Sun N1 Service Provisioning System User's Guide and Release Notes for the WebLogic 8 Plug-In 2.0

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054
U.S.A.

Part No: 819–2903–10
September 2005

Copyright 2005 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, docs.sun.com, AnswerBook, AnswerBook2, Java, N1, JavaBeans, EJB, Java Naming and Directory Interface, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2005 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées du système Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, docs.sun.com, AnswerBook, AnswerBook2, Java, N1, JavaBeans, EJB, Java Naming and Directory Interface, et Solaris sont des marques de fabrique ou des marques déposées, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REPONDRE A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.





050829@12762

Contents

Preface 9

1 Overview of the WebLogic 8 Plug-In 13
Purpose of the WebLogic 8 Plug-In 13
What the WebLogic 8 Plug-In Includes 13
Requirements for Using the WebLogic 8 Plug-In 14

2 Release Notes for the WebLogic 8 Plug-In 17
Installation Issues 17
Runtime Issues 17

3 Installing and Configuring the WebLogic 8 Plug-In 19
Acquiring the WebLogic 8 Plug-In 19
Adding the WebLogic 8 Plug-In to the Sun N1 Service Provisioning System 20
▼ How to Import the WebLogic 8 Plug-In Using the Browser Interface 20
▼ How to Import the WebLogic 8 Plug-In using the CLI 20
▼ How to Install the WebLogic Software 21
Upgrading Considerations 23
▼ How to Access Previous Versions of a Component 23

4 Using the WebLogic 8 Plug-In 25
Installing and Using the WebLogic 8 Environment with the Sun N1 Service Provisioning System 25
Plug-In Conventions 25
Global Prerequisites 26

Process Overview 27
Creating the WebLogic Infrastructure 28
▼ How to Create a WebLogic 8 Domain and Administration Server 28
▼ How to Create Multiple Domains with Different Passwords 31
▼ How to Create a WebLogic Managed Server 32
▼ How to Create a License Component 34
▼ How to Install a License Component 35
▼ How to Create a WebLogic Cluster 36
▼ How to Create Cluster Members 37
Managing WebLogic Domains, Servers, and Clusters 39
Managing WebLogic Domains and Administration Servers 39
▼ How to Remove a WebLogic Domain and Administration Server 40
Managing WebLogic Clusters 41
▼ How to Start or Stop Clusters 41
▼ How to Remove a WebLogic Cluster 42
▼ How to Remove a WebLogic Cluster Member 43
Managing WebLogic Managed Servers 44
▼ How to Start a Managed Server 44
▼ How to Stop a Managed Server 45
▼ How to Remove a Managed Server 45
▼ How to Add Additional `CLASSPATH` Elements to a Managed Server 46
Capturing and Editing WebLogic Applications 47
▼ How to Capture a WebLogic Enterprise Application or EAR File 47
▼ How to Capture a WebLogic Web Application or WAR File 48
▼ How to Capture a WebLogic JAR File 48
Using Component Types to Deploy WebLogic Applications 49
Enterprise Application (EAR) Component Type 50
Web Application (WAR) Component Type 51
Java Archive Files Containing EJBs Component Type 53
Data Source and Transaction Data Source Component Types 54
Connection Pool Component Type 55
Multi Pool Component Type 56
Thread Pool Component Type 57
Transaction Service Component Type 57
JMS Server Component Type 58
Mail Session Component Type 58
Using the CLI to Work With WebLogic 59
Using the Sun N1 Service Provisioning System Command-Line Interface 59

Using the WebLogic Command-Line Interface 60

▼ How to Use the WebLogic Command-Line Interface Through the Sun N1 Service Provisioning System 60

Using the WebLogic Server Scripting Tool Within the Sun N1 Service Provisioning System 62

▼ How to Create a WebLogic Script Component 62

▼ How to Install a WebLogic Script Component 62

Using Plans 63

Troubleshooting 63

Examples of WebLogic Installation Error Messages 64

Index 67

Tables

TABLE 1–1 JRE Requirements 15

TABLE 1–2 WebLogic Install Media Requirements 15

TABLE 4–1 Common Task Names 26

TABLE 4–2 WebLogic Enterprise Application Error Conditions 51

TABLE 4–3 WebLogic Web Application Error Conditions 52

TABLE 4–4 WebLogic EJB container Error Conditions 54

Preface

This book explains how to use the N1™ Service Provisioning System software to perform the following tasks.

- Install WebLogic 8 software and configure infrastructure components
- Deploy applications to WebLogic
- Configure the WebLogic environment

Who Should Use This Book

The main audience for the Sun N1 Service Provisioning System User's Guide for the WebLogic 8 Plug-In includes system administrators and operators of Sun N1 Service Provisioning System software who want to be able to incorporate BEA WebLogic 8 functionality with Sun N1 Service Provisioning System software. These users are expected to be familiar with the following:

- The Sun N1 Service Provisioning System product
- Standard UNIX® and Windows commands and utilities
- The general concepts and management features available in the BEA WebLogic 8 product

Before You Read This Book

If you are not already familiar with using the Sun N1 Service Provisioning System software, read the following books:

- *Sun N1 Service Provisioning System 5.1 System Administration Guide*

- *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*

How This Book Is Organized

Chapter 1 provides an overview of the plug-in solution.

Chapter 2 describes installation and runtime issues.

Chapter 3 explains how to install and configure the plug-in.

Chapter 4 explains how to capture and deploy applications and files through the plug-in and describes the specific component types that are provided with the plug-in.

Related Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

The BEA WebLogic 8 product documentation can be found at `http://e-docs.bea.com/platform/docs81/`.

Note – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

Documentation, Support, and Training

Sun Function	URL	Description
Documentation	`http://www.sun.com/documentation/`	Download PDF and HTML documents, and order printed documents
Support and Training	`http://www.sun.com/supportraining/`	Obtain technical support, download patches, and learn about Sun courses

Typographic Conventions

The following table describes the typographic changes that are used in this book.

TABLE P–1 Typographic Conventions

Typeface or Symbol	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories, and onscreen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% you have mail.`
`AaBbCc123`	What you type, contrasted with onscreen computer output	`machine_name%` **`su`** `Password:`
aabbcc123	Placeholder: replace with a real name or value	The command to remove a file is `rm` *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the *User's Guide*. Perform a *patch analysis*. Do *not* save the file. [Note that some emphasized items appear bold online.]

Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

TABLE P–2 Shell Prompts

Shell	Prompt
C shell prompt	`machine_name%`
C shell superuser prompt	`machine_name#`
Bourne shell and Korn shell prompt	`$`
Bourne shell and Korn shell superuser prompt	`#`

CHAPTER 1

Overview of the WebLogic 8 Plug-In

This chapter explains general information about using Sun N1 Service Provisioning System to provision BEA WebLogic 8 applications. This chapter includes the following information:

- "Purpose of the WebLogic 8 Plug-In" on page 13
- "What the WebLogic 8 Plug-In Includes" on page 13
- "Requirements for Using the WebLogic 8 Plug-In" on page 14

Purpose of the WebLogic 8 Plug-In

The Sun N1 Service Provisioning System software provides enhanced capabilities in support for BEA WebLogic 8 applications. You can provision the WebLogic 8 infrastructure by installing domains, managed servers, and clusters with the provisioning software. Once installed, you can manage your WebLogic environment by starting and stopping managed servers and domains. You can also browse existing applications to capture previously installed applications and deploy those applications throughout your enterprise.

What the WebLogic 8 Plug-In Includes

The WebLogic 8 Plug-In includes several WebLogic-specific component types, along with pre-defined components and resource files that enable you to easily capture, configure and deploy WebLogic Enterprise, Enterprise JavaBeans™ (EJB™) technology, and Web Applications. These component types can be grouped into three families:

- A component to install the WebLogic software
- Components to support the WebLogic services:
  - WebLogic Administration Server
  - WebLogic Managed Server
  - WebLogic Cluster
- Plans for installing enterprise applications, web applications, and Java archive files.
- Special components to deploy and capture applications for deployment on the WebLogic 8 application servers
- Special component types to configure the WebLogic 8 services.
  - License – Enables you to deploy your WebLogic license.
  - Thread Pool – Enables you to edit and deploy thread-pool configurations.
  - Data Source – Enables you to capture, edit, and deploy data sources.
  - Transaction Data Source – Enables you to capture, edit, and deploy data sources.
  - JMS Server – Enables you to capture, edit, and deploy JMS servers.
  - Connection Pool – Enables you to capture, edit, and deploy connection pools.
  - Multi Pool – Enables you to capture, edit, and deploy multi pools.
  - Transaction Service – Enables you to edit the transaction service.
  - WLScript – Enables you to run WebLogic commands through the provisioning system's interface.

