

BEA Campaign Manager for WebLogic BEA WebLogic Personalization Server

Personalization Server Tour

BEA Campaign Manager for WebLogic 1.1 BEA WebLogic Personalization Server 3.5 Document Edition 3.5.1 April 2001

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Personalization Server Tour

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About This Document

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

This document includes the following topics:

 Chapter 1, "Overview of the Personalization Tour," previews the steps you will take in the example portal tour. The tour uses the BEA 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, you 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. You will assign a user five AcmePoints, overriding the default value for the user's AcmePoints property. When you test the portal later, you 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 you add different messages for frequent visitors and infrequent visitors.
- Chapter 5, "Matching Users with Content," describes creating the rules necessary to match content to users.

- Chapter 6, "Editing the Example Portal," describes adding a portlet to the example portal to display the personalized content in the Acme Web page.
- 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 BEA 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 BEA WebLogic Personalization Server engine, if that level of customization is needed.

e-docs Web Site

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You can print a copy of this document from a Web browser, one file at a time, by using the File —> Print option on your Web browser.

A PDF version of this document is available on the BEA 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 BEA WebLogic Personalization Server documentation Home page, click the PDF files button and select the document you want to print.

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In your e-mail message, please indicate that you are using the documentation for the BEA WebLogic Personalization Server, and include the release number for the product.

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- 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.	
italics	Indicates emphasis or book titles.	
monospace text	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.	
	Examples:	
	#include <iostream.h> void main () the pointer psz</iostream.h>	
	chmod u+w *	
	\tux\data\ap	
	.doc	
	tux.doc	
	BITMAP	
	float	

Convention	Item
monospace boldface text	Identifies significant words in code. <i>Example</i> : void commit ()
monospace italic text	Identifies variables in code. <i>Example</i> : String <i>expr</i>
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators. <i>Examples</i> : LPT1 SIGNON OR
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.
[]	<pre>Indicates optional items in a syntax line. The brackets themselves should never be typed. Example: buildobjclient [-v] [-o name] [-f file-list] [-1 file-list]</pre>
	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.
	 Indicates one of the following in a command line: 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 The ellipsis itself should never be typed. <i>Example:</i> buildobjclient [-v] [-o name] [-f file-list] [-1 file-list]
	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

-x Personalization Server Tour

1 Overview of the Personalization Tour

This tour walks you through the steps required to use many of the personalization services provided by the BEA WebLogic Personalization Server. You will build upon the Acme Web site that ships with the product.

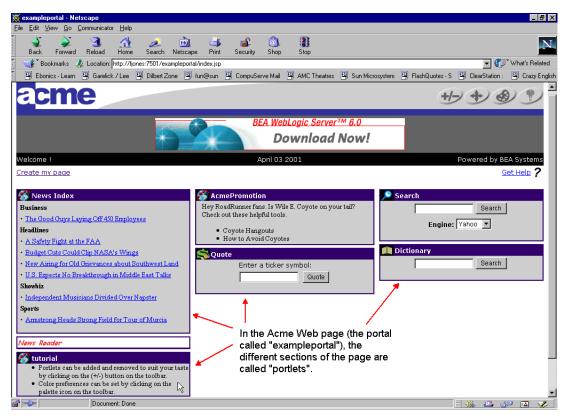
In technical Web terminology, a Web site is called a "portal," so the technical name for the Acme Web site is called "exampleportal" in this tour.

The ultimate goal of this tour is to set up the Web site so that when visitors log in they are automatically identified as frequent or infrequent visitors and shown different content accordingly.

You will set up the exampleportal so that when a user logs in the user is awarded an AcmePoint. AcmePoints represent the number of times a user has logged into the exampleportal, ultimately determining whether the user is a frequent or infrequent visitor. You'll set up the exampleportal so that frequent visitors see Acme promotional messages, and infrequent visitors see tips on using the BEA WebLogic Personalization Server.

