



BEA WebLogic Personalization Server

Personalization Server Tour

BEA WebLogic Personalization Server 3.2
Document Edition 3.2
February 2001

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BEA WebLogic Personalization Server Tour

Document Edition	Date	Software Version
3.2	February 2001	BEA WebLogic Personalization Server 3.2

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About This Document

This document provides a tour of the example portal, which is included with the WebLogic Personalization Server as sample code.

This document includes the following topics:

- Chapter 1, “Overview of the Personalization Tour,” previews the steps we will take in the example portal tour. The tour uses the WebLogic Personalization Server’s Administration Tools to personalize the example portal that ships with the product.

In our example, users who visit the portal often are classified as frequent visitors and are shown messages from our mythical Acme company, while users classified as infrequent visitors are shown tips about the WebLogic Personalization Server.

- Chapter 2, “Working with Properties,” describes adding properties to the appropriate property set to extend the portal. Using the Property Set Management tools, we will add a property called `AcmePoints` to the example portal property set, and set its default value to zero. The `AcmePoints` property will be used to track the number of times a user visits the site.
- Chapter 3, “Working with User Profiles,” describes changing a user profile with the User Management Administration Tools. We will assign a user five `AcmePoints`, overriding the default value for the user’s `AcmePoints` property. When we test the portal later, we will see that this user has enough points to be classified as a frequent visitor.
- Chapter 4, “Working with Content,” describes loading content into the Content Management system. Here is where different messages for frequent visitors and infrequent visitors are added.

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- Chapter 5, “Working with Rules,” describes creating the rules necessary to classify users and the rules to select the appropriate content based on the user’s classification.
 - Chapter 6, “Editing the Example Portal,” describes adding a portlet to the example portal to display the personalized content as a message.
 - Chapter 7, “Deploying the New Example Portal,” describes deploying and viewing the example portal using different users to see personalization in action.

What You Need to Know

This document is intended for business analysts, Web developers, and Web site administrators involved in setting up an e-commerce site using BEA WebLogic Personalization Server. It assumes a familiarity with the WebLogic Personalization Server platform and related Web technologies as described below. The topics in this document are organized primarily around development goals and the tasks needed to accomplish them. Generally, a set of topics also speaks to a particular development role and requires the basic knowledge with regard to the technology focus of that role:

- *Java Server Page (JSP) developer* creates JSPs using the tags provided or by creating custom tags as needed.
- *System analyst, or database administrator* writes rules, designs the database, writes and tunes SQL, creates indexes, and monitors usage.
- *System administrator* installs, configures, deploys, and monitors the Web application server
- *Java developer* extends or modifies the Enterprise Java Bean (EJB) components that make up the WebLogic Personalization Server engine, if that level of customization is needed.

e-docs Web Site

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A PDF version of this document is available on the WebLogic Personalization Server documentation Home page on the e-docs Web site (and also on the documentation CD). You can open the PDF in Adobe Acrobat Reader and print the entire document (or a portion of it) in book format. To access the PDFs, open the WebLogic Personalization Server documentation Home page, click the PDF files button and select the document you want to print.

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When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
boldface text	Indicates terms defined in the glossary.
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
<i>italics</i>	Indicates emphasis or book titles.

Convention	Item
monospace text	<p>Indicates code samples, commands and their options, data structures and their members, data types, directories, and filenames and their extensions. Monospace text also indicates text that you must enter from the keyboard.</p> <p><i>Examples:</i></p> <pre>#include <iostream.h> void main () the pointer psz chmod u+w * \tux\data\ap .doc tux.doc BITMAP float</pre>
monospace boldface text	<p>Identifies significant words in code.</p> <p><i>Example:</i></p> <pre>void commit ()</pre>
<i>monospace</i> <i>italic</i> text	<p>Identifies variables in code.</p> <p><i>Example:</i></p> <pre>String <i>expr</i></pre>
UPPERCASE TEXT	<p>Indicates device names, environment variables, and logical operators.</p> <p><i>Examples:</i></p> <pre>LPT1 SIGNON OR</pre>
{ }	<p>Indicates a set of choices in a syntax line. The braces themselves should never be typed.</p>
[]	<p>Indicates optional items in a syntax line. The brackets themselves should never be typed.</p> <p><i>Example:</i></p> <pre>buildobjclient [-v] [-o name] [-f file-list]... [-l file-list]...</pre>
	<p>Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.</p>

Convention	Item
...	<p>Indicates one of the following in a command line:</p> <ul style="list-style-type: none">■ That an argument can be repeated several times in a command line■ That the statement omits additional optional arguments■ That you can enter additional parameters, values, or other information <p>The ellipsis itself should never be typed.</p> <p><i>Example:</i></p> <pre>buildobjclient [-v] [-o name] [-f file-list]... [-l file-list]...</pre>
.	<p>Indicates the omission of items from a code example or from a syntax line.</p> <p>The vertical ellipsis itself should never be typed.</p>

1 Overview of the Personalization Tour

This tour walks you through the steps required to use many of the personalization services provided by the WebLogic Personalization Server. We will build upon the Acme Demo example portal that ships with the product. In this scenario, users are awarded AcmePoints which are incremented each time the user logs in. At run time, we provide personalized information based on the number of customer visits (AcmePoints). We provide frequent visitors with Acme promotional messages. Infrequent visitors receive tips on using the WebLogic Personalization Server.