The WebLogic 8 Plug-In also includes several plans that install and remove the WebLogic Administration Servers, Managed Servers, and Clusters.

Requirements for Using the WebLogic 8 Plug-In

The WebLogic 8 plug-in supports the WebLogic Server Version 8.1 on the following platforms.

- Solaris 8 for SPARC
- Solaris 9 for SPARC
- Solaris 9 for x86
- RedHat Linux AS 2.1
- RedHat Linux AS 3.0
- AIX 5.1 and 5.2

Any host on which you intend to deploy the WebLogic 8 plug-in must meet the following requirements. These requirements represent minimum prerequisites for installation.

Disk space	On UNIX systems, approximately 375 Mbytes free storage space for the installed product. Approximately 1 Gbyte of temporary storage space is required by the installer in the `/var/tmp` directory. If no space exists in the /var/tmp folder, use the `altTempDir` component variable to create an alternate temporary directory. See "How to Install the WebLogic Software" on page 21 for more information.
RAM	512 Mbytes (minimum); 1 Gbyte (recommended)
Java run-time environment (JRE)	The WebLogic Server installation program requires a JRE to run. The following requirements are summarized from the BEA's list of supported configurations. You can find the complete list on BEA's WebLogic 8.1 product documentation website.

TABLE 1–1 JRE Requirements

	Java SDK already installed	Included in Installation
AIX	IBM SDK 1.4.2	
RedHat Linux		WebLogic JRockit 1.4.2_04 SDK
Solaris x86	Sun Java 2 SDK 1.4.2_04	
Solaris SPARC		Sun Java SDK 1.4.2_04

TABLE 1–2 WebLogic Install Media Requirements

	Binary Installer	JAR Installer	Supplemental JAR file
AIX		X	
RedHat Linux	X		
Solaris x86		X	X
Solaris SPARC	X		

Your configurations might require additional resources depending on the applications that are installed. For BEA's WebLogic requirements, see the WebLogic Platform 8.1 Supported Configurations web page.
(`http://e-docs.bea.com/platform/suppconfigs/configs81/81_over/`)

CHAPTER 2

Release Notes for the WebLogic 8 Plug-In

This chapter describes late-breaking news and known issues with the WebLogic 8 plug-in. The chapter contains the following information:

- "Installation Issues" on page 17
- "Runtime Issues" on page 17

Installation Issues

There are no known installation issues.

Runtime Issues

There are no known runtime issues.

CHAPTER 3

Installing and Configuring the WebLogic 8 Plug-In

This chapter explains how to install and configure the WebLogic 8 plug-in. The chapter contains the following information:

- "Acquiring the WebLogic 8 Plug-In" on page 19
- "Adding the WebLogic 8 Plug-In to the Sun N1 Service Provisioning System" on page 20
- "Upgrading Considerations" on page 23

Acquiring the WebLogic 8 Plug-In

The BEA WebLogic Plug-In is packaged as a *plug-in* to the Sun N1 Service Provisioning System software. Plug-ins are packaged in Java™ Archive (JAR) files. The plug-in files for the BEA WebLogic plug-in are available from the Sun N1 Service Provisioning System Supplement CD or from the Sun Download Center.

The WebLogic 8 Plug-In is available for import from two different JAR files. Choose the correct file depending on your situation.

- If you are importing the WebLogic 8 Plug-In for the first time, acquire the `com.sun.weblogic8_2.0.jar` file.
- If you have already imported the previous version of the WebLogic 8 Plug-In, acquire the `com.sun.weblogic8_1.0_2.0.jar` file.

Adding the WebLogic 8 Plug-In to the Sun N1 Service Provisioning System

To make a given plug-in known to the Sun N1 Service Provisioning System product, you need to import the plug-in to the Master Server. To import a plug-in, follow these steps as explained in detail in Chapter 5, "Plug-In Administration," in *Sun N1 Service Provisioning System 5.1 System Administration Guide*.

▼ How to Import the WebLogic 8 Plug-In Using the Browser Interface

To import or upgrade a plug-in, follow these steps as explained in detail in Chapter 5, "Plug-In Administration," in *Sun N1 Service Provisioning System 5.1 System Administration Guide*

Steps

1. **In the Administrative section of the browser interface main window, click Plug-ins.**
2. **In the Action column of the Plug-ins page, click Import.**
3. **Browse to the location where you downloaded the JAR file.**
   - If you are importing the WebLogic 8 Plug-In for the first time, select the `com.sun.weblogic8_2.0.jar` file.
   - If you have already imported a previous version of the WebLogic 8 Plug-In, select the `com.sun.weblogic8_1.0_2.0.jar` file.
4. **Click the Continue to Import button.**

   When the import complete successfully, a plug-in details page appears and shows you the objects that the plug-in provides.

▼ How to Import the WebLogic 8 Plug-In using the CLI

You can also import a plug-in by using the command line.

Step

- **To import a plug-in file from the CLI, type:**

  `% cr_cli -cmd plg.p.add -path` *plugin-filename* `-u` *username* `-p` *password*

- If you are importing the WebLogic 8 Plug-In for the first time, *plugin-filename* is `com.sun.weblogic8_2.0.jar`.
- If you have already imported the previous version of the WebLogic 8 Plug-In, *plugin-filename* is `com.sun.weblogic8_1.0_2.0.jar`.

▼ How to Install the WebLogic Software

You need to install the WebLogic software before you create WebLogic domains, Administration Servers, or Managed Servers. When you install the WebLogic software, a virtual host that represents the software installation is created. You use this virtual host later as the target host for WebLogic Administration Servers and Managed Servers.

Managed Servers and Administration Servers use the same `Install` component, which installs the WebLogic 8 software on the Remote Agent. After you have installed the `Install` component on a Remote Agent, you do not have to reinstall that component again.

You can use this procedure to install the WebLogic software or you can use this procedure to register existing software within the provisioning system by selecting the `markOnly` option.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the WebLogic Software Installation: Install link.**
   The plan's Details page displays.
3. **Click Run.**
   The Run page displays.
4. **In the Plan Parameters area, select the variable settings for the `Install` component that you plan to deploy.**
   - **If the variable settings have been established for this component, select the appropriate settings from the menu.**
   - **If the settings are not available from the menu, click Select From List.**
     The Select Variable Settings From List window displays.
     - **To create a new set of variable settings, select Create Set.**
       The following list provides commonly updated variables for the `Install` component.

variable set name	Required. A name for the new variable set you create
`beaHome`	Required. The WebLogic BEAHOME directory. The default value for `beaHome` is `/usr/local/bea`. You

need to update this value if you plan to have multiple installations of the WebLogic software on one machine.

Note – This directory or link must exist or be able to be created by the `weblogicUser`. If the directory or link exists, the `weblogicUser` must have write access to the directory.

`sourceImage`	Required for all non-`markOnly` installations. The absolute path to the WebLogic binary package installer or JAR file.
`x86supplementalJAR`	Required only for Solaris x86 installations. The absolute path to the WebLogic Solaris x86 Supplemental JAR file.
`sdkJavaHome`	Required only for AIX and Solaris x86 JAR file installers. JAVA_HOME for SDK version 1.4.2 or higher.
`componentPaths`	Optional. Additional components can be specified in a pipe-separated list. For example, `WebLogic Server|WebLogic Workshop|WebLogic Integration|WebLogic Portal`. By default, the software required to run WebLogic domains and application servers is installed. If additional components are selected more space (beyond the 350 Mbytes) is required.
`altTempDir`	Optional. An alternative directory to expand the install image. The default value is the `/var/tmp` directory. If the `/var/tmp/` directory does not contain 1 Gbyte of available space, set `altTempDir` to another directory.
`webLogicUser`	Required. The UNIX user to run the WebLogic installation. This user must exist on the host to be installed and must have write permission on the `beaHome` directory.

`targetRefName`	Required. The unique virtual hostname for this installation. This value is used as the target host during domain and Managed Server creation. You need to provide a unique value for this variable for each installation of WebLogic.

Note – If you install the WebLogic software multiple times on the same host, you need to change this variable to a new value. `beaHome` must also be different for each installation.

- **To use variable components from another component, click Import Set.**

  For more information about importing variable sets, see "How to Run a Plan" in *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*.

5. **Select the target host.**

   Install the WebLogic software on the Remote Agent that you plan to use as an Administration Server or a Managed Server.

6. **Deselect the Target Host Set checkbox.**

7. **If you are capturing an existing WebLogic domain within the provisioning system, select the `markOnly` option.**

8. **Click Run Plan (Includes Preflight).**

Upgrading Considerations

This section describes issues that you might need to consider after upgrading to a new plug-in version.