The following picture shows what the Acme Web site (the exampleportal) looks like:



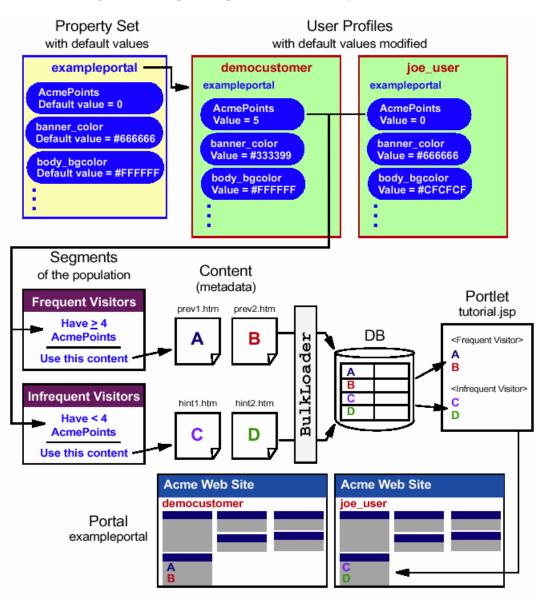


In this tour, the content you'll be focused on is in the "tutorial" section of the site, which contains only two bulleted items. The individual sections of the page are called "portlets," so you will be working with the "tutorial portlet." When you're finished with the tour, frequent and infrequent users will see different content in the tutorial portlet.

The Personalization Tour walks you through the following procedures. Each is explained in more detail later in the tour.

- 1. Adding one property, AcmePoints, to the exampleportal. This will be used to keep track of user visits.
- 2. Setting the AcmePoints value higher for one user. Doing this makes the user a frequent visitor and triggers the frequent visitor content so you can see that your setup is working.
- 3. Loading and indexing the content that will be used to personalize Web pages.
- 4. Creating the rules necessary to classify users as frequent or infrequent visitors, and select the content to be displayed accordingly.
- 5. Building a portlet to display the personalized content and adding the portlet to the portal.
- 6. Adding JSP code to make a user's AcmePoints increment automatically each time the user logs in.
- 7. Viewing the end result using different users to see personalization in action.
- **Note:** The Personalization Tour adds functionality to the Acme exampleportal, a pre-built portal that ships with the BEA WebLogic Personalization Server. In the *Guide to Building Personalized Applications*, you learn how to create a custom portal using the exampleportal as a framework.

The following diagram illustrates the process you're about to go through. It may be helpful to refer to the diagram during and after the tour to see how all the pieces fit together.





Getting Started

Before you begin the tour, make sure the following are installed:

- WebLogic Server
- BEA WebLogic Commerce Server with BEA WebLogic Personalization Server
- BEA Campaign Manager
- Any pertinent service packs

Before you begin the tour:

- 1. Start the BEA WebLogic Commerce Server:
 - Windows Start → Programs → BEA WebLogic E-Business Platform → BEA WebLogic Commerce Server 3.5 → Start BEA WebLogic Commerce Server. (Or double-click the desktop icon.)
 - UNIX run <install-dir>/WebLogicCommerce3.5/StartCommerce.sh
- 2. Enter the login password that was set up during WebLogic Commerce Server installation.

Startup is complete when the console window shows an "Initializing Logger" section with a line that reads, <date/time> <Notice> <WebLogic Server> <WebLogic Server> started>

Note: When you start the WebLogic Commerce Server for the first time, the startup process can take several minutes while the server compiles Enterprise Java Beans (EJBs). Subsequent startups happen much more quickly.

2 Working with Properties

Properties are fields for which values are set. For example, in this chapter you will create an AcmePoints property that represents the number of times a user visits the exampleportal site. You can change the AcmePoints value manually, or, as you will do at the end of the tour, add code to a JSP that automatically increments the value for a user every time the user logs into the site. The number of AcmePoints a user accumulates determines whether the user is classified as an infrequent or frequent visitor, which in turn determines the content the user sees.

Individual properties, like AcmePoints, are grouped into property sets. This chapter describes how to create a property in a property set.

This topic includes the following sections:

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

Creating a Property Within the exampleportal Property Set

In this section, you will add the AcmePoints property to the existing exampleportal 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 property set:

1. Log into the BEA WebLogic Personalization Server administration client. If you installed BEA WebLogic Personalization Server with the default settings, you can use the following URL in a browser that is invoked on the same machine as the server:

http://localhost:7501/tools

Enter the following user name and password:

User Name: administrator

Password: password

- **Note:** The default port is 7501. For information on changing port numbers, see "Changing the Listen Ports" in "The Server Configuration" chapter of the *Deployment Guide*.
- 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, click the exampleportal link. The Property Set: exampleportal (USER) page appears.
 - **Note:** Be sure to click the exampleportal property set under the User Property Sets title bar, not under the Application Initialization Property Sets title bar.
- 4. Click Create on the Properties bar. The Create Properties page appears.