The Personalization Tour describes how to:

1. Add one property, `AcmePoints`, to the example portal property set using the Property Set Management Tool.
2. Set the `AcmePoints` property value higher for one user using the User Management Administration Tool.
3. Examine how a document management system (DMS) indexes content for personalization.
4. Create the rules necessary to classify users as frequent visitors or infrequent visitors and selects the content to be displayed accordingly.
5. Build a portlet to display the personalized content.
6. Add the portlet to the example portal.
7. Make a user's `AcmePoints` property value increment each time a user logs in.
8. View the new portal using different users to see personalization in action.

Notes: The Personalization Tour adds functionality to the Acme Demo example portal, a pre-built portal that ships with the WebLogic Personalization Server. In the *WebLogic Personalization Server User's Guide*, you will learn how to create a custom portal, using the example portal as a framework.

At the end of this tour, you will need to modify a JSP file within the example portal. Therefore you cannot use the copy of the example portal that is deployed as a Web application (accessed using

`http://<wlhost>:<port>/portal/application/exampleportal`).

Access instead the version located in

`<install-dir>/server/public_html/portals` (accessed using

`http://<wlhost>:<port>/application/exampleportal`).

In this scenario, the `exampleportal` property set has already been created for you, and sample content has been added in the correct directories.

For the purpose of this tour, we assume you are using the Cloudscape database. If you have ported your data to Oracle, do *not* add users through WebLogic Personalization Server's Administration Tools; rather, add users through the example portal's User Registration page.

Get Started!

Now that you have installed WebLogic Server (remember to also install its Service Pack!) and WebLogic Commerce Server with WebLogic Personalization Server, it's time to get started with the demonstration software.

- First, you will want to start the WebLogic Commerce Server on your system. From the Windows Start menu, select Start → Programs → WebLogic Commerce Server 3.2 → Start Commerce Server.

2 Working with Properties

This chapter describes how to add a property to a property set. We will create a property and then add a default value.

This topic includes the following sections:

- Adding Properties Within a Property Set
 - Creating a Property Within the exampleportal Property Set
 - Adding a Default Value to the AcmePoints Property

Adding Properties Within a Property Set

WebLogic Personalization Server provides Administration Tools that make it easy to personalize your application. We will start by adding a property to a property set using the Property Set Management Tool.

Creating a Property Within the exampleportal Property Set

In this section, we will add the `AcmePoints` property to the existing `exampleportal` User Property property set. The `AcmePoints` property will be used to track the number of times a user visits the site.

Follow these steps to add the `AcmePoints` property to the `exampleportal` properties set:

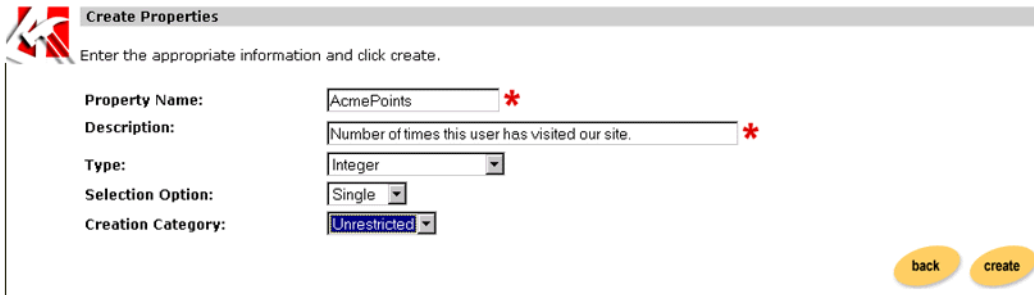
1. Log into the WebLogic Personalization Server administration client. If you installed WebLogic Personalization Server with the default settings, you can use this URL in a browser that is invoked on the same machine as the server: `http://localhost:7501/tools`. The default username is `administrator` and the default password is `password`.

Note: The default port is 7501. Refer to the configuration section in the installation guide for more information about setting the `ListenPort` in the `weblogic.properties` file.

2. From the Administration Tools Home page, click the Property Set Management icon. The Property Set Management Home page appears.
3. From the User Property Sets list, select the `exampleportal` link. The Property Set view page appears.

Note: Be sure to click on the `exampleportal` property set under the “User Property Sets” titlebar, and not under the “Application Initialization Property Sets” titlebar.

