BEA AquaLogic® Interaction

Installation and Upgrade Guide

Version 6.1 MP2
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CHAPTER 1

Welcome

This book describes how to install and deploy AquaLogic Interaction 6.1. It also provides instructions for upgrading to AquaLogic Interaction 6.1 (and any maintenance packs) from earlier versions.

How to Use This Book

This guide has been designed to be a quick reference for users with installation experience, while also providing detailed instructions for users installing for the first time.

Audience

This guide is written for the user responsible for installing or upgrading AquaLogic Interaction. This user must have strong knowledge of the platform operating system, database, web and application servers, and any other third-party software required for installation.

Organization

This guide includes the following chapters:

- This chapter provides information on how to use this guide and describes other resources available to help install, deploy, upgrade, and administer AquaLogic Interaction.
- Chapter 2, "Installation Prerequisites," provides hardware and software requirements, as well as environmental and third-party software prerequisites. You must read this chapter and meet the prerequisites prior to proceeding to the installation or upgrade.

- Chapter 3, "Quickstart Overview," provides a high level overview of the AquaLogic Interaction installation and upgrade procedures. Sufficient detail is provided to allow an experienced portal administrator to quickly install or upgrade AquaLogic Interaction. Cross-references link the high level tasks to detailed procedures in other chapters.
- Chapter 4, "Installation," provides detailed instructions for installing and configuring AquaLogic Interaction.
- Chapter 5, "Upgrade," provides detailed instructions for upgrading versions of Plumtree Corporate Portal and Plumtree Foundation to the latest version of AquaLogic Interaction.
- Appendix A, "Uninstalling," provides instructions for uninstalling AquaLogic Interaction.
- Appendix B, "Troubleshooting," provides information on troubleshooting the installation and configuration process for AquaLogic Interaction.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention	Typeface	Examples/Notes
• File names • Folder names • Screen elements	**bold**	• Upload **Procedures.doc** to the portal. • The log files are stored in the **logs** folder. • To save your changes, click **Apply Changes**.
• Text you enter	`computer`	Type `Marketing` as the name of your community.
• Variables you enter	`computer with angle brackets (<>)`	Enter the base URL for the Remote Server. For example, `http://<my_computer>/`.
• New terms • Emphasis • Object example names	*italic*	• *Portlets* are Web tools embedded in your portal. • The URI *must* be a unique number. • The example Knowledge Directory displayed in Figure 5 shows the *Human Resources* folder.

BEA Documentation and Resources

The tables in this section list other documentation and resources provided by BEA.

Table 1-2 Documentation

Resource	Description
Installation Worksheet	This worksheet helps you to gather and record prerequisite information necessary for installing AquaLogic Interaction. It is available on edocs.bea.com/alui/ali/docs61.
Administrator Guide	This book describes how to perform management and maintenance of AquaLogic Interaction. It is available on edocs.bea.com/alui/ali/docs61.
Release Notes	These files are written for AquaLogic Interaction administrators. They include information about new features and known issues in the release. They are available on edocs.bea.com/alui/ali/docs61 and on any physical media provided for delivering the application.
Deployment Guide	This document is written for business analysts and system administrators. It describes how to plan your AquaLogic User Interaction deployment. It is available on edocs.bea.com/alui/deployment/index.html.
Online Help	The online help is written for all levels of AquaLogic Interaction users. It describes the user interface for AquaLogic Interaction and gives detailed instructions for completing tasks in AquaLogic Interaction. To access online help, click the help icon.

Table 1-3 Other BEA Resources

Resource	Description
Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code	These resources are provided for developers on the BEA dev2dev site (dev2dev.bea.com). They describe how to build custom applications using AquaLogic User Interaction and how to customize AquaLogic User Interaction products and features.

Table 1-3 Other BEA Resources

Resource	Description
AquaLogic User Interaction Support Center	The AquaLogic User Interaction Support Center is a comprehensive repository for technical information on AquaLogic User Interaction products. From the Support Center, you can access products and documentation, search knowledge base articles, read the latest news and information, participate in a support community, get training, and find tools to meet most of your AquaLogic User Interaction-related needs. The Support Center encompasses the following communities: **Technical Support Center** Submit and track support incidents and feature requests, search the knowledge base, access documentation, and download service packs and hotfixes. **User Group** Visit the User Group section to collaborate with peers and view upcoming meetings. **Product Center** Download products, read Release Notes, access recent product documentation, and view interoperability information. **Developer Center** Download developer tools and documentation, get help with your development project, and interact with other developers via BEA's dev2dev Newsgroups. **Education Services** Find information about available training courses, purchase training credits, and register for upcoming classes. If you do not see the Support Center when you log in to http://support.plumtree.com, contact ALUIsupport@bea.com for the appropriate access privileges.
Technical Support	If you cannot resolve an issue using the above resources, BEA Technical Support is happy to assist. Our staff is available 24 hours a day, 7 days a week to handle all your technical support needs. E-mail: ALUIsupport@bea.com Phone Numbers: U.S.A. +1 866.262.PLUM (7586) or +1 415.263.1696 Europe +44 1494 559127 France +33 1.46.91.86.79 Australia/NZ +61 2.9923.4030 Asia Pacific +61 2.9931.7822 Singapore +1 800.1811.202