Figure 2-1 Creating a property

🔰 Prope	rty Set: exampleportal		
	Create Properties Enter the appropriate informa	ation and click create.	
	Property Name: Description: Type:	AcmePoints * Number of times user has visited Integer	*
	Selection Option: Creation Category:	Single Vnrestricted	
			back create

5. Enter the following values in this page:

Property Name: Enter AcmePoints (Make sure you type this exactly as shown.)

Description: Enter Number of times user has visited.

Type: Select Integer.

Selection Option: Select Single.

Note: The "single" option refers to those properties having only one choice (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).

Creation Category: Select Unrestricted.

- **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.
- 6. Click Create. A message confirms that the operation was successful. You have now created a new property called AcmePoints in the exampleportal property set.

📔 Property Set: exampleportal	
Property creation was successful	
Create Properties	
Enter the appropriate information and click create	
Property Name: AcmePoints	_

Figure 2-2 Confirmation that the property was created

7. Click Back to return to the Property Set: exampleportal (USER) page. The AcmePoints property is displayed under the Properties section.

Adding a Default Value to the AcmePoints Property

Now you will add a default value so the application will always find a value. As users are added to the system, they will receive this default AcmePoints value automatically.

- 1. Click Edit on the AcmePoints property bar. The Property: AcmePoints page appears.
- 2. Click Edit on the Property Values bar.

3. Enter 0 in the Default Values field, then click Save. The Property: AcmePoints view page appears and displays the default value.

Figure 2-3 Adding a default property value

Property Set: examplepo	ortal
Property: AcmePoints	
Edit Property Values	
Enter changes to the pr	operty value and click save.
Default Value:	0
	at the second se

4. Click Back to return to the Property Set: exampleportal (USER) page.

- 5. Click Finished to save the exampleportal property set with the new AcmePoints property. The Property Set Management page appears.
- 6. Click Home on the BEA WebLogic Commerce Server banner to return to the Administration Tools Home page.

3 Working with User Profiles

A user is someone who visits your Web site. Users have profiles, which consist of property sets of type "User." These property sets contain properties with default values. For example, the exampleportal property set contains a property called AcmePoints. When you created the AcmePoints property in the previous chapter, you also assigned it a default value of zero. Each user, by default, has an AcmePoints value of zero—until you change that value manually in the Administration Tools or programmatically, both of which you'll do in this tour.

Properties are the key to triggering personalized content to users when they log in. For example, the AcmePoints property provides a value that lets WebLogic track the number of visits the user makes to the Acme Web site. In this tour, the number of visits a user makes to the Acme Web site determines whether the user is an infrequent or frequent visitor, which in turn determines the content the user is shown.

This chapter describes how to manually set the number of AcmePoints for a specific user, which sets the user up for being classified later as a frequent visitor.

This topic includes the following section:

Editing User Properties

Editing User Properties

In this section, you will change the AcmePoints for a user called "democustomer." Changing the AcmePoints for democustomer is an important preparatory step for a later part of the tutorial. The AcmePoints you set will categorize democustomer as a frequent visitor, letting you see different Web page content than what infrequent visitors see.

- 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 (not the Create icon) in the Users banner. The Search for a User page 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.
- b. To see a list of all users within an alphabetized category, click the appropriate letter corresponding to the first letter of the username. In this case, click "D". 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 (*), such as demo*. The users matching that search appear at the bottom of the page.
- 3. Click democustomer to edit this user. The Users: democustomer page 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.

Figure 3-1 Viewing properties in a property set

łŻ	Users: democustomer	finished
	Select a property set to view for this user : exampleportal	
	User Information	edit
	Username: democustomer	
	Properties	
	AcmePoints (Integer, Single, Unrestricted) edit	reset
	Number of times user has visited	_
	Value= 0	
	FavoriteCharacter (Text, Single, Restricted)	reset

- 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.