4. Click Create on the Properties bar. The Create Properties page appears.



Create Properties

Enter the appropriate information and click create.

Property Name: *

Description: *

Type:

Selection Option:

Creation Category:

[back](#) [create](#)

5. Enter `AcmePoints` in the Property Name field.
6. Enter `Number of times user has visited` in the Description field.
7. Select `Integer` from the Type drop-down list box.
8. Select `Single` from the Selection Option drop-down list box.

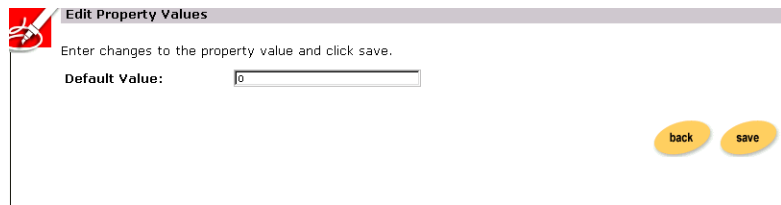
Note: The “single” option refers to those properties having only one option (for example, Property: `FavoriteColor`, Attribute: `red`). The “multiple” option refers to those properties having multiple options (for example, Property: `Colors`, Attributes: `red`, `green`, `blue`, and so on).
9. Select `Unrestricted` from the Creation Category drop-down list box.

Note: Restricted categories refer to user input via a list, radio buttons, check boxes, and so on. Unrestricted categories refer to instances in which users populate a form field.
10. Click `Create`. A message confirms that the operation was successful. You have now created a new property called `AcmePoints` in the `exampleportal` property set.
11. Click `Back` to return to the Property Set view page. The `AcmePoints` property is displayed under the Properties section.

Adding a Default Value to the AcmePoints Property

Now we will add a default value so the application will always find a value.

1. Click Edit on the AcmePoints property bar. The AcmePoints Property view page appears.
2. Click Edit on the Property Values bar.
3. Enter 0 in the Default Values field, then click Save. The AcmePoints Property view page appears and displays the default value.



Edit Property Values

Enter changes to the property value and click save.

Default Value:

back save

4. Click Back to return to the Property Set view page.
5. Click Finished to save the `exampleportal` property set with the new `AcmePoints` property. The Property Sets view page appears.
6. Click Home on the BEA WebLogic Personalization Server banner to return to the Administration Tools Home page.

3 Working with User Profiles

This chapter describes how to use the User Management Tool to assign a user's values for the properties in the `exampleportal` property set.

This topic includes the following section:

- Editing User Properties

Editing User Properties

In this section, we set a particular user's `AcmePoints` value higher so we can see that the rules we create are operational.

1. From the Administration Tools Home page, click the User Management icon. The User Management Home page appears.
2. From the User Management Home page, click the Users link in the Users banner. The Search for a User tool appears.

To locate a user, do one of the following:

- a. To locate the user by name, enter `democustomer` in the Username field, then click Search. The search returns the username `democustomer` and displays a link at the bottom of the page.

3 Working with User Profiles

- b. To see a list of all users within an alphabetized category, click the appropriate letter corresponding to the first letter of the username. A list of users appear at the bottom of the page.
 - c. To see a list of all users in the database, use the wildcard feature. Enter a partial username immediately followed by an asterisk (*).
3. Click `democustomer` to edit this user. The User Property view appears.
 4. From the drop-down list box, select the `exampleportal` property set, then click Search. The page refreshes and shows the user's values for the properties in the `exampleportal` property set.

The screenshot shows a web interface for user management. At the top, a teal header reads "Users: democustomer" with a "finished" status indicator. Below this, a section titled "Select a property set to view for this user:" contains a dropdown menu with "exampleportal" selected and a "search" button. The next section, "User Information", shows "Username: democustomer" with an "edit" button. The "Properties" section lists "AcmePoints (Integer, Single, Unrestricted)" with a description "Number of times this user has visited our site." and a "Value=0". There are "edit" and "reset" buttons next to the property name.

5. Click Edit on the AcmePoints Properties bar. The Edit Property Values page appears.
6. Enter 5 in the New Value field, then click Save. The page refreshes and confirms that the property was set correctly. You have now given `democustomer` a non-default value for `AcmePoints`.

The screenshot shows the "Edit Property Values" page. The header reads "Property Set: exampleportal" and "Property: AcmePoints (Type: Single, Unrestricted)". Below this is a section titled "Edit Property Values" with a pencil icon. The instructions say "Enter changes to the property value and click Save." There are two fields: "Default Value:" with the value "0" and "New Value:" with a text input field containing the number "5".

7. Click Back to return to the User Properties view page.

8. Click Finished to save the user's property set values. The system returns to the User Properties view page.
9. Click Home on the BEA WebLogic Personalization Server banner to return to the Administration Tools Home page.