▼ How to Access Previous Versions of a Component

When you upgrade to a new version of a plug-in, the Common Tasks page for the plug-in is updated to provide links to components that are installed with the new plug-in version. This feature enables you to easily view components that contain the most current features and improvements. Components that rely on old functionality are not linked to from the Common Tasks page.

If you have trouble finding a component that you previously installed, the component was likely created from the previous version of the plug-in.

Follow these steps to view or work with a previous version of the component:

Steps

1. **Click the appropriate component procedure on the Common Tasks page.**
   The Component Detail page appears.
2. **On the Component Details page, click Version History.**
   A list of components and versions appears.
3. **Click the appropriate link.**
   - To perform a task with a component, click the version number or the Details link that applies to the component that you want to use.
   - To view where a component is installed, click Where Installed.

CHAPTER 4

Using the WebLogic 8 Plug-In

The WebLogic 8 plug-in provides several specific component types and provides easy access to functions that are useful for working with BEA WebLogic 8 applications. This chapter describes the following information:

- "Installing and Using the WebLogic 8 Environment with the Sun N1 Service Provisioning System" on page 25
- "Creating the WebLogic Infrastructure" on page 28
- "Managing WebLogic Domains, Servers, and Clusters" on page 39
- "Capturing and Editing WebLogic Applications" on page 47
- "Using Component Types to Deploy WebLogic Applications" on page 49
- "Using Plans" on page 63
- "Troubleshooting" on page 63

Installing and Using the WebLogic 8 Environment with the Sun N1 Service Provisioning System

Plug-In Conventions

The provisioning system enables you to provision and manage applications.

Plans and Component Procedures

The WebLogic 8 plug-in provides both plans and component procedures as tools for you to perform tasks. By using plans, you link directly to the functionality you desire. Using component procedures, you have a greater number of tasks that you can perform.

Task Names

The WebLogic 8 plug-in organizes tasks in four categories: application tasks, infrastructure tasks, configuration tasks, and advanced tasks. These task categories follow the same convention for describing the task that you need to perform.

TABLE 4–1 Common Task Names

Task Name	Description
View Installations, View Configurations, View Clusters, View Cluster Members	View a list of where all components of a particular type are installed.
View All	View all components of a particular type within a specified folder.
Create	Links to the component Details page where you can add a new component of this type to the provisioning system. You can create new components by importing them from an existing WebLogic Admin Server or by browsing the file system.
Start or Stop	Links to the component Details page to run the Start or Stop component procedure.
Install, Uninstall, Remove, Join, Leave	Represents a plan that produces the described functionality.

Global Prerequisites

Two prerequisites exist for each task documented in this book.

- The WebLogic Administration Server is used to perform or verify many operations. Therefore, to perform any task that alters the WebLogic 8 environment, the Administration Server must be configured within the provisioning system with the correct connection information and running.

Note – The Administration Server does not need to be online when installing the WebLogic software, creating the WebLogic Domain, or when creating the enterprise application (EAR), web application (WAR), and Java archive (JAR) files.

- All tasks within the provisioning system require that you have specific permissions. To perform tasks with the WebLogic plug-in, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

  For more information about permissions, see Chapter 3, "Controlling Access Using Permissions," in *Sun N1 Service Provisioning System 5.1 System Administration Guide*.

  For information about how to update your group membership, see "How to Change a User's Group Membership" in *Sun N1 Service Provisioning System 5.1 System Administration Guide*.

Process Overview

Creating a WebLogic 8 environment within the provisioning system is similar to the process of creating the environment without the provisioning system.

1. Import the WebLogic 8 plug-in.

   See "Importing Plug-Ins" in *Sun N1 Service Provisioning System 5.1 System Administration Guide*.

2. Set the WebLogic session variables: `WL_DEFAULT_PASSWORD` and `WL_DEFAULT_USER`.

   See Chapter 5, "Session Variables," in *Sun N1 Service Provisioning System 5.1 Plan and Component Developer's Guide*.

3. Prepare all hosts.

   The WebLogic 8 plug-in contains a new system service that must be distributed to all hosts in the provisioning system. See "Preparing a Physical Host" in *Sun N1 Service Provisioning System 5.1 System Administration Guide*.

4. Install the WebLogic software.

   See "How to Install the WebLogic Software" on page 21

5. Create a WebLogic domain by installing an Administrative Server.

   See "How to Create a WebLogic 8 Domain and Administration Server" on page 28.

6. Create a Managed Server in the new WebLogic domain.

   See "How to Create a WebLogic Managed Server" on page 32.

7. Create and Install the WebLogic license component.

See "How to Create a License Component" on page 34 and "How to Install a License Component" on page 35.

8. (Optional) Create a WebLogic 8 cluster.

   See "How to Create a WebLogic Cluster" on page 36.

9. (Optional) Add a cluster member by assigning existing Managed Servers to the cluster.

   See "How to Create Cluster Members" on page 37.

10. If necessary, configure the application's connection to the database.

    a. Configure a connection pool.

       See "Connection Pool Component Type" on page 55.

    b. (Optional) Configure a Multi Pool.

       See "Multi Pool Component Type" on page 56.

    c. Configure a data source or transactional data source.

       See "Data Source and Transaction Data Source Component Types" on page 54.

11. If the application uses Java Messaging Service, configure the JMS server.

    See "JMS Server Component Type" on page 58.

12. Capture application files (EARs, JARs, and WARs).

    See "Capturing and Editing WebLogic Applications" on page 47.

13. Deploy applications to targets hosts, host sets, or clusters.

    An application can target either a cluster or a Managed Server.

    See "Installing an Enterprise Application" on page 51, "Installing a Web Application" on page 52, or "Installing a JAR or EJB File" on page 53.

Creating the WebLogic Infrastructure

Use the WebLogic 8 Common Tasks page as a starting point to create and manage WebLogic servers and clusters.

▼ How to Create a WebLogic 8 Domain and Administration Server

You need to create a domain and Administration Server before you can set up Managed Servers to host your applications. A domain is a set of WebLogic servers that is managed by an Administration Server. All information about the domain is contained in a configuration file that is stored on the Administration Server.

When you create a new domain by installing the `AdminServer` component, you also:

- Configure the domain
- Create the Admin Server virtual host

You can use this procedure to create a new domain or you can use this procedure to register an existing domain within the provisioning system by selecting the `markOnly` option.

Note – In this document, two similar terms are used: AdminServer and Administration Server. The prepackaged Sun N1 Service Provisioning System WebLogic 8 component is called the AdminServer component. AdminServer represents the provisioning system component and Administration Server represents the installed application running in the WebLogic 8 environment.

Before You Begin

To create a WebLogic 8 domain, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **Verify that your WebLogic session variables, `WL_DEFAULT_USER` and `WL_DEFAULT_PASSWORD`, are set.**

   WebLogic session variables must be seven characters long and include a number.

   For more information about session variables, see Chapter 5, "Session Variables," in *Sun N1 Service Provisioning System 5.1 Plan and Component Developer's Guide*.

2. **In the Common Tasks section in the browser interface, click WebLogic 8.**

3. **Click the Domain Management: Create link.**

   The plan's Details page displays.

4. **Click Run.**

   The Run page displays.

5. **In the Plan Parameters area, select the variable settings for the `AdminServer` component that you plan to deploy.**

   - **If the variable settings have been established for this component, select the appropriate settings from the menu.**
   - **If the settings are not available from the menu, click Select From List.**

     The Select Variable Settings From List window displays.

     - **To create a new set of variable settings, select Create Set.**

       The following list provides commonly updated variables for the `AdminServer` component.

`domainName`	Required. The WebLogic domain name.
`adminPort`	Required. The default TCP port for the AdminServer virtual host to use. Before the domain is created, a check is performed to verify that this port is available.
`secureConnect`	Optional. `True` specifies that the SSL port can be used to connect the Administration Server.
`production`	Required. This variable determines whether the managed server is run in production mode. The default value of production is `false`. This variable can be set to `true` or `false`.

Variables that are updated less often include configuration variables such as the following:

`adminManagedServer`	Required. The name of the managed server that hosts the domain administration console. The default value is `myserver`. If performing a `markOnly` install, set the variable to the server name used during the WebLogic install.
`adminHost`	Required. The hostname or IP address that managed servers use to connect to the Admin Server. The default value is the hostname of the Remote Agent on which the Admin Server resides.
`targetRefName`	Required. This variable becomes the name of the domain's virtual host. The substitution variable is based on the values for the host name and for the domain name. This variable follows the format `:[`*target:sys.hostName*`]_weblogic_admin_:[`*domainName*`]`. For example, `sqa-420_weblogic_admin_wls`.

