

BEAGuardian™

User Guide

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About BEA Guardian

This chapter provides an overview of Guardian components, features, and key concepts. Also provided are basic instructions for using and navigating the Guardian User Interface and Online Help System. Topics include the following:

- Introduction
- Guardian User Interface
- Guardian Online Help System
- Guardian Command Line Interface
- Key Concepts
- Security
- Privacy
- Key Tasks
- Example Scenarios
- Supported Configurations
- Supported Targets

Introduction

What is Guardian?

Guardian is a diagnostic tool for identifying potential problems in your environment before they occur, and provides specific instructions for resolving them. Guardian is like having the entire BEA Customer Support Team scrutinize your domain and immediately present their findings and recommendations to you, at your convenience.

How do you use it?

First, activate one or more *Domains* in Guardian. A domain is a logically related group of WebLogic Server resources that you manage as a unit. You can also organize multiple domains into *Domain Groups*. Then, select one or more domains, select a *Signature Bundle*, and launch an *Evaluation*. Guardian then proceeds to evaluate the Signature Bundle against the specified domain(s), and generates a detailed report of potential issues and their remedies. You can then review the report and decide how to proceed.

Where can I run it?

Guardian can run on Windows or Linux systems that have Java Version 5 or higher installed. Guardian can evaluate any platform based on WebLogic Server version 8.1 through 10.3, regardless of the operating system on which it is running.

Guardian User Interface

This section provides an overview and basic navigation instructions for the Guardian User Interface. For a complete, detailed description of all interface components, see Chapter 3, "Reference." For detailed instructions for specific Guardian tasks, see Chapter 2, "Tasks."

In general, you will use the Guardian User Interface to perform the majority of Guardian tasks and activities. For some highly repetitive or complex tasks—for example, activating multiple Guardian domains in multiple Guardian instances—you may want to create a Guardian Command Line Interface (CLI) script to automate a series of tasks. For basic instructions on using the CLI, see "Command Line Interface" on page 73 on Chapter 2, "Tasks." For a detailed description of all CLI commands and syntax, see "Command Line Interface" on page 134 of Chapter 3, "Reference."

The sections below provide a description and basic navigation instructions for each of the following elements:

- Guardian Main Window
 - Main Menu Bar
 - Main Toolbar
 - Navigation Pane
 - Document Pane
 - Document View and Editor Titlebars
 - Context Menus
- Wizards
 - Wizard Titlebar Menus

For a complete detailed description of the Guardian User Interface, see Chapter 3, "Reference."

Guardian Main Window

The Guardian Main Window contains the following basic navigation and display components:

- Main Menu Bar
- Main Toolbar
- Navigation Pane
 - Explorer Tabs
 - Explorer Toolbar Icons
 - Explorer Toolbar Menus
- Document Pane
 - Document Views and Editors
 - Document View and Editor Titlebars
- Context Menus

The following sections provide instructions for using each of these components.

Main Menu Bar

The Main Menu Bar is at the top of the BEA Guardian main window just below the BEA Guardian titlebar. The Menu Bar contains the following menus:

- File Menu
- Tools Menu
- Window Menu
- Help Menu

The Menu Bar menus in turn contain a series of options and submenus, some of which also lead to additional menus, dialog boxes, or wizards. The following sections provide an overview of each of these menus, and instructions for invoking them.

Keyboard Shortcuts

You can invoke many menus, submenus, and menu options by using a keyboard shortcut. To display Menu Bar menus, press the **Alt** key and type the menu selection key for the menu you want to display. The menu selection key is the letter underlined in the menu name when you press the **Alt** key.

Some menu options also have keyboard shortcuts, which consist of a specific sequence of characters pressed simultaneously. If a menu item has a keyboard shortcut, the key sequence is listed next to the item in the menu. To see the complete list of keyboard shortcuts, press **Ctrl+Shift+L**.

File Menu

Table 1-1 describes the **File** menu options and submenus.

Table 1-1 File Menu

Menu Item	Description	
New >	This option opens a submenu with the following options:	
	 Domain Group — Open the Add Domain Group dialog box for creating a new Domain Group. 	
	• Domain — Open the Domain Activation Wizard .	
	 Inventory — Open the Inventory Wizard. 	
	• Evaluation — Open the Evaluation Wizard .	
	• Shortcut — Open the Shortcut Wizard .	
Close	Close the current display in the Document Pane.	
Close All	Close all Document Pane displays.	
Save As	Export the selected Domain Inventory or Evaluation as a file (PDF or HTML).	
Print	Print the contents of the Report tab or Source tab currently displayed in the Document Pane.	
Import	Open the Import dialog box for importing Guardian Preferences, Workspace, or Report Plug-in.	
Export	Open the Export dialog box for exporting Guardian Preferences, Workspace, or Report Plug-in.	

Tools Menu

Table 1-2 describes the **Tools** menu options and submenus.

Table 1-2 Tools Menu

Menu Item	Description	
Refresh Site List	Update the list of BEA Support site identifiers available for creating support cases.	
Purge Inactive Domains	Removes deactivated domains from the Domain Explorer and the Guardian Registry. This also removes the Domain Inventories, Evaluation Summaries, and any Case Creation Archives for those domains from the Guardian Workspace.	
View Log >	 This opens a submenu with the following options: Signature Log — Display the Guardian Signature log file. Guardian Log — Display the Guardian log file. 	

Window Menu

Table 1-3 describes the **Window** menu options and submenus.

Table 1-3 Window Menu

Menu Item	nu Item Description	
Show View	Open a submenu containing options for opening the following Views: • Domain Explorer — Opens the Domain Explorer in the Navigation	
	Pane. • Bundle Explorer — Opens the Bundle Explorer in the Navigation Pane.	
	• Shortcut Explorer — Opens the Shortcut Explorer in the Navigation Pane.	
	 Signature Explorer — Opens the Signature Explorer in the Navigation Pane. 	
	• Active Domains Table — Opens the Active Domains Table in the Document Pane.	
	 Shortcuts Table — Opens the Shortcuts Table in the Document Pane. 	
	• Progress View — Opens the Progress View in the Navigation Pane.	
	 Outline View — Opens the Outline View to the right of the Document Pane. 	
Reset Perspective	Resets the Guardian displays to their default settings.	
Preferences	Open the Preferences configuration page.	

Help Menu

Table 1-4 describes the Help menu options and submenus.

Table 1-4 Help Menu

Menu Item	Description
Welcome	Display the Guardian Welcome page.
Help Contents	Open the BEA Guardian Online Help System.
Search	Open the Online Help Search utility.
Dynamic Help	Opens the Guardian Dynamic Online Help pane (to the right of the Document Pane).
Cheat Sheet	Open the Cheat Sheet Selection dialog box for selecting and displaying a Guardian Cheat Sheet. The Cheat Sheet provides step-by-step instructions for certain Guardian tasks. Action buttons are provided for some tasks; click a button to initiate that task.
Manage Guardian >	Open a submenu with the following options: • Update Guardian — Open the Update Wizard. • Manage Configuration — Open the Product Configuration Manager for performing the following tasks: - Scan for Updates - View Installation History - Show Activities - Add an Extension Location
Key Assist	Display the list of keyboard shortcuts.
Software Updates >	 Open a submenu with the following options: Find and Install — Open the Install/Update dialog box for searching for and installing updates and new features. Manage Configuration — Open the Product Configuration Manager.
About BEA Guardian	Open the About BEA Guardian dialog box. This displays the version of your current Guardian installation, and details about Guardian features, plug-ins, and configuration.

Main Toolbar

The Main Toolbar is located below the Main Menu, and contains action buttons for the most common Guardian tasks. To identify a button, move your mouse pointer over the button; this displays the tool tip text for that button.

Table 1-5 describes the Main Toolbar buttons.

Table 1-5 Guardian Main Toolbar Buttons

Button	Description	
Open	Display the selected resource in the Document Pane.	
	 Open Active Domain Table when Target Domains is selected in the Domain Explorer. 	
	 Open Domain Inventory when a Domain Inventory is selected in the Domain Explorer. 	
	 Open Evaluation Summary when an Evaluation Summary is selected in the Domain Explorer. 	
	 Open Signature Details when a signature is selected in the Signature Explorer or Bundle Explorer. 	
	 Open Bundle Details when a bundle is selected in the Bundle Explorer. 	
	 Open Evaluation Wizard when a shortcut is selected in the Shortcut Explorer. 	
Print	Print the contents of the Report tab or Source tab currently displayed in the Document Pane.	
Activate	Open the Domain Activation Wizard .	
Inventory	Open the Inventory Wizard.	
Evaluate	Open the Evaluation Wizard.	
Update	Open the Update Wizard .	

Navigation Pane

The Navigation Pane resides in the left side of the BEA Guardian main window. The Navigation Pane contains several tabs leading to Explorer Views. You can have multiple Views open at once, but only one can be displayed at a time. Click on a tab to display an Explorer view.

Explorer Tabs

Table 1-6 describes the Navigation Pane Explorer View tabs:

Table 1-6 Navigation Pane Explorer Tabs

Explorer Tab	Description
Domain Explorer	Open the Domain Explorer . This View enables you to browse, manage, and administer the domains you have defined in Guardian. Right-click in the Domain Explorer to open a context menu of domain operations. For instructions on Domain Explorer tasks, see "Domains" on page 47 in Chapter 2, "Tasks."
Signature Explorer	Open the Signature Explorer . This View enables you to browse the available signatures and view Signature Details for a selected signature. For instructionson Signature Explorer tasks, see "Signatures" on page 62 in Chapter 2, "Tasks."
Bundle Explorer	Open the Bundle Explorer . This View enables you to browse the available Signature Bundles and their contents. For instructions on Bundle Explorer tasks, see "Bundles" on page 69 in Chapter 2, "Tasks."
Shortcut Exporer	Open the Shortcut Explorer . This View enables you to view and manage your Evaluation Shortcuts. For instructions on Shortcut Explorer tasks, see "Shortcuts" on page 70 in Chapter 2, "Tasks."

For a detailed description of each of the Explorer views, see "Navigation Pane" on page 93 of Chapter 3, "Reference."

Explorer Toolbar Icons

Below each Explorer titlebar is the Explorer toolbar. An Explorer toolbar may contain all or some of the following active icons:

Table 1-7 Explorer Toolbar Icons

Icon	Function
×	Close
	Minimize
	Maximize
8	Restore
	Expand all items.
	Collapse all items.
∇	Open Explorer menu.
F	Link selected item with Editor.

Explorer Toolbar Menus

The **Domain Explorer**, **Signature Explorer**, and **Bundle Explorer** each contain a Menu icon in the right corner of the toolbar. Click the Menu icon to display a menu of operations for that Explorer.

Table 1-8 describes the Explorer menus.

Table 1-8 Explorer Menus

Explorer	Menu Options
Domain Explorer	 The Domain Explorer menu contains the following options: Filter Domain Explorer — Open the Filter Domain Explorer dialog box to filter inventories and evaluations by date created. Link with Editor — Link the selected item with an Editor.
Signature Explorer	 The Signature Explorer menu contains the following options: Sort Signatures > — This opens a submenu of the following options for sorting signatures: By Name By Severity Filters — Open the Filters dialog box for filtering signatures in Signature Lists. For instructions, see "Filter Signatures" on page 63 in Chapter 2, "Tasks." Link with Editor — Link the selected item with an Editor.
Bundle Explorer	 Filters — Open the Filters dialog box for filtering signatures in Signature Lists. For instructions, see "Filter Signatures" on page 63 in Chapter 2, "Tasks." Sort Signatures > — This opens a submenu of the following options for sorting bundles and signatures in the Bundle Explorer: By Bundle Name, Signature Name By Bundle Name, Severity Link with Editor — Link the selected item with an Editor.

Document Pane

The Document Pane is located in the central portion of the BEA Guardian main window. The Document Pane displays the Document Views and Editors.

Document Views and Editors

Table 1-9 describes the Guardian Views and editors that can be displayed in the Documentation Pane.

Table 1-9 Document Pane Views and Editors

View/Editor	Description
Active Domain Table	Select Window > Show View > Active Domains Table to display this View. This contains a table of all of the domains currently activated in Guardian, and action buttons for the following tasks:
	 Open Admin Console — Open an instance of the WebLogic Server Administration Console.
	 Modify Domain — Open the Domain Properties configuration page for the selected domain.
	 Deactivate Domain — Open the Domain Deactivation Wizard for the selected domain(s).
Domain Inventory	Double-click on a Domain Inventory entry in the Inventory History folder in the Domain Explorer to display the Inventory Details for that inventory. The inventory includes descriptions of your servers, Java Virtual Machines, operating systems, databases, product versions, and certain configuration settings. The Domain Inventory View contains the following tabs:
	 Overview — Display the Domain Inventory Overview for this Inventory.
	• Source — Display the XML source for the Inventory.
	• Report — Display the Domain Inventory report for this inventory.
Evaluation Summary	Double-click on an Evaluation Summary entry in the Evaluation History folder in the Domain Explorer to display that Evaluation Summary. This contains a table of all detected signatures for the evaluated domain. Select a signature in the list to display the signature details and remedy for that signature.
Shortcut Table	Select Window > Show View > Shortcuts Table to display this View. This contains a table of all of your Shortcuts, and action buttons for the following tasks:
	Add Shortcut — Open the Shortcut Wizard for creating Shortcuts
	 Delete Shortcut — Delete the selected Shortcut. A Confirm Delete dialog box prompts you to confirm the delete operation. Click OK to delete the Shortcut.

Table 1-9 Document Pane Views and Editors

View/Editor	Description
Signature Details	Double-click on a signature entry in the Signature Explorer or Bundle Explorer . This View contains the following tabs:
	• Overview — Display the Signature Overview for the signature.
	• Source — Display the XML source for the signature.
	• Report — Display the Signature Report for that signature.
Bundle Details	Double-click on a Bundle node in the Bundle Explorer . This View provides a description and some additional details about the selected Bundle. Also included is the Signature Definition for the Bundle.

Note: You can have multiple Views or Editors open in the Document Pane, but only one can be active at a time.

Document View and Editor Titlebars

Each View and Editor has a titlebar that contains the name of the View or Editor, an identity icon, and buttons to close, minimize, maximize, and restore the display.

You can also use View and Editor titlebars to do the following:

- Double-click the titlebar to maximize a View or Editor, and double-click it again to restore it to its original size.
- Right-click on a titlebar to open the **System Menu** for that View or Editor.
- You can group multiple Views or Editors together on a titlebar as a tab group. Tab groups
 can be moved together as a unit, using either the System Menu > Move menu option or
 drop cursors. Only the titlebar of the currently active View or Editor is visible in a tab
 group.
- If you have more Views or Editors open than can fit on a titlebar, a Show List icon appears to the right of the titlebar tabs. The icon includes a number that indicates how many more of the open Views or Editors can fit on the titlebar. Click the icon to display a list of all the titlebar Views and Editors. Select an item from the list to make it active and bring it to the forefront of the Navigation Pane or Document Pane display. The items listed in bold font are those that cannot fit on the titlebar. The items not listed in bold are those that are already shown on the titlebar.

- You can move Views or Editors by dragging their titlebars to different locations.
 - You can move the Views in the Navigation Pane almost anywhere, including outside the BEA Guardian main window. However, you can move Editors only within the Document Pane.
 - As you drag a View or Editor titlebar, the mouse pointer changes into a drop cursor that indicates where the View or Editor will appear when you release it.
 - The point in the titlebar at which you click determines what will be dragged. Click a
 View or Editor tab to move that View or Editor, but not the whole tab group. To move
 the whole tab group, click to the right of the tabs in the title bar, or select Move > Tab
 Group from the System Menu.

Context Menus

Many views and displays contain context menus. Right-click on an item or anywhere in a display to open the associated context menu. For a complete description of context menus, see Chapter 3, "Reference."

Wizards

BEA Guardian provides the several wizards for guiding you through some of the more complex or common Guardian tasks.

Table 1-10 describes the Guardian wizards and how to invoke them.

Table 1-10 Guardian Wizards

Menu Item	Description
Domain Activation Wizard	Click Activate to open the Domain Activation Wizard . This contains fields and options for configuring and activating a domain in Guardian. For instructions on using this wizard, see "Activate Domain" on page 47 in Chapter 2, "Tasks."
Domain Deactivation Wizard	In Domain Explorer , right-click on a domain entry and select Deactivate Domain from the context menu to open this wizard. This contains a table of all active domains. For instructions on using this wizard, see "Deactivate Domain" on page 49 in Chapter 2, "Tasks."
Evaluation Wizard	Click Evaluate to open the Evaluation Wizard for evaluating one or more domains. For instructions on using this wizard, see "Evaluate Domain" on page 57 in Chapter 2, "Tasks."
Support Case Wizard	Select a signature in an Evaluation Summary and click Get more help from BEA support. This opens the Support Case Wizard for the selected signature. This enables you to create and submit a support case based on the selected signature. For instructions on using this wizard, see "Submit Support Case" on page 78 in Chapter 2, "Tasks."
Inventory Wizard	Click Inventory to open the Inventory Wizard . A Domain Inventory is a snapshot of all of the configuration details for a domain as it exists at that moment. For instructions on using this wizard, see "Inventory Domain" on page 56 in Chapter 2, "Tasks."
Shortcut Wizard	Select File > New > Shortcut to open the Shortcut Wizard for creating and modifying Shortcuts. For instructions on using this wizard, see "Create Shortcut" on page 70 in Chapter 2, "Tasks."

Table 1-10 Guardian Wizards

Menu Item	Description
Shortcut Evaluation Wizard	Click the Shortcut Explorer tab to open the Shortcut Explore r. Then, double-click on a Shortcut name in the Shortcut list to open the Shortcut Evaluation Wizard . For instructions on using this wizard, see "Evaluate Shortcut" on page 72 in Chapter 2, "Tasks."
Update Wizard	Click Update to open the Update Wizard . This wizard enables you to automatically download new BEA Guardian software and signatures from the BEA Guardian update site. For instructions on using this wizard, see "Automatically Update Guardian" on page 81 in Chapter 2, "Tasks."
	WARNING: Upgrading from Guardian 1.0.x to Guardian 1.1 must be done manually. For instructions, see "Manually Update Guardian" on page 83 and "Manually Update Guardian Registry" on page 86 in Chapter 2, "Tasks."

For a detailed description of each of the Guardian Wizards, see "Wizards" on page 116 of Chapter 3, "Reference."

Wizard Titlebar Menus

Right-click a wizard titlebar to open a context menu of options to **Move**, **Size**, or **Close** the wizard. You can also move or resize a Wizard by dragging the titlebar or window borders.

Guardian Online Help System

The Guardian Online Help system has the following structure:

- **About BEA Guardian** This section provides an overview of Guardian components, features, and key concepts. Also provided are basic instructions for using and navigating the Guardian User Interface and Online Help System.
- Tasks This section provides detailed instructions for Guardian tasks and procedures.
 Tasks are categorized according to the component or feature to which they apply. The
 Tasks Help folder contains a number of subfolders, one for each task category. Expand a
 category folder to see the tasks relating to that topic.

 Reference — This section provides a detailed description of the Guardian User Interface components and features, and a detailed reference guide to the Guardian Command Line Interface.

Guardian Command Line Interface

The Guardian Command Line Interface is a command interpreter that is an executable .cmd batch file for Windows, and a .sh shell script for Linux. Both the Windows batch file and the Linux shell script are wrappers that accumulate and organize arguments to the Java command. You can invoke the Command Line Interface from a Windows Command Prompt window or a Linux terminal window.

For basic instructions on using the CLI, see "Command Line Interface" on page 73 on Chapter 2, "Tasks." For a detailed description of all CLI commands and syntax, see "Command Line Interface" on page 134 of Chapter 3, "Reference."

Key Concepts

This section provides an overview of Guardian components, features, and key concepts. These include:

- Guardian Agent
- Guardian Workspace
- Guardian Registry
- Domain
- Domain Groups
- Domain Inventory
- Signature
- Signature Bundle
- Signature Annotations
- Evaluation
- Snapshot Evaluation
- Evaluation Summary

- Signature Repository
- Shortcut
- Support Case

Guardian Agent

The Guardian Agent is a lightweight web application that gathers the data used for evaluations. The Guardian Agent collects the following data:

- JMX data
- Java system properties
- Database metadata for your JDBC connection pools
- J2EE Deployment Descriptors from WebLogic instances
- JRockit JMAPI data
- JRockit Runtime Analyzer data
- JRockit thread dump data

Multiple Guardian Agent Threads

If you have one or more managed servers in a domain, the Guardian Agent spawns the appropriate number of threads for communicating between the Guardian Agent on the WebLogic Administration Server, and the Guardian Agent running on the Managed Server(s).

An excessive number of threads can affect the performance of the Administration Server, so Guardian enables you to specify the maximum number of Agent threads that can be spawned. In addition, in order to manage Agent resources on both the Administration and Managed Servers, you can specify the maximum amount of time (in seconds) that can elapse before a thread is terminated. For instructions, see "Configure Maximum Agent Threads" on page 39 and "Configure Agent Thread Timeout" on page 40 in Chapter 2, "Tasks."