Figure 3-2 Changing a property value from its default

📔 Prop	erty Set: examplepor	tal			
Prop	Property: AcmePoints (Type: Integer, Single, Unrestricted)				
	Edit Property Values				
Ø	Enter changes to the prope	rty value and click Save.			
	Default Value:	0			
	New Value:	2			

- 7. Click Back to return to the Users: democustomer page.
- 8. Click Finished to save the user's property set values. The system returns to the User Management Home page.
- 9. Click Home on the BEA WebLogic Personalization Server banner to return to the Administration Tools Home page.

4 Working with Content

This chapter describes how to load custom content that you want to show to frequent and infrequent visitors.

The topic includes the following sections:

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

Adding Content

Now that you have set up a user profile that you can match with custom content, you need to add that content to the system. The content for this tour has already been installed in the correct directories. This content will appear in the "tutorial" portlet on the exampleportal Home page.

You will use the BulkLoader, a command-line utility that ships with BEA WebLogic Personalization Server, to load metadata into the reference implementation database. Metadata is information stored with the content that describes and defines the content. For example, in this tour, content that is geared toward frequent visitors contains metadata with a value of "FrequentVisitor." In this tour, the content itself—the text that will appear in the Web page for infrequent and frequent visitors—is also stored as

metadata. The BulkLoader loads and indexes this metadata in the database. The WebLogic Personalization Server can then find the metadata in the database and locate the correct content to display in a Web page.

When building your own sites, you might use a third-party document management system (DMS) to index and load data. However, the BulkLoader will meet your needs for this tour.

Ensuring Content Is Available

Before you index the new content and load its 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>\WebLogicCommerce3.5\dmsBase directory:

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

These files contain the content you will use later in the tour. The "hint" files contain metadata and content to be used for infrequent visitors, and the "prev" files contain the data for frequent visitors.

Check the Metadata in the Content

After ensuring the content you need resides in the correct directories, use this procedure to open the files and view the metadata. Viewing 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 the *.htm files from the previous section, "Ensuring Content Is Available."

- 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. You will see these metadata names later when you create the rules that select which content to match to users. The "content" attributes contain the actual text that will appear in the portlet.
- 3. Close the files without saving any changes.

Loading and Indexing Content with the BulkLoader

You will now run the BulkLoader command-line utility to load and index the metadata you viewed in the previous procedure.

Follow these steps to use the BulkLoader:

1. Run the BulkLoader.

Windows

Click Start → Run, and run <install-dir>\WebLogicCommerce3.5\bin\win32\loaddocs.bat

UNIX <install-dir>/WebLogicCommerce3.5/bin/unix/loaddocs.sh

A command/terminal window opens, the BulkLoader runs, and the window closes automatically when the BulkLoader finishes.

- 2. Restart WebLogic Server.
- **Note:** For more BulkLoader instructions, see the Content Management chapter in the *Guide to Building Personalized Applications.*

The BulkLoader indexes metadata for content that resides in the dmsBase directory and subdirectories. In our example, this includes the "hint" and "prev" HTML files that reside in the \dmsBase\hint and \dmsBase\preview directories.

In the next chapter, "Matching Users with Content," you will create the rules that match personalized content with exampleportal users.

5 Matching Users with Content

This chapter describes how to set up rules that control how indexed content is matched to users.

This topic includes the following sections:

- Creating Rules
 - Creating User Segments
 - Creating Content Selectors

Creating Rules

In the chapter on "Working with User Profiles," you assigned a set of properties to a user, which included a property called AcmePoints. This property allows you to track the number of visits a user has made to the exampleportal site. In the chapter on "Working with Content," you loaded and indexed metadata and content, making it available to show to different types of users. In this chapter, you will combine those two pieces to match users with content.

You will create categories of users called user "segments" (as in segments of the population) that automatically classify users as infrequent visitors or frequent visitors based on the number of AcmePoints, or logins, they have accumulated. You will then create rules that map infrequent and frequent visitors to the metadata—and the content—you want to show them.

Launching the E-Business Control Center

You will use the BEA E-Business Control Center to create segments and content selectors. To launch the E-Business Control Center:

- 1. Make sure WebLogic Commerce Server is running. (See the "Getting Started" section in the "Overview of the Personalization Tour" chapter for instructions on starting the server.)
- 2. Launch the BEA E-Business Control Center:

Windows Start \rightarrow Programs \rightarrow BEA WebLogic E-Business Platform \rightarrow BEA Campaign Manager \rightarrow BEA E-Business Control Center.