- **To use variable components from another component, click Import Set.**

  For more information about importing variable sets, see "How to Run a Plan" in *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*.

6. **Select the target host.**

   Target the virtual host that was created when you installed the WebLogic software. See "How to Install the WebLogic Software" on page 21 procedure.

Note – The target host must be a member of the `com.sun.weblogic#InstallHS` host set.

7. **Deselect the Target Host Set checkbox.**
8. **If you are capturing an existing WebLogic domain within the provisioning system, select the `markOnly` option.**
9. **Click Run Plan (Includes Preflight).**

▼ How to Create Multiple Domains with Different Passwords

You can create multiple domains using the same user and password. However, if you prefer to have separate passwords for each of your domains, you need to update your WebLogic user and password session variables after each domain installation.

The plan that creates new domains always uses the default session variable names, `WL_DEFAULT_USER` and `WL_DEFAULT_PASSWORD`.

Steps

1. **Install the new domain and AdminServer using the default WebLogic session variables, `WL_DEFAULT_USER` and `WL_DEFAULT_PASSWORD`.**
   See "How to Create a WebLogic 8 Domain and Administration Server" on page 28.
2. **Go to the Session Variables page by clicking Session Variables at the top of the browser interface.**
3. **Create new session variables for the newly installed AdminServer.**
   These new session variables have the same value as the default variables with which you installed the AdminServer.

Attribute Name	Default Session Variable Names	New Session Variable Names
`adminUser`	`WL_DEFAULT_USER`	`WL_TEST_USR`
`adminPassword`	`WL_DEFAULT_PASSWORD`	`WL_TEST_PWD`

4. **Go to the host Details page for the AdminServer you created in step 1 and click Edit.**
5. **Update the AdminServer's host type attributes.**
   For example, replace the `adminUser` value with `:[session:WL_TEST_USR]`.

6. **If you have another domain to install, return to the Session Variables page and update the default WebLogic session variables with the new values to be used for the next domain you plan to install.**

▼ How to Create a WebLogic Managed Server

You can run multiple Managed Servers in each domain to host your applications. WebLogic Managed Servers are captured and represented in the provisioning system by Server components. Throughout this book, Server refers to the provisioning system component, while Managed Server refers to the installed instance of the Managed Server running in the WebLogic 8 environment.

You can use this procedure to create a new Managed Server or you can use this procedure to register an existing Managed Server within the provisioning system by selecting the `markOnly` option.

Note – If you plan to create a cluster, you need to create the Managed Servers that belong to that cluster *before* you create the cluster.

Before You Begin

Before you can create a WebLogic Managed Server, the following criteria must be met.

- A domain to contain the Managed Server must exist.

  For more information, see "How to Create a WebLogic 8 Domain and Administration Server" on page 28.
- The domain's AdminServer must be running.

  To manually start an AdminServer, run the startAdminServer component procedure from the AdminServer component Details page.
- The WebLogic software must be installed on the host on which you plan to install a Managed Server.

  See "How to Install the WebLogic Software" on page 21.
- You must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Application Server Management: Create link.**

   The plan's Details page displays.
3. **Click Run.**

   The Run page displays.

4. **In the Plan Parameters area, select the variable settings for the `ManagedServer` component that you plan to deploy.**

   The `Server` component represents the Managed Server instance within the WebLogic 8 environment.

   - **If the variable settings have been established for this component, select the appropriate settings from the menu.**
   - **If the settings are not available from the menu, click Select From List.**

     The Select Variable Settings From List window displays.

     - **To create a new set of variable settings, select Create Set.**

       The following list provides commonly updated variables for the `ManagedServer` component.

variable set name	Required. A name for the new variable set you create
`adminServerHostName`	Required. Name of the AdminServer virtual host that hosts the new Managed Server. This value will be in the format *remoteAgentName*`_weblogic_admin_`*domainName*. You can find the virtual host on the Hosts page. The virtual host will be of type `com.sun.weblogic8#AdminServerHS`.
`targetName`	Required. The new Managed Server's name. This name is used in the `targetRefName` variable to create the Managed Server virtual host.
`startupScriptName`	Required. The name of the Managed Server's startup script. The default location of the startup script is `/usr/local/bea/user_projects/servers/`*domainName*`/`*targetName*`.` This location can be changed by setting the `altServerRoot` component variable.
`serverPort`	Required if not using SSL. The default value for this variable is 7010. If this port is not available, the Managed Server does not start and an error message displays. After you free the port, you can start the Managed Server by running the Start component procedure on the Managed Server's component Details page.
`serverSslPort`	Required if using SSL. The default value for this variable is 7020. This port must be

	available, otherwise the Managed Server does not start and an error message displays. After you free the port, you can start the Managed Server by running the Start component procedure on the Managed Server's component Details page.
`production`	Required. This variable determines whether the managed server is run in production mode. The default value of production is `false`. This variable can be set to `true` or `false`.

- **To use variable components from another component, click Import Set.**

  For more information about importing variable sets, see "How to Run a Plan" in *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*.

5. **Select the target host or target host set.**

   The Managed Server resides on the Remote Agent that you target.

Note – The target host must be a member of the `com.sun.weblogic#AdminServer` host set.

---

6. **Deselect the Target Host Set checkbox.**
7. **If you are capturing an existing WebLogic Managed Server within the provisioning system, select the `markOnly` option.**
8. **Click Run Plan (Includes Preflight).**

▼ How to Create a License Component

This procedure provides the steps on how to create a license component. After the license component is created, see "How to Install a License Component" on page 35 to install the license.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the License Management: Create link.**

   The component's Edit page displays.

3. **Type the name of the new license component.**

4. **(Optional) Type the components label and description.**
5. **Select a host that has a copy of the BEA license on its file system.**
6. **Navigate through the host's file system and select the license file.**
7. **Click Check In Selected Item.**
   The component's Check In page displays.
8. **Choose a folder on which you have edit permissions.**
9. **Click Continue to Check In.**

▼ How to Install a License Component

Before You Begin

Before you can install a license component, one must exist within the provisioning system. See "How to Create a License Component" on page 34.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the License Management: View All link.**
   The Components page displays.
3. **In the row of the license component that you plan to install, click Details.**
   The component's Details page displays.
4. **In the Component Procedures table, select the Default: Install procedure and click Run.**
   The plan's Run page displays.
5. **Select the target host.**
   You target the AdminServer virtual host.

   Note – You do not need to modify the component variables for license installation.

   ---

6. **(Optional) If you want to replace an existing license, in the Plan Variables section, select the Replace Rather Than Merge With Existing License option.**

   Note – If you choose to replace an existing license, you need to restart the WebLogic domain for the new license to take effect.

   ---

7. **Click Run Plan (Includes Preflight).**

▼ How to Create a WebLogic Cluster

You might need to create a cluster for the following reasons:

- To increase application availability with the server's failover capabilities
- To increase throughput by scaling applications across multiple servers

A cluster appears to clients as a single WebLogic Managed Server instance. The server instances that constitute a cluster can run on the same machine, or can be located on different machines. Each cluster member in a cluster must run the same version of WebLogic.

You can use this procedure to create a new cluster or you can use this procedure to register an existing cluster within the provisioning system by selecting the `markOnly` option.

Before You Begin

Before you create a WebLogic cluster, you must create a WebLogic domain, an Administration Server, and the Managed Servers that you plan to use in the cluster.

To create a WebLogic cluster, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Cluster Management: Create link.**
   The plan's Details page displays.
3. **Click Run.**
   The Run page displays.
4. **In the Plan Parameters area, select the variable settings for the Cluster component that you plan to deploy.**
   - **If the variable settings have been established for this component, select the appropriate settings from the menu.**
   - **If the settings are not available from the menu, click Select From List.**
     The Select Variable Settings From List window displays.
     - **To create a new set of variable settings, select Create Set.**

The following list provides commonly updated variables for the `ManagedServer` component.

variable set name	Required. A name for the new variable set you create
`targetName`	Required. The name of the new cluster.
`clusterAddress`	Optional. This variable can be a DNS host name that maps to multiple IP addresses or a comma-separated list of single address host names or IP addresses. No value is necessary for this variable.
`multicastAddress`	This variable provides the address that cluster members can use to communicate with each other.

- **To use variable components from another component, click Import Set.**

  For more information about importing variable sets, see "How to Run a Plan" in *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*.

5. **Select the target host.**

   Because you can only install a cluster on an Administrative Server, the target host is the AdminServer virtual host.