Guardian Workspace

The Guardian Workspace is the directory in which all of your Guardian data is stored. It includes the following data for each domain you have defined in Guardian:

- Preferences
- Domain Inventories
- Evaluation Summaries

When you invoke Guardian, you are prompted to select a location for your Guardian Workspace. To prevent loss of work when Guardian is updated or uninstalled, select a Workspace location outside of the Guardian installation directory (see "Select Workspace" on page 41). You can also safely back up your Workspace data by exporting your Workspace to a file also located outside of your Guardian Installation directory. For instructions, see "Export Workspace" on page 42 of Chapter 1, "About BEA Guardian."

Although the documents in the Guardian Workspace are persisted as XML files, they are best viewed through the Guardian User Interface. The Guardian User Interface provides a number of tools for viewing, managing, and processing your data, as well as better protection against unintended edits or deletions. For basic instructions on using the interface, see "Guardian User Interface" on page 2. For a detailed description of Guardian User Interface components and features, see Chapter 3, "Reference." See Chapter 2, "Tasks," for detailed instructions for using the interface to perform specific Guardian tasks.

Guardian Registry

The Guardian Registry is an XML document in which your BEA Guardian configuration specifications are maintained. The Guardian Registry is created during product installation, and updated whenever you modify your configuration or perform certain Guardian operations. The Guardian Registry identifies the domains you have activated, the Signature Bundles available for evaluation, the Shortcuts you have defined, and your Guardian Workspace location(s).

Domain

A domain is a logically related group of WebLogic Server resources that are managed as a unit. A domain always includes at least one WebLogic Server instance called the Administration Server. The Administration Server acts as a central point of contact for server instances and system administration tools. A domain may also include additional WebLogic Server instances called Managed Servers.

Each BEA Guardian installation maintains a Guardian Registry of active domains. A domain is considered active when it is capable of being evaluated. You can activate and deactivate domains at will, and select which to evaluate at any given time.

Domain Groups

You can organize the domains in Guardian into Domain Groups for easier management. For instructions on creating and managing Domain Groups, see "Domain Groups" on page 52 in Chapter 2, "Tasks."

Domain Inventory

A Domain Inventory is an XML document that describes the products in a Guardian domain. The inventory includes descriptions of your servers, Java Virtual Machines, operating systems, and databases. The descriptions include product versions as well as some configuration settings.

A Domain Inventory is created when you activate or evaluate a domain. The **Inventory History** is also refreshed each time a domain is evaluated. You can use the **Domain Inventory Wizard** in the Guardian User Interface to define and generate a new Domain Inventory.

Domain Inventory files are stored and maintained in your Guardian Workspace. You can use the **Domain Explorer** in the Guardian User Interface to view and manage Domain Inventories.

Signature

BEA Support has identified patterns in user domains that can cause problems. These patterns are described in XML documents called *signatures*.

Signatures describe potential problems based on information about your BEA WebLogic Servers and the environment in which they are deployed, including Java Virtual Machines (JVMs), operating systems, and databases. Signatures contain executable logic that can identify specific versions of these products as well as their configuration settings.

In addition to the potential problem description, signatures also contain a remedy recommendation and a severity level: 1-Critical, 2-Warning, or 3-Info.

To detect which signatures apply to your domain, you conduct an evaluation. When the evaluation is complete, the results are displayed in an Evaluation Summary. The Evaluation Summary lists all of the detected signatures, along with the severity level, description, and recommended remedy for each.

Signatures form a primary component of BEA Guardian, since they contain the distilled knowledge of BEA Support for both detecting potential problems and resolving them.

Signature Bundle

A Signature Bundle is a group of signatures that are evaluated together against one or more specified domains. You can select which bundle to evaluate against which domain(s). Bundles determine the signatures—and consequently, the potential issues—for which to search. The domain(s) you specify determine where to search.

Signature Annotations

Signature Annotations enable you to tag a detected signature with one or more persistent annotations about that signature.

An annotation contains the following information:

- Type This indicates the Annotation Type. There are two types: Ignore and Flag.
- Name (Optional) This is a text field into which you can enter a short name for this
 annotation.
- **Comment** This is a text field into which you can enter comments or other notes about the signature.
- **Timestamp** This records the date and time the annotation was created.
- **Domains** This specifies the Annotation Target for this annotation for this signature. This can be **All Domains**, **This Domain**, or **This Evaluation**.
- **Evaluations** (Automatic) This specifies the Evaluation(s) to which this annotation applies for this signature.

You can use the Annotations Wizard to create, edit, and delete annotations. For instructions, see "Signature Annotations" on page 64 in Chapter 2, "Tasks."

In addition, you can use Signature Filters to specify which annotated signatures are to be displayed in the Signature Explorer, Bundle Explorer, and Evaluation Summaries. For instructions, see "Filter Annotated Signatures" on page 68 in Chapter 2, "Tasks." For complete instructions on using filters, see "Filter Signatures" on page 63 in Chapter 2, "Tasks."

Evaluation

To detect which signatures apply to your domain, you conduct an evaluation. When the evaluation is complete, the results are displayed in an Evaluation Summary. The Evaluation Summary lists all of the detected signatures, along with the severity level, description, and recommended remedy for each.

Snapshot Evaluation

A Snapshot Evaluation is a complete assessment of all of the configuration details for a specific domain, at the particular moment the evaluation is executed.

You can compare two Snapshot Evaluations to see very quickly the differences between configurations for two domains, or the same domain at different points in its history. For instructions, see "Compare Inventories or Evaluations" on page 60 of Chapter 2, "Tasks."

Evaluation Summary

The results of an evaluation are displayed in an Evaluation Summary. The Evaluation Summary lists all of the signatures from the specified bundle that were detected for the evaluated domain, along with the severity level, description, and recommended remedy for each signature.

Signature Repository

The Signature Repository contains the locally persisted store of signatures available for evaluation. When you download signatures from the Guardian update site, they arrive in a Java Archive (JAR) file. The JAR file is stored in the repository/archives directory of your Guardian installation directory.

Shortcut

A Shortcut enables you to streamline the evaluation procedure by predefining and storing the domain, Signature Bundle, and other parameters for evaluations that you perform frequently. You can then evaluate the Shortcut, saving you the effort of re-entering the parameter values each time you want to run the evaluation.

Support Case

A support case is a record created when you submit technical questions or issues to BEA Support. Customers with a support contract can open a support case on the BEA eSupport website or by calling BEA Customer Support.

Guardian enables you to open a BEA Customer Support case directly from a Guardian evaluation. When you conduct an evaluation that detects a signature, you can create and submit a support case directly from a selected signature in an Evaluation Summary. Guardian automatically creates the case and includes all of the information from the signature and submits it, enabling a BEA support engineer to begin working on your case right away. You can also add any additional attachments and notes before sending the support case to BEA

You also have the option not to submit the case immediately at the time of creation, but rather to save the case data as a *Case Creation Archive* for later submission. Case Creation Archives are stored as files with the file name extension .car.

To learn more about BEA Support and support cases, see the *BEA Customer Support Guidebook*, which you can download from the BEA eSupport website.

Security

Authentication

To safeguard your domains, Guardian requires valid login credentials for all communications between Guardian and your Guardian domains. Whenever you conduct an evaluation or activate a domain, Guardian prompts you for the username and password of an Administrator or Monitor account on the target domain. You can choose to store the username and password so you do not have to enter them for every evaluation. All usernames, passwords, and server names persisted on disk are encrypted.

Data Encryption

Any passwords, usernames, or server names persisted on disk are encrypted. This encryption helps prevent the disclosure of any clear text data that could compromise the security of your domain. SSL encryption is available for communication between Guardian and your domains and between Guardian and BEA. Guardian uses 128 bit open source encryption for SSL.

Secure Transmission

Secure Sockets Layer (SSL) encryption is available for all communication with BEA over the Internet, and all communication with Guardian Agents in your target domain(s). Please note that Guardian uses 128 bit open source encryption for SSL. If you want to use SSL, there are three types of communication to consider:

- Target domain communication To use SSL encryption for communications between BEA Guardian and your target domain(s), select the https:// communications protocol option in the Domain Activation Wizard. For instructions, see "Activate Domain" on page 47 of Chapter 2, "Tasks."
- Signature downloads To use SSL encryption when downloading signatures from BEA
 Support, select Require SSL in the Guardian Preferences configuration page. This will
 also set SSL encryption for uploading signature usage statistics (see "Privacy" on page 25).
 For instructions on configuring your Guardian preferences, see "Preferences" on page 44 of
 Chapter 2, "Tasks."
- Support case creation To use SSL encryption when opening support cases with BEA Support, select Require SSL in the Guardian Preferences configuration page. For instructions on configuring your Guardian preferences, see "Preferences" on page 44 of Chapter 2, "Tasks."

Privacy

When you download signatures into Guardian from BEA Support, BEA collects high level statistics about your signature usage, including the number of times each signature was evaluated and detected. *No customer data is included in the usage statistics*. This information is used only in aggregate to assess the effectiveness of each signature. This data is crucial to the continuous improvement of BEA Guardian.

The signature usage statistics contain the following information:

- signature id This is the unique identifier for the signature.
- type This is the category of the signature.
- fired This is the number of times the signature was considered for use. This also includes the number of times the signature was disqualified before evaluation due to targeting products not present on the domain.

- evaluated This is the number of times the signature was actually compared against the target domain.
- detected This is the number of times the signature was actually found on the target domain

The following is a sample signature usage statistic:

```
<?xml version="1.0" encoding="UTF-8"?>
<usage>
<signature id="123456.sig" type="Evaluation" fired="30" evaluated="18"
detected="2" />
<signature id="234567.sig" type="Evaluation" fired="30" evaluated="20"
detected="1" />
</usage>
```

Key Tasks

There are many ways to configure and use Guardian to diagnose the health of your domains. However, there are four essential tasks that can be considered the primary functions of Guardian. These are as follows:

- Activate Domain
- Inventory Domain
- Evaluate Domain
- Update Guardian

The following sections provide a brief description of each of these tasks. For a complete description of all Guardian tasks and procedures, see Chapter 2, "Tasks."

Activate Domain

Activating a domain prepares the domain for evaluation and conducts an initial inventory of the domain configuration.

To activate a domain, use the **Domain Activation Wizard**. For instructions, see "Activate Domain" on page 26 of Chapter 2, "Tasks."

Inventory Domain

A Domain Inventory is a snapshot of all of the configuration details for a domain as it exists at that moment. The results are displayed in a **Domain Inventory Overview** in the Document Pane. The inventory is also added to the **Inventory History** folder in the **Domain Explorer**. Domain Inventories are also generated automatically whenever you activate or evaluate domains.

To inventory a domain, use the **Inventory Wizard**. For instructions, see "Inventory Domain" on page 27 of Chapter 2, "Tasks."

Evaluate Domain

To detect which signatures apply to your domain, you conduct an evaluation. Guardian collects data about your domain environment, and identifies which signatures apply to the domain. When the evaluation is complete, the results are displayed in an Evaluation Summary. The Evaluation Summary lists all of the detected signatures, along with the severity level, description, and recommended remedy for each.

You can review the Evaluation Summary to determine your response to any signatures that are detected. If you need more help resolving the potential problem identified by the signature, you can use Guardian to create and submit a BEA support case.

For instructions on conducting evaluations, see "Evaluate Domain" on page 27 of Chapter 2, "Tasks."

Update Guardian

BEA Support Engineers create new signatures every day, and new application enhancements to Guardian are also periodically released. The Guardian **Update** feature enables Guardian to connect directly to the Guardian Update site to automatically download and install new signatures and product updates. To update Guardian on servers that do not have Internet access, you can perform a manual update.

For instructions for performing both automatic and manual updates, see "Updates and Upgrades" on page 81 of Chapter 2, "Tasks."

Example Scenarios

The following scenarios are examples of some of the different ways you can use Guardian to find problems before they impact your environment.

Scenario 1: Development Cycle Evaluations

As you develop an application and migrate from development to quality assurance to production, you can run an evaluation at each stage. Guardian will help ensure that each phase of your development process is compliant with BEA best practices.

Scenario 2: Heavy Load Evaluations

Some signatures are designed to evalute runtime domain settings. Running an evaluation under heavy load can detect potential problems that would not otherwise be detected. BEA recommends conducting these evaluations during load and performance testing.

Scenario 3: Application Update Evaluations

After you update an existing application, you can run an evaluation to assess the deployment. Guardian will help you find any potential problems that could impact your upgrade.

Scenario 4: Vendor Software Update Evaluations

After you install a new BEA patch, service pack, or upgrade, or install or upgrade third party software, you can run an evaluation to identify any new issues that may have been introduced.

Scenario 5: Post Repair Evaluations

If Guardian earlier detected a signature, and you subsequently applied the remedy or made other changes to your system, you can run an evaluation to confirm that the signature is no longer detected and no new issues were introduced.

Scenario 6: Post Domain Change Evaluations

If you made changes to your domain configuration or settings, you can run an evaluation to confirm that the result is compliant with BEA best practices.

Scenario 7: Scheduled Overnight Evaluations

If you are concerned about domain settings being incorrectly changed overnight, or your domain is approaching certain resource limits, you can schedule evaluations to run overnight. You can review the Evaluation Summary in the morning and decide if any detected signatures merit further investigation.

Scenario 8: Heartbeat Evaluations

Guardian evaluations are designed to have as minimal an impact on throughput and CPU usage as possible. If your domain has extra capacity, you can schedule Guardian to run evaluations at regular intervals; for example, every 15 minutes. Then, if any changes are made or certain thresholds are reached, you can be notified quickly.

Scenario 9: Diagnostic Evaluations

If you notice a problem on your domain, you can run an evaluation. Even if an earlier evaluation detected no signatures, something may have changed since that time to cause the new problem. Guardian can be your first line of defense in diagnosing and repairing domain problems.

Supported Configurations

Supported Configurations are the environments in which the BEA Guardian application can be installed and run. This is distinct from the Supported Targets, which are the environments that Guardian can target for evaluations.

Note: Guardian requires Java Version 5 or above.

Guardian supports the following environments:

Table 1-11 Supported Operating Systems

Operating System	Vendor/Version	
Windows	XP, 2003, 2000	
Linux	Red Hat Enterprise Linux 3, 4	
	Note: Requires Mozilla	

Table 1-12 Supported Java Runtime Versions

Java Runtime Environment Version	Vendor
V5 (also known as V1.5) or above	JRockit, Sun

Supported Targets

Supported Targets are the environments that BEA Guardian can target for evaluations. This is distinct from Supported Configurations, which are the environments in which the Guardian application itself can be installed and run.

Basically, Guardian can target any platform for evaluation that allows it to install and communicate with the Guardian Agent. In addition, the Guardian Agent itself must have access to a specific set of Java system information properties and methods. The BEA products capable of supporting these operations are based on WebLogic Server versions 8.1 and above.

The following BEA product versions are supported:

Note: For the most current information on Supported BEA product versions, please see the *Guardian 1.1 Release Notes*.

Table 1-13 Supported BEA Product Versions

BEA Product	Versions
AquaLogic Data Services Platform	2.0 and above
AquaLogic Service Bus	2.1 and above
JRockit JDK	Please see Guardian 1.1 Release Notes.
WebLogic Communications Platform SIP Server	3.0 and above
WebLogic Integration	8.1 and above
WebLogic Platform	8.1 and above
WebLogic Portal	8.1 and above
WebLogic RFID Enterprise Server	1.1
	2.0
WebLogic Server	8.1 and above
WebLogic Virtual Edition	1.1

About BEA Guardian

Tasks

This chapter provides detailed instructions for using and managing the following Guardian features and components:

- Basic Tasks
- Guardian Agent
- Workspaces
- Preferences
- Domains
- Domain Groups
- Proxy Servers
- Inventories and Evaluations
- Signatures
- Signature Annotations
- Bundles
- Shortcuts
- Command Line Interface
- Troubleshooting

- Support
- Updates and Upgrades

Basic Tasks

There are many ways to configure and use Guardian to diagnose the health of your domains. However, there are four essential tasks that can be considered the primary functions of Guardian. These are as follows:

- Activate Domain Activating a domain prepares the domain for evaluation and conducts an initial inventory of the domain configuration. To activate a domain, use the **Domain** Activation Wizard. For instructions, see "Activate Domain" on page 47.
- Inventory Domain A Domain Inventory is an assessment of your current domain environment. The results are displayed in a **Domain Inventory Overview** in the Document Pane. The inventory is also added to the **Inventory History** folder in the Domain Explorer. Domain Inventories are also created automatically whenever you activate or evaluate domains. To inventory a domain, use the **Inventory Wizard**. For instructions, see "Inventory Domain" on page 56.
- Evaluate Domain To detect which signatures apply to your domain, you conduct an evaluation. Guardian collects data about your domain environment, and identifies which signatures apply to the domain. When the evaluation is complete, the results are displayed in an Evaluation Summary in the Document Pane. The Evaluation Summary lists all of the detected signatures, along with the severity level, description, and recommended remedy for each. You can review the Evaluation Summary to determine your response to any signatures that are detected. If you need more help resolving the potential problem the signature identified, you can use Guardian to create and submit a BEA support case. For instructions on conducting evaluations, see "Evaluate Domain" on page 57.
- Updates and Upgrades BEA Support Engineers create new signatures every day, and
 application enhancements to Guardian are also periodically released. The Guardian Update
 feature enables Guardian to connect directly to the Guardian Update Site to automatically
 download and install new signatures and product updates. To update Guardian on servers
 without Internet access, you can perform a manual update. For instructions for performing
 both automatic and manual updates, see "Updates and Upgrades" on page 81.

There are numerous other Guardian tasks and activities, which are categorized according to the following topics:

- Guardian Agent
- Workspaces
- Preferences
- Domains
- Domain Groups
- Proxy Servers
- Inventories and Evaluations
- Signatures
- Signature Annotations
- Bundles
- Shortcuts
- Command Line Interface
- Troubleshooting
- Support
- Updates and Upgrades

The following sections provide detailed instructions for performing the tasks in each of these categories.

Guardian Agent

This section provides instructions for the following tasks:

- Manually Deploy Guardian Agent
 - Deploy Guardian Agent from WebLogic Server Adminstration Console
 - Deploy Guardian Agent to Multiple Servers
- Configure Maximum Agent Threads
- Configure Agent Thread Timeout

Manually Deploy Guardian Agent

For Guardian versions 1.0.7 and above, you must manually deploy the new Guardian Agent in WebLogic Server before you can use Guardian to evaluate your environment.

Note: If you have enabled Online Signature/Software Updates in your Guardian Preferences, Guardian periodically performs an automatic update for the latest Guardian version. Clicking the Update button in Guardian also initiates a software version update. If you were previously able to activate domains and run evaluations in Guardian, but are no longer able to do so, this may be due to an update to Guardian 1.0.7 or above. You must delete the earlier Guardian Agent and deploy the new Agent to continue using Guardian.

You can use the WebLogic Server Administration Console to uninstall the existing Guardian Agent and then install and deploy the new Agent. The WebLogic Server Administration Console provides a series of Web-based deployment assistants that guide you through the deployment process. For a summary of the steps involved in deploying the Guardian Agent, see "Deploy Guardian Agent from WebLogic Server Administration Console" on page 37. For complete instructions on deploying applications, see the Administration Console Online Help, and WebLogic Server documentation.

If you want to deploy the Guardian Agent to multiple servers, you can use a WebLogic Scripting Tool to automate this task. For basic instructions, see "Deploy Guardian Agent to Multiple Servers" on page 38. For instructions on using a script to activate multiple domains in Guardian, see "Activate Multiple Domains" on page 49. For complete instructions on using the WebLogic Scripting tool to deploy applications, see the WebLogic Scripting Tool documentation.

Deploy Guardian Agent from WebLogic Server Adminstration Console

You can use the WebLogic Server Administration Console to manually deploy the Guardian Agent on that server. This section provides a summary of the basic steps involved for WebLogic Server versions 9.0 and above. For complete instructions for your specific version of WebLogic Server, please see your WebLogic Server documentation and Administration Console Online Help. Please also refer to the *Guardian 1.1 Installation Guide* and *Guardian 1.1 Release Notes* for additional important information.

To use the Administration Console to manually deploy the Guardian Agent, do the following:

1. Start the WebLogic Administration Console, and select **Lock & Edit** in the left pane.

Caution: Make sure that **Lock & Edit** is selected for each of the following procedures.

2. Stop the existing Guardian Agent deployment in the WebLogic Server.

By default, the Guardian Agent is named **bea-guardian-agent**.

Note: For detailed instructions for this procedure, see "Start and stop a deployed Enterprise Application" in the WebLogic Administration Console Online Help.

3. Delete the existing Guardian Agent deployment from the WebLogic Server, and activate your changes.

Note: For detailed instructions for this procedure, see "Delete an Enterprise Application" in the WebLogic Administration Console Online Help.