3 *Working with User Profiles*

4 Working with Content

This chapter describes how content is loaded into the database.

The topic includes the following sections:

- Adding Content
 - Ensuring Content Is Available
 - Check the Metadata in the Content
 - Indexing Content with the BulkLoader

Adding Content

Now that we have set up a user profile and a property set to extend the example portal, we need to add some content. We will use the BulkLoader, a command-line utility that ships with WebLogic Personalization Server, to load metadata into the reference implementation database. When building your own sites, you might use another document management system (DMS) such as Interwoven's TeamSite or Documentum, but the BulkLoader will meet our needs for this tour.

For this tour, the content has already been installed in the correct directories. Take a moment to review the directory structure now, to gain an understanding of how to set up your own content with a document management system. These files are in the `<install-dir>\dmsBase` directory.

Follow these steps to add content to the example portal:

1. Make sure the relevant content for the promotion resides in the correct directory path.
2. Check the metadata in the content.
3. Run the BulkLoader to load the content's metadata into the reference implementation database.

Ensuring Content Is Available

Before indexing the new content and loading metadata into the reference implementation database, you first need to ensure that the files reside in the correct directory. Check that the following files reside in the `<install-dir>\dmsBase` directory:

- `hint\hint1.htm`
- `hint\hint2.htm`
- `preview\prev1.htm`
- `preview\prev2.htm`

These files contain the content we will use later in the tour.

Check the Metadata in the Content

After ensuring the content you need for the promotion resides in the correct directories, you need to check the metadata that describes the content. The BulkLoader uses this metadata to index content in the database, and then the Rules Engine matches the indexed content to user profiles at run time.

For this tutorial, you should examine the metadata in the HTML files that we are using to extend the example portal. Examining the metadata in the files will help you understand how the Rules Engine matches content to users.

To examine the metadata in the content source files:

1. Use a text or HTML editor to open a few of the *.htm files listed in “Ensuring Content Is Available” on page 4-16.
2. Examine the <meta> tags inserted into the file. The <meta> tags include name and content attributes that constitute the name/value pairs that the BulkLoader uses to index content. We will see these content names later when we create the rules that select which content to match to users.
3. Close the files without saving any changes.

Indexing Content with the BulkLoader

You have examined the content’s metadata. We will now index the metadata using the BulkLoader command-line utility.

Note: The following procedure works around a limitation of the evaluation Cloudscape database that ships with WebLogic Personalization Server. If you use are using the BulkLoader with Oracle, you can just run the `loaddocs.bat` or `loaddocs.sh` file.

Follow these steps to run the BulkLoader:

1. The evaluation version of Cloudscape that ships with WebLogic Personalization Server only allows one application to access it at time. Therefore, you must stop WebLogic Server before running the BulkLoader.
2. Run `loaddocs.bat` (Windows in `bin/win32`) or `loaddocs.sh` (UNIX in `bin/solaris2`).
3. When the BulkLoader finishes indexing the content, restart WebLogic Server.

Note: For more bulk loader instructions, see the [Content Management](#) chapter in the *WebLogic Personalization Server Developer’s Guide*.

The BulkLoader indexes metadata for content that resides in the `dmsBase` directory and subdirectories. In our example, this includes all files that reside in the `<install-dir>\dmsBase` directory and its subdirectories.

4 *Working with Content*

In the next section, “Working with Rules,” we will create the rules that match personalized content with example portal users.

5 Working with Rules

This chapter describes how the Rules Engine matches indexed content to users.

This topic includes the following sections:

- Creating Rules
 - Creating the Classifier Rules
 - Creating the Content Selector Rules

Creating Rules

Now that we have indexed the content, we need to create rules that will match the content with users when they visit the example portal. To implement this functionality, we need to create four rules:

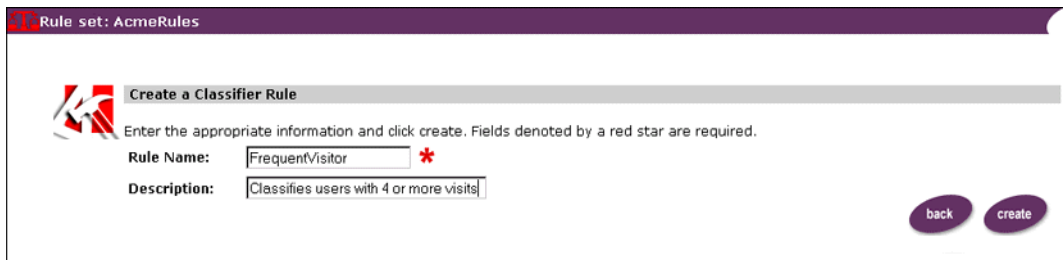
1. A classifier rule that classifies users as frequent visitors if they have accumulated four or more AcmePoints.
2. A classifier rule that classifies users as infrequent visitors if they have accumulated fewer than four AcmePoints.
3. A content selector rule that matches frequent visitor message content to user profiles in the frequent visitor classification.
4. A content selector that matches site usage hints to user profiles in the infrequent visitor classification.