6. **Deselect the Target Host Set checkbox.**

7. **If you are capturing an existing WebLogic cluster within the provisioning system, select the `markOnly` option.**

8. **Click Run Plan (Includes Preflight).**

▼ How to Create Cluster Members

Cluster nodes are Managed Servers assigned to a cluster. You will want to create cluster members to make your applications highly available and scalable.

When a Managed Server joins the cluster, the applications that are currently targeted to the Managed Server continue to target that server, the application deployment state is preserved. The plan that creates the cluster members automatically stops the Managed Server to add it to the cluster. After the Managed Server is added, the plan restarts the Managed Server.

You can use this procedure to create a new cluster member or you can use this procedure to register an existing cluster member within the provisioning system by selecting the `markOnly` option.

Before You Begin

Before you can create cluster members, the following requirements must be met.

- Managed Servers that you plan to convert to cluster members must exist.

  For more information, see "How to Create a WebLogic Managed Server" on page 32.
- The cluster that you plan to add nodes to must exist.

  For more information, see "How to Create a WebLogic Cluster" on page 36.

To create a cluster member, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Cluster Member Management: Join link.**

   The plan's Details page displays.
3. **Click Run.**

   The plan's Run page displays.
4. **Choose the Managed Server that you want to add to the cluster.**
   - **Select the Target Host by typing the Managed Server's name or selecting it from a list.**

     Note – The Target Host Set option is automatically selected. If you select a single Managed Server, deselect the Target Host Set checkbox.

   - **Select the Target Host Set from the menu.**
5. **Verify that the plan variable WebLogic Cluster Name contains the correct cluster name.**
6. **To specify how long the provisioning system waits before verifying that the server was restarted, type the number of seconds in the Seconds to Wait Before Failing Verify Step field.**
7. **If you are capturing an existing WebLogic cluster member within the provisioning system, select the `markOnly` option.**
8. **Click Run Plan (Includes Preflight).**

Managing WebLogic Domains, Servers, and Clusters

This section describes the tasks that are commonly performed with WebLogic servers and clusters after they have been installed.

Domains and Administrative Servers

- "How to Remove a WebLogic Domain and Administration Server" on page 40

Clusters

- "How to Start or Stop Clusters" on page 41
- "How to Remove a WebLogic Cluster" on page 42
- "How to Remove a WebLogic Cluster Member" on page 43

Managed Servers

- "How to Start a Managed Server" on page 44
- "How to Stop a Managed Server" on page 45
- "How to Remove a Managed Server" on page 45
- "How to Add Additional `CLASSPATH` Elements to a Managed Server" on page 46

Managing WebLogic Domains and Administration Servers

This section contains procedures for managing WebLogic Domains and Administration Servers.

▼ How to Remove a WebLogic Domain and Administration Server

By removing a WebLogic domain through the provisioning system, you automatically perform the following tasks.

- Uninstall the WebLogic AdminServer component and virtual host.

  This task removes the Administration Server. If you select the `markOnly` option, only AdminServer virtual host is removed.
- Uninstall all Managed Servers components and virtual hosts that belonged in the domain.

  This action also removes the Managed Server within the WebLogic environment unless you select the `markOnly` option.
- Uninstall all cluster components and virtual hosts that belonged in the domain.

  This action also removes clusters within the WebLogic environment unless you select the `markOnly` option.
- Remove application components, license configurations, and applications.

Note – The WebLogic virtual hosts cannot contain components that do not belong to the plug-in. To successfully remove the WebLogic domain, all components that do not belong to the plug-in must be removed before running the domain uninstall plan.

Before You Begin

To remove a WebLogic domain, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Domain Management: Remove link.**

   The plan's Details page displays.
3. **Click Run.**

   The plan's Run page displays.
4. **Select the target host.**

   Target the virtual host that was created when you installed the WebLogic software. See "How to Install the WebLogic Software" on page 21 procedure.

Note – The target host must be a member of the `com.sun.weblogic#InstallHS` host set.

5. **Type the name of the WebLogic domain, in the WebLogic Domain Name field.**
6. **If you want to remove the WebLogic domain, Administration Server, clusters, and Managed Server from the provisioning system and plan to keep the domain running in the WebLogic environment, select the `markOnly` option.**
7. **Click Run Plan (Includes Preflight).**

Managing WebLogic Clusters

The following section describes how to start, stop, and remove clusters.

▼ How to Start or Stop Clusters

When you start or stop a cluster, you start or stop all cluster members within the cluster.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Cluster Management: Start or Stop link.**
   The component Details page displays.
3. **In the Component Procedures list, select the row containing the Start or Stop procedure and click Run.**
   The plan's Run page displays.
4. **Select the cluster that you plan to start or stop.**
   The cluster name is a part of the `installPath`.
5. **Click Run Selected Installations.**
   The plan's Run page displays.
6. **Click Run Plan (Includes Preflight).**

▼ How to Remove a WebLogic Cluster

When you remove a cluster, all cluster members associated with that cluster are also removed. .

For more information about the behavior of cluster members returning to the role of Managed Servers, see "How to Remove a WebLogic Cluster Member" on page 43.

Note – When the Managed Servers are removed from the cluster, they are stopped. If you plan to continue using the Managed Server, you must restart it. See "How to Start a Managed Server" on page 44

Before You Begin

To remove a cluster, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Cluster Management: Remove link.**
   The plan's Details page displays.
3. **Click Run.**
   The plan's Run page displays.
4. **In the Target Host field, select the domain that hosts the cluster.**
5. **Deselect the Target Host Set checkbox.**
6. **In the WebLogic Cluster Name field of the Plan Variables section, type the cluster name that would display in the WebLogic interface.**
7. **Select the `markOnly` option if you want to remove the WebLogic Cluster from the provisioning system but plan to keep the cluster running in the WebLogic environment.**
8. **Click Run Plan (Includes Preflight).**

▼ How to Remove a WebLogic Cluster Member

When you remove a cluster member, the cluster member component is removed from the Managed Server and the Managed Server that acted as the cluster member returns to its original state. Applications that were targeted to the cluster, and therefore cluster members, are no longer hosted by the Managed Server after it is restarted. Applications targeted directly to the Managed Server continue to target the Managed Server.

When a Managed Server is removed from a cluster, the Managed Server is left in a stopped state. If you plan to continue using the Managed Server, you must restart it. See "How to Start a Managed Server" on page 44.

Before You Begin

To remove a cluster member, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Clusters Member Management: Leave link.**
   The plan's Details page displays.
3. **Click Run.**
   The plan's Run page displays.
4. **Choose the Managed Server that you plan to remove.**
5. **Deselect the Target Host Set checkbox.**
6. **If you want to remove the WebLogic cluster member from the provisioning system but plan to keep the cluster member running in the WebLogic environment, select the `markOnly` option.**
7. **Click Run Plan (Includes Preflight).**

Managing WebLogic Managed Servers

▼ How to Start a Managed Server

Before You Begin

To start a Managed Server, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Application Server Management: Start link.**

   The component Details page displays.
3. **In the Component Procedures list, select the row containing the Start procedure and click Run.**

   The plan's Run page displays.
4. **Select the Managed Server that you need to start.**

   Managed Servers follow the format *host (install-path)*, where *host* represents the name of the physical host and *install-path* represents the name of the managed server. The managed server name displays as `server_wls_`*managedServerName*, for example, `server_wls_Server-One`
5. **Click Run Selected Installations.**

   The plan's Run page displays.
6. **Set the Plan Variables.**

   a. **(Optional) To override the standard memory arguments passed to Java, type the name in the `VmArgs` field.**

      The format used for the `vmArgs` field is *–virtualMachineName*. For example, `-Xms32m -Xmx200m`.

   b. **To specify how long the provisioning system waits before verifying that the server started, type the number of seconds in the Seconds to Wait Before Failing Verify Step field.**
7. **Click Run Plan (Includes Preflight).**

▼ How to Stop a Managed Server

Before You Begin

To stop a Managed Server, you must belong to a user group that has the Run Component Procedures permission on the folder that contains the component. You must also have the Allow on Host Set permission for the host set on which you plan to deploy the component.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Application Server Management: Stop link.**
   The component Details page displays.
3. **In the Component Procedures list, select row containing the Stop procedure and click Run.**
   The plan's Run page displays.
4. **Select the Managed Server that you need to start.**
   Managed Servers follow the format *host (install path)*, where *host* represents the name of the physical host and *install path* represents the name of the managed server. The managed server name displays as `server_`*domainName*`_`*managedServerName*. For example, `server_wls_Server-One`.
5. **Click Run Selected Installations.**
   The plan's Run page displays.
6. **Click Run Plan (Includes Preflight).**