4. Install the new Guardian Agent in the WebLogic Server, and activate your changes.

The Guardian Agent is a WAR file named bea-guardian-agent.war, and is located in the following directory:

WARNING: Do not change the name of the Guardian Agent when deploying it. Be sure to use the default name, bea-quardian-agent.war.

<root>\guardian\plugins\com.bea.guardian.agent.weblogic_<guard-version>
\weblogic<wls-version>

Where:

<root> is the parent directory for the Guardian installation. For example:
C:\\Program Files

<quard-version> is the current (updated) Guardian version.

<wl><wl>-versionis the version of WebLogic Server in which you are deploying this Agent.

If you are installing the Agent on WebLogic 8.1.x, install the bea-guardian-agent.war file located in the ..\weblogic8 directory. For WebLogic Server 9.x and 10.x, install the bea-guardian-agent.war file located in the ..\weblogic9 directory.

Note: For detailed instructions for this procedure, see the section entitled, "Install an Enterprise Application" in the Administration Console Online Help.

5. Start the new Guardian Agent in the WebLogic Server.

Note: For detailed instructions for this procedure, see "Start and stop a deployed Enterprise Application" in the WebLogic Administration Console Online Help.

6. Start Guardian and activate the neccessary domains in Guardian.

Note: For detailed instructions for this procedure, see "Activate Domain" in the BEA Guardian Online Help.

You can now use Guardian to evaluate the activated domains in your environment.

Deploy Guardian Agent to Multiple Servers

If you need to deploy the Guardian Agent to multiple servers in a cluster environment, you can use the weblogic.Deployer command in the WebLogic Server Command Line Interface to automate this task. You can also use the BEA WebLogic Diagnostics Framework (WLDF) to deploy the Agent. This section provides basic instructions for using the weblogic.Deployer command for this purpose. For instructions on using WLDF, please see the WebLogic Diagnostics Framework product documentation.

Note: Please also refer to the *Guardian 1.1 Installation Guide* and *Guardian 1.1 Release Notes* for additional important information.

WARNING: Do not change the name of the Guardian Agent when deploying it. Be sure to use the default name, bea-guardian-agent.war.

At the WebLogic Server CLI prompt, enter the following command line:

java weblogic.Deployer -debug -adminurl http://<admin_url>:<port> -username
<username> -password <password> -targets adminserver,<cluster1>,<cluster2>
-deploy -sourcerootforupload <dir_path>\bea-guardian-agent.war

Where:

- <admin_url> is the URL for the WLS Admin Server.
- <port> is the port number for the WLS Admin Server.

- <cluster1>, <cluster2> are the names of all configured clusters.
- <dir_path> is the directory path to the Guardian Agent WAR file (bea-guardian-agent.war).

Configure Maximum Agent Threads

If you have one or more managed servers in a domain, the Guardian Agent spawns the appropriate number of threads for communicating between the Guardian Agent on the WebLogic Administration Server, and the Guardian Agent running on the Managed Server(s). However, an excessive number of threads can affect the performance of the Administration Server. To control this, you can specify the maximum number of Agent threads to allocate to the WebLogic Server Administration Server for a specified domain. The **Max. Agent Threads** parameter setting determines this value. The default is 10.

There are two ways to set the value for this parameter:

- When activating the domain, you can set the **Max. Agent Threads** parameter in the **Advanced** tab page of the **Domain Activation Wizard** (see "Activate Domain" on page 47).
- If the domain is already activated, you can set the **Max. Agent Threads** parameter in the **Domain Properties** dialog box (see below).

To set the **Max. Agent Threads** value for an activated domain, do the following:

- 1. In the Navigation pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- Right-click on the domain name and select Modify Domain from the context menu.
 This displays the Domain Properties dialog box.
- Select or enter a value in the Max. Agent Threads field.
 This can be an interger value from 1 to 20. The default is 10.
- 4. Click OK.

This resets **Max. Agent Threads** to the specified value for the selected domain.

Configure Agent Thread Timeout

In order to manage Agent resources on both the WebLogic Administration Server and Managed Servers, Guardian enables you to specify the maximum amount of time (in seconds) that can elapse before a thread is terminated. The **Agent Thread Timeout** parameter governs this timeout. The default is **60**.

There are two ways to set the **Agent Thread Timeout** parameter:

- When activating the domain, you can set the **Agent Thread Timeout** parameter in the **Advanced** tab page of the Domain Activation Wizard (see "Activate Domain" on page 47).
- If the domain is already activated, you can set the **Agent Thread Timeout** parameter in the **Domain Properties** dialog box (see below).

To set the **Agent Thread Timeout** value for an activated domain, do the following:

- 1. In the Navigation pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- Right-click on the domain name and select Modify Domain from the context menu.
 This displays the Domain Properties dialog box.
- Select or enter a value in the Agent Thread Timeout field.
 This can be an integer value from 10 to 600. The default is 60.
- 4. Click OK.

This resets **Agent Thread Timeout** to the specified value for the selected domain.

Workspaces

This section provides instructions for the following tasks:

- Select Workspace
- Export Workspace
- Import Workspace

The Guardian Workspace is the directory in which all of your Guardian data is stored. It includes the following data for each domain you have defined in Guardian:

- Preferences
- Domain Inventories

- Evaluation Summaries
- Case Archives (optional)

To prevent loss of work when Guardian is updated or uninstalled, your Workspace directory must be located outside of the Guardian installation directory. You can safely back up your Workspace data by exporting your Workspace to a file also located outside of your Guardian Installation directory. For instructions, see "Export Workspace" on page 42.

Select Workspace

To specify the location for your Guardian Workspace, you must restart Guardian and specify a new location in the **Select Workspace** dialog box during startup.

WARNING: To prevent loss of work when Guardian is updated or uninstalled, your Workspace directory must be located outside of the Guardian installation directory. You can safely back up your Workspace data by exporting your Workspace to a file also located outside of your Guardian Installation directory. For instructions, see "Export Workspace" on page 42.

To select a Guardian Workspace when starting Guardian, do the following:

1. Start Guardian.

Guardian first displays the initial splash screen while loading, and then displays the **Select Workspace** dialog box.

2. Click **Browse**.

This opens the **Browse For Folder** dialog.

3. Select or create the folder (directory) to use as your Workspace folder.

Caution: Make sure this directory is not located within the Guardian installation directory.

To use an existing folder: Browse to the folder location and select the folder.

To create a new folder:

- a. Click Make New Folder.
- b. Select the location for the folder.
- c. Enter the name of the folder

4. Click OK.

This creates or selects the file and returns to the **Select Workspace** dialog box.

5. (Optional) Specify this as the default Workspace.

If you do not want to select the Workspace each time you start Guardian, select the checkbox for Use this as the default workspace and do not ask again.

To change this setting at a later time, do the following:

- a. Select **Window** > **Preferences...** to open the **Preferences** configuration page.
- b. In the **Preferences** tree on the left, select **Guardian**.
- c. Select the **Prompt for workspace on startup** checkbox.
- Click **OK**.

The **Select Workspace** dialog box will be displayed the next time you start Guardian.

6. Click Finish.

Guardian loads the selected Workspace and completes the startup procedure.

Export Workspace

You can export your Guardian Workspace data to a file, which you can use for backup and recovery purposes, or to import to another Guardian instance.

WARNING: To prevent loss of work when Guardian is updated or uninstalled, make sure your Workspace and any Workspace export files are located outside of your Guardian Installation directory.

To export a Guardian Workspace, do the following:

1. Select **File** > **Export**.

This opens the **Export Workspace Wizard**.

2. In the **Export** dialog box, open the **Guardian** folder and select **Guardian Workspace**.

Note: To clear a typed entry, click the **Clear** icon (file page icon) to the right of the destination field. This clears the **Select an export destination** field and redisplays the default folder tree.

3. Click Next.

4. For **Select File**, specify the file name and location to which to save your Workspace data.

Use one of the following methods to specify the file:

- Type in the absolute path name and file name.
- Click Browse to display a file browser from which you can select the file. Click Save to select the file and return to the Export Workspace Wizard.

Click Finish.

This saves your current Workspace as a .zip file containing all of your Workspace data, including the guardian.registry, .project and .refresh files.

Import Workspace

You can import a Guardian Workspace from another Guardian instance, or an exported Workspace data file.

To import a Guardian Workspace, do the following:

1. Select **File** > **Import**.

This opens the **Import Workspace Wizard**.

2. In the **Import Workspace Wizard**, open the **Guardian** folder and select **Guardian Workspace**.

Note: To clear a typed entry, click the **Clear** icon (file page icon) to the right of the destination field. This clears the **Select an import source** field and redisplays the default folder tree.

- Click Next.
- 4. For **Select File**, specify the Workspace file you want to import.

Use one of the following methods to specify the file:

- Type in the absolute path name and file name.
- Click Browse to display a file browser from which you can select the file. Click Save to select the file and return to the Import Workspace Wizard.
- Click Finish.

This imports the selected Workspace data and returns to the main Guardian window.

Preferences

This section provides instructions for the following tasks:

- Configure Preferences
- Export Preferences
- Import Preferences

Configure Preferences

You can use the **Preferences** page to configure your Guardian Preferences and customize your Guardian environment.

To configure your Guardian Preferences, do the following:

1. Open the **Preferences** configuration page.

You can use either of the following methods to open the **Preferences** configuration page:

- Press Ctrl+Shift+P.
- Select **Window** > **Preferences** from the titlebar menu.
- 2. Open a folder and click on a category name to display the preferences in that category.

The left pane of the **Preferences** configuration page is a navigation tree containing an extensive series of hierarchical folders and subfolders. Each folder and subfolder in the hierarchy is a category of preference attributes that you can configure.

The top level folders are as follows:

- General
- Guardian
- Help
- Install/Update

Note: For a detailed description of all **Preference** page folders and parameters, see "Preferences" on page 115 in Chapter 3, "Reference."

3. (Optional) Click **Apply** to apply your preference settings for the current category, or click **Restore Defaults** to restore the default values for all **Preference** page parameters.

4. When you have finished setting your preferences for each category, click **OK**.

This applies and saves all of your new **Preference** page settings.

Export Preferences

You can export your Guardian Preferences to a file for backup and recovery purposes, or to import to another Guardian instance.

To export your Guardian Preferences to a file, do the following:

1. Select **File** > **Export**.

This opens the **Export Preferences Wizard**.

2. In the **Export Preferences Wizard**, open the **General** folder and select **Preferences**.

Note: To clear a typed entry, click the **Clear** icon (file page icon) to the right of the destination field. This will clear the **Select an export destination** field and redisplay the default folder tree.

- 3. Click Next.
- 4. Specify the preferences to export.

Do one of the following:

- Select **Export all** to export all of your Guardian Preferences information.
- Select Choose specific preferences to export to display a selection list of preferences in the Preferences box. Then select the individual preferences you want to export, or click Select All.
- 5. For **To preference file**, specify the file name and location to which to save your preferences information.

Use one of the following methods to specify the file:

- Type in the absolute path name and file name.
- Click Browse to display a file browser from which you can select the file. Then click
 Save to select the file and return to the Export Preferences Wizard.
- 6. Click Finish.

This saves your current preferences information as a .epf file in the specified location.

Import Preferences

To import a Guardian Preferences from a file, do the following:

1. Select **File** > **Import**.

This opens the Import Preferences Wizard.

2. In the **Import Preferences Wizard**, open the **General** folder and select **Preferences**.

Note: To clear a typed entry, click the **Clear** icon (file page icon) to the right of the destination field. This clears the **Select an import source** field and redisplays the default folder tree.

- Click Next.
- 4. For **From preference file**, specify the file name and location of the file you want to import.

Use one of the following methods to specify the file:

- Type in the absolute path name and file name.
- Click Browse to display a file browser from which you can select the file. Then click
 Save to select the file and return to the Import Preferences Wizard.
- 5. Specify the preferences to import.

Do one of the following:

- Select **Import all** to import all preference information.
- Select Choose specific preferences to import to display a selection list of preferences in the Preferences box. Then select the individual preferences you want to import, or click Select All.
- 6. Click Finish.

This replaces your current **Preference** page settings with the settings from the imported file.

Domains

This section provides instructions for the following tasks:

- Activate Domain
- Activate Multiple Domains
- Deactivate Domain
- Modify Domain Properties
- Purge All Inactive Domains

Activate Domain

A domain is considered active when it is capable of being evaluated. Activating a domain prepares it for evaluation and creates a new Domain Inventory.

Activating a domain also results in the following:

- The new domain node is added to the Domain Explorer **Target Domains** folder.
- Guardian inventories the domain, and displays the **Domain Inventory Overview** in the Document Pane. In the **Domain Explorer**, the new inventory is added to the **Inventory History** folder for that domain.
- The domain is added to the **Active Domain Table**.
- The domain is added to the Guardian Registry.
- A folder for the domain is added to the Guardian Workspace. The domain folder contains the data from all Domain Inventories and Evaluation Summaries for the domain.

To activate a domain, do the following:

Note: If you are unable to activate any domains, you may need to manually deploy the Guardian Agent. For instructions, see "Manually Deploy Guardian Agent" on page 36.

1. Open the **Domain Activation** Wizard.

You can use any of the following methods to open the wizard:

- Press Ctrl+Shift+A.
- Click Activate in the Main Toolbar.

- Select New > Domain from the File menu.
- Click the **Domain Explorer** tab to open the **Domain Explorer**. Then, right-click anywhere in the **Domain Explorer** and select **Activate Domain** from the context menu.
- 2. Click the **General** tab and configure the General Domain Properties.

The **General** tab contains the following fields:

- **Protocol** Select one of the following from the drop-down menu:
 - http:// Select this to use the HTTP protocol without encryption.
 - https:// Select this to use HTTP protocol with Secure Sockets Layer (SSL) encryption.

Note: Guardian does not use 128 bit SSL encryption for domain activation.

- Host Name This is the listen address for the WebLogic Administration Server in the target domain.
- Port Number This is the listen port for the WebLogic Administration Server for the target domain.
- Username This is the username of a WebLogic Server Administrator or Monitor account on the target domain.
- Password This is the password for the WebLogic Server Administrator or Monitor account on the target domain.
- Remember Username/Password This specifies that the domain credentials are to be stored so that you do not have to enter them for future domain operations.
 Usernames and passwords are encrypted when stored.

Note: If you preselected a deactivated domain when you invoked the **Domain Activation Wizard**, the **Protocol**, **Hostname**, and **Port** fields will be automatically filled with the appropriate values.

3. Click the **Advanced** tab and enter the Advanced Domain Properties.

The **Advanced** tab contains the following fields and options:

Enable Proxy Connection: Select this if a proxy server is to be used to access the target domain. Then, select a proxy server from the drop-down list. Click Add Proxy Servers to add proxy servers to this list (see "Add Inbound Proxy Servers" on page 54 for complete instructions).

- Max. Agent Threads: Select the maximum number of Agent threads to allocate in the WebLogic Server Administration Server. This can be an integer value from 1 to 20.
 The default is 10.
- Agent Thread Timeout (secs): Specify the maximum number of seconds that can
 elapse before an Agent thread is deactivated when collecting data from managed
 servers. This can be an integer value from 10 to 600. The default is 60.
- Domain Notes: Enter a text description or other details pertaining to this domain.
 These notes are displayed in inventories and evaluations for this domain.

Click Finish.

You can now evaluate and inventory the domain.

Activate Multiple Domains

If you need to activate multiple domains in Guardian, you can use a script to automate this procedure.

WARNING: You must deploy the Guardian Agent to each domain that is to be activated prior to running the activation script. For instructions, see "Deploy Guardian Agent to Multiple Servers," above.

The following is an example script for activating multiple domains:

```
-gactivateDomain -t http://slp7:7001 -u un -p pw -c true -gactivateDomain -t http://slp8:7001 -u un -p pw -c true -gactivateDomain -t http://sqa-lldev:4044 -u un -p pw -c true
```

The script is then run in Guardian Headless Mode, by using the following command line:

```
guardianHeadless.cmd -gscript -f activatingScript.txt
```

For more information about running scripts, see "Run Scripts" on page 75.

Deactivate Domain

When you deactivate a domain, it is no longer available for evaluation. Any shortcuts that use the domain are removed from the **Shortcut Table** and Shortcut Explorer. The Domain Inventory and Evaluation Summary data persists after deactivation, but is not available for viewing in Domain Explorer. You must reactivate the domain before you can view the data or evaluate the domain.

To deactivate a domain, do the following:

1. Open the **Domain Deactivation Wizard**.

Do one of the following:

- Click on the **Domain Explorer** tab to open the **Domain Explorer**. Then, right-click on a domain and select **Deactivate** from the context menu.
- Select Window > Show View > Active Domains Table. Then, select a domain from the table and click Deactivate Domain.
- 2. Click on a domain entry to select it.
- 3. Click Finish.

This deactivates the domain and returns to the **Domain Explorer** or **Active Domain Table**.

Note: The **Domain Deactivation Wizard** does not remove the BEA Guardian Agents that were installed when you activated the domains. For instructions on removing Agents, see the WebLogic Server Administration Console Online Help. For instructions on purging inactive domains from Guardian, see "Purge All Inactive Domains" on page 51.

Modify Domain Properties

You can modify the Domain Properties for a domain to customize the way BEA Guardian communicates with that domain.

To modify the Domain Properties for a domain, do the following:

1. Open the **Domain Properties** configuration page.

Do one of the following:

- Select Window > Show View > Active Domains Table to open the Active Domains Table. Then, select a domain and click Modify Domain.
- Click the **Domain Explorer** tab to open the **Domain Explorer**. Then, right-click on a
 domain in the **Domain Explorer** tree, and select **Modify Domain** from the context
 menu.
- 2. Configure the Domain Properties.

The **Domain Properties** configuration page contains the following fields and options:

Name: This contains the name for this domain. You cannot modify this value.

- Username This is the username of an WebLogic Server Administrator or Monitor account on the target domain.
- Password This is the password for the WebLogic Server Administrator or Monitor account on the target domain.
- Remember Username/Password This specifies that the domain credentials are to be stored so that you do not have to enter them for future domain operations.
- Enable Proxy Connection: Select this if a proxy server is to be used to access the target domain. Then, select a proxy server from the drop-down list. Click Add Proxy Servers to add proxy servers to this list (see "Add Inbound Proxy Servers" on page 54 for complete instructions).
- Max. Agent Threads: Select the maximum number of Agent threads to allocate in the WebLogic Server Administration Server. This can be an integer value from 1 to 20.
 The default is 10.
- Agent Thread Timeout (secs): Specify the maximum number of seconds that can
 elapse before an Agent thread is deactivated when collecting data from managed
 servers. This can be an integer value from 10 to 600. The default is 60.
- Notes: Enter a text description or other details pertaining to this domain.

Click OK.

This applies your new Domain Properties settings to the selected domain.

Purge All Inactive Domains

To remove all deactivated domains from the Domain Explorer, select **Tools** > **Purge Inactive Domains**. There is no confirmation request; the domains are purged immediately.

WARNING: Purging the inactive domains also deletes the associated Domain Inventories and Evaluation Summaries from the Guardian Workspace, and removes the domains from the Guardian Registry.

Domain Groups

This section provides instructions for the following tasks:

- Add Domain Group
- Rename Domain Group
- Delete Domain Group

Add Domain Group

To create and populate a new Domain Group, do the following:

- 1. In the Navigation Pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- Right-click on Target Domains and select Add Domain Group from the context menu. This opens the Add Domain Group dialog box.
- 3. In the **Name** field, enter a name for the Domain Group.
- 4. Click OK.

This adds the new Domain Group to the **Domain Explorer** Domain Tree, and closes the **Add Domain** dialog box.

5. Populate the Domain Group.

In the **Domain Explorer** Domain tree, click on a domain name to select it, then drag and drop it into the new Domain Group folder. Repeat this step for each domain you want to include in the new Domain Group.

Rename Domain Group

To rename an existing Domain Group, do the following:

- 1. In the Navigation Pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- Right-click on Target Domains and select Rename Domain Group from the context menu.
 This opens the Rename Domain Group dialog box.
- 3. In the **Name** field, enter the new name for the Domain Group.

4. Click OK.

This renames the Domain Group in the **Domain Explorer** Domain Tree, and closes the **Rename Domain** dialog box.

Delete Domain Group

- 1. Click on the **Domain Explorer** tab to open the **Domain Explorer**.
- 2. Remove any domains from the Domain Group.

You cannot delete a Domain Group that contains a domain. If there are domains in the Domain Group, you can drag and drop the domains into the Target Domain folder, or into another Domain Group folder.

3. Right-click on the Domain Group you want to delete, and select **Delete Domain Group** from the context menu.

This displays a **Domain Group Delete Confirmation** dialog box prompting you to confirm the delete request.

4. Click OK.

This deletes the Domain Group from the **Domain Explorer** Domain Tree, and closes the **Delete Confirmation** dialog box.

Proxy Servers

This section provides instructions for the following tasks:

- Add Inbound Proxy Servers
- Enable Inbound Proxy Connection
- Enable and Test Outbound Proxy

Add Inbound Proxy Servers

If you want to use an inbound proxy server for communications between Guardian and the WebLogic Administration Server, you must first add the proxy server to Guardian.