Creating the Classifier Rules

In this section, we will create two classifier rules to classify users as frequent visitors or infrequent visitors. We will later use these classifier rules in content selector rules that select a message or hint to display to users.

Note: WebLogic Personalization Server does not save rules until you click the Finished button in a Rule view page.

1. Make sure WebLogic Commerce Server is running, then go to the Administration Tools Home page at `http://<wlhost>:<port>/tools`.
2. From the Administration Tools Home page, click the Rules Management icon. The Rules Management Home page appears.
3. Click the rule set named AcmeRules to edit it. The AcmeRules Rule Set view page appears.
4. Click Create in the Classifiers bar to create a new classifier rule. The Create a Classifier Rule edit page appears.
5. Enter the rule name `FrequentVisitor` into the Rule Name field.
6. Enter a description of the rule into the Description field. For example, you might type `Classifies users with 4 or more visits`.
7. Click Create to add the rule to the AcmeRules rule set. The Create a Classifier Rule edit page refreshes and displays a message about the rule creation's success.



Rule set: AcmeRules

Create a Classifier Rule

Enter the appropriate information and click create. Fields denoted by a red star are required.

Rule Name: *

Description:

back create

Note: We will add phrases to the rule later in the tour.

8. Now create another classifier rule by entering the rule name `InfrequentVisitor` into the Rule Name field.
9. Enter a description for this rule. For example, `Classifies users with fewer than 4 visits.`
10. Click Create to save the rule in the AcmeRules rule set. The Create a Classifier Rule edit page refreshes and displays a message about the rule creation's success.
11. Click Back to return to the AcmeRules Rule Set view page.

Adding Phrases to the Classifier Rules

We need to add conditions to the classifier rules to classify users depending on the value of their `AcmePoints`.

1. Click the `FrequentVisitor` classifier rule link on the AcmeRules Rule Set view page to open it for editing. The Rule view page appears.
2. Click Phrase to add a phrase to the rule.
3. Select the Single-Value with Constant template to define the phrase, then click Next. Step 2 of the Create If Phrase Wizard appears.

Rule set: AcmeRules

Rule: **FrequentVisitor**

Create If Phrase Wizard

Template: Single-Value with Constant (OR)

2 Select a property for the rule phrase and click next.

Property

- USER.AcmePoints
- USER.FavoriteCharacter
- USER.banner_color
- USER.body_bgcolor
- USER.content_bgcolor

back next

5 Working with Rules

- Click the `USER.AcmePoints` property to define the left operand of the rule phrase, then click Next. Step 3 of the Create If Phrase Wizard appears.

Rule set: AcmeRules

Rule: **FrequentVisitor**

Create If Phrase Wizard
Template: **Single-Value with Constant (OR)**

3 Complete the rule phrase by selecting the appropriate information. Click the or button to add any number of OR conditions to the current phrase. When finished, click save.

Property	Comparator	Constant
USER.AcmePoints	>=	4

OR

back save

- From the Comparator drop-down list box, select the `>=` comparator, then enter the value `4` into the Constant field.
- Click Save to add the phrase to the rule. The Rule view page appears with the new phrase displayed.

Rule set: AcmeRules

finished

Definition edit

Rule Type: Classifier

Name: FrequentVisitor

Description: Classifies users with 4 or more visits

If the user has the following characteristics: phrase

USER.AcmePoints >= 4 X

finished

- Click Finished to save the rule set and return to the AcmeRules Rule Set view page.
- Now we will repeat the process to add a phrase to the InfrequentVisitor rule. Click the `InfrequentVisitor` classifier rule on the AcmeRules Rule Set view page to open it for editing. The Rule view page appears.
- Click Phrase to add a phrase to the rule.

10. Select the Single-Value with Constant template to define the phrase, then click Next. Step 2 of the Create If Phrase Wizard appears.
11. Click on the `USER.AcmePoints` property to define the left operand of the rule phrase, then click Next. Step 3 of the Create If Phrase Wizard appears.
12. From the Comparator drop-down list box, select the `<` comparator, then enter the value `4` into the Constant field.
13. Click Save to add the phrase to the rule. The Rule view page appears with the new phrase displayed.
14. Click Finished to save the rule set and return to the AcmeRules Rule Set view page.

