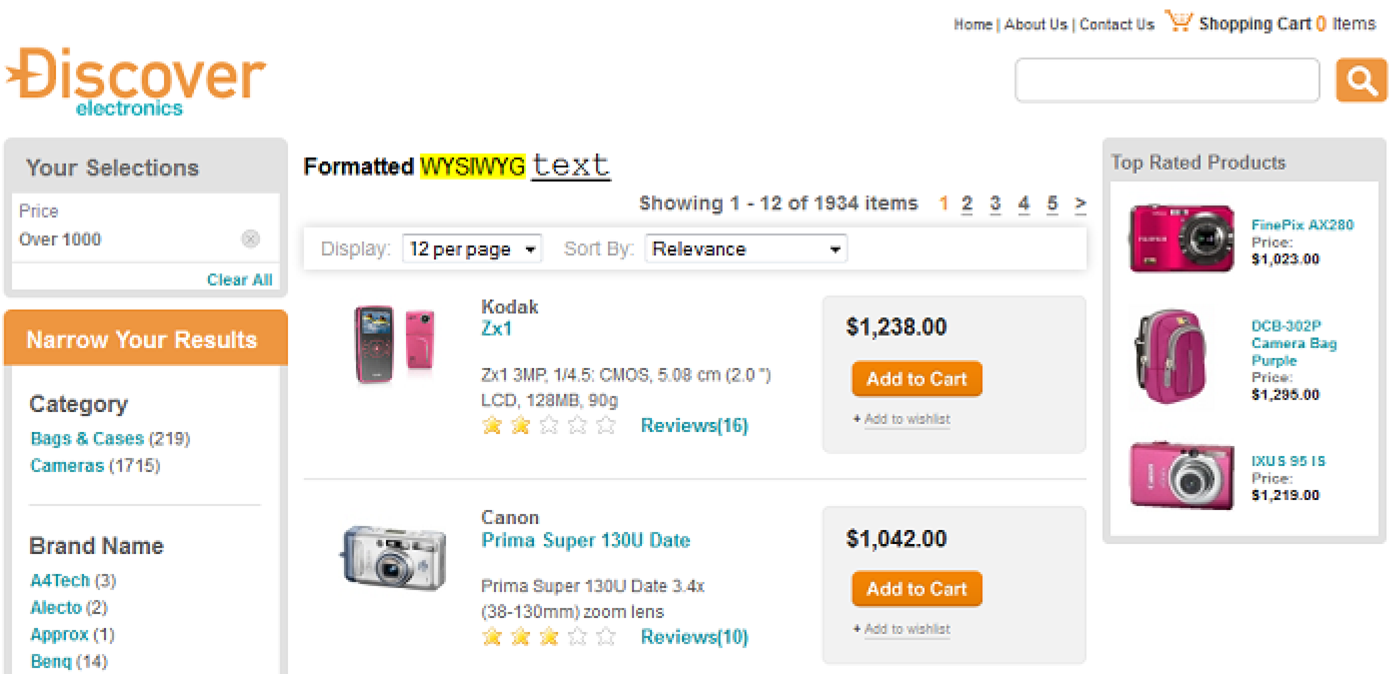
The **Select Records** dialog provides traditional search and Guided Navigation within Experience Manager. Several cartridges, such as the Results List and Record Spotlight cartridges, use it as a means of selecting featured or dynamic records.

The Rich Text cartridges

The Rich Text Main and Rich Text Secondary cartridges provide a text editing interface in Experience Manager and allow you to include formatted text in your application content.

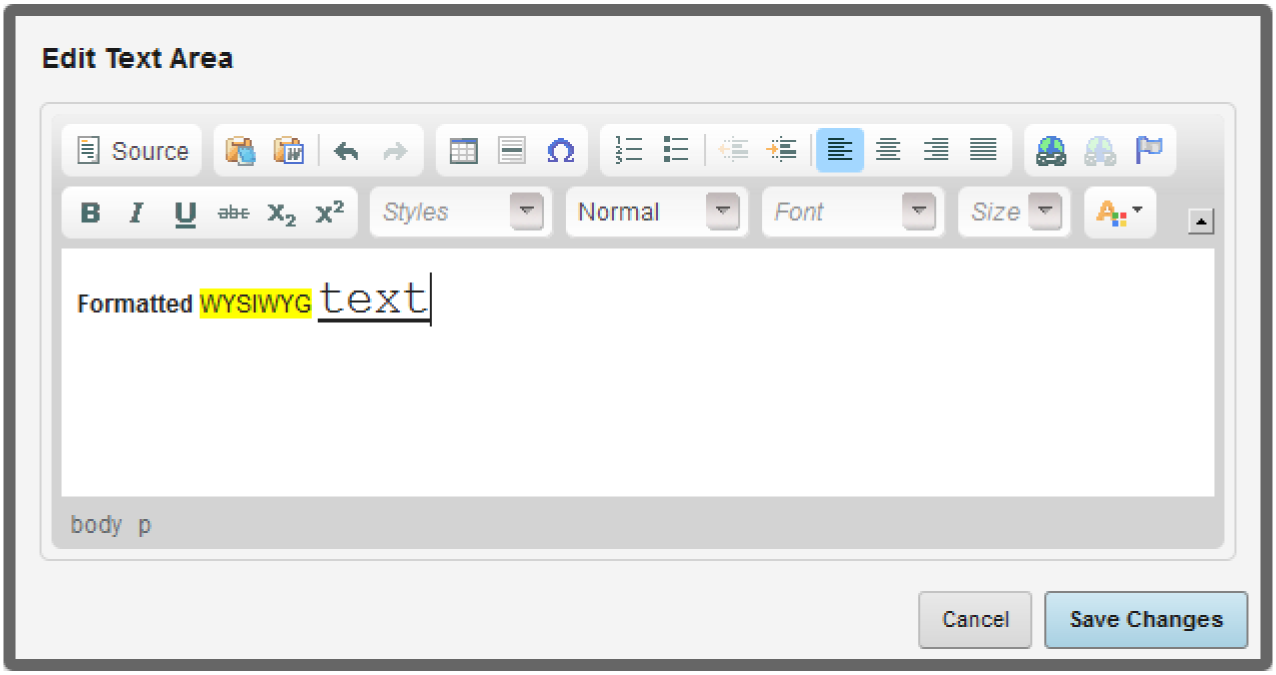
The Rich Text cartridges

The Rich Text Main cartridge is highlighted below in the Discover Electronics reference application:



Configuring the Rich Text cartridges

Both Rich Text cartridges use the **Edit Text Area** dialog as an interface for specifying featured or dynamic records. The cartridge configuration interface is shown below:



The specific toolbar buttons are defined by your application developer and include common text formatting options.

Note: The **Source** button allows you to view editor content as HTML. This view is for reference purposes only; the editor does not support full HTML editing, and any unsupported elements added in this view are not saved in the content item XML.

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