UNIX <install-dir>/E-BusinessControlCenter/bin/ebcc.sh

Three separate windows appear, including a Server Connection window.

🕯 Server Conne	ction	
New Connection	Previous Connections	
Display Name: (o	ptional)	
Acme		
Hostname:		
localhost		
Port:		
7501		
Username:		
administrator		
Password:		

	Connect	

Figure 5-1 Connecting to the E-Business Control Center

3. In the Server Connection window, select the New Connection tab and enter the following:

Display Name: An optional name to identify the server

Hostname: The <wlhost> name, for example, localhost

Port: The server <port> number, for example, 7501

Note: If you don't know the port number, or if it is different than the default of 7501, you can look at the bottom of the WebLogic Commerce Server startup window to see which ports are listed.

Username: administrator

Password: password

- **Note:** The Username and Password are the same defaults used to log into the Administration Tools Home page.
- 4. Click Connect. On successful connection, the Server Connection window disappears.
 - **Note:** On subsequent logins, you can click the Previous Connections tab in the Server Connection window to select the server you want. You must also reenter the password.

Creating User Segments

In this section, you will create two user segments that define frequent visitors and infrequent visitors. Later, you will map these segments to content by creating content selector rules.

Creating a FrequentVisitor Segment

The FrequentVisitor segment will identify frequent visitors as those who have logged in fewer than four times (have less than four Acme points).

1. In the Explorer [E-Business Control Center] window, click the New icon, and in the drop-down list, select "Segment." The Editor window appears.

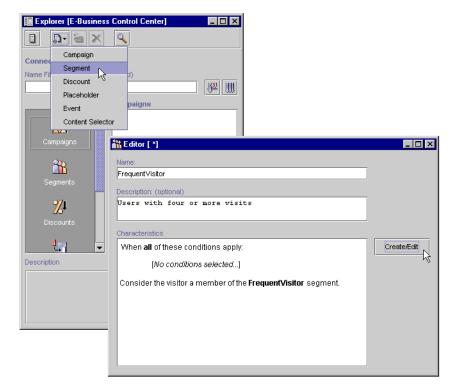


Figure 5-2 Creating a segment

2. In the Edit window, enter the following:

Name: FrequentVisitor (Make sure you type this exactly as shown.) Description: Users with four or more visits

3. Click the Create/Edit button. The Customer Segment window appears.

👬 CustomerSegment: FrequentVisitor	×
Select the conditions that will activate this action.	
Conditions:	
V The visitor has specific characteristics	7
The HTTP session has specific properties	
An HTTP request has specific properties	
The date is	
🔲 It is after a given date	
☐ It is after a given date and time	
It is between two times	
🔲 It is between two dates	
🔲 It is between two date/times	
Action: (click the underlined text to edit the values):	
When <u>all</u> of these conditions apply:	
● the visitor has these <u>[characteristics]</u> d ^h n	
Consider the visitor a member of the FrequentVisitor segment.	
OK Cancel	

Figure 5-3 Assigning characteristics to a segment

- 4. In the Conditions section of the window, select "The visitor has specific characteristics" option.
- 5. In the Action pane, click the "characteristics" link. The Visitor Characteristics window appears.
 - **Note:** In the "When all of these conditions apply" line, clicking the "all" link toggles it to an "any" link, and vice versa. This setting applies to the items you add to the Action pane.

Figure 5-4 Using the AcmePoints property as a characteristic of the segment

		Visitor property:	
exampleportal	•	AcmePoints	•
Describe the visitors of inter- available Property Sets and /			the Add
scriptors: (qualifying visitors)	must have these	characteristics)	
			Rem
			E

- 6. In the Visitor property set field, select "exampleportal."
- 7. In the Visitor property field, select "AcmePoints."
- 8. Click Add. The Visitor Characteristic Values window appears.