To add an inbound proxy server, do the following:

- 1. Click Activate to open the **Domain Activation Wizard.**
- 2. Click the **Advanced** tab.
- 3. Click **Add Proxy Servers** to open the **Proxy Servers Preferences** configuration page.
- 4. Click **Add** to open the **Proxy Properties** dialog box.
- 5. Enter the proxy server **Hostname**, **Port**, **Username**, and **Password** information.
- 6. Click OK.

This adds the proxy server to the **Proxy Servers** list in the **Proxy Servers** configuration page, and dismisses the **Proxy Properties** dialog box.

- 7. (Optional) Repeat steps four through six to add additional proxy servers to the list.
- 8. Click OK.

This adds the new proxy server to the Proxy Server drop-down list in the **Advanced** tab of the **Domain Activation Wizard** and dismisses the dialog box.

Enable Inbound Proxy Connection

If you want to use an inbound proxy server for communications between Guardian and the WebLogic Administration Server, you must enable the proxy connection.

To enable an inbound proxy connection, do the following:

- 1. Manually deploy the Guardian Agent onto the target domain.
- 2. If you have not already done so, add the proxy server to the **Domain Activation** wizard **Proxy Server** list.

For instructions, see "Add Inbound Proxy Servers" on page 54.

3. Open the **Domain Activation Wizard**.

You can use any of the following methods to open the wizard:

- Press Ctrl+Shift+A.
- Click Activate in the Main Toolbar.
- Select **New** > **Domain** from the File menu.
- Click the **Domain Explorer** tab to open the **Domain Explorer**. Then, right-click in the **Domain Explorer** panel and select **Activate Domain** from the context menu.
- 4. Click the **Advanced** tab in the **Activate Domain Wizard**.
- 5. Check the **Enable Proxy Connection** checkbox.
- 6. Select the proxy server from the drop down list.
- 7. Click Finish.

Enable and Test Outbound Proxy

If you are using an outbound proxy server for communications between Guardian and the outside world, you will need to test the outbound proxy connection.

To enable and test an outbound proxy server connection, do the following:

- 1. Select **Window** > **Preferences** from the titlebar menu.
 - This displays the **Preferences** configuration page.
- 2. In the **Preferences** folder tree (left pane) open the **Guardian** folder and select **BEA Support**.

This displays the **BEA Support** preferences, which include some settings for proxy testing.

- 3. In the **BEA Support** preferences, select the **Requires Proxy** checkbox.
- 4. Click **Test Proxy**.

After the test completes, a status message is displayed at the top of the page as to whether it was successful or not.

Inventories and Evaluations

This section provides instructions for the following tasks:

- Inventory Domain
- View Domain Inventory
- Evaluate Domain
- Evaluate Snapshot
- Compare Inventories or Evaluations
- Export Inventory or Evaluation

Inventory Domain

A Domain Inventory is an assessment of your current domain environment. The results are displayed in a **Domain Inventory Overview** in the Document Pane. The inventory is also added to the **Inventory History** folder in the **Domain Explorer**. Domain Inventories are also created automatically whenever you activate or evaluate domains.

To inventory a domain, do the following:

1. Open the **Inventory Wizard**.

You can use any of the following methods to open the wizard:

- Press Ctrl+Shift+I.
- Click **Inventory** on the Main Toolbar.
- Select **File** > **New** > **Inventory**.
- Click the **Domain Explorer** tab to open the Domain Explorer. Then, right-click on a
 domain name in the **Domain Explorer** tree and select **Inventory** from the context
 menu.
- 2. If you did not preselect a domain when opening the wizard, select a domain from the **Inventory Wizard** domain table.
- 3. Enter the **Username** and **Password** of the Weblogic Server Administrator or Monitor account for the target domain.

4. Click Finish.

This initiates the Domain Inventory and displays the results in a **Domain Inventory Overview** in the Document Pane.

View Domain Inventory

To view an existing Domain Inventory, do the following:

- 1. Click the **Domain Explorer** tab to open the **Domain Explorer**.
- 2. Open the **Inventory History** folder for the domain.
- 3. Double-click on the inventory name to view the selected **Domain Inventory Overview** in the Document Pane.

Evaluate Domain

To identify potential problems before they occur, you can use the Evaluation Wizard to evaluate one or more domains.

To evaluate a domain, do the following:

- 1. In the Navigation Pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- 1. Select a domain and open the **Evaluation Wizard**.

Use any of the following methods to select a domain and open the wizard:

- In the **Domain Explorer**, select a domain and then click the **Evaluation** button. To select multiple domains, press the Ctrl or Shift key while selecting additional items.
- Right-click on a domain and then select **Evaluate** from the context menu.
- Double-click a domain name in the **Domain Explorer**.
- Select **File** > **New** > **Evaluation** from the titlebar.
- Select Window > Show View > Active Domains Table to display the Active Domains Table. Then, double-click a domain name to open the wizard for the selected domain.
- 2. In the **Bundle** field, select the Signature Bundle to evaluate.

Select a Signature Bundle from the **Bundle** field drop-down menu. The default is **Default Signatures**.

3. Enter the credentials for the WebLogic Server for the selected domain.

In the **Domain Credentials** section, enter the following:

- Username: This is the username for the WebLogic Server Administrator or Monitor account on the target domain.
- Password: This is the password for the WebLogic Server Administrator or Monitor account on the target domain.

If you selected multiple domains, you must supply the login credentials for each domain before you can launch the Evaluation.

4. (Optional) Select the **Remember username/password** checkbox to save your login credentials for the selected domain(s).

Select this option if you want your login information to persist so that you do not have to enter it each time you evaluate this domain. This is especially useful if you routinely evaluate multiple domains concurrently. Usernames and passwords are encrypted when stored.

5. (Optional) Create a shortcut for this evaluation.

This is useful if you routinely perform this particular type of evaluation. To create a shortcut, select the **Create Shortcut** checkbox, and enter a brief name for the shortcut in the text field. For detailed instructions on creating, evaluating, and managing shortcuts, see the section entitled, "Shortcuts" on page 70.

6. Click Finish.

This initiates the evaluation and displays an **Evaluation Summary** of the results in the Document Pane. In the **Domain Explorer**, the new Domain Inventory is added to the **Inventory History** folder, and the new Evaluation Summary is added to the **Evaluation History** folder.

Evaluate Snapshot

A Snapshot Evaluation is a complete assessment of all of the configuration details for a specific domain, at the particular moment the evaluation is executed. The process for performing a Snapshot Evaluation is the same as for any other type of evaluation. The primary difference is in the type of Signature Bundle you select for the evaluation, and the type of information the evaluation collects and evaluates.

Note: As with other evaluations, you can compare Snapshot Evaluations. Comparing two Snapshot Evaluations enables you to see very quickly the differences between configurations for those two domains. For instructions, see "Compare Inventories or Evaluations" on page 60.

Caution: Generating a Snapshot Evaluation of a large domain may consume a lot of memory, and take a long time to complete.

To evaluate a snapshot of a domain configuration, do the following:

- 1. In the Navigation Pane, click the **Domain Explorer** tab to open the **Domain Explorer**.
- 1. Select a domain and open the **Evaluation Wizard**.

Do one of the following:

- In the **Domain Explorer**, select a domain and then click the **Evaluation** button.
- Right-click on a domain name and then select **Evaluate** from the context menu.
- 2. In the **Bundle** field, select the type of snapshot to create and evaluate.

Select one of the following from the **Bundle** field drop-down menu:

- Snapshot All
- Snapshot JDBC
- Snapshot JMS
- Snapshot Security
- 3. Enter the credentials for the WebLogic Server for the selected domain.

In the **Domain Credentials** section, enter the following:

- Username: This is the username for the WebLogic Server Administrator or Monitor account on the target domain.
- Password: This is the password for the WebLogic Server Administrator or Monitor account on the target domain.
- 4. Click Finish.

This initiates the Snapshot Evaluation and displays an **Evaluation Summary** of the results in the Document Pane. In the **Domain Explorer**, the new Domain Inventory is added to the **Inventory History** folder, and the new Evaluation Summary is added to the **Evaluation History** folder.

Compare Inventories or Evaluations

You can compare inventories or evaluations from the same or different domains. Both objects must be of the same type—that is, two inventories or two evaluations. You cannot compare an inventory against an evaluation.

You can compare any two Evaluation Summaries. Comparing two Snapshot Evaluations is particularly useful, as a Snapshot Evaluation collects and evaluates all of the configuration data for the evaluated domain. Such a comparison enables you to see very quickly the differences between the configurations and their issues for those two domains.

To compare two Domain Inventories or Evaluation Summaries, do the following:

- 1. In the Navigation pane, open the **Domain Explorer**.
 - Click the **Domain Explorer** tab, or select **Window** > **Show View** > **Domain Explorer**.
- 2. Open the **History** folder containing the resources to be compared (**Inventory History** or **Evaluation History**).
- 3. Select the two files to be compared.
 - Click on the first item to select it, and then hold down the Ctrl key and click on the second item.
- 4. Right-click in the **Domain Explorer** and select **Compare** from the context menu.

Note: The **Compare** option remains deactivated until two like items have been selected.

Selecting **Compare** opens the **Text Compare** display in the Document Pane. The differences between the two files are highlighted, and related segments are shown in boxed sections, with connectors indicating the relation.

The **Text Compare** navigation controls are as follows:

- **Go to next/previous segment** Click the up/down arrows at the top right corner of the **Text Compare** display.
- **Jump to a segment** Click on a segment bar in the far right column.
- **Resize panels** Move your cursor over the center divider until the cursor changes to a double arrow. Then click and drag the divider to the left or right to resize the panels.

- **Display Text Compare context menu** Right-click in the left or right **Text Compare** panel to display the **Text Compare** context menu. This menu has the following options:
 - Copy Copy the selected text. You can then use a text editor to paste the selected text into a file and save it.
 - Select All Select all text in the current panel. You can then use a text editor to paste
 the selected text into a file and save it.
 - **Ignore White Space** Remove white space characters in both panels.
 - Show Whitespace Characters Show white space characters and carriage returns in both panels. A light blue dot indicates a white space characters. A light blue paragraph symbol indicates a carriage return.
 - Show Line Numbers Display line numbers in both panels.
 - Find/Replace Display the Find/Replace dialog box. Enter your search criteria and click Find to search in the selected panel. Replace is disabled for this page.

Export Inventory or Evaluation

You can export a Domain Inventory or Evaluation Summary report to a PDF or HTML file for external viewing or archiving.

To export a report, do the following:

- 1. Click the **Domain Explorer** tab in the Navigation Pane to open the **Domain Explorer**.
- 2. Open the **History** folder containing the report you want to save.

The **Domain Explorer** contains two **History** folders:

- Inventory History This contains a linked list of the available Domain Inventory reports.
- Evaluation History This contains a linked list of the available Evaluation Summary reports.
- 3. Open the report.

Double-click on a report name to open the report and display it in the Document Pane.

4. Select **File** > **Save As**.

This opens a standard **Save As** file browser.

5. Browse to the location to which to save the file.

6. Select the type of file to which to save the report.

For the **Save as type:** field, select one of the following from the drop-down menu:

- PDF Files (*.pdf)
- HTML Files (*.html)
- 7. Enter a file name in the **File name** field.
- Click OK.

Signatures

This section provides instructions for the following tasks:

- View Signature Overview
- Filter Signatures
- Sort Signatures

View Signature Overview

To display the overview for a signature, do the following:

- 1. In the Navigation Pane, click on the **Signature Explorer** or **Bundle Explorer** tab.
 - This opens the **Signature Explorer** or **Bundle Explorer**, respectively. Signature Overviews are accessible only through these two Explorers.
- 2. Double-click on a signature name in the Navigation Pane.

This displays the overview for that signature in the Document Pane.

Filter Signatures

You can use Signature Filters to specify which signatures are to be displayed in the **Signature Explorer**, **Bundle Explorer**, and **Evaluation Summaries**.

To apply Signature Filters, do the following:

- 1. Open the **Filters** dialog box.
 - From the Signature Explorer or Bundle Explorer:

Click the Menu icon (small white delta in the upper right corner), and select **Filters...** from the context menu.

From an Evaluation Summary:

Right-click on any signature in the **Detected Signatures** list, and select **Filters...** from the context menu.

2. Specify your filter settings.

Click a radio button to specify **Show** or **Hide** for each filter. The Signature Filters are as follows:

Name — Filter according to name. Specify all or a portion of a signature name to use as the filter criteria. This can be a character string or standard regular expression. Enter .* to filter all signatures. The default is **Show** all (.*).

Severity — Filter according to severity. Click a checkbox to select/deselect a severity level. These are: **Critical**, **Warning**, and **Information**. The default is **Show** all (all selected).

Type — Filter annotated signatures according to Annotation Type. Click a checkbox to select/deselect a type. There are two Annotation Types: **Flag** and **Ignore**. The default is **Hide** signatures with an Annotation Type of **Ignore**. For more information on Annotation Types, see "Signature Annotations" on page 22 in Chapter 1, "About BEA Guardian."

Annotation Name — Filter annotated signatures according to Annotation Name. Specify all or a portion of an Annotation Name to use as the filter criteria. This can be a character string or standard regular expression. Enter .* to filter all annotated signatures. The default is **Show** all (.*).

Comment — Filter annotated signatures according to annotation comment. Specify all or a portion of a comment to use as the filter criteria. This can be a character string or standard regular expression. Enter .* to filter all signatures. The default is **Show** all (.*).

Domain — Filter annotated signatures in this domain, as specified above.

Evaluation — Filter annotated signatures in this Evaluation, as specified above.

3. Click OK.

This applies your filter specifications and returns to the Guardian main window.

Sort Signatures

You can sort the list of signatures displayed in the **Signature Explorer**, **Bundle Explorer**, and Evaluation Summaries.

- In the Navigation Pane, click the Signature Explorer or Bundle Explorer tab to open one
 of these Explorers.
- 2. Click the Menu icon to open the Explorer menu.
- 3. Select **Sort Signatures** > to open the **Sort** submenu.
- 4. Select the category by which to sort.

Select one of the following:

- By Name
- By Severity

The signature lists are automatically reordered according to the selected category.

Signature Annotations

This section provides instructions for the following tasks:

- Annotate Signature
- Edit Annotation
- Delete Annotation
- View Annotations
- Filter Annotated Signatures

You can use the **Annotations Wizard** to create, edit, delete, and view signature annotations.

You can access the **Annotations Wizard** from the Signatures List in any of the following contexts:

- Evaluation Summary
- Signature Explorer
- Bundle Explorer

To open the wizard, right-click on a signature title and select **Annotations** > **Manage Annotations** from the context menu.

Annotate Signature

To create an annotation and add it to a signature, do the following:

1. Navigate to the Signatures List containing the signature you want to annotate.

The contents of a Signatures List may vary according to the context in which it occurs. Signatures Lists can be found in the following locations:

- Evaluation Summary
- Signature Explorer
- Bundle Explorer
- 1. Open the **Annotations Wizard**.

Right-click on the signature title and select **Annotations** > **Manage Annotations** from the context menu.

2. Click Add.

This displays the **Add** dialog box.

3. Select an **Annotation Type**.

Select one of the following:

- **Ignore** Ignore this signature for the specified targets.
- Flag Flag this signature for the specified targets.
- 4. (Optional) Enter a **Name** and **Comment** for the annotations.

5. Select an Annotation Target.

Click the down-arrow next to the **Apply to** field to display a drop-down menu of Annotation Targets. Select one of the following:

- All Domains Apply this annotation to this signature for all domains.
- This Domain Apply this annotation to this signature for this domain, only. This
 option is available only if you are annotating a signature in an Evaluation Summary.
- This Evaluation Apply this annotation to this signature in this evaluation, only.
 This option is available only if you are annotating a signature in an Evaluation Summary.

6. Click Finish.

This adds the new annotation to the **Annotations** list for the selected signature.

7. Click OK.

This returns to the Guardian main window. Note that a decoration has been added to the icon for the annotated signature.

Edit Annotation

To change an existing annotation, do the following:

1. Navigate to the Signatures List containing the signature with the annotation you want to modify.

Note: If the signature is not included in the Signatures List(s), you may need to temporarily set one or more filter attributes to **Show**. For instructions, see "Filter Signatures" on page 63.

2. Open the **Annotations Wizard**.

Right-click on the title of the annotated signature and select **Annotations** > **Manage Annotations** from the context menu.

3. Select the annotation to be modified and click **Edit**.

Note: The **Edit** button will be greyed out (deactivated) until you select an annotation.

This displays the **Edit** dialog box for the selected annotation.

4. Enter your changes.

5. Click Finish.

This updates the **Annotations** list with your changes.

6. Click OK.

This updates the appropriate Signatures Lists and returns to the Guardian main window.

Note: If you modified any filter settings in step 1, you can reset the filters to their original settings now. For instructions, see "Filter Signatures" on page 63.

Delete Annotation

To delete an annotation, do the following:

 Navigate to the Signatures List containing the signature with the annotation you want to delete.

Note: If the signature is not included in the Signatures List(s), you may need to temporarily set one or more filter attributes to **Show**. For instructions, see "Filter Signatures" on page 63.

2. Open the **Annotations Wizard**.

Right-click on the title of the annotated signature and select **Annotations** > **Manage Annotations** from the context menu.

3. Select the annotation to be modified and click **Delete**.

Note: The **Delete** button remains deactivated until you select an annotation.

This removes the annotation from the **Annotations** list for that signature.

Click OK.

This updates the appropriate Signatures Lists and returns to the Guardian main window.

Note: If you modified any filter settings in step 1, you can reset the filters to their original settings now. For instructions, see "Filter Signatures" on page 63.

View Annotations

You can view the annotations for a signature by selecting the signature and then opening the **Annotations Wizard**. The Annotations Wizard displays a table of all annotations for the selected signature.

You can access the **Annotations** Wizard from the Signatures List in any of the following contexts:

- Evaluation Summary
- Signature Explorer
- Bundle Explorer

To open the wizard, right-click on a signature title and select **Annotations** > **Manage Annotations** from the context menu.

Filter Annotated Signatures

You can use Signature Filters to specify which signatures to display in the **Signature Explorer**, **Bundle Explorer**, and Evaluation Summaries. Some filters apply specifically to annotated signatures and their attributes.

This section provides instructions for applying filters to annotated signatures, only. For complete instructions on using Signature Filters, see "Filter Signatures" on page 63.

To apply Annotation Filters, do the following:

- 1. Open the Evaluation Summary to which you want to apply the filter.
- 2. Open the **Filter Configuration** wizard.

In the Signatures List, right-click on a signature name and select **Filters...** from the context menu.

3. Specify your filter settings.

Click a radio button to specify **Show** or **Hide** for each filter. The Signature Filters that apply to annotations are as follows:

Type — Filter annotated signatures according to Annotation Type. Click a checkbox to select/deselect a type. There are two Annotation Types: **Flag** and **Ignore**. The default is **Hide** signatures with an Annotation Type of **Ignore**.

Annotation Name — Filter annotated signatures according to Annotation Name. Specify all or a portion of an Annotation Name to use as the filter criteria. This can be a character string or a standard regular expression. Enter .* to filter all annotated signatures. The default is **Show** all (.*).

Comment — Filter annotated signatures according to annotation comment. Specify all or a portion of a comment to use as the filter criteria. This can be a character string or standard regular expression. Enter .* to filter all signatures. The default is **Show** all (.*).

Click OK.

This applies your filter specifications and returns to the Guardian main window.

Bundles

This section provides instructions for the following tasks:

- Explore Bundles
- View Bundle Overview

Explore Bundles

You can use the **Bundle Explorer** to view the available Signature Bundles and their contents. For a detailed description of the Bundle Explorer, see "Bundle Explorer" on page 101 in Chapter 3, "Reference."

View Bundle Overview

To display an overview of the contents of a Bundle, do the following:

- 1. In the Navigation Pane, click the **Bundle Explorer** tab to open the **Bundle Explorer**.
- 2. In the **Bundle Explorer**, double-click on a bundle name.

This displays the selected **Bundle Overivew** in the Document Pane.

Shortcuts

This section provides instructions for the following tasks:

- Create Shortcut
- Evaluate Shortcut
- Delete Shortcut

A Shortcut enables you to streamline the evaluation procedure by predefining and storing the domain, Signature Bundle, and other parameters for evaluations that you perform frequently. You can then evaluate the Shortcut, saving you the effort of re-entering the values each time you want to run the evaluation.

Create Shortcut

A Shortcut enables you to predefine the evaluation parameters for evaluations you perform frequently, saving you the effort of re-entering the values each time you run the evaluation.

There are two ways to create a Shortcut:

- Create Shortcut with Shortcut Wizard Use this method if you want to quickly create a Shortcut without evaluating the selected domain.
- Create Shortcut with Evaluation Wizard Use this method if you want to create a
 Shortcut when evaluating a domain. This method also enables you to enter and save the
 Administrator login credentials so that you do not have to enter them each time you
 evaluate the Shortcut.