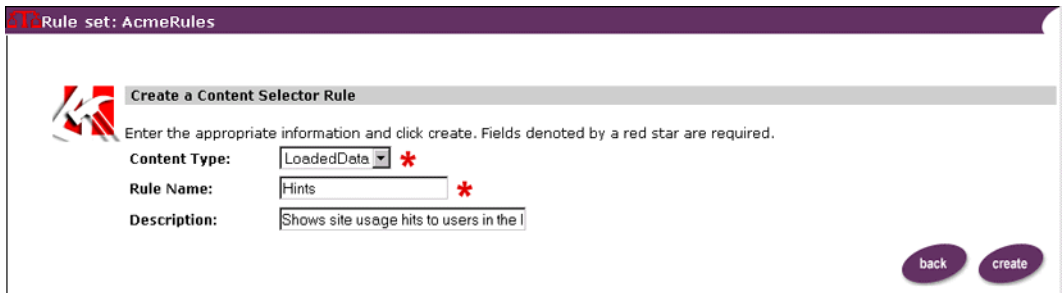
Creating the Content Selector Rules

We have created two classifier rules to categorize users as frequent visitors or infrequent visitors. In this section, we will create two content selector rules that use the classifier rules. The content selector rules will match content to users based on the user's classification. Let's create a rule to show site usage hints to infrequent visitors.

Note: The hints will tell new users how to use example portal's features.

1. From the AcmeRules Rule Set view page, click Create in the Content Selectors bar. The Create a Content Selector Rule edit page appears.
2. From the Content Type drop-down list box, select the `LoadedData` content type.
Note: The `BulkLoader` utility created the `LoadedData` content type. If you use a different document management system, you will see different content types.
3. Enter the rule name `Hints` into the Rule Name field.
4. Enter a description of the rule into the Description field. For example, `Shows site usage hints to users in the InfrequentVisitor classification.`

5. Click Create to add the rule to the AcmeRules rule set. The Create a Content Selector Rule edit page refreshes and displays a message about the rule creation's success.



The screenshot shows a web interface for creating a rule. At the top, a purple header bar reads "Rule set: AcmeRules". Below this is a grey bar with the title "Create a Content Selector Rule" and a red and white icon. A message states: "Enter the appropriate information and click create. Fields denoted by a red star are required." The form contains three fields: "Content Type" with a dropdown menu set to "LoadedData" and a red asterisk; "Rule Name" with the text "Hints" and a red asterisk; and "Description" with the text "Shows site usage hits to users in the |". At the bottom right, there are two purple buttons labeled "back" and "create".

6. Add another rule that shows promotional messages to frequent visitors. Enter the rule name `FrequentVisitorMessage` into the Rule Name field.
7. Enter a description of the rule into the Description field. For example, `Selects a preview message for users in the FrequentVisitor classification.`
8. Click Create to save the new rule in the AcmeRules rule set. The Create a Content Selector Rule edit page refreshes and displays a message about the rule creation's success.
9. Click Back to return to the AcmeRules Rule Set view page.

Adding Conditions to the Hints Rule

1. From the AcmeRules Rule Set view page, click the `Hints` content selector rule to open it for editing. The Rule view page appears.

Rule set: AcmeRules finished

Definition edit

Rule Type: Content

Content Type: LoadedData

Name: Hints

Description: Shows site usage hints to users in the InfrequentVisitor classification

If the user has the following characteristics: classifier phrase

And when: phrase

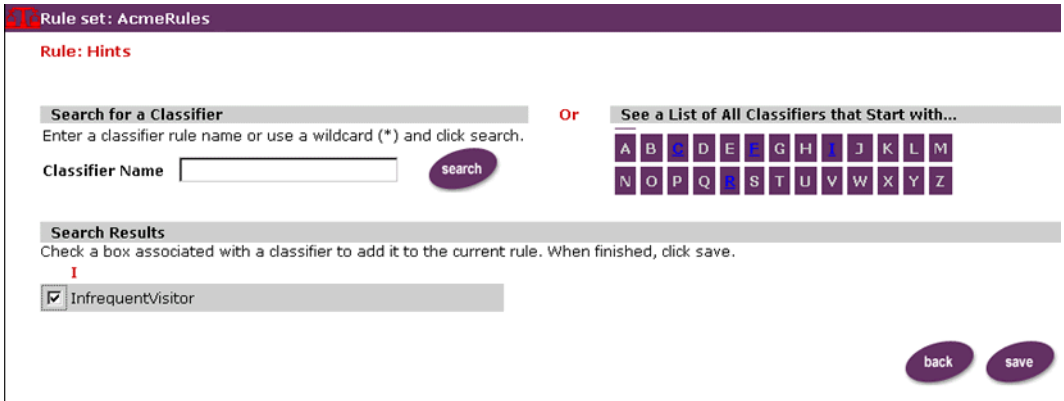
Then display content based on: phrase

finished

2. From the “If the user has the following characteristics” bar, click Classifier to add a classifier to the `Hints` rule. The Rule search page appears.
3. Enter `InfrequentVisitor` in the Classifier Name field to find the `InfrequentVisitor` classifier rule, then click Search.

Note: The `*` character allows you to perform a wildcard search. Using the `*` character alone returns a list of all classifier rules. The search is case sensitive.