▼ How to Remove a Managed Server

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Application Server Management: Remove link.**
   The plan's Details page displays.
3. **Click Run.**
   The plan's Run page displays.
4. **Select the Managed Server that you plan to remove.**
5. **Modify the plan variables if necessary.**
   a. **Type the name of the WebLogic Managed Server.**

b. **Type the name of the WebLogic domain that the Managed Server is registered with.**

c. **If you want to remove the WebLogic Managed Server from the provisioning system but want to keep the Managed Server running in the WebLogic environment, select the `markOnly` option.**

6. **Click Run Plan (Includes Preflight).**

▼ How to Add Additional `CLASSPATH` Elements to a Managed Server

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Application Server Management: Start link.**
   The component Details page displays.
3. **In the Component Procedures list, select the row containing the setAdditionalClasspath procedure and click Run.**
   The plan's Run page displays.
4. **Select the Managed Server that you plan to update.**
   Managed Servers follow the format *host (install path)*, where *host* represents the name of the physical host and *install path* represents the name of the managed server. The managed server name displays as `server_`*domainName*`_`*managedServerName*. For example, `server_wls_Server-One`.
5. **Click Run Selected Installations.**
   The plan's Run page displays.
6. **Type the additional `CLASSPATH` elements.**
   The additional `CLASSPATH` elements will be added to the default `CLASSPATH`, which is defined in the WebLogic Managed Server startup script. This startup script was defined when the Managed Server was created. See "How to Create a WebLogic Managed Server" on page 32.
7. **(Optional) If you want the new `classpath` elements to take effect immediately, select Restart Server.**
8. **Click Run Plan (Includes Preflight).**

Capturing and Editing WebLogic Applications

The WebLogic Common Tasks page enables you to capture, configure, and deploy WebLogic Enterprise, EJB technology, and Web Applications.

You can perform several specific tasks, as described in the following sections:

- "How to Capture a WebLogic Enterprise Application or EAR File" on page 47
- "How to Capture a WebLogic Web Application or WAR File" on page 48
- "How to Capture a WebLogic JAR File" on page 48

Note – Do not deploy or manage your WebLogic applications outside of the Sun N1 Service Provisioning System. If you use the provisioning software, you must manage your WebLogic applications exclusively with the provisioning software.

▼ How to Capture a WebLogic Enterprise Application or EAR File

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic.**
2. **Click the Enterprise Applications (EAR): Create link.**
3. **Type a label for this component.**
4. **Type a description for this component.**
5. **Choose how you plan to import the application.**
   For more information, see "Browsing for an Enterprise Application" on page 50.
   - **If you are importing from the AdminServer, select WebLogic Admin Server and choose the WebLogic Admin Server from which you plan to import the EAR file.**
   - **If you are importing from a file system, select File System and choose the host from which you plan to import the EAR file.**
6. **Navigate through the hierarchy to find the enterprise application to capture.**
7. **Click Check-in Selected Item.**

8. **Confirm the information on the check-in page, then click Continue to Check-in.**

▼ How to Capture a WebLogic Web Application or WAR File

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic.**
2. **Click Create in the Web Applications (WAR) section of the WebLogic Common Tasks page.**
3. **Type a label for this component.**
4. **Type a description for this component.**
5. **Choose how you plan to import the application.**
   For more information, see "Browsing for a Web Application" on page 52.
   - **If you are importing from the AdminServer, select WebLogic Admin Server and choose the WebLogic Admin Server from which you plan to import the WAR file.**
   - **If you are importing from a file system, select File System and choose the host from which you plan to import the WAR file.**
6. **Navigate through the hierarchy to find the web application to capture.**
7. **Click Check-in Selected Item.**
8. **Confirm the information on the check-in page, then click Continue to Check-in.**

▼ How to Capture a WebLogic JAR File

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic.**
2. **Click Create in the Java Archives Containing EJBs (JAR) section of the WebLogic Common Tasks page.**
3. **Type a label for this component.**
4. **Type a description for this component.**
5. **Choose how you plan to import the JAR file.**
   For more information, see "Browsing for a JAR or EJB File" on page 53.

- **If you are importing from the AdminServer, select WebLogic Admin Server and choose the WebLogic Admin Server from which you plan to import the JAR file.**
- **If you are importing from a file system, select File System and choose the host from which you plan to import the JAR file.**

6. **Navigate through the hierarchy to find the JAR file to capture.**
7. **Click Check-in Selected Item.**
8. **Confirm the information on the check-in page, then click Continue to Check-in.**

Using Component Types to Deploy WebLogic Applications

The WebLogic 8 Plug-In includes several WebLogic-specific component types. These component types enable you to quickly model many of the most common WebLogic application components and to automatically associate install, uninstall, export, and snapshot behavior with a particular resource. Many of the component types are used by the software when you create and manage servers and clusters. As a result, you will only work with a few component types on a regular basis.

- "Enterprise Application (EAR) Component Type" on page 50
- "Web Application (WAR) Component Type" on page 51
- "Java Archive Files Containing EJBs Component Type" on page 53

However, based on the needs of your application, you might need to configure the WebLogic services before you can deploy the application components. To configure the services, you might need to rely on the component types that are described in the following sections:

- "Data Source and Transaction Data Source Component Types" on page 54
- "Data Source and Transaction Data Source Component Types" on page 54
- "Connection Pool Component Type" on page 55
- "Multi Pool Component Type" on page 56
- "Thread Pool Component Type" on page 57
- "Transaction Service Component Type" on page 57
- "JMS Server Component Type" on page 58
- "Mail Session Component Type" on page 58

These configuration component types are only necessary if your application requires them. For example, if your web application uses a database to retrieve and store information, you will need to configure a connection pool and data source or transactional data source.

To use these configuration component types, select the task that you want to perform and run the associated component procedure. If you need to create and check-in a new component based on an existing component elsewhere on your file system, click Create. After checking in the new component, you can run the appropriate component procedure to configure the WebLogic environment according to your application's needs.

You usually configure and deploy these configuration component types before deploying your application. However, you can configure the WebLogic environment after the application components have been deployed by restarting the application after configuration is complete. Redeploy the application to restart it.

For more information about configuring these configuration objects, see BEA's Administration Console Online Help.

Enterprise Application (EAR) Component Type

A component of this type models an enterprise application. The component can contain either an enterprise application archive (EAR) or the expanded version of an EAR as a package.

Browsing for an Enterprise Application

You can use one of the following browsers to select your enterprise application for this component type:

- A WebLogic Administration Server browser from which you can select one of the installed applications and its relevant settings. The Administration Server browser provides an alphabetical list of enterprise applications on the Administration Server. You can choose one enterprise application for a component.
- A file system browser from which you can select the EAR file to create a component that does not include settings. The file system browser provides a list of files and directories from which you can choose. You can choose to see only those files or type `*.ear` in the browser.

Installing an Enterprise Application

To install an enterprise application component, you must use a WebLogic Managed Server or cluster as the target host. The installation process performs three main tasks:

1. Installs the EAR file on the target.
2. Registers the EAR with the WebLogic Administration Server.
3. Applies any properties previously captured during domain browse.

You can install the enterprise application by navigating to the application's component Details page and running the Install component procedure.

Uninstalling an Enterprise Application

When you uninstall an enterprise application component, the enterprise application no longer targets the virtual host. If the enterprise application is not targeted elsewhere, the registration component is removed from the Administration Server.

You can uninstall the enterprise application by navigating to the application's component Details page and running the Uninstall component procedure.

Error Conditions

TABLE 4–2 WebLogic Enterprise Application Error Conditions

Action	Condition	Result
Install	The topology is incorrectly configured (target host does not point at correct domain host)	Targeting fails
Install	The target host is not a valid WebLogic target	Installation prohibited
Browsing/Install/Uninstall	Credentials are not properly configured	Operation fails
Browsing	Path not correctly configured in domain host	Browsing fails

Web Application (WAR) Component Type

A component of this type includes a web application. The component can contain either a web application and its relevant settings or the web application without its settings.

Browsing for a Web Application

You can use one of the following browsers to select your web application for this component type:

- A WebLogic Administration Server browser from which you can select one of the installed applications and its relevant settings. The Administration Server browser provides an alphabetical list of web applications on the Administration Server. You can choose one web application for a component.
- A file system browser from which you can select the WAR file to create a component that does not include settings. The file system browser provides a list of files and directories from which you can choose. You can choose to see only those files or type `*.war` in the browser.

Installing a Web Application

To install a web application component, you must use a WebLogic Managed Server or cluster as the target host. The installation process will install the component on that target, and install the contained registration component on the Administration Server of the target.