The following sections describe each of these procedures.

Create Shortcut with Shortcut Wizard

Use the **Shortcut Wizard** if you want to quickly create a Shortcut without evaluating the selected domain. However, you will not be able to enter and save the login credentials for the WebLogic Server Administrator or Monitor account. Consequently, you will need to enter these each time you evaluate the Shortcut. For instructions on storing the login credentials when creating a Shortcut, see "Create Shortcut with Evaluation Wizard" on page 71.

To use the **Shortcut Wizard** to create a Shortcut, do the following:

1. Open the **Shortcut Wizard**.

You can use any of the following methods to open the wizard:

- Press Ctrl+Shift+S.
- Select File > New > Shortcut.
- Select Window > Show View > Shortcuts Table to open the Shortcuts Table. Then, click Add Shortcut in the Shortcuts Table toolbar.
- Right-click in the **Domain Explorer** or **Shortcut Explorer** and select **Add Shortcut** from the context menu.
- 2. Select the domain to associate with the Shortcut.
- 3. Select the Signature Bundle to associate with the Shortcut.

Select a Signature Bundle from the **Bundle** field drop-down menu. This is the Bundle that will be evaluated against the specified domain when you evaluate the Shortcut. The default is **Default Signatures.**

- 4. Select the **Create Shortcut** checkbox and enter a brief name for the Shortcut.
- 5. Click Finish.

This adds the new Shortcut to the **Shortcuts Table** and the **Shortcut Explorer** tree. For instructions on evaluating a Shortcut, see "Evaluate Shortcut" on page 72.

Create Shortcut with Evaluation Wizard

You can create a Shortcut by selecting the **Save as Shortcut** option when using the Evaluation Wizard to evaluate a domain. This method of creating a Shortcut enables you to enter and store the Administrator login credentials so that you need not enter them each time you evaluate the Shortcut.

To use the **Evaluation Wizard** to create a Shortcut, do the following:

1. Open the **Evaluation Wizard**.

You can use any of the following methods to open the wizard:

- Press Ctrl+Shift+E.
- Select File > New > Evaluation.
- Right-click in the **Domain Explorer** and select **Evaluate** from the context menu.

- 2. Select the domain to associate with the Shortcut.
- 3. In the **Bundle** field, select the Signatures Bundle to associate with the Shortcut.

Select a Signature Bundle from the **Bundle** field drop-down menu. This is the bundle that will be evaluated against the specified domain when you evaluate the Shortcut. The default is **Default Signatures.**

- 4. Enter the **Username** and **Password** for the WebLogic Server Administrator or Monitor account on the target domain.
- 5. (Optional) Select the **Remember username/password** checkbox to store your login credentials for the selected domain(s).

Select this option if you want your login information to persist so that you do not have to enter it each time you evaluate this Shortcut. This is especially useful if you will be evaluating the Shortcut on a frequent basis. Usernames and passwords are encrypted when stored.

- 6. Select the **Create Shortcut** checkbox and enter a brief name for the Shortcut.
- 7. Click Finish.

This adds the new Shortcut to the **Shortcuts Table** and the **Shortcut Explorer** tree. For instructions on evaluating a Shortcut, see "Evaluate Shortcut" on page 72.

Evaluate Shortcut

A Shortcut enables you to predefine the evaluation parameters for evaluations you perform frequently, saving you the effort of re-entering the values each time you run the evaluation. To evaluate a Shortcut, use the **Shortcut Evaluation Wizard**.

To evaluate a Shortcut, do the following:

1. Open the **Shortcut Evaluation Wizard**.

You can do this using any of the following methods:

- Select Window > Show View > Shortcuts Table to open the Shortcuts Table. Then, double-click on a Shortcut name in the Shortcut Table.
- Click the Shortcut Explorer tab to open the Shortcut Explorer. Then, double-click on a Shortcut name in the Shortcut list.
- Click the Shortcut Explorer tab to open the Shortcut Explorer. Then, right-click on a
 Shortcut name in the Shortcut list and select Evaluate Shortcut from the context
 menu.

The **Shortcut Evaluation Wizard** opens with the predefined values for the selected Shortcut displayed in the domain table. You can change the **Bundle** selection.

If necessary, enter the Username and Password for the WebLogic Server Administrator or Monitor account for the target domain.

If you selected the **Remember username/password** option when you activated the domain or defined the Shortcut, the **Username** and **Password** fields are prefilled. Otherwise, you must enter this information before launching the evaluation.

Click Finish.

This launches the evaluation, and returns you to the Guardian main window when the evaluation completes. As with a standard evaluation, the **Domain Explorer History** folders are updated to include an entry for the resulting Domain Inventory and Evaluation Summary. The results of the evaluation are displayed in an **Evaluation Summary Overview** in the Document Pane.

Delete Shortcut

You can use either of the following methods to delete a Shortcut:

- Select Window > Show View > Shortcuts Table to open the Shortcuts Table. Then, select a Shortcut from the Shortcut list and click Delete.
- Click the **Shortcut Explorer** tab to open the **Shortcut Explorer**. Then, right-click on a Shortcut in the Shortcut list and select **Delete Shortcut** from the context menu.

Command Line Interface

This section provides instructions for the following tasks:

- Start Guardian Headless Mode
- Run Scripts
- Schedule Scripts
- Receive Notifications

The Command Line Interface (CLI) is also referred to as Guardian Headless Mode. For a complete list of Guardian Command Line Interface commands and syntax, see "Command Line Interface" on page 134 of the Reference section of this manual. For instructions on starting the Command Line Interface, see the next section, "Start Guardian Headless Mode" on page 74.

Start Guardian Headless Mode

The Guardian Command Line Interface (CLI)—also referred to as Guardian Headless Mode—is a set of Guardian commands that can be issued directly from the operating system command prompt. There is a Guardian CLI command for almost every task available in the Guardian User Interface. For a complete description of these commands and their syntax, see "Command Line Interface" on page 134 in Chapter 3, "Reference."

To start the Guardian Command Line Interface, do the following:

Note: Guardian Command Line Interface commands are case sensitive.

1. At the operating system command prompt, change directories to the Guardian installation directory.

```
cd < root > \guardian \
```

Where:

<root> is the parent directory for the Guardian installation directory.

- 2. Enter the Guardian Headless command.
 - On Windows:

guardianHeadless.cmd

- On Linux:

quardianHeadless.sh

- 3. (Optional) To see a list of CLI commands and their syntax, enter the CLI Help command at the operating system prompt.
 - On Windows:

```
guardianHeadless.cmd -ghelp
```

- On Linux:

```
guardianHeadless.sh -ghelp
```

The Command Line Interface uses your specified Guardian Workspace as the location for all CLI operations, unless you specify otherwise in each command. Identifying the Guardian Workspace location is essential for accessing the correct set of active domains, Domain Inventories, and Evaluation Summaries. For instructions on selecting a Guardian Workspace, see "Select Workspace" on page 41.

IMPORTANT: Each command must include the prefix -g with no trailing space, as shown in the following examples:

- guardianHeadless.cmd -glistActiveDomains
- guardianHeadless.cmd -gactivateDomain -t http://localhost:9116 -u un -p pw -c true -data "D:\MyData\Guardian Data Directories\ Installer-2079"
- guardianHeadless.cmd -gcreateShortcut -d Naxos_localhost_9116 -b 2
- guardianHeadless.cmd -gdeleteShortcut -s "Security Advisories in Naxos"

The output of each command is sent to the following output file:

```
headless_output.txt
```

The output file is created in your current directory, and is overwritten each time you run a Guardian Headless Mode command.

For a complete list of Guardian Command Line Interface commands and syntax, see "Command Line Interface" on page 134 in Chapter 3, "Reference."

Run Scripts

You can create a Guardian Command Line script to perform several Guardian tasks with one command. You can schedule scripts to run at specified times and intervals by using utilities such as the Windows Task Scheduler or the Linux crontab command.

To run a script, enter the following command at the operating system prompt:

• On Windows:

```
guardianHeadless.cmd -gscript -f <script_name>
```

• On Linux:

```
guardianHeadless.sh -gscript -f <script_name>
```

Where:

<script_name> is the path and name of your CLI script.

To view the results of evaluations and inventories conducted from the CLI, use the **Domain Explorer** in the Guardian User Interface.

Schedule Scripts

To schedule a script to run automatically at a specified time, you can use utilities such as the Windows Task Scheduler or the Linux crontab command. For instructions on scheduling scripts, see your operating system documentation.

Receive Notifications

To receive notification of detected signatures, create an evaluation script and use the Windows Task Scheduler or the Linux crontab command to schedule the script to run at regular intervals. Each time the script runs, the signature.log file in the Guardian installation directory is updated with an entry for each detected signature. You can the configure a third party management tool to scan the log for detected signatures, and notify you when one is found.

Each signature.log entry starts with four number signs (####) and includes a timestamp for the entry. Each entry with a detected signature contains the label <detected> and is followed by a brief description which is also surrounded by angle brackets. The description includes the domain name.

The following is a sample signature.log file:

####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000022>
<not detected> <Signature 000022 (Rotational Upgrade may cause
java.io.StreamCorruptedException) not detected by username un evaluating
bundle ID 0 in domain ID g-dev_slp7_7001.>

####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000027> <detected> <Signature 000027 (Native IO should be enabled in production mode for better performance) detected by username un evaluating bundle ID 0 in domain ID g-dev_slp7_7001.>

####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000055>
<not detected> <Signature 000055 (JDK 1.5 is not certified for WebLogic 8.1)
not detected by username un evaluating bundle ID 0 in domain ID
q-dev_slp7_7001.>

Troubleshooting

This section provides instructions for the following tasks:

- View Logfiles
- Crash Recovery
- Resolve Exceptions

View Logfiles

The BEA Guardian log files contain information that BEA Customer Support can use to diagnose and resolve issues with your system.

The Guardian log files are as follows:

- guardian.log —This is located in the Guardian installation directory you specified during installation. This file contains information about every operation the Guardian application performs.
- signature.log This is located in the Guardian installation directory you specified during installation. This file contains information about each evaluation performed, including entries for all detected signatures. You can also use a command line script to automatically scan the signature.log for detected signatures, and automatically notify you when new signatures are detected.
- .log This is located in the .metadata subdirectory of the Guardian Workspace directory you specified when starting Guardian. This file contains information about certain Guardian operations.
- install.log This is located in the ../configuration/org.eclipse.update subdirectory of the Guardian installation directory you specified during installation. This contains Guardian installation details.

Crash Recovery

Guardian crashes are extremely unlikely, since Guardian uses the Eclipse Rich Client Platform. If Guardian does crash, simply restart Guardian. No additional cleanup operations are required.

Resolve Exceptions

In the unlikely event of an exception, the recommended steps for resolving the issue are as follows:

- 1. Read the text of the error message to determine what is wrong.
- Save the Exception Error window text with a screen capture, or cut and paste the text into a file.
- 3. Try the operation again to see if the issue recurs.
- 4. Copy the BEA Guardian log files to another location and save them for future reference
- 5. Contact BEA Support for assistance

Tip: To save log files, copy them to another location so that the error is among the last entries in the log file, making it easier to identify. For the location of Guardian log files, see "View Logfiles" on page 77.

Support

This section provides instructions for the following task:

• Submit Support Case

Submit Support Case

You can use the **Support Case Wizard** to create a support case based on a detected signature, and automatically submit the case to BEA Customer Support. The wizard automatically creates the case with all of the signature-specific information required for a BEA support engineer to begin working on your case right away. You can also add any additional attachments and notes before sending the support case to BEA.

If you choose not to submit a support case, you can instead save the case information as a Case Creation Archive. Case Creation Archives are stored as files with the file name extension .car.

Notes: Before you can create and submit a support case, you must first associate your eSupport ID with Guardian. For information, visit the BEA Customer Support site at https://support.bea.com.

If you are using a proxy server for outbound Guardian communications, make sure that you have enabled and tested the outbound proxy connection. For instructions, see "Enable and Test Outbound Proxy" on page 55.

To create and submit a support case, do the following:

1. Open the Evaluation Summary containing the signature you want to include in the support case.

Double-click on an Evaluation Summary entry in the **Domain Explorer**.

2. Select the signature you want to include in the support case.

Click on a signature entry to highlight it. This displays the **Description** and **Remedy** for the signature in the bottom portion of the **Evaluation Summary** display in the Document Pane.

3. Open the **Support Case Wizard**.

Click the **Get more help from BEA support** link at the bottom of the signature **Remedy** section to open the wizard. This automatically includes the signature details in the new support case, and displays the first page of the **Support Case Wizard**, which is the **Support Case Notes** page.

4. (Optional) Enter any additional support case notes.

In the **Additional Case Notes** field, enter any additional text that may be helpful to BEA Customer Support in resolving your case.

5. Click **Next** to proceed to the **Select Case Attachments** page.

Select the background information files to include with the support case. You can select one or more of the following:

- Case Attachments:
 - Domain Inventory
 - Detected Signature Results
- Recommended Attachments:
 - Server Log

- Other Attachments:

- Click the + icon to open a file browser from which you can select files to include.
- Click the **X** icon to remove a file from the list.
- 6. Click **Next** to proceed to the **Select Case Destination** page.
- 7. Select the destination for the case.

Select one of the following:

- Submit Case to BEA Support Select this if you want to connect to the BEA Customer Support sita and upload the support case.
- Save Case Creation Archive Select this to save the support case as a Case Archive for uploading later. Enter the location to which to save the file, or click the elipsis (...) to open a file browser from which you can select the location.
- 8. Click **Next** to proceed to the **eSupport Login** page.
- 9. Enter your eSupport Username and Password.

If you elected to submit the case, enter your eSupport **Username** and **Password**. If you elected to save the case as an archive for later submittal, these fields are disabled.

- 10. Click **Next** to proceed to the **Select eSupport Site ID** page.
- 11. Select the eSupport Site Identifier to use for this case.

Select an ID from the **Enter Site ID** drop down menu. If you have only one eSupport Site Identifier, this field is disabled. Otherwise, select an identifier from the **Select Site** drop down list.

12. Click **Finish** to submit the case.

If you elected to save the case to an archive file, a **Case Creation Complete** dialog box displays the date, time, and location of the file.

If you elected to submit your case, Guardian proceeds to connect to the eSupport site and submit the new support case to BEA Customer Support. When the submission completes, a **Case Creation Complete** dialog box displays the date, time, and location of the archive file.

13. Click OK.

This dismisses the dialog box and returns to the Guardian main window.

Updates and Upgrades

This section provides instructions for the following tasks:

- Automatically Update Guardian
- Manually Update Guardian
- Check Product Configuration

Notes: Before you can update or upgrade Guardian, you must first associate your eSupport ID with Guardian. For information, visit the BEA Customer Support site at https://support.bea.com.

If you are using a proxy server for outbound Guardian communications, make sure that you have enabled and tested the outbound proxy connection. For instructions, see "Enable and Test Outbound Proxy" on page 55.

Automatically Update Guardian

To update Guardian, use the **Update Wizard** to download new BEA Guardian software and signatures from the BEA Guardian update site, http://guardian.bea.com/update.

Notes: Before you can update or upgrade Guardian, you must first associate your eSupport ID with Guardian. For information, visit the BEA Customer Support site at https://support.bea.com.

If you are using a proxy server for outbound Guardian communications, make sure that you have enabled and tested the outbound proxy connection. For instructions, see "Enable and Test Outbound Proxy" on page 55.

To update Guardian, do the following:

1. Open the **Update Wizard**.

Use one of the following methods to open the wizard:

- Press Ctrl+Shift+U.
- Click the Update button on the Main Toolbar.
- Select Help > Software Updates > Guardian Updates.
- 2. Enter your BEA eSupport **Username** and **Password** to access your eSupport site identifiers.

3. (Optional) Select the **Remember Username/Password** checkbox to store your login credentials for future use.

Select this option if you want your login information to persist so that you do not have to enter it each time you create a support case.

- 4. Click **Next** to proceed to the **Select eSupport Site Id** page.
- 5. Select your eSupport site identifier.

This displays the **Password Required** dialog box for connecting to the Guardian Update Site.

- 6. Click **Next** to proceed to the **Password Required** page.
- 7. Enter your BEA eSupport **Username** and **Password** and click **OK**.

This connects to the Guardian Update Site, initiates a search for new updates, and displays the results in the **Search Results** page of the wizard.

8. Select the available features to install.

Expand the folders in the **Select the features to install** tree to see the available selections.

To select features, do the following:

- a. (Optional) To filter the results, you can select from the following filter options:
 - Show the latest version of a feature only to display only the current version of each feature in the results.
 - Select Filter patches included in other patches on the list to filter out duplicate patch entries.
- b. (Optional) Click **More Info** to see details about a selection.
- c. (Optional) Click **Properties** to display the properties for a selection.
- d. (Optional) Click **Select Required** to automatically select all required updates.
- e. Click the checkbox beside a feature name to select/deselect it.
- 9. Click **Next** to proceed to the **Feature License** page.

Accept the terms in the license agreement to proceed with the installation.

10. Click **Next** to proceed to the **Installation** page.

11. Select the installation location, or accept the default.

Click **Change Location** to open a directory browser from which you can select the location. Click **OK** to enter your selection and close the browser. Click **Next** to proceed.

12. Verify the list of features to install, and click **Install** or **Install All**.

After the updates are installed, you are prompted as to whether to restart Guardian.

13. Click **Yes** to restart Guardian and incorporate the new features.

Manually Update Guardian

To update Guardian on servers that do not have Internet access, you can perform a manual update. To do so, first automatically update Guardian on a server that has Internet access, and then copy the updated files to the server(s) without access.

WARNING: If you are upgrading from Guardian 1.0.x to Guardian 1.1.0 and want to preserve your Guardian Registry, you must first back up and then manually update the Guardian Registry. For instructions, see "Manually Update Guardian Registry" on page 86. Please also refer to the *Guardian 1.1 Installation Guide* and *Guardian 1.1 Release Notes* for additional important information.

To manually update Guardian, do the following;

1. Automatically update Guardian on a server that has Internet access.

For instructions, see "Automatically Update Guardian" on page 81.

2. Shut down Guardian on the offline server(s).

Select **File** > **Exit** from the titlebar menu.

3. Update the Guardian Signatures Repository on the secure (offline) machine.

Copy the following directory and all of its contents from the updated server to the offline server(s) you want to update, overwriting the old contents:

<...>\guardian\repository\archives

Where:

<..> is the parent directory of the Guardian installation root directory. The Guardian installation root directory is named guardian.

Note: If you only want to update the Guardian Signatures Repository but not the Guardian application itself, you can skip the remainder of these steps.

4. (Optional) Remove the old Signature Features directories from the offline server(s).

The Signature Features directories are kept in the following directory:

<..>\guardian\features\

Where:

<..> is the parent directory of the Guardian installation root directory. The Guardian installation root directory is named guardian.

The Signature Features directories are named according to the following convention:

com.bea.guardian.feature.signature.weblogic_<old_version>

Where:

<old_version> is the old signature release version.

For example:

- ..\guardian\features\com.bea.guardian.feature.signature.weblogic_1.0.42
- 5. Copy the updated Signatures Features directory to the offline server(s).

Copy the following directory and all of its contents from the updated machine to the offline server(s):

..\guardian\features\com.bea.guardian.feature.signature.weblogic_<CurVersion>

Where:

<..> is the parent directory of the Guardian installation root directory. The Guardian installation root directory is named guardian.

<CurVersion> is the most current signature release version.

6. (Optional) Remove the old Signature Plugins JAR files from the offline server(s).

The Signature Plugins JAR files reside in the following directory:

<..>\guardian\plugins\

Where:

<..> is the parent directory of the Guardian installation root directory. The Guardian installation root directory is named guardian.

The files are named according to the following convention:

com.bea.guardian.signature.weblogic_<old_version>

Where:

<old_version> is the old signature release version.

7. Copy the updated Signatures Plugins file to the offline server(s).

Copy the following file from the updated machine to the offline server(s):

..\guardian\plugins\com.bea.guardian.signature.weblogic_<CurVersion>

Where:

<..> is the parent directory of the Guardian installation root directory. The Guardian installation root directory is named guardian.

<CurVersion> is the most current signature release version.

- 8. Restart Guardian on the newly-updated offline servers.
- 9. Check the new configuration.

Do the following:

- a. Select **Help** > **Manage Guardian** to open the **Product Configuration** page.
- b. In the Product Configuration tree (left pane), expand the **BEA Guardian** folder and subfolders.
- c. Check the version numbers for each item.

Manually Update Guardian Registry

If you are upgrading from Guardian 1.0.x to Guardian 1.1, you must manually update the Guardian Registry. For instructions, please see the *Guardian 1.1 Installation Guide* and the *Guardian 1.1 Release Notes*.

Check Product Configuration

You can use the **Product Configuration** page to check the current configuration for a Guardian installation. This is especially useful if you have manually updated Guardian and want to check that the update was completed correctly.