4. Check the box next to the `InfrequentVisitor` classifier rule. This will add the classifier to the `Hints` rule when you click Save.



5. Click Save to commit the changes. The Rule search page refreshes and displays a message about the process's success.
6. Click Back to return to the Rule view page. The Rule view page appears with the new classifier displayed.
7. Now we will add a phrase to select hints to match to infrequent visitors. Click Phrase in the “Then display content based on” bar. Step 1 of the Create Then Phrase Wizard appears.

Note: This phrase defines the query that will execute at run time if a user matches the `InfrequentVisitor` classification.
8. Select the Value with Constant template to use to define the content query, then click Next. Step 2 of the Create Then Phrase Wizard appears.
9. Select the `CONTENT.visitingFrequency` property from the Property list, then click Next. Step 3 of the Create Then Phrase Wizard appears.

Note: The property list receives its data from the metadata stored in the document management system. In this case, content property comes from the information in the `<meta>` tags in the `hints1.htm` and `hints2.htm` files the BulkLoader indexed earlier.

Note: If the “back” and “save” buttons do not appear on the screen after selecting this property, resize the browser until the horizontal scroll bar appears.

10. Select the == comparator and enter `InfrequentVisitor` into the Constant field. Click Save to add the phrase to the rule. The Rule view page appears with the new phrase displayed.

Note: The value `InfrequentVisitor` is stored in the metadata in the `hint1.htm` and `hint2.htm` files. We loaded the metadata using the `BulkLoader` earlier in the tour. At run time, a user who logs in with fewer than four `AcmePoints` in the `AcmePoints` property will match the `InfrequentVisitor` classification and will see the hints content selected through the query defined here.

11. Click Finished to save the rule set and return to the `AcmeRules` Rule Set view page.

Adding Conditions to the `FrequentVisitorMessage` Rule

Now we will add conditions to the `FrequentVisitorMessage` rule.

Note: The steps are the same as the process we used above to add conditions to the `Hints` rule, except that in this case we are operating on the `FrequentVisitorMessage` content selector rule, and the Classifier Name is `FrequentVisitor`.

1. Click the `FrequentVisitorMessage` content selector rule on the `AcmeRules` Rule Set view page to open it for editing. The Rule view page appears.
2. From the “If the user has the following characteristics” bar, click Classifier to add a classifier to the `FrequentVisitorMessage` rule. The Rule search page appears.
3. Enter `FrequentVisitor` in the Classifier Name field to find the `FrequentVisitor` classifier rule, then click Search.

Note: The * character allows you to perform a wildcard search. Using the * character alone returns a list of all classifier rules. The search is case sensitive.

4. Check the box next to the `FrequentVisitor` classifier rule. This will add the classifier to the `FrequentVisitorMessage` rule when you click Save.
5. Click Save to commit the changes. The Rule search page refreshes and displays a message about the process’s success.

6. Click Back to return to the Rule view page. The Rule view page appears with the new classifier displayed.
7. Now we will add a phrase to select special messages to match to frequent visitors. Click Phrase in the “Then display content based on” bar. Step 1 of the Create Then Phrase Wizard appears.
Note: This phrase defines the query that will execute at run time if a user matches the `FrequentVisitor` classification.
8. Select the Value with Constant template to use to define the content query, then click Next. Step 2 of the Create Then Phrase Wizard appears.
9. Select the `CONTENT.visitingFrequency` property from the Property list and click Next. Step 3 of the Create Then Phrase Wizard appears.
Note: The property list receives its data from the metadata stored in the document management system. In this case, content property comes from the information in the metadata in the `prev1.htm` and `prev2.htm` files that the `BulkLoader` indexed earlier.
10. Select the `==` comparator and enter `FrequentVisitor` into the Constant field. Click Save to add the phrase to the rule. The Rule view page appears with the new phrase displayed.
11. Click Finished to save the rule set and return to the AcmeRules Rule Set view page.

You have completed indexing the content and creating the rules to match the content to users who log into the example portal. In the next section, we will use the Advisor’s JSP tags to create the JSP page to pull the entire personalized application together.

Note: Remember that WebLogic Personalization Server does not save rules until you click the Finished button in a Rule view page.

6 Editing the Example Portal

Now we are ready to pull the pieces together. In this chapter we will create a new portlet JSP page, add the new portlet to the example portal, and test the portal.

This topic includes the following sections:

- Viewing the JSP Page
- Building the Portlet
- Adding the Portlet to the Portal

Viewing the JSP Page

The JSP page displays content based on the defined rules and profile information.

To view the page, follow these steps:

1. In a text editor, open `tutorial.jsp`, which is in `<install-dir>\server\public_html\portals\repository\portlet.s`.
2. View the JSP code that you will add to the portlet later in this tour.
3. Close `tutorial.jsp` when you finish viewing the page.