Visitor property	Visitor prope	Comparison:	Value:	
exampleportal	AcmePoints	is greater than or equ 🔻	4	
	cription by indicati	ing the specific Value(s) the		Add
customer should r	natch for the sele	cted property.		
alue phrases: (valu				
alue priruses. (valu	es to pe matcheu)		
)		Remove
)		Remove
greater than or equ		J		Remove
		J		Remove
		,		Remove
		,		Remove
		,		Remove
greater than or equ	ual to "4"	,		Remove
greater than or equ	ual to "4"	,		Remove
greater than or equ	ual to "4"			Remove
greater than or equ	ial to "4" rases			Remove
greater than or equ	nal to "4" mases may match ANY	value phrase		Remove

Figure 5-5 Setting the condition to compare itself to the number of AcmePoints

- 9. In the Comparison field, select "is greater than or equal to," and in the Value field, enter 4.
- 10. Click Add. A line is added to the Value phrases pane.
- 11. Click OK. The window disappears, and a line is added to the Visitor Characteristics window.
- 12. Click OK. The line is added to the Action pane of the Customer Segment window.

_	jment: FrequentVisitor	
	ons that will activate this action.	
Conditions:		
The visitor has a second se	s specific characteristics	
The HTTP se	sion has specific properties	
🗌 An HTTP req	iest has specific properties	
The date is		
🗌 lt is after a gi	/en date	
🗌 lt is after a gi	ven date and time	
🗌 It is between	two times	
🗌 It is between	two dates	
🗌 It is between	two date/times	
Action: (click the	underlined text to edit the values):	
When <u>all</u> of th	ese conditions apply:	
• the v	sitor has the following characteristics:	
\$	AcmePoints is greater than or equal to 4	
Consider the	isitor a member of the FrequentVisitor segment.	

Figure 5-6 Viewing the completed characteristic in the Action pane

- **Note:** The items in the Action pane are links that let you view, edit, or remove the actions.
- 13. Click OK. The Editor window displays the new characteristic for FrequentVisitor.
- 14. Click the Save icon in the BEA E-Business Control Center window to save the new FrequentVisitor segment rule.
 - Note: The Save icon will not be active if the Explorer window has focus.

BEA E-Business Control Center				
<u>File Window Help</u>				
Retrieved Save (Ctri+S) hts.				
Explorer [E-Business Control Center]	🏦 Editor [*]			
	Name:			
	FrequentVisitor			
Connected to: Acme	Description: (optional)			
Name Filter (partial names allowed)	Users with four or more visits			
Segments	Characteristics			
RoadRunnerFan	When all of these conditions apply:			
Campaigns Affluent Mr/Ms Fixit	• the visitor has the following characteristics:			
Boulder User	\diamond AcmePoints is greater than or equal to 4			
Segments	Consider the visitor a member of the FrequentVisitor segment.			

Figure 5-7 Viewing the new segment in the Explorer window

15. In the Explorer window, click the Segments icon and make sure FrequentVisitor is listed.

Creating an InfrequentVisitor Segment

The InfrequentVisitor segment will identify infrequent visitors as those who have logged in four times or more (have four or more Acme points).

Go back to "Creating a FrequentVisitor Segment" on page 5-4. Repeat the procedure, but this time create an InfrequentVisitor segment. Substitute the following field values for those in the existing procedure:

Name: Enter InfrequentVisitor (Make sure you type this exactly as shown.)

Description: Enter Users with less than four visits

Comparison: Select "is less than"

Value: Enter the number 4

Note: When you're finished, make sure that InfrequentVisitor shows up in the Segments list of the Explorer window.

Creating Content Selectors

You have created two segment rules that categorize users as frequent visitors or infrequent visitors. In this section, you will create two content selector rules that match infrequent visitors to one set of content and frequent visitors to another set of content.

Creating a Hints Content Selector

The hints content selector will match infrequent visitors to hints on how to use exampleportal's features.

- 1. In the Explorer [E-Business Control Center] window, click the New icon, and in the drop-down list, select "Content Selector." The Editor window appears.
- 2. In the Edit window, enter the following:

Name: Hints (Make sure you type this exactly as shown.)

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

- 3. Click the Create/Edit button. The ContentSelector window appears.
- 4. In the Conditions list, select "The visitor is a member of a predefined customer segment."
- 5. In the Action pane, click the customer segment link. The Select Customer Segments window appears.
- 6. In the Available Segments list, double-click InfrequentVisitor to move it to the Selected Segments list.