To check the current Guardian configuration, do the following:

- 1. Select **Help** > **Manage Guardian** to open the **Product Configuration** page.
- In the Product Configuration tree (left pane), expand the BEA Guardian folder and subfolders.
- 3. Check the version numbers for each item.

Reference

This chapter provides a detailed description of the Guardian User Interface components and features, and a detailed reference guide to the Guardian Command Line Interface. Topics include the following:

- Main Menu
- Main Toolbar
- Keyboard Shortcuts
- Navigation Pane
- Document Pane
- Preferences
- Wizards
- Log Files
- Command Line Interface

Main Menu

The BEA Guardian Main Menu is located below the Main Titlebar and above the Main Toolbar. Running from left to right, the Main Menu headings are:

- File
- Tools
- Window
- Help

File Menu

The menu options in the File menu are:

- New Opens a submenu with:
 - Domain Invokes the Domain Activation Wizard.
 - Inventory Invokes the Inventory Wizard.
 - Evaluation Invokes the Evaluation Wizard.
 - Shortcut Invokes the Shortcut Wizard.
- Close Closes the most recently opened or most recently active editor in the Document Pane.
- Close All Closes all the open editors in the Document Pane.
- Print Prints the contents of the Report tab for whichever one of these editors is active in the Document Pane:
 - Domain Inventory
 - Evaluation Summary
 - Signature Details
 - Bundle Details
- Import Reserved for future use.
- Export Reserved for future use.
- Exit Closes the Guardian application.

Tools Menu

The menu options in the Tools menu are:

- Refresh Site List Updates the list of BEA Support site identifiers available for creating support cases.
- Purge Inactive Domains Removes domains that have been deactivated from the Domain Explorer and the Guardian Registry. The Domain Inventories, Evaluation Summaries, and Case Creation Archives for each purged domain are deleted from the Guardian Workspace on disk.
- View Log Opens the Guardian Log file and the Signature Log file.

Window Menu

The menu options in the Window menu are:

- Show View Opens a submenu with the following choices to open certain views. Please
 note that if a view is already open it is brought to the forefront and made active rather than
 cloned:
 - Domain Explorer Opens the Domain Explorer view in the Navigation Pane.
 - Bundle Explorer Opens the Bundle Explorer view in the Navigation Pane.
 - Shortcut Explorer Opens the Shortcut Explorer view in the Navigation Pane.
 - Signature Explorer Opens the Signature Explorer view in the Navigation Pane.
 - Active Domains Table Opens the Active Domains Table view in the Document Pane.
 - Shortcuts Table Opens the Shortcuts Table view in the Document Pane.
 - Progress View Opens the Progress View to the left of the Document Pane.
 - Outline View Opens the Outline View to the right of the Document Pane.
- Reset Perspective Resets the Guardian application window settings to their original values. This includes opening and arranging all of the Navigator views, opening the Outline and Progress views, and resizing the Document Pane. Any open views and editors remain open.
- Preferences Opens the Preferences page.

Help Menu

The menu options in the Help menu are:

- Welcome Opens the Guardian Welcome Page.
- Help Contents Opens the Guardian help system, which includes the Guardian User Guide, a guide to using the Guardian help, and a utility for searching help.
- Search Opens a utility that searches the Guardian User Guide for the text you enter.
- Dynamic Help Opens the Guardian dynamic help system. Dynamic help displays all the help text from the Guardian User Guide relating to the currently active view or editor. The dynamic help automatically updates itself to match each view or editor you select.
- Tips and Tricks Opens a dialog box to select a Guardian Tips and Tricks table. The Tips and Tricks table describes how to perform certain Guardian tasks more efficiently.
- Cheat Sheet Opens a dialog box to select a Guardian Cheat Sheet. The Cheat Sheet shows how to perform certain Guardian tasks, step by step. Some of the steps can be done for you automatically at the press of a button.
- Manage Guardian Open the Manage Guardian submenu containing the following options:
 - Update Guardian Invoke the Update Wizard.
 - Manage Configuration Open the Product Configuration Manager. You can use this to perform the following tasks:
 - Scan for Updates Search for updates for all installed features and invokes the Update Wizard.
 - View Installation History View all activites since installation of the product.
 - Show Activities Display the steps that led to the current Guardian configuration.
 - Add an Extension Location Locate and add an Extension Location to the current configuration. An Extension Location contains all features and plugins previously installed.
- Key Assist Display a list of the Guardian Keyboard Shortcuts.
- About BEA Guardian Display the Guardian version and features, plug-ins, and configuration details.

Related Tasks

- Deactivate Domain
- Submit Support Case

Related Reference

- Domain Activation Wizard
- Evaluation Wizard
- Shortcut Wizard
- Document Pane
- Domain Inventory
- Evaluation Summary
- Signature Details
- Bundle Details
- Navigation Pane
- Domain Explorer
- Bundle Explorer
- Shortcut Explorer
- Signature Explorer
- Active Domains Table
- Shortcuts Table
- Keyboard Shortcuts

Main Toolbar

The BEA Guardian Main Toolbar is located below the Main Titlebar and Main Menu and above the Navigation Pane. Running from left to right, the Main Toolbar buttons are:

• Open - Opens the selected resource for editing or execution:

- Active Domains Table when Target Domains is selected in the Domain Explorer
- Domain Inventory when a Domain Inventory is selected in the Domain Explorer
- Evaluation Summary when an Evaluation Summary is selected in the Domain Explorer
- Signature Details when a signature is selected in the Signature Explorer and Bundle Explorer
- Bundle Details when a bundle is selected in the Bundle Explorer
- Evaluation Wizard when a shortcut is selected in the Shortcut Explorer.
- Print Prints the contents of the Report tab for whichever one of these editors is active in the Document Pane:
 - Domain Inventory
 - Evaluation Summary
 - Signature Details
 - Bundle Details
- Activate Invokes the Domain Activation Wizard.
- Inventory Invokes the Inventory Wizard.
- Evaluate Invokes the Evaluation Wizard.
- Update Invokes the Update Wizard.

When the mouse pointer is over a toolbar button, a tool tip window pops up under the mouse pointer that says what the button does.

Related Reference

- Navigation Pane
- Document Pane
- Active Domains Table
- Domain Explorer
- Domain Inventory
- Evaluation Summary
- Signature Details

- Signature Explorer
- Bundle Explorer
- Bundle Details
- Shortcut Explorer
- Domain Activation Wizard
- Inventory Wizard
- Evaluation Wizard
- Update Wizard

Keyboard Shortcuts

The Keyboard Shortcuts are sequences of keystrokes that enable you to perform certain Guardian graphical user interface operations without using the mouse pointer.

The following table lists the Guardian Keyboard Shortcuts and can be displayed by pressing Ctrl+Shift+L:

Related Reference

- Main Menu
- Main Toolbar

Navigation Pane

The Navigation Pane contains the follow views, which by default display on the left hand side of the BEA Guardian window:

- Domain Explorer
- Bundle Explorer
- Signature Explorer
- Shortcut Explorer

Explorer Toolbar Icons

Each Explorer toolbar may contain all or some of the following active icons:

Icon	Name	
Ħ	Close	
П	Minimize	
	Maximize	
4	Restore	
	Expand all items	
	Collapse all items	
∇	Menu	
ŲÎ	Link with Editor	

Related Reference

- Domain Explorer
- Bundle Explorer
- Signature Explorer
- Shortcut Explorer

Domain Explorer

The Domain Explorer is a Navigator view that enables you to browse and interact with the domains that you have activated.

Domain Nodes

The first time you activate a domain, a domain node is added to the Target Domains folder. To distinguish between domains that could have the same name, the domain node name is a generated name. The generated name includes the host name and listen port you entered in the Domain Activation Wizard. The domain node name is also known as the domainId in the Guardian Command Line Interface.

The format of the generated domain name is: <domain name>_<host name>_listen port>. For example, guardian-test_mj23_32292, would be the domain node name for a domain named "guardian-test" activated with a host name, "mj23", and a listen port, "32292".

The Domain Explorer includes both active and inactive domain nodes. Active domain nodes are listed in **bold**. Inactive domain nodes are not bold. Inactive domain nodes can be removed with the Purge Inactive Domains option in the Tools menu.

Domain nodes also include icons. As indicated below, one icon is for active domains and one is for inactive domains. Active domains can also be decorated with icons that indicate whether the username and password have been persisted, and whether the domain requires SSL encryption for all communication. Please note that Guardian uses 128 bit open source encryption for SSL.

Icon	Meaning
3	Domain is active.
D	Domain is inactive.
F	Username and password have been persisted (icon decorates active domain icon).
A	Domain requires 128 bit SSL (icon decorates active domain icon).

The following graphic and table shows five domains with their icons:

Domain Name	Active/ Inactive	Password Persisted/ Not Persisted	128 bit SSL Enabled/ Not Enabled
816clusterdomain	Inactive	N/A	N/A
guardian-dev	Active	Not Persisted	Not Enabled
mydomain	Active	Persisted	Not Enabled
QA_815_windows	Active	Not Persisted	Enabled
WLS92cluster	Active	Persisted	Enabled

Domain History Folders

Each domain node contains folders that accumulate all your Domain Inventories and Evaluation Summaries. These folders are persisted on disk in the Guardian Workspace.

Inventory History Folder

Every time you activate, evaluate, or inventory a domain, a new Domain Inventory is created and added to the Inventory History folder for that domain. If you double-click a Domain Inventory, a Domain Inventory editor opens in the Document Pane.

To distinguish between Domain Inventories, the Domain Inventory name is a generated name. To enforce uniqueness, the generated name includes the domain name, host name, listen port, date and time it was created, in the format: <domain name>_<host name>_port>_<date> <time>.

Evaluation History Folder

Every time you evaluate a domain, a new Evaluation Summary is created and added to the Evaluation History folder for that domain. If you double-click an Evaluation Summary, an Evaluation Summary editor opens in the Document Pane.

To distinguish between Evaluation Summaries, the Evaluation Summary name is a generated name. To enforce uniqueness, the generated name includes the bundle evaluated, date and time it was created, in the format: <bur>
<bur

The Evaluation Summary entry includes an icon that indicates whether any signatures were detected. If any signatures were detected, the icon is decorated with a severity indicator. The icon with its severity indicator identifies the most severe signature detected:

Icon	Severity	Meaning
G.	Critical	The evaluation detected at least one critical signature.
	Warning	The evaluation detected at least one warning signature and no critical signatures.
	Informational	The evaluation detected at least one informational signature and no critical or warning signatures.
	No Signature	The evaluation did not detect any signatures.

Domain Explorer Menu

Click the **Domain Explorer** menu icon to display a menu containing the following options:

- Filter Domain Explorer This opens the Filter Domain Explorer dialog box. This enables you to filter out the older Domain Inventories and Evaluation Summaries.
- Link with Editor Link selected item with an Editor.

Domain Explorer Context Menu

The Domain Explorer has a context menu. To open it, right-click inside the Domain Explorer. The menu that pops up includes these choices:

- Delete
- Activate
- Deactivate
- Modify Domain
- Inventory
- Add Shortcut
- Evaluate
- Evaluate Bundle

Please note that if you right-click any entry in an expanded, active domain node, or any entry in an active domain node is selected when you right-click, the Inventory, Add Shortcut, Evaluate, and Evaluate Bundle menu options will proceed as if that is the domain you want to target. Also, the Deactivate and Modify Domain menu options are unavailable unless you right-click directly on an active domain node, or an active domain node is selected when you right-click. Conversely, the Activate menu option is unavailable if an active domain node is selected.

The Delete menu option deletes the Domain Inventories and Evaluation Summaries that are selected in the Domain Explorer. It deletes the entries from the Domain Explorer as well as the underlying files from the Guardian Workspace. A confirmation box enables you to cancel the deletion. You can also use the Delete key on your keyboard to delete any selected Domain Inventories and Evaluation Summaries.

The Evaluate Bundle menu option opens a submenu that lists all the bundles available for evaluation. Selecting any of them invokes the Bundle Evaluation Wizard. The Bundle Evaluation Wizard opens with the currently selected domain and the bundle you select, just as if you had invoked a shortcut. The Bundle Evaluation Wizard works just like the Shortcut Evaluation Wizard. Unless an active domain node or one of its entries is selected, or you right-click an active domain node or one of its entries, the bundle list is greyed out and cannot be selected.

Domain Properties

The Domain Properties dialog box enables you to modify how BEA Guardian accesses a target domain. In particular, you can change:

- The username and password Guardian uses to access the domain
- Whether to remember the username and password
- Whether to use a proxy server to access the domain

There are two different ways to open the Domain Properties dialog box:

- Select a domain in the Active Domains Table and click the Modify Domain button.
- Right-click a domain in the Domain Explorer and select Modify Domain.

The Domain Properties dialog box includes the following components:

- The domain name, read only
- The URL of the domain's Administration Server, read only
- The username and password of an administrator account on the domain

Please note that changing the username and password in Guardian does not change the username and password on the domain.

Whether to remember the username and password

If selected, the username and password are encrypted and stored on disk. Then, whenever you evaluate, inventory, modify, or open an admin console to the domain, or submit a support case, the domain's username and password are filled in automatically. Otherwise, you have to enter them for each operation that accesses the domain.

Whether to use a proxy server to access the domain

If selected, you must select the name of the proxy server from the drop down list. If there are no proxy servers in the drop down list, the Enable proxy connection check box is disabled. To add a proxy server, select Proxy from the Preferences page. Please note that in order to use a proxy server, you must also manually deploy the Guardian Agent onto the target domain.

Related Tasks

- Evaluate Domain
- Inventory Domain
- Create Shortcut
- Submit Support Case

Related Reference

- Active Domains Table
- Domain Explorer
- Preferences

Signature Explorer

The Signature Explorer is a Navigator view that enables you to browse and interact with the available signatures.

The signature entries include the following severity indicator icons. The severity indicator approximates the level of attention you should give the signature when it is detected.

Icon	Severity
T.	Critical
*	Warning
IJ	Informational

Double-click a signature in the Signature Explorer, to opena a Signature Details editor in the Document Pane.

Signature Explorer Titlebar

The Signature Explorer Titlebar contains the following active (clickable) icons:

Icon	Name
ĸ	Close
0	Minimize
	Maximize
D.	Restore
\forall	Menu

Signature Explorer Menu

Click the Signature Explorer Menu icon to open a menu of options for sorting and filtering the signature list. These are as follows:

- The Sort Signatures submenu offers you these choices:
 - By Name lists the signatures alphabetically by name. This is the default ordering when you first open the Signature Explorer.
 - By Severity groups the signatures by severity level, and then lists the signatures alphabetically by name within each severity level.
- The Filters menu option opens the Signature Filters dialog box which enables you to specify which signatures you want to see listed in the Signature Explorer.

Signature Explorer Context Menu

Right-click on a signature name in the Signature Explorer to display the Signature Explorer context menu with the following option:

- **Annotations** This opens a submenu with the following option:
 - Manage Annotations: Select this to open the Annotations Wizard. For instructions on using this wizard, see "Signature Annotations" on page 64 of Chapter 2, "Tasks."

Related Reference

- Signature Details
- Document Pane
- Filters Wizard

Bundle Explorer

The Bundle Explorer is a Navigator view for browsing and managing the available signature bundles.

The Bundle Explorer contains a top level folder named Bundles. In the Bundles folder is a node for each bundle that is available for evaluation. Each bundle node contains all the signatures for that bundle.

Signatures are grouped into different bundles based on their characteristics. For example, the Security Advisories bundle contains signatures that detect potential security problems for which BEA has issued security advisories. The Service Pack Remedy bundle contains signatures whose resolution requires installation of a specific service pack. The Bundle Details editor describes each of the Guardian signature bundles.

The signature entries in each bundle node include the following severity indicator icons. The severity indicator approximates the level of attention you should give the signature when it is detected.

Icon	Severity
u	Critical
*	Warning
IJ	Informational

Double-click a bundle in the Bundle Explorer to open a Bundle Details editor in the Document Pane. Double-click a signature in the Bundle Explorer to open a Signature Details editor in the Document Pane.

Bundle Explorer TitleBar

The Bundle Explorer Titlebar contains these icons you can click:

Icon	Name
×	Close
	Minimize
	Maximize
8	Restore
	Expand all items

	Collapse all items
E	
	Menu

Bundle Explorer Menu

Click the Bundle Explorer Menu icon to open a menu with the following options:

- Filters... This opens the Filters dialog box for filtering signatures in Detected Signatures lists.
- **Sort Signatures** This displays a submenu with options for sorting the signatures displayed in each bundle. From the Sort Signatures submenu, you can select:
 - By Bundle Name, Signature Name lists the signatures in each bundle alphabetically by name. This is the default ordering when you first open the Bundle Explorer.
 - By Bundle Name, Severity groups the signatures in each bundle by severity level, and then lists the signatures alphabetically by name within each severity level.

Note: Selecting either of the **Sort Signatures** choices collapses all the bundle nodes. To see the signatures in their new sort order, either click each bundle node individually to expand it, or click the Expand all items icon to expand all the bundle nodes.

• Link with Editor — Link selected item with an editor.

Bundle Explorer Context Menu

Right-click on a signature name in the Bundle Explorer to display the Bundle Explorer context menu with the following option:

- **Annotations** This opens a submenu with the following option:
 - Manage Annotations: Select this to open the Annotations Wizard. For instructions on using this wizard, see "Signature Annotations" on page 64 of Chapter 2, "Tasks."

- Bundle Details
- Document Pane
- Signature Details

Shortcut Explorer

The Shortcut Explorer is a Navigation Pane view for managing the shortcuts you have created.

If you double-click a shortcut in the Shortcut Explorer, the Shortcut Evaluation Wizard opens with the shortcut target domain and signature bundle preselected. Shortcuts save steps by saving the domain and bundle so you do not have to select them each time you perform an evaluation.

Shortcut Explorer Context Menu

The Shortcut Explorer has a context menu. To open it, right-click inside the Shortcut Explorer. The menu that pops up contains the following options:

- Add Shortcut
- Delete Shortcut
- Evaluate Shortcut

If you right-click a shortcut, or a shortcut is selected when you right-click, the Delete Shortcut and Evaluate Shortcut menu options will proceed as if that is the shortcut you want to delete or evaluate. Conversely, the Delete Shortcut and Evaluate Shortcut menu options are unavailable unless you right-click directly on a shortcut, or a shortcut is selected when you right-click.

Related Tasks

- Create Shortcut
- Delete Shortcut
- Evaluate Shortcut

- Navigation Pane
- Shortcut Evaluation Wizard

Document Pane

The Document Pane is the location where these BEA Guardian views and editors open, by default in the central region of the BEA Guardian window:

- Active Domains Table
- Domain Inventory
- Evaluation Summary
- Signature Details
- Bundle Details
- Shortcuts Table

Related Reference

- Active Domains Table
- Domain Inventory
- Evaluation Summary
- Signature Details
- Bundle Details
- Shortcuts Table

Active Domains Table

The Active Domains Table is a Document Pane view for managing the domains you have activated.

To open the Active Domains Table, select Show View > Active Domains Table from the BEA Guardian Window Menu.

The Active Domains Table lists the active domains, each having these columns:

- Domain: the domain name
- Administration Server URL: the URL of the domain's Administration Server

 Last Evaluation: the name of the Evaluation Summary for the most recent evaluation performed.

By default, the domains are listed alphabetically by domain name. Clicking a column heading sorts the domains by that column. For example, clicking the Last Evaluation column sorts the domains alphabetically by the Evaluation Summary name of the last evaluation. Clicking the same column heading in succession alternates between sorting in alphabetical order and reverse alphabetical order.

Active Domains Table Toolbar

The Active Domains Table toolbar contains the following buttons. Please note that they cannot be clicked until you select one of the active domains listed:

 Open Admin Console - opens a BEA Weblogic Server Administration Console in your Web browser. The Administration Console is a Web application that is hosted by the Administration Server which you specified in the Domain Activation Wizard.

If you selected the Remember username/password check box when activating or modifying the domain, the browser will automatically log you into the Administration Console. If not, the browser will start at the Administration Console login page.

Administration Console documentation can be found on the BEA eDocs website for:

- BEA WebLogic Server 9.1
- BEA WebLogic Server 8.1
- Modify Domain opens the Domain Properties dialog box, which enables you to change how Guardian accesses the domain.
- Deactivate Domain invokes the Domain Deactivation Wizard to deactivate the domain.

Related Tasks

- Activate Domain
- Create Shortcut

- Document Pane
- Evaluation Summary

- Domain Activation Wizard
- Domain Properties
- Domain Deactivation Wizard
- Main Menu

Domain Inventory

A Domain Inventory is an XML document, persisted in the Guardian Workspace, that describes the products in your domain. The Domain Inventory editor in the Document Pane enables you to interact with the Domain Inventory to better understand how BEA Guardian evaluates your domain.

A Domain Inventory is created when you activate a domain and a new one is created each time you evaluate a domain. You can also create a new Domain Inventory with the Inventory Wizard. The Inventory History folder in the Domain Explorer contains all the Domain Inventories for a domain.