You can install the web application by navigating to the application's component Details page and running the Install component procedure.

Uninstalling a Web Application

When you uninstall a web application component, the web application no longer targets the virtual host. If the web application is not targeted elsewhere, the registration component is removed from the Administration Server.

You can uninstall the web application by navigating to the application's component Details page and running the Uninstall component procedure.

Error Conditions

TABLE 4–3 WebLogic Web Application Error Conditions

Action	Condition	Result
Install	The topology is incorrectly configured (target host doesn't point at correct domain host)	Targeting fails.

TABLE 4–3 WebLogic Web Application Error Conditions *(Continued)*

Action	Condition	Result
Install	The target host is not a valid WL target.	Installation prohibited.
Browsing/Install/Uninstall	Credentials aren't properly configured.	Operation fails.
Browsing	Path not correctly configured in domain host.	Browsing fails.

Java Archive Files Containing EJBs Component Type

Browsing for a JAR or EJB File

You can use one of the following browsers to select your EJB or JAR files for this component type:

- A WebLogic Administration Server browser from which you can select one of the installed applications and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server. You can choose one EJB for a component.
- A file system browser from which you can select the JAR file to create a component that does not include settings. The file system browser provides a list of files and directories from which you can choose. You can choose to see only those files or type `*.jar` in the browser.

Installing a JAR or EJB File

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the JAR or EJB file by navigating to the application's component Details page and running the Install component procedure.

Uninstalling a JAR or EJB File

When you uninstall a component of this type, the file or directory is removed from the master server.

You can uninstall the JAR or EJB file by navigating to the component Details page and running the Uninstall component procedure.

Error Conditions

TABLE 4–4 WebLogic EJB container Error Conditions

Action	Condition	Result
Uninstall	A dependant WebLogic EJB is still installed.	Uninstall fails indicating the dependency.

Data Source and Transaction Data Source Component Types

Browsing for a Data Source or Transaction Data Source

You can use a WebLogic Administration Server browser from which you can select the data source or transaction data source and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server.

The WebLogic plug-in also includes a default data source and transaction data source, which eliminates the need for browsing. You can find the default components in the `/com/sun/webLogic8` folder or by selecting View All from the Common Tasks page. The default components can then be installed through the component Details page using the Default: Install component procedure. The default components are named as follows:

- `WLDataSourceConfig` – the data source component
- `WLTxDataSourceConfig` – the transactional data source component

Installing a Data Source or Transaction Data Source

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the data source or transaction data source by navigating to the component Details page and running the Install component procedure.

You must edit the following variables before installing the data source or transaction data source:

- Data Source or Transaction Data Source name
- Java Naming and Directory Interface™ (JDNI™) name
- Pool name

Uninstalling a Data Source or Transaction Data Source

When you uninstall a component of this type, the file or directory is removed from the master server.

You can uninstall the data source or transaction data source by navigating to the component Details page and running the Uninstall component procedure.

Connection Pool Component Type

Browsing for a Connection Pool

You can use a WebLogic Administration Server browser from which you can select a connection pool and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server.

The WebLogic plug-in also includes a default connection pool component called `WLJDBCConnectionPoolConfig`. This default component eliminates the need for browsing. You can find the default component in the `/com/sun/webLogic8` folder or by selecting View All from the Common Tasks page. The default component can then be installed through the component Details page using the Default: Install component procedure.

Installing a Connection Pool

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the connection pool by navigating to the component Details page and running the Install component procedure.

You must edit the following variables before installing the connection pool:

- Pool name
- URL
- Driver
- Database name
- User
- Password

Uninstalling a Connection Pool

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the connection pool by navigating to the component Details page and running the Uninstall component procedure.

Multi Pool Component Type

Browsing for a Multi Pool

You can use a WebLogic Administration Server browser from which you can select a Multi Pool and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server.

The WebLogic plug-in also includes a default connection pool component called `WLJDBCMultiPoolConfig`. This default component eliminates the need for browsing. You can find the default component in the `/com/sun/webLogic8` folder or by selecting View All from the Common Tasks page. The default component can then be installed through the component Details page using the Default: Install component procedure.

Installing a Multi Pool

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the multi pool by navigating to the component Details page and running the Install component procedure.

You must edit the following variables before installing the multi pool:

- Multi Pool name
- Algorithm type
- Pool List – A pipe-separated (|) list of connection pools.

Uninstalling a Multi Pool

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the Multi Pool by navigating to the component Details page and running the Uninstall component procedure.

Thread Pool Component Type

Configuring the Thread Pool

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the thread pool by navigating to the component Details page and running the Install component procedure.

You can edit the plan parameter variable settings.

Uninstalling a Thread Pool

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the thread pool by navigating to the component Details page and running the Uninstall component procedure.

Transaction Service Component Type

Configuring the Transaction Service

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the transaction service by navigating to the component Details page and running the Install component procedure.

You can edit the plan parameter variable settings.

Uninstalling a Transaction Service

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the transaction service by navigating to the component Details page and running the Uninstall component procedure.

JMS Server Component Type

Browsing for a JMS Server

You can use a WebLogic Administration Server browser from which you can select a JMS Server and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server.

The WebLogic plug-in also includes a default connection pool component called `WLJMSServerConfig`. This default component eliminates the need for browsing. You can find the default component in the `/com/sun/webLogic8` folder or by selecting View All from the Common Tasks page. The default component can then be installed through the component Details page using the Default: Install component procedure.

Installing a JMS Server

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the JMS Server by navigating to the component Details page and running the Install component procedure.

You must edit the JMS Server name variable before installing the JMS Server.

Uninstalling a JMS Server

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the JMS Server by navigating to the component Details page and running the Uninstall component procedure.

Mail Session Component Type

Browsing for a Mail Session

You can use a WebLogic Administration Server browser from which you can select a mail session and its relevant settings. The Administration Server browser provides an alphabetical list of applications on the Administration Server.

Installing a Mail Session

When you install a component of this type, the file or directory is copied to the file system based on the install path. Once that copy finishes, the file or directory is registered with the WebLogic Administration Server.

You can install the mail session by navigating to the component Details page and running the Install component procedure.

You must edit the following variables before installing the mail session:

- Mail Session name
- JNDI name

Uninstalling a Mail Session

When you uninstall a component of this type, the file or directory is removed from the Master Server.

You can uninstall the mail session by navigating to the component Details page and running the Uninstall component procedure.

Using the CLI to Work With WebLogic

When you work with WebLogic through the provisioning system, you can use two command lines: the Sun N1 Service Provisioning System command line and the WebLogic command line.

Using the Sun N1 Service Provisioning System Command-Line Interface

By default, the provisioning system's command-line interface is located in the following directory:
`/opt/SUNWn1sps/N1_Service_Provisioning_system_5.1/cli/bin/cr_cli`.

BEA WebLogic 8 plug-in objects are located in the `/com/sun/weblogic8` folder.

You can interact with plug-in components and plans much like any other custom component or plan. However, if you want to make changes to the components or plans, you need to save the component or plan to a new folder and make your changes there. For more information about using the provisioning system's command-line interface, see Chapter 1, "Using the Command-Line Interface," in *Sun N1 Service Provisioning System 5.1 Command-Line Interface Reference Manual*

Using the WebLogic Command-Line Interface

The WebLogic command line is accessible through the WebLogic 8 Common Task page. For more information about the WebLogic 8 command-line interface, see the WebLogic Server Command Reference on BEA's web site.

▼ How to Use the WebLogic Command-Line Interface Through the Sun N1 Service Provisioning System

You can run WebLogic commands on any Administration Server or Managed Server.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Select whether you plan to run the command on an Administration Server or a Managed Server.**
   - **If you plan to run commands on an Administration Server, click Domain Management: Start.**
   - **If you plan to run commands on a Managed Server, click Application Server Management: Start.**

   The component Details page displays
3. **Select the `Run-cli` component procedure and click Run.**

   The plan's Run page displays.
4. **Select the AdminServer virtual host or Managed Server virtual host on which to run the CLI and click Run Selected Installations.**
5. **Type the needed information in the plan variable fields.**

   Many of the plan variables do not require information and can be left blank. The following list describes the optional variables.

   The SSL arguments for the command
   This variable can be safely ignored if you do not connect to the server using SSL.

   The name of the user who must have appropriate permission to view or modify the target of the command
   This is the user name variable. The user name and password variables are mutually exclusive with the user-configuration file and key file variables. Supply either the user name and password or the user-configuration file and key file locations.