Select Customer Segments			×		
Available Segments:		Selected Segments:			
CoyoteFan		InfrequentVisitor			
RoadRunnerFan					
Affluent Mr/Ms Fixit					
Contractor	Add >>				
Boulder User	Add >>				
San Jose User	Dura David				
FrequentVisitor	<< Remove				
For Multiple Selected	Segments:				
T OF MULLIPIC SELECTED	r ooginionito.				
Qualifying visito	rs may belong to ANY	/ of these segments			
 Qualifying visitor 	rs must belong to ALL	of these segments			
	OK Cance	el			

Figure 5-8 Choosing a segment for matching content

- 7. Select either of the "Qualifying visitors may belong to..." options.
- 8. Click OK. The window disappears, and the InfrequentVisitor segment name is added to the Content Selector window.

Now that you have assigned the InfrequentVisitor segment to the Hints content selector, you will select the content that infrequent visitors will see when they visit the site.

- 9. In the Action pane of the ContentSelector window, click the empty content search link. The Content Search window appears.
- 10. In the Property set field, select "LoadedData."
 - **Note:** LoadedData is made up of the metadata that was loaded when you ran the BulkLoader. If you use a different document management system, you will see different content types.
- 11. In the Property field, select "visitingFrequency."
- 12. Click Add. The Content Search Values window appears.

🖳 Content Search	Values		×		
Values Propertie	es				
Search for conte	ent in which				
Property Set:	Property:	Comparison:	Value:		
LoadedData	visitingFrequency	is equal to	▼ InfrequentVisito		
	earch description by indicat				
Value Phrases: (va	alues to be matched)		Remove		
For multiple value phrases					
◯ Qualifying items may match ANY value phrase					
Qualifying items must match ALL value phrases					
	ок	Cancel			

Figure 5-9 Selecting content to show customers who belong to the segment

- 13. In the Comparison field, make sure "is equal to" is selected.
- 14. In the Value field, enter InfrequentVisitor.
 - **Note:** Make sure you type this exactly. If it doesn't exactly match the name in the metadata, the messages won't be displayed.
- 15. Click Add. The item is added to the Value Phrases pane.
- 16. Click OK. The window appears, and the line is added to the Content Search window.
- 17. Click OK. In the Content Selector window, the "empty content search" link is replaced with "content search."

- 18. Click OK. The "InfrequentVisitor" and "content search" items appear in the Editor window.
- 19. Click the Save icon in the BEA E-Business Control Center window to save the new Hints content selector rule.

Note: The Save icon will not be active if the Explorer window has focus.

20. In the Explorer window, click the Content Selectors icon and make sure Hints is listed.

Creating a FrequentVisitorMessage Content Selector

The FrequentVisitorMessage content selector will match promotional messages to frequent visitors.

Go back to "Creating a Hints Content Selector" on page 5-11. Repeat the procedure, but this time create a content selector rule for frequent visitors. Substitute the following field values for those in the existing procedure:

Name: Enter FrequentVisitorMessage. (Make sure you type this exactly as shown.)

Description: Enter Selects a preview message for users in the FrequentVisitor segment.

Available Segments: Double-click "FrequentVisitor" to move it into the Selected Segments list.

Value: Enter FrequentVisitor. (Make sure you type this exactly as shown.)

Note: When you're finished, make sure that FrequentVisitorMessage appears in the Content Selectors list of the Explorer window.

You have completed creating rules that match content to users who log into the exampleportal. In the next section, you will add a JSP that displays the infrequent visitor or frequent visitor content based on the number of AcmePoints the visitor has accumulated.

6 Editing the Example Portal

Now that you have identified the content you want to display to frequent and infrequent visitors, you need a place to put that content. In this chapter, you will view the pre-built JSP that will be used as a portlet to contain the content, and you will add that portlet to the exampleportal so that it shows up in the Acme Web page.

This topic includes the following sections:

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

Viewing the JSP

The JSP displays content based on whether the user is a frequent or infrequent visitor. The JSP in this procedure was created for you to use in this tour.

To view the page, follow these steps:

 In a text editor, open tutorial.jsp, which is in <install-dir>\config\wlcsDomain\applications\wlcsApp\ exampleportal\portals\repository\portlets. 2. View the JSP code that you will add to the portlet later in this tour.