You can open a Domain Inventory editor in any of the following ways:

- Activate a domain, or inventory a domain. Then click the OK button in the Progress View.
- Double-click a Domain Inventory in the Inventory History folder of a domain in the Domain Explorer.

Domain Inventory Tabs

On the bottom of the Domain Inventory editor are the following tabs for the different Domain Inventory representations. Please note that these representations are read only:

- Overview provides a summary of the Domain Inventory. It contains the following sections:
 - General Information the domain name and date and time the Domain Inventory was created.
 - Servers the number of servers in the domain, the number of servers active at the time
 of the inventory, a list of the servers, and information about each server. Please note
 that if a server is down at the time of an evaluation, it could mask some signatures from
 being detected.

When you click on a server in the list, the following server information is displayed. Information on the first server in the list is displayed by default:

- Server Details the server's name and WebLogic version, whether the server is the Administration Server or not, and whether the server is in production mode or not.
- Java Details the Java vendor and version, and the Java Virtual Machine vendor, name, and version.
- Operating System Details the operating system name, version, and processor architecture.
- JDBC the number of JDBC connection pools, a list of the JDBC connection pools, and details about each JDBC connection pool.

When you click on a JDBC connection pool in the list, the following JDBC connection pool details are displayed. JDBC connection pool details on the first JDBC connection pool in the list are displayed by default:

- the JDBC connection pool name
- · the JDBC data source name
- the database product name and version
- the JDBC driver name and version
- Source provides the actual XML source for the Domain Inventory. It can be copied to your paste buffer or printed with the context menu. You can access the context menu by right-clicking inside the Domain Inventory.
- Report provides all the information contained in the Overview tab in a printer friendly format. It can also be copied into your paste buffer or printed with the context menu.

Domain Inventory Outline View

When the Outline View is open and the Domain Inventory editor is active, you can use the Outline View to control what the Domain Inventory editor displays. Clicking the Overview, Source, and Report nodes in the Outline View brings the corresponding tab of the Domain Inventory editor to the forefront. Expanding the Outline View Source node enables you to select specific XML tag names, causing the Domain Inventory editor to jump to those tags and hightlight them.

Related Tasks

- Activate Domain
- Evaluate Domain
- Inventory Domain

Related Reference

- Document Pane
- Inventory Wizard
- Domain Explorer

Evaluation Summary

An Evaluation Summary is created each time you evaluate a domain, and is persisted in the Guardian Workspace. The Evaluation Summary editor in the Document Pane enables you to interact with the Evaluation Summary and determine if you need to take any corrective action.

These are the different ways to open an Evaluation Summary:

- Conduct an evaluation. An Evaluation Summary is opened automatically when the evaluation completes.
- Double-click an Evaluation Summary entry in the Evaluation History folder of the Domain Explorer.

Evaluation Summary Tabs

On the bottom of the Evaluation Summary editor are the following tabs for the different Evaluation Summary representations. Please note that these representations are read only:

- Overview provides evaluation statistics and a list of detected signatures. It also includes a
 description and remedy recommendation for each signature detected in the evaluation. It
 contains the following sections. Each section can be expanded or collapsed by clicking the
 triangle icon in the heading.
 - General Information the target domain name, the signature bundle evaluated, the date
 and time of the evaluation, the length of time to conduct the evaluation, and the number
 of signatures targeted, detected, not detected, and undetectable in the evaluation.

For a given bundle of signatures, some signatures may not be used in the evaluation because they target different products than the domain has. The ones that do target what the domain has are counted as Targeted Signatures. The Targeted Signatures are divided into Detected Signatures, which are actually found on the domain; and Undetected Signatures, which are not found on the domain. If a signature fails to evaluate, it is counted as an Undetectable Signature, and is considered flawed.

Detected Signatures - a table that includes information about every signature detected
in the evaluation, including the signature name, identification number, severity, area of
impact, and BEA product affected. It also includes the signature topic and subtopic,
which further narrow the category of potential problem found. If you submitted any
support cases to BEA, the case information is listed as well.

Clicking a detected signature displays information about it in the Description and Remedy sections. Information about the first detected signature is displayed by default. You can sort the detected signature table by clicking any of the column headings. The detected signatures are sorted by severity and name by default.

The Severity column of the detected signature table includes an icon that approximates the amount of attention you should give each signature that has been detected.

Icon	Severity
¥	Critical
*	Warning
U	Informational

- Description information about the signature, from the signature XML file itself.
 Description includes the signature name, severity, category of impact (for example, Server Outage, Performance, or User Viewable Error), and a detailed description.
- Remedy an explanation of how to resolve the potential problem, from the signature XML file itself. It includes the servers impacted by the signature and links to get more information about the potential problem.

Remedy also includes a link, Get more help from BEA Support, which opens the Support Case Wizard. Opening a support case enables you to get more help from BEA to analyze and repair the potential problem that the signature detected.

- Source provides the actual XML source from the Evaluation Summary. It includes the
 raw data for each detected and undetected signature, and can be copied to your paste buffer
 or printed with the context menu. You can access the context menu by right-clicking inside
 the Evaluation Summary.
- Report provides all the information contained in the Overview tab in a printer friendly format. It can also be copied into your paste buffer or printed with the context menu.

Evaluation Summary Outline View

When the Outline View is open and the Evaluation Summary editor is active, you can use the Outline View to control what the Evaluation Summary editor displays. Clicking the Overview, Source, and Report nodes in the Outline View brings the corresponding tab of the Evaluation Summary editor to the forefront. Expanding the Outline View Source node enables you to select specific XML tag names, causing the Evaluation Summary editor to jump to those tags and highlight them.

Related Tasks

• Evaluate Domain

Related Reference

- Document Pane
- Domain Explorer

Signature Details

A signature is an XML document that identifies potential problems in your domain. The Signature Details editor in the Document Pane provides more information about each signature.

To open a Signature Details editor, double-click a signature in the Signature Explorer or Bundle Explorer.

Signature Details Tabs

On the bottom of the Signature Details editor are the following tabs for the different Signature Details representations. Please note that these representations are read only:

- Overview provides information about the signature and how it was created. It contains these sections:
 - General Information the signature identifier, name, publication date, and severity level (Critical, Warning, or Informational).
 - Description an explanation of the signature in plain language, from the actual signature XML file itself.
 - Target the XPath expression used to match the signature with the target domain's Domain Inventory.
- Source provides the actual XML source for the signature. It includes the raw data for each signature, and can be copied to your paste buffer or printed with the context menu. You can access the context menu by right-clicking inside the Signature Details editor.
- Report provides all the information contained in the Overview tab in a printer friendly format. It can also be copied into your paste buffer or printed with the context menu.

Signature Details Outline View

When the Outline View is open and the Signature Details editor is active, you can use the Outline View to control what the Signature Details editor displays. Clicking the Overview, Source, and Report nodes in the Outline View brings the corresponding tabs of the Signature Details editor to the forefront. Expanding the Outline View Source node enables you to select specific XML tag names, causing the Signature Details editor to jump to those tags and hightlight them.

- Document Pane
- Signature Explorer
- Bundle Explorer

Bundle Details

A bundle is a group of signatures that are evaluated together. The Bundle Details editor in the Document Pane provides more information about each bundle.

To open a Bundle Details editor, double-click a bundle node in the Bundle Explorer.

Bundle Details Tabs

On the bottom of the Bundle Details editor are the following tabs for the different Bundle Details representations. Please note that these representations are read only:

- Overview provides information about the bundle and how it was created. It contains the following sections:
 - General Information the bundle identifier, name, creation date, and modification date.
 - Description a plain language description of the bundle.
 - Signature Def the XPath expression that created the bundle.
- Report provides all the information contained in the Overview tab in a printer friendly
 format. The report can be copied to your paste buffer or printed with the context menu.
 You can access the context menu by right-clicking inside the Bundle Details editor.

Bundle Details Outline View

When the Outline View is open and the Bundle Details editor is active, you can use the Outline View to control what the Bundle Details editor displays. Clicking the Overview and Report nodes in the Outline View brings the corresponding tabs of the Bundle Details editor to the forefront.

Related Reference

- Document Pane
- Bundle Explorer

Shortcuts Table

The Shortcuts Table is a view in the Document Pane that enables you to manage the shortcuts you have created.

To open the Shortcuts Table, select Show View > Shortcuts Table from the BEA Guardian Window menu.

The Shortcuts Table lists the shortcuts, each having these columns:

• Shortcut: the shortcut name

• Domain: the domain the shortcut targets

• Bundle: the signature bundle the shortcut evaluates

By default, the shortcuts are listed alphabetically by shortcut name. Clicking a column heading sorts the shortcuts by that column. For example, clicking the Domain column sorts the shortcuts alphabetically by domain name. Clicking the same column heading in succession alternates between sorting in alphabetical order and reverse alphabetical order.

Shortcuts Table Toolbar

The Shortcuts Table toolbar contains buttons to add and delete shortcuts:

- Clicking the Add Shortcut button invokes the Shortcut Wizard to create a new shortcut.
- Clicking the Delete Shortcut button pops up a confirmation box to confirm that you really
 want to delete the selected shortcut. Please note that the Delete Shortcut button can't be
 clicked until a shortcut has been selected.

Related Tasks

- Create Shortcut
- Delete Shortcut

- Document Pane
- Shortcut Wizard
- Shortcut Explorer
- Main Menu

Preferences

The Preferences page enables you to customize the BEA Guardian environment.

These are the different ways to open the Preferences page:

- Press "Ctrl+Shift+P"
- Select Preferences from the Window menu.

The Preferences page is a dialog box that enables you to select from the following main categories:

- General settings that control the appearance of, interaction with, and startup of Guardian.
 The ones most useful for Guardian are:
 - Keys enables you to change Guardian's Keyboard Shortcuts.
 - Startup and Shutdown enables you to change whether Guardian prompts you for the Guardian Workspace location when starting.
- Guardian settings that control Guardian's data interactions and appearance. The ones most useful for Guardian are:
 - BEA Support enables you to specify whether to use Secure Sockets Layer (SSL) encryption when creating support cases, and whether to use a proxy server when updating Guardian. Please note that Guardian uses 128 bit open source encryption for SSL. BEA Support also enables you to specify the hostname, port, and (optionally) the username and password for authentication for a proxy server. This is the proxy server that the Support Case Wizard would use to create a BEA Support Case.
 - Proxy enables you to add proxy servers to use when activating domains.
- Help settings that control how Guardian help content is displayed.
- Install/Update settings that control how the Guardian application is updated. The
 Automatic Updates section enables you to tell Guardian to automatically contact the BEA
 Guardian update site to find new signatures and application updates. The "Enable HTTP
 proxy connection" field enables you to specify the host address and port of the proxy
 server that the Update Wizard would use to access the BEA update server to download new
 signatures and software updates.

Related Tasks

- Submit Support Case
- Automatically Update Guardian
- Activate Domain

Related Reference

- Keyboard Shortcuts
- Main Menu

Wizards

BEA Guardian provides the following wizards:

- Domain Activation Wizard
- Domain Deactivation Wizard
- Evaluation Wizard
- Support Case Wizard
- Inventory Wizard
- Shortcut Wizard
- Shortcut Evaluation Wizard
- Update Wizard

A Wizard is a series of one or more dialog boxes that enable you to complete certain BEA Guardian tasks. The wizard prompts you for the information BEA Guardian needs to complete the task. For example, the Evaluation Wizard prompts you for the target domain and the signature bundle to evaluate.

When all the required information is filled in, you can click the Finish button to actually execute the task. When the Domain Activation, Domain Deactivation, Evaluation, and Inventory Wizards finish, the Progress View indicates successful completion. The Update and Support Case Wizards have their own notification, and the Shortcut Wizard gives no notification.

Related Tasks

- Manually Deploy Guardian Agent
- Activate Domain
- Deactivate Domain
- Evaluate Domain
- Submit Support Case
- Inventory Domain
- Create Shortcut
- Evaluate Shortcut
- Automatically Update Guardian

- Domain Activation Wizard
- Domain Deactivation Wizard
- Evaluation Wizard
- Support Case Wizard
- Inventory Wizard
- Shortcut Wizard
- Shortcut Evaluation Wizard
- Update Wizard
- Domain Explorer

Domain Activation Wizard

The Domain Activation Wizard prepares a target domain for evaluation by installing any needed Guardian Agents and creating a new Domain Inventory.

There are several different ways to invoke the Domain Activation Wizard:

- Press Ctrl+Shift+A.
- Click the Activate button on the Main Toolbar.
- Select New > Domain from the File menu.
- Right-click inside the Domain Explorer and select Activate Domain from the pop-up context menu.

The Domain Activation Wizard contains the following data entry fields:

- The communication protocol either http://, or https:// for Secure Sockets Layer (SSL) encryption. Please note that Guardian does not use 128 bit SSL encryption for domain activation.
- The host name the listen address of the target domain's Administration Server, for example, localhost, 66.248.193.194, or guardian-dev.bea.com
- The port number the listen port for the target domain's Administration Server
- The username of an administrator account on the target domain
- The password of an administrator account on the target domain
- Whether to remember the username and password

If selected, the username and password are encrypted and stored on disk. Then, whenever you access the domain, the username and password are filled in automatically. Otherwise, you have to enter them. The following Guardian operations require login credentials:

- Evaluate a domain
- Inventory a domain
- Modify a domain
- Open an admin console
- Submit a support case

• Whether to use a proxy server to access the domain

If selected, you must select the name of the proxy server from the drop down list. If there are no proxy servers in the drop down list, click the Add Proxy Server link to add one. Please note that in order to use a proxy server, you must also manually deploy the Guardian Agent onto the target domain.

If a deactivated domain is selected and the Domain Explorer is active when you invoke the Domain Activation Wizard, the communication protocol, host name, and listen port fields will be filled in automatically with the values for the deactivated domain. You still must enter the username and password.

Once you have entered the required data, click the Finish button to activate the domain. A progress indicator tracks the progress as the domain is activated.

The successful completion of the Domain Activation Wizard results in:

- The domain is available for evaluation.
- Any needed Guardian Agents are installed on the domain.
- A new Domain Inventory editor is opened in the Document Pane.
- A domain node is added to the Domain Explorer, in the Target Domains folder. A Domain Inventory entry is also added to the domain node's Inventory History folder.
- The domain is added to the Active Domains Table.
- The domain is added to the Guardian Registry.
- A folder for the domain is added to the Guardian Workspace. The domain folder persists the Domain Inventories, Evaluation Summaries, and Case Creation Archives.

Related Tasks

- Activate Domain
- Deactivate Domain
- Evaluate Domain
- Inventory Domain
- Create Shortcut
- Submit Support Case

Related Reference

- Domain Explorer
- Active Domains Table
- Domain Inventory
- Evaluation Summary
- Keyboard Shortcuts
- Main Toolbar
- Main Menu

Domain Deactivation Wizard

The Domain Deactivation Wizard makes a domain unavailable for evaluation.

There are two different ways to invoke the Domain Deactivation Wizard:

- Select a domain in the Active Domains Table and click the Deactivate Domain button.
- Right-click a domain in the Domain Explorer and select Deactivate Domain.

The Domain Deactivation Wizard dialog box prompts you for the domains to deactivate. By default, the domains selected when you invoked the Domain Deactivation Wizard are highlighted. You can deactivate multiple domains at once.

When you have selected the domains to deactivate, click the Finish button. The deactivation completes immediately because the operation is local to Guardian and the domains are not contacted.

The successful completion of the Domain Deactivation Wizard results in:

- A pop-up dialog box indicates successful completion.
- The Progress View shows the time the deactivation finished.
- The domains are removed from the Active Domains Table.
- The domains are still listed in the Domain Explorer so you can access their previous Domain Inventories and Evaluation Summaries. But they are no longer displayed with a bold font.

You can remove deactivated domains from the Domain Explorer with the Purge Inactive Domains option from the Tools menu.

- Any shortcuts that target the deactivated domains are removed from the Shortcuts Table and Shortcut Explorer.
- The domains can no longer be selected for evaluations or inventories. However, you can activate the domain again at any time.

Please note that the Domain Deactivation Wizard does not remove any of the Guardian Agents that were installed during domain activation. If you want to remove the Guardian Agents after deactivating a domain, you can use the deployment tools provided with WebLogic Server. Guardian Agents are deployed as Web Application Archive (WAR) files with the name, "bea-guardian-agent". Deployment documentation can be found on the BEA eDocs website for:

- BEA WebLogic Server 8.1
- BEA WebLogic Server 9.1
- BEA WebLogic Server 9.2

Related Tasks

- Deactivate Domain
- Activate Domain

- Active Domains Table
- Domain Explorer
- Domain Inventory
- Evaluation Summary
- Shortcuts Table
- Shortcut Explorer
- Main Menu

Evaluation Wizard

The Evaluation Wizard enables you to evaluate one or more domains.

There are several different ways to invoke the Evaluation Wizard:

- Press Ctrl+Shift+E.
- Click the Evaluate button on the Main Toolbar.
- Select New > Evaluation from the File menu.
- Double-click a domain in the Active Domains Table.
- Double-click a domain in the Domain Explorer.
- Right-click a domain in the Domain Explorer, or anywhere in the Domain Explorer, and select Evaluate from the pop-up context menu.

The Evaluation Wizard dialog box contains the following data entry fields:

- The domains to evaluate click the domain you want to evaluate. Use the Ctrl or Shift
 keys when clicking to select more than one domain. Please note that any domain selected
 with the Domain Explorer or Active Domains Table active when the Evaluation Wizard is
 invoked will be preselected already.
- The bundle to evaluate for each domain, you can select one bundle to evaluate. The Default Signatures bundle is selected by default. To change the bundle, click the bundle name and select a different bundle from the drop down list.
- The domain login credentials if you checked the Remember username/password check box when activating or modifying the domain, the username and password are already filled in. Otherwise, the domain is displayed in *italics*, and you must enter the username and password in the Domain Credentials section.
 - If you have multiple domains selected, every one must have its credentials filled in before you can launch the evaluation. If any of the selected domains are missing credentials, a message at the top of the dialog box says that the required credentials are missing and the Finish button is greyed out.
- Whether to remember the username and password if you check the Remember username/password check box, you won't have to enter domain login credentials for any future domain access operations.

• Whether to create a shortcut - if you check the Create Shortcut check box, the domain and bundle evaluated are saved as a shortcut for future evaluations. If evaluating multiple domains, you must create a shortcut for each domain and bundle pair separately.

When you check Create Shortcut, a default shortcut name is created in the text box next to it. The default shortcut name is in the form, "<bul>
 you can change the shortcut name by editing the text box.

When you have finished editing the Evaluation Wizard dialog box, you can click the Finish button to launch the evaluation. A progress indicator tracks the progress as the evaluation executes.

The successful completion of the Evaluation Wizard results in:

- The Progress View shows the time it finished for each domain evaluated.
- A new Evaluation Summary is opened in the Document Pane.
- The Domain Explorer is modified as follows:
- If you checked the Remember username/password check box, the domain node icon is decorated to indicate that the login credentials have been persisted.
- A new Evaluation Summary entry is added to the Evaluation History folder for each domain evaluated.
- A new Domain Inventory entry is added to the Inventory History folder for each domain evaluated.
- If you selected the Create Shortcut check box, the shortcut is added to both the Shortcut Explorer and the Shortcuts Table.

Related Tasks

- Evaluate Domain
- Activate Domain
- Create Shortcut

- Active Domains Table
- Domain Explorer

- Bundle Details
- Domain Activation Wizard
- Evaluation Summary
- Document Pane
- Keyboard Shortcuts
- Main Toolbar
- Main Menu

Filters Wizard

The Filters Wizard enables you to specify which signatures to display in Signature Lists.

To open the Filters Wizard, click the Signature Explorer menu icon and select the Filters menu option.

The Filters Wizard contains the following components that determine which signatures are displayed:

- Name Filter Pattern a text box that enables you to enter a search pattern for the signature names you want to select. For example:
 - SSL* selects all signatures whose first three letters are SSL Please note that Guardian uses 128 bit open source encryption for SSL.
 - *8.?* selects all the signatures relating to WebLogic Server Version 8

Whether the names you select are displayed or filtered out depends on the following radio button settings.

- Show matching names a radio button that causes the signatures matching the Name Filter Pattern text box to be displayed rather than filtered out.
- Hide matching names a radio button that causes the signatures matching the Name Filter Pattern text box to be filtered out rather than displayed.
- Select the severity levels to include a check box for each severity level: Critical,
 Warning, or Informational that further refines which signatures are displayed. Whatever the
 results are of the Name Filter Pattern text box and the Show matching names and Hide
 matching names radio buttons, only the signatures matching the severity levels selected in
 these check boxes are displayed.

Related Reference

Signature Explorer

Inventory Wizard

The Inventory Wizard enables you to create a new Domain Inventory for one or more domains.

There are several different ways to invoke the Inventory Wizard:

- Press "Ctrl+Shift+I".
- Click the Inventory button on the Main Toolbar.
- Select New > Inventory from the File menu.
- Right-click a domain in the Domain Explorer, or anywhere in the Domain Explorer, and select Inventory.