Building the Portlet

We have created the JSP page for the promotion. We now need to add a portlet that uses the `tutorial.jsp` into the portal.

1. From the Administration Tools Home page, click the Portal Management icon. The Portal Management Home page appears.
2. From the Portlets bar, click Create. The Create a New Portlet page appears.
3. Type `tutorial` in the Portlet Name field and append `tutorial.jsp` to the existing content of `portlets/` in the Content URL field.
4. Click Create to create the new portlet. The page refreshes and confirms that the system created the portlet.
5. Click Back to return to the Portal Management Home page.

Adding the Portlet to the Portal

1. Click on the `exampleportal` link. The Example Portal Attributes view page appears.
2. Notice that the tutorial portlet is displayed in the Associated Portlets table but it is grayed out, indicating that it is inactive. You must add the portlet to the example portal to activate it. Click (+/-) in the Associated Portlets bar to add the tutorial portlet to the example portal. The Add or Remove Portlets edit page appears.
3. For the portlet named `tutorial`, click the radio button in the Visible column. This will make the portlet visible to example portal users.
4. Click Save to save the changes. The page refreshes and displays a message about the operation's success.
5. Click Back to return to the Example Portal view page. The page appears and the tutorial portlet name is displayed in the table with a check mark next to it. The check mark indicates that the portlet is visible to example portal users.

6. Click Finished to save the example portal changes. The Portal Management Home page appears.
7. Close the administration tool.

We have created the JSP page to match content to users based on the amount of AcmePoints they have. We also added a portlet to the example portal to display the content as a message. In the next chapter, we will deploy the portal and test it to see content personalization at work.

7 Deploying the New Example Portal

In this chapter, we will log in as different users to see the portal in action. Then we will enhance the `exampleportal` login to increment the users' AcmePoints.

This topic includes the following sections:

- Viewing the New Example Portal
 - Logging In as a Frequent Visitor
 - Viewing Infrequent Visitor Hints
- Enhancing the Example Portal Login

Viewing the New Example Portal

We have set up everything we need to view the new example portal. Now we will view the example portal on the WebLogic Server. To view the frequent visitor personalization message, we will log in as `democustomer`. To view the infrequent visitor hints, we will not log into the portal; the portal will then treat us as if we have zero AcmePoints. To get to the portal, go to

```
http://<machine-name>:<port>/application/exampleportal.
```

Note: Windows users: Do not use the Start Menu `exampleportal` URL.

Logging In as a Frequent Visitor

1. In your browser, go to the example portal.
2. Click the key icon in the top right-hand corner of the page.
3. Log in using the username `democustomer` with the password `password`. This is the user we created with five `AcmePoints`. When you log in, you will see the frequent visitor messages in the portlet because the classifier rule classifies the user as a `FrequentVisitor` and the content selector rule `FrequentVisitorMessage` retrieves messages to display to frequent visitors.

Viewing Infrequent Visitor Hints

1. In your browser, go to the example portal.
2. Do not log into the portal.
3. You will see a message in the portlet. Because you did not log in and the default `AcmePoints` value is zero, the system uses the `InfrequentVisitor` classifier rule to classify you as a new user. The content selector rule `Hints` retrieves the hint message and displays site information.

Enhancing the Example Portal Login

You can add a code to a login page to have the page increment each user's `AcmePoints` each time they visit the `exampleportal`. To enhance the login, insert code similar to the example below into the login page. The code increments the logged in users' `AcmePoints` by 1 each time they log in.

```
<%-- Load the user's profile into scope. --%>  
<um:getProfile scope="session" profileKey="<%=username%>" />
```



```
<!-- Get current AcmePoints --%>
<um:getProperty id="points" propertySet="exampleportal"
propertyName="AcmePoints" />

<%
// increment AcmePoints
long newTot = ((Long)points).longValue() + 1;
Long newTotal = new Long(newTot);
%>

<!-- Set incremented AcmePoints --%>
<um:setProperty propertySet="exampleportal"
propertyName="AcmePoints" value="<%=newTotal%>" />
```

The login page is:

```
<install-dir>\server\public_html\portals\repository\_userlogin.jsp
```

Follow these steps to add this code:

1. Open the `_userlogin.jsp` file in your favorite text editor.
2. Insert the example code into the `userlogin.jsp` file, as shown:

```
<!--setUser(username, request) --%>
    example code goes here
<!--If multiple groups, set group check to true --%>
```

3. Close your browser to ensure that nothing is cached. Restart your browser and open the example portal.
4. Log in as username `acme`, password `acme`. Notice the Hint displayed in the portlet.
5. Log out and log back in four more times. Notice that after the fourth login, the portlet displays the Frequent Visitor messages, instead of the Hints.

Note: You can also see this property by looking at the `AcmePoints` property for username `Acme`. For more information, see “Editing User Properties” on page 3-11.

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