In particular, look for the rule="Hints" and rule="FrequentVisitorMessage" lines in the JSP. These identify the "Hints" and "FrequentVisitorMessage" content selectors you created in the previous chapter. The JSP reads the rules in those content selectors, looks at the number of AcmePoints the user has, and determines which set of content to display.

3. Close tutorial.jsp when you finish viewing the page.

Building the Portlet

Now that you know tutorial.jsp will display the content, you need to identify it as a portlet that you can add to the exampleportal 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

Now that you have created a portlet for the tutorial.jsp to display its content in the Acme Web site, you must connect that portlet to the exampleportal portal.

1. Under the Portals bar, click on the exampleportal link. The Portal: exampleportal page appears.

Notice that the tutorial portlet is displayed in the Associated Portlets table but is grayed out, indicating that it is inactive.

- 2. To activate the tutorial portlet, click (+/-) in the Associated Portlets bar. The Add or Remove Portlets page appears.
- 3. Select the "Visible" option for the tutorial portlet. This will make the portlet visible to example portal users.
- 4. Click Save. The page refreshes and displays a message about the operation's success.
- 5. Click Back to return to the Portal: exampleportal page. 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 exampleportal users.
- 6. Click Finished in the Portal: exampleportal bar to save the changes. The Portal Management Home page appears.
- 7. Close the Administration Tools.

You have created a portlet, and you have added the portlet to a portal. This means the tutorial.jsp content will display content in the Acme Web site based on the amount of AcmePoints users have. In the next chapter, you will deploy the portal and test it to see content personalization in action.

7 Deploying the New Example Portal

In this chapter, you will log in as different users to see the portal in action. Then you will enhance the exampleportal login to increment users' AcmePoints automatically when users log in to the Web site.

This topic includes the following sections:

- Viewing the New Example Portal
 - Logging in as a Frequent Visitor
 - Logging in as an Infrequent Visitor
- Enhancing the Example Portal Login

Viewing the New Example Portal

You have set up everything you need to view the Acme Web site (exampleportal). Now you will view the Web site on the WebLogic Server, both as a frequent visitor and an infrequent visitor.

To view the frequent visitor personalization message, you will log in as democustomer. To view the infrequent visitor hints, you will not log into the portal. The portal will then read the default AcmePoints value of zero.

Logging in as a Frequent Visitor

1. With the WebLogic Server running, go to the following URL in your browser:

http://<machine-name>:<port>/exampleportal

- **Note:** If you don't know your machine name, use your network or machine login name. Windows users: Do not use the Start menu exampleportal URL. Type the URL in your browser.
- 2. Click the key icon in the top right-hand corner of the page.
- 3. Enter the username democustomer with password as the password, and click Sign In.

This is the user you created with five AcmePoints. When you log in, you will see the frequent visitor messages in the "tutorial" portlet, because democustomer is classified as a frequent visitor.

Logging in as an Infrequent Visitor

- 1. In your browser, go to the exampleportal again.
- 2. Do not log into the portal.

Because you did not log in, and the default AcmePoints value is zero, you are classified as an infrequent visitor and the "tutorial" portlet displays hints.

Enhancing the Example Portal Login

You can add 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%>"/>
```

Follow these steps to add this code:

- Open the loginSuccess.jsp file in your favorite text editor. It resides in the <install-dir>\config\wlcsDomain\applications\wlcsApp\ exampleportal\portals\repository\ directory.
- 2. Insert the example code *directly* between the following lines in the file:
 - <%-- Begin: Insert Personalization tour code here --%>
 - <%-- End: Insert Personalization tour code here --%>
 - **Note:** You can also add the following line of code at the end of the example code as a troubleshooting tool. The code prints a comment in the console window when the code runs successfully:
- <% System.out.println("adding points for user: " + username); %>
- 3. Save the file.
- 4. Close your browser to ensure that nothing is cached. Restart your browser and open the exampleportal.
- 5. Log in as username acme, password acme. Notice the Hint displayed in the portlet.

- 6. Log out and log back in three more times. Notice that after the fourth login, the portlet displays the Frequent Visitor messages instead of the Hints.
 - **Note:** You can also see the new AcmePoints value for the "acme" user by looking at the user's profile in the Administration Tools. For more information, see "Editing User Properties" in Chapter 3, "Working with User Profiles."

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