The Inventory Wizard contains the following data entry fields:

- The domains to inventory click each domain to inventory. Use the Ctrl or Shift keys
 when clicking to select more than one domain. Please note that any domain selected with
 the Domain Explorer or Active Domains Table active when the Inventory Wizard is
 invoked will be preselected already.
- The domain login credentials if you checked the Remember username/password check box when activating or modifying the domain, the username and password are already filled in. Otherwise, the domain is displayed in *italics*, and you must enter the username and password in the Domain Credentials section.
 - If you have multiple domains selected, every one must have its credentials filled in before you can create the inventories. If any of the selected domains are missing credentials, a message at the top of the Inventory Wizard says that the required credentials are missing and the Finish button is greyed out.
- Whether to remember the username and password if you check the Remember username/password check box, you won't have to enter domain login credentials for any future domain access operations.

When you have finished editing the Inventory Wizard, you can click the Finish button to create the inventories. A progress indicator tracks the progress as the inventories are created.

The successful completion of the Inventory Wizard results in:

- A new Domain Inventory editor is opened in the Document Pane for each domain you selected.
- The Domain Explorer is modified as follows:
 - If you checked the Remember username/password check box, the domain node icon is decorated to indicate that the login credentials have been persisted.
 - A new Domain Inventory entry is added to the Inventory History folder for each domain you selected.

Related Tasks

- Activate Domain
- Create Shortcut

Related Reference

- Domain Explorer
- Active Domains Table
- Domain Activation Wizard
- Domain Inventory
- Document Pane
- Keyboard Shortcuts
- Main Toolbar
- Main Menu

Shortcut Wizard

The Shortcut Wizard enables you to create a shortcut.

There are several different ways to invoke the Shortcut Wizard:

- Press "Ctrl+Shift+S".
- Click the Add Shortcut button in the Shortcuts Table toolbar.

- Select New > Shortcut from the File menu.
- Right-click inside the Shortcut Explorer and select Add Shortcut.

The Shortcut Wizard contains the following data entry fields:

- The domain to evaluate click the domain you want to evaluate. Each shortcut can only
 evaluate one domain and one bundle at a time. Please note that any domain selected with
 the Domain Explorer or Active Domains Table active when the Shortcut Wizard is invoked
 will be preselected already.
- The bundle to evaluate for each domain, you can select one bundle to evaluate. The Default Signatures bundle is selected by default. To change the bundle, click the bundle name and select a different bundle from the drop down list.
- The shortcut name when you check the Create Shortcut check box, a default shortcut name is created in the text box next to it. The default shortcut name is in the form, "
bundle name> in <domain name>". You can change the shortcut name by editing the text box.

When you have finished selecting the bundle, domain, and shortcut name, you can click the Finish button to create the shortcut. The successful completion of the Shortcut Wizard results in:

- The shortcut is added to the list of shortcuts in the Shortcut Explorer.
- The shortcut is added to the list of shortcuts in the Shortcuts Table.

Double clicking the shortcut name in the Shortcut Explorer or Shortcuts Table invokes the Shortcut Evaluation Wizard with the domain and bundle for that shortcut already selected.

Related Tasks

- Create Shortcut
- Delete Shortcut

- Shortcuts Table
- Shortcut Explorer
- Domain Explorer
- Active Domains Table

- Bundle Details
- Shortcut Evaluation Wizard
- Keyboard Shortcuts
- Main Menu

Shortcut Evaluation Wizard

The Shortcut Evaluation Wizard enables you to evaluate a domain with fewer steps than it would take using the Evaluation Wizard.

You can invoke the Shortcut Evaluation Wizard in any of the following ways:

- Double-click a shortcut in the Shortcuts Table.
- Double-click a shortcut in the Shortcut Explorer.
- Right-click a shortcut in the Shortcut Explorer and select Evaluate Shortcut from the pop-up context menu.

The Shortcut Evaluation Wizard opens with the domain and bundle specified in the shortcut preselected.

You can change the bundle, but only for the current evaluation. The bundle for that shortcut will remain unchanged for future invocations of the Shortcut Evaluation Wizard.

If you checked the Remember username/password check box when activating or modifying the domain, the username and password are already filled in. Otherwise, the domain is displayed in *italics*, and you must enter the username and password in the Domain Credentials section.

If you check the Remember username/password check box, you will not have to enter domain login credentials for any future domain access operations.

When you have finished editing the Shortcut Evaluation Wizard dialog box, you can click the Finish button to launch the evaluation. A progress indicator tracks the progress as the evaluation executes.

The successful completion of the Evaluation Wizard results in:

- The Progress View shows the time it finished for each domain evaluated.
- A new Evaluation Summary is opened in the Document Pane.
- The Domain Explorer is modified as follows:

- If you checked the Remember username/password check box, the domain node icon is decorated to indicate that the login credentials have been persisted.
- The Evaluation Summary is added to the target domain's Evaluation History folder for each domain evaluated.
- A new Domain Inventory entry is added to the Inventory History folder for each domain evaluated.

Related Tasks

- Evaluate Shortcut
- Activate Domain
- Create Shortcut

Related Reference

- Evaluation Wizard
- Shortcuts Table
- Shortcut Explorer
- Domain Explorer
- Domain Activation Wizard
- Evaluation Summary
- Document Pane

Support Case Wizard

The Support Case Wizard gathers the information needed to create a BEA support case. You can either connect to BEA to open an actual support case now, or save the case information in a Case Creation Archive to open a support case later.

To invoke the Support Case Wizard, click the Get more help from BEA support link in an Evaluation Summary. You can create a support case in response to any signature that is detected in an evaluation.

You can open an Evaluation Summary either by performing an evaluation, or by double-clicking the Evaluation Summary entry in the Domain Explorer.

The Support Case Wizard uses a sequence of dialog boxes to gather the information needed to open a support case and enable a BEA support engineer to begin working on it. The Support Case Wizard steps are:

- Select Server Node identify the server node on the domain that has the detected signature. If the node preselected in the dialog box is not the correct one, then you can change it by selecting an item from the pull down list. If there is only one server in your domain, then the Administration Server is used by default and this step is skipped.
- Support Case Notes add any additional text that you feel may help resolve the support case sooner in the Additional Case Notes section. The Default Case Notes section already contains the text from the Evaluation Summary's description and remedy sections.
- Select Case Attachments specify which background materials to send to BEA, for
 example, the server log or the domain configuration file. Each signature includes a list of
 attachments needed to resolve the case. Some, such as the Domain Inventory, are required
 to create a support case. They are listed in the Case Attachments section and cannot be
 unselected. Others, such as the Server Log, are optional. They are listed in the
 Recommended Attachments section and are selected by default, but can be unselected.

If you feel additional attachments would help in resolving the support case sooner, you can add them to the Other Attachments section by clicking the plus sign icon and navigating to the attachment you want to add.

By submitting these background materials now, you save the BEA support engineer from having to contact you to get the same information later. This saves time in getting your support case resolved sooner.

- Domain Login enter the username and password to login to the domain and get the case
 attachments specified in the previous step. If you checked the Remember
 username/password check box when activating or modifying the domain, the username and
 password are already filled in. If you check the Remember username/password check box,
 you won't have to enter domain login credentials for any future domain access operations.
- Select Case Destination select whether to connect to BEA and create a support case now, or save the case information as a Case Creation Archive, and create a support case later.
 Saving the case as a Case Creation Archive may be useful for people who are not connected to the Internet and need to send it to BEA from a different machine.

If you choose to save the case as a Case Creation Archive, you must select a folder in which to save it. BEA recommends using the data/<domain node>/Case Creation Archives folder in the Guardian Workspace location you specified when you started Guardian.

- eSupport Login enter your BEA eSupport username and password. This enables Guardian
 to log in to the eSupport website to get your list of available eSupport site identifiers and
 create the support case. If you select the Remember username/password check box, you
 won't have to enter your eSupport login credentials for future support cases.
- Select eSupport Site Id if you have more than one eSupport site identifier, select the one
 to use for this support case. This step is skipped for most customers who have only one site
 identifier.

The successful completion of the Support Case Wizard results in:

The Case Creation Complete dialog box gives you the support case number, date, and time
of creation. The time includes the time zone of BEA's eSupport website. BEA recommends
saving the case number to aid in future correspondence with BEA.

Once the case has been created, it is treated like any other BEA support case. But, because the Support Case Wizard included attachments specific to the case and optional notes from you, BEA's support engineers can analyze it more efficiently.

If you earlier elected to save the case as a Case Creation Archive instead of connecting to BEA, the Case Creation Complete dialog box displays the date, time, and location of the archive file.

- The Progress View shows the local time that the case was created.
- After the case has been created, the Evaluation Summary is updated with either the BEA support case number, or the name of the Case Creation Archive. The Get more help from BEA support link is no longer available.

Related Tasks

- Submit Support Case
- Activate Domain
- Create Shortcut

- Evaluation Summary
- Domain Explorer
- Domain Activation Wizard
- Domain Properties

Update Wizard

The Update Wizard downloads and installs new signatures and application features from the BEA Guardian update web site, http://guardian.bea.com/.

There are several different ways to invoke the Update Wizard:

- Press Ctrl+Shift+U.
- Click the Update button on the Main Toolbar.
- Select Manage Guardian > Update Guardian from the Help Menu.

The Update Wizard uses a sequence of dialog boxes to gather the information needed to download and install new signatures and application features. The Update Wizard steps are:

- eSupport Login enter your BEA eSupport username and password to access the Guardian
 update site. If you select the Remember username/password check box, you won't have to
 enter your eSupport login credentials for future updates.
- Select eSupport Site Id if you have more than one eSupport site identifier, select the one to use for this update. Most customers only have one site identifier.
- eSupport Login enter your BEA eSupport username and password again to access the Guardian update site.
- No updates for the currently installed features if there are no new signatures or application features available, a dialog box suggests you try again later. BEA adds new signatures and application features to the Guardian update site when they are ready for customer use.
- Search Results if there are new signatures or application features available, select which ones to install. All of them are selected by default, but you can expand the check box to select specific updates.
 - Guardian signature updates are grouped under the Guardian Signatures heading, Guardian application feature updates are grouped under the Guardian heading. Select the check boxes next to the signature and application feature updates you want.
- Feature License click the radio button indicating that you accept the terms in the license agreement.
- Installation Location you can change the installation location for each signature and application feature update, but BEA recommends using the default location. A progress indicator tracks the progress as the updates are downloaded.

- Feature Verification once the updates are downloaded, click the Install All button to integrate all the signature and application feature updates into Guardian in one step.
- Restart Guardian once all the updates are installed, click the Yes button to restart
 Guardian. When Guardian restarts, all the new signatures and application features you
 downloaded will be available.

Related Tasks

• Automatically Update Guardian

Related Reference

- Keyboard Shortcuts
- Main Toolbar
- Main Menu

Log Files

The BEA Guardian Log Files contain information that is typically only needed by BEA in the unlikely event of an exception. One situation where you may want to view a log file is running command line scripts and automatically scanning the signature.log for detected signatures.

The Guardian log files are:

- guardian.log located in the guardian installation directory you specified during installation. Contains information about every operation the Guardian application performs.
- signature.log located in the guardian installation directory you specified during installation. Contains information about each evaluation performed.
- .log located in the .metadata subdirectory of the Guardian Workspace directory you specified when starting Guardian. Contains information about certain Guardian operations.
- install.log located in the configuration/org.eclipse.update subdirectory of the Guardian installation directory you specified during installation. Contains information about the Guardian installation itself.

Related Reference

- Signature Log File
- Guardian Log File

Signature Log File

A Signature Log File, signature.log, is located in the guardian installation directory you specified during installation. It contains information about each evaluation performed.

Related Reference

- Log Files
- Guardian Log File

Guardian Log File

The Guardian Log File, guardian.log, is located in the guardian installation directory you specified during installation. It contains information about every operation the BEA Guardian application performs.

Related Reference

- Log Files
- Signature Log File

Command Line Interface

The BEA Guardian Command Line Interface is accessed with a Windows Command Prompt window or a Linux terminal window. The Guardian command interpreter is an executable .cmd batch file for Windows, and a .sh shell script for Linux. Both the Windows batch file and the Linux shell script are wrappers that accumulate and organize arguments to the Java command.

To use the Guardian Command Line Interface, run the guardianHeadless.cmd (for Windows) or guardianHeadless.sh (for Linux) executable file which was placed in the installation directory you specified when you installed Guardian.

If you have not previously set your Guardian Workspace location when starting the Graphical User Interface, the Guardian Command Line Interface will use a default Guardian Workspace location, unless you specify otherwise in each command. The default Guardian Workspace location is in your home directory; for example, C:\Documents and Settings\cusername>\guardianWorkspace for Windows, and /home/<username>/guardianWorkspace for Linux. If you have previously set your Guardian Workspace location, the Guardian Command Line Interface will use that location for all its operations, unless you specify otherwise in each command. Identifying the Guardian Workspace location is essential for accessing the correct set of active domains, Domain Inventories, and Evaluation Summaries.

The Guardian Command Line Interface accepts a variety of commands that perform almost every task available with the Graphical User Interface. To see a list of the commands available and their syntax, type guardianHeadless -ghelp at the operating system command prompt. Please note that the Guardian Command Line Interface commands are case sensitive.

The output of each command is not sent to the console window. Instead, it is sent to the output file, headless_output.txt. The output file created in your current directory, and is overwritten each time you run it.

Also note that each command must have a prefix of -g, as shown in the examples below. Please pay special attention to the spacing, the arguments that require quotes, and the case sensitivity.

Examples:

- guardianHeadless.cmd -glistActiveDomains
- guardianHeadless.cmd -gactivateDomain -t http://localhost:9116 -u un -p pw -c true -data
 "D:\MyData\Guardian Data Directories\Installer-2079"
- guardianHeadless.cmd -gcreateShortcut -d Naxos_localhost_9116 -b 2
- guardianHeadless.cmd -gdeleteShortcut -s "Security Advisories in Naxos"

The following table describes each Guardian command. After that is a syntax description for each command.

Command	What It Does
activateDomain	Activates the domain specified to prepare it for evaluation and returns the domain identifier.
createShortcut	Creates a shortcut for the domain and bundle specified to save keystrokes in conducting evaluations.
deactivateDomain	Removes the domain specified from evaluation eligibility.
deleteShortcut	Deletes the shortcut specified.
evaluateDomainBundle	Evaluates the domain and bundle specified. Use the Graphical User Interface to see the evaluation results.
evaluateShortcut	Evaluates the domain and bundle associated with the shortcut specified. Use the Graphical User Interface to see the evaluation results.
help	Displays usage information.
listActiveDomains	Lists the active domains available for evaluation in domain identifier format.
listBundles	Lists the bundle identifier and bundle name of the bundles available for evaluation.
listShortcuts	Lists the shortcuts available for evaluation.
script	Executes the commands contained in the script file specified.

The following list gives the syntax for each command that accepts arguments. Optional parameters are enclosed in square brackets:

- activateDomain -t targetUrl -u username -p password [-c persistCredentials] [-data workspaceDir]
 - targetUrl: the http://listen-address:port-number format address of the domain's administration server (not in quotes)
 - username: administrator account username for the specified domain
 - password: administrator account password for the specified domain

- persistCredentials (true or false, without quotes): whether to persist the username and password in encrypted form (default = false)
- workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- createShortcut -d domainId [-b bundleId] [-s shortcutName] [-data workspaceDir]
 - domainId: the domain identifier for the shortcut
 - bundleId: the bundle identifier for the shortcut (default = 0, which is the identifier for the bundle named, "Default Signatures"). The values for all the bundles can be found with the listBundles command.
 - shortcutName: the name of the shortcut in quotes (default = "<burble name> in <domain name>")
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- deactivateDomain -d domainId [-l deleteUserData] [-data workspaceDir]
 - domainId: the domain identifier of the domain to deactivate
 - deleteUserData (true or false, without quotes): whether to delete the Domain
 Inventories and Evaluation Summaries from the Guardian Workspace (default = false)
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- deleteShortcut -s shortcutName [-data workspaceDir]
 - shortcutName: the name of the shortcut to delete, in quotes, as shown with the listShortcuts command.
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- evaluateDomainBundle -d domainId [-b bundleId] [-u username -p password] [-c persistCredentials] [-data workspaceDir]
 - domainId: the domain identifier of the domain to evaluate
 - bundleId: the bundle identifier for the shortcut (default = 0, which is the identifier for the bundle named, "Default Signatures"). The values for all the bundles can be found with the listBundles command.
 - username: administrator account username for the specified domain (not required if persistCredentials set to true in activateDomain)

- password: administrator account password for the specified domain (not required if persistCredentials set to true in activateDomain)
- persistCredentials (true or false, without quotes): whether to persist the username and password in encrypted form (default = false)
- workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- evaluateShortcut -s shortcutName [-u username -p password] [-c persistCredentials] [-data workspaceDir]
 - shortcutName: the name of the shortcut to evaluate in quotes
 - username: administrator account username for the specified domain (not required if persistCredentials set to true in activateDomain)
 - password: administrator account password for the specified domain (not required if persistCredentials set to true in activateDomain)
 - persistCredentials (true or false, without quotes): whether to persist the username and password in encrypted form (default = false)
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- help
- listActiveDomains [-data workspaceDir]
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- listBundles [-data workspaceDir]
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- listShortcuts [-data workspaceDir]
 - workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace
- script -f scriptname [-data workspaceDir]
 - scriptname: the name of a script file containing Guardian commands. Each command has to be on a separate line. See Running Scripts for more information.

 workspaceDir: the full directory specification, in quotes, of the location of the Guardian Workspace

Using Scripts

Scripts enable you to perform several Guardian tasks by issuing a single command in the Guardian Command Line Interface. You can schedule scripts to run at specified times and intervals by using utilities such as the Windows Task Scheduler or the Linux crontab command.

Here is an example of a script (activate.txt) that activates several domains:

```
activateDomain -t http://slp7:7001 -u un -p pw -c true activateDomain -t http://slp8:7001 -u un -p pw -c true activateDomain -t http://sqa-lldev:4044 -u un -p pw -c true activateDomain -t http://slg-lldev:7001 -u un -p pw -c true activateDomain -t http://slg-lldev:4401 -u un -p pw -c true activateDomain -t http://mj23:32292 -u un -p pw -c true
```

To run this script, enter the command:

```
guardianHeadless -gscript -f activate.txt
```

Here is an example of a script (evaluate.txt) that evaluates several domains:

```
evaluateDomainBundle -d guardian-dev_slp7_7001 -b 1
evaluateDomainBundle -d guardian-dev_slp7_7001 -b 2
evaluateDomainBundle -d guardian-dev2_slp8_7001 -b 0
evaluateDomainBundle -d guardian-qa_sqa-lldev_4044
evaluateDomainBundle -d guardian-domain_slg-lldev_7001 -b 1
evaluateDomainBundle -d guardian-domain_slg-lldev_7001 -b 2
evaluateDomainBundle -d guardian-domain_slg-lldev_4401
evaluateDomainBundle -d mydomain_mj23_32292
```

To run this script, enter the command:

```
guardianHeadless -gscript -f evaluate.txt
```

To review the results of script evaluations, use the Guardian Graphical User Interface. The Domain Explorer Evaluation History folder contains an Evaluation Summary for each evaluation performed.

Scheduling Scripts

To schedule a script to run automatically at a specified time, you can use utilities such as the Windows Task Scheduler or the Linux crontab command. For example, to schedule the evaluate.txt script, you would schedule the command:

guardianHeadless -gscript -f evaluate.txt

Receiving Notifications

To receive notification of detected signatures, create an evaluation script and use the Windows Task Scheduler or the Linux crontab command to schedule the script to run at regular intervals. Each time the script runs an evaluation, the signature.log file in the Guardian installation directory is updated with an entry that tells whether the signature was detected or not. You can set a third party management tool to scan that log for detected signatures and notify you when one is found.

Each signature.log entry starts with four number signs (####) and includes a time stamp. Each entry with a detected signature contains <detected> and is followed by a brief description which is also surrounded by < >. The description includes the domain name. Following is a sample signature.log file:

####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000022> <not detected> <Signature 000022 (Rotational Upgrade may cause java.io.StreamCorruptedException) not detected by username un evaluating bundle ID 0 in domain ID g-dev_slp7_7001.> ####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000027> <detected> <Signature 000027 (Native IO should be enabled in production mode for better performance) detected by username un evaluating bundle ID 0 in domain ID g-dev_slp7_7001.> ####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <0000055> </u>

####<Tue Aug 01 16:03:47 EDT 2006> <0> <g-dev_slp7_7001> <un> <0> <000055> <not detected> <Signature 000055 (JDK 1.5 is not certified for WebLogic 8.1) not detected by username un evaluating bundle ID 0 in domain ID g-dev_slp7_7001.>

Appendix A: Apache License

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Appendix A: Apache License

Appendix B: Eclipse License

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March 17, 2005

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