   The password that is associated with the username
   This is the password variable. The user name and password variables are mutually exclusive with the user-configuration file and key file variables. Supply either the user name and password or the user-configuration file and key file locations.

The name and location of a user-configuration file, which contains an encrypted username and password

This is the user-configuration file variable. The user name and password variables are mutually exclusive with the user-configuration file and key file variables. Supply either the user name and password or the user-configuration file and key file locations.

The name and location of the key file

This is the key file variable. The user name and password variables are mutually exclusive with the user-configuration file and key file variables. Supply either the user name and password or the user-configuration file and key file locations.

6. **Click Run Plan (Includes Preflight).**

Example 4–1 Using the Command-Line Interface

This example uses the WebLogic `FORCESHUTDOWN` command to illustrate input for each `Run-cli` plan variable.

Weblogic CLI to run (weblogic.Admin or weblogic.Deployer):	weblogic.Admin
The SSL arguments for the command:	
The listen address of the server instance that runs the command:	sun03 *This is the name of the AdminServer.*
The listen port of the server instance that runs the command:	7001
The name of the user who must have appropriate permission to view or modify the target of the command:	admin
The password that is associated with the username:	xxxxx
The name and location of a user-configuration file, which contains an encrypted username and password:	
the name and location of the key file:	
The name of the command to run:	FORCESHUTDOWN
Arguments of the command:	Server-one

Using the WebLogic Server Scripting Tool Within the Sun N1 Service Provisioning System

You can use the WebLogic Server Scripting Tool (WLST) from the provisioning system's browser interface. For information on how to perform administrative tasks and configuration changes using the WLST, see BEA's WebLogic Server Using the WebLogic Server Scripting Tool (`http://dev.bea.com/codelibrary/code/wlst.jsp`) document.

▼ How to Create a WebLogic Script Component

You must first create the WebLogic script component, then install it.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Command Line Interface: Create link.**
   The component's Edit page displays.
3. **Type the name of the new WebLogic Script component.**
4. **(Optional) Type the components label and description.**
5. **Select a host that has a copy of the WebLogic script file on its file system.**
6. **Navigate through the host's file system and select the file.**
7. **Click Check In Selected Item.**
   The component's Check In page displays.
8. **Select a folder on which you have edit permissions.**
9. **Click Continue to Check In.**

▼ How to Install a WebLogic Script Component

Before You Begin

Before you can install a WebLogic script component, one must exist within the provisioning system. See "How to Create a WebLogic Script Component" on page 62.

Steps

1. **In the Common Tasks section in the browser interface, click WebLogic 8.**
2. **Click the Command Line Interface: View All link.**
   The Components page displays.
3. **In the row of the WLScript component that you plan to install, click Details.**

The component's Details page displays.

4. **In the Component Procedures table, select the Default: Install procedure and click Run.**

   The plan's Run page displays.

5. **Select the target host.**

   You target the AdminServer virtual host.

Note – You do not need to modify the component variables for license installation.

---

6. **(Optional) Type the name of the WebLogic user who installed the software in the RunAs field.**

   This user represented by the `webLogicUser` variable used in the software installation plan.

7. **Click Run Plan (Includes Preflight).**

Using Plans

The WebLogic 8 Plug-In relies on plans to perform many of the tasks associated with installing and removing Administration Servers, Managed Servers, and clusters.

BEA WebLogic 8 plug-in plans are located in the `/com/sun/weblogic8` folder and linked to from the Common Tasks page.

Troubleshooting

If you are experiencing problems managing WebLogic through the provisioning software, messages will likely appear on the screen to tell you that a problem exists.

```
Problems encountered during plan run or preflight
The plan (or preflight) "/com/sun/weblogic8/InstallAdminServerPlan"
finished with 1 failed host(s). (017034)
Unable to find session variable "WL_DEFAULT_PASSWORD" (Unresolved
session variable WL_DEFAULT_PASSWORD. This session variable was
automatically created when the system was unable to find it.).
Add this session variable and try the operation again. (040111)
```

Although the message in this example is easily understood, not all messages are this straightforward.

The following message means that the JMX interface on the Administration Server was not available or the login information is wrong.

```
Admin Server adminHost JMX interface
 running on port portNumber is not available;
Admin Server must be running for this operation.
```

To find out more information about the specific problem, follow the Run History Details links until you reach the final error block. View the output of `stderr` and `stdout` for details on the error condition.

Examples of WebLogic Installation Error Messages

This section includes examples of error messages that you might encounter during the installation of WebLogic.

EXAMPLE 4–2 Invalid User Message

```
The user specified is not a valid system users: weblogic (017056)
```

You must create the system user “weblogic” or change the Install variable `weblogicUser` to an existing user.

EXAMPLE 4–3 Target Host Error Message

```
Specified target(s) "sol01" were not in the required host set
 "com.sun.weblogic8#SupportedHS". (017087)
```

This error message could result for two reasons:

- The host does not support an operating system that is compatible with the plug-in.

  If true, select a host that uses an operating system that is supported by the plug-in.
- The host has not been prepared.

  If true, go to the Hosts page and prepare the host.

EXAMPLE 4–4 Error Message in a Raise Step

```
Error: Installation could not be preformed check the deployment details
 for more information.
```

You must check the deployment details of the final `execNative` control to find information from the WebLogic installer.

EXAMPLE 4–4 Error Message in a Raise Step *(Continued)*

The following messages are examples of what could be contained in the `stdout` output.

- SilentBEAHomeTask – Access to the directory is denied: [/usr/local/bea]

  If this message is displayed, the WebLogic user specified in the installation plan does not have permission to create or write to the `beaHome` directory. You can change the permissions on the directory or create the `beaHome` directory using the provisioning system's directory component.

- SilentBEAHomeTask – At least one item must be selected.

  If this message is displayed, an installation of WebLogic already exists in this path. You must change the path or uninstall the existing WebLogic installation.

Index

A

accessing, older components, 23-24
administration servers, removing, 40-41

C

capturing a JAR files, 48-49
capturing an enterprise application, 47-48
capturing EJBs, 48-49
capturing web applications, 48
cluster members, removing, 43
clusters
  leaving, 43
  removing, 42
  starting, 41
  stopping, 41
command-line interface, WebLogic, 60-62
component type
  Connection Pool, 55-56
  Data Source, 54-55
  EJB, 53-54
  enterprise applications, 50-51
  JAR files, 53-54
  JMS Server, 58
  mail session, 58-59
  Multi Pool, 56
  Transaction Data Source, 54-55
  transaction service, 57
  web applications, 51-53
components, accessing, 23-24
configuring
  transaction service, 57
Connection Pool, component type, 55-56
connection pool
  installing, 55
  uninstalling, 55-56

D

Data Source
  component type, 54-55
  installing, 54
  uninstalling, 55
deleting, *See* removing
deployment server requirements, 14-15
domains, removing, 40-41

E

EAR, *See* enterprise applications
EJB
  capturing, 48-49
  component type, 53-54
enterprise applications
  capturing, 47-48
  component type, 50-51
  installing, 51
  uninstalling, 51

F

finding, *See* accessing

I

importing the plug-in, 20-23
installing
  connection pool, 55
  Data Source, 54
  enterprise applications, 51
  JAR files, 53
  JMS Server, 58
  mail session, 59
  Multi Pool, 56
  web applications, 52
  WebLogic software, 21-23

J

JAR files
  capturing, 48-49
  component type, 53-54
  installing, 53
  uninstalling, 53
Java archive, *See* JAR files
JMS Server
  component type, 58
  installing, 58
  uninstalling, 58

L

leaving, clusters, 43

M

mail session
  component type, 58-59
  installing, 59
  uninstalling, 59
Multi Pool
  component type, 56
  installing, 56
  uninstalling, 56

P

plans, using, 63
plug-in
  deployment server requirements, 14-15
  importing, 20-23
  parts, 13-14
plug-in files
  importing, 20-23
  location of, 19

R

removing
  administration servers, 40-41
  cluster members, 43
  clusters, 42
  domains, 40-41

S

starting, clusters, 41
stopping, clusters, 41

T

Transaction Data Source, component type, 54-55
transaction service
  component type, 57
  configuring, 57
  uninstalling, 57
troubleshooting, description, 63-65

U

uninstalling
  connection pool, 55-56
  Data Source, 55
  enterprise applications, 51
  JAR files, 53
  JMS Server, 58
  mail session, 59
  Multi Pool, 56
  transaction service, 57
  web applications, 52
upgrading, considerations, 23-24

using, plans, 63

W

web applications
  capturing, 48
  component type, 51-53
  installing, 52
  uninstalling, 52
WebLogic command-line interface, 60-62
WebLogic software, installing, 21-23