CHAPTER 2

Installation Prerequisites

Before you run the AquaLogic Interaction installer, complete the following steps:

1. Download the most up-to-date documentation from edocs.bea.com.
2. Read the release notes for additional information on compatibility issues, known problems, and workarounds that might affect how you proceed with your deployment. Release notes are located at the top-level directory of the product package.
3. Plan your portal deployment. For more information, consult the *Deployment Guide for BEA AquaLogic User Interaction*. For installation in a production environment, determining the number of machines and how to distribute the components of AquaLogic Interaction across the machines can be complicated. We recommend that you consult BEA Business Interaction Division Services or your BEA integration partner.
4. Provision host machines and configure software dependencies for your deployment. For details on software requirements, see "Software Requirements" on page 2-2. For details on hardware requirements, see *Deployment Guide for BEA AquaLogic User Interaction*.
5. Organize the information needed for the installation process by completing the *Installation Worksheet for AquaLogic Interaction*.
6. Create a user and group to own the AquaLogic Interaction software. For details, see "User and Group Requirements" on page 2-5.
7. **(Windows only)** Configure the portal host machine to run using 3 GB of virtual memory. For details, see "Virtual Memory Requirements for .NET Portals" on page 2-7.

Software Requirements

The following tables summarize the operating system and software requirements for AquaLogic Interaction.

Software Requirements on Unix

Note: For the most current platform support information, see the Interoperability Matrix in the Product Center at support.plumtree.com. For details on hardware requirements and scaling, see the *Deployment Guide for BEA AquaLogic User Interaction*.

Caution: IPv6 is not supported. You should verify that IPv6 is not enabled prior to installing AquaLogic Interaction.

Table 2-1 Software Requirements on Unix

Component	Requirement
AquaLogic Interaction Host Machine	• AIX 5.3, on POWER3, POWER4, POWER5 • HP-UX 11i v2, on Itanium • Red Hat Enterprise Linux 4 Update 3, on x86 • Solaris 8, 9, and 10, on SPARC • SUSE Enterprise Linux 9, on x86 Solaris 8 requires these patches: • 108434-21 (32-Bit Shared library patch for C++) • 108435-21 (64-Bit Shared library patch for C++) Solaris 9 requires these patches: • 111711-15 (32-bit Shared library patch for C++) • 111712-15 (64-Bit Shared library patch for C++)
Database Server Host Machine	• Oracle 9i (9.2.0.4 and above) in default or Oracle RAC configuration • Oracle 10g (10.1.0.3 and above) and 10g R2 (10.2.0.1 and above) in default or Oracle RAC configuration **Note:** When deploying AquaLogic Interaction on HP-UX, only Oracle 10g R2 (10.2.0.1 and above) is supported.

Table 2-1 Software Requirements on Unix

Component	Requirement
Web Application Server	**AIX** • IBM WebSphere 6.0.1 with IBM (32-bit) SDK 1.4.2 SR6, IBM WebSphere 6.1 with IBM (32bit) SDK 5.0 SR2
	HP-UX • BEA WebLogic 9.2 with HP-UX JDK 5.0.03 with Java HotSpot™ Server VM (32-bit), BEA WebLogic 9.2 MP1 with HP-UX JDK 5.0.04 (32-bit) with Java HotSpot™ Server VM
	Red Hat Enterprise Linux • Apache Tomcat 5.0.28 with Sun SDK 1.4.2_11 • BEA WebLogic 8.1 SP5 with BEA JRockit 1.4.2_11; BEA WebLogic 9.1, 9.2 with BEA JRockit 5.0 (R26.0.0) JDK (32-bit); BEA WebLogic 9.2 MP1 with BEA JRockit 5.0 (R26.4.0 + CR302700) JDK (32-bit), BEA WebLogic 10 with BEA JRockit 5.0 (R26.4.0 + CR302700) JDK (32-bit) and all later 5.0 releases of JRockit
	Solaris • Apache Tomcat 5.0.28 with Sun SDK 1.4.2_11 • BEA WebLogic 8.1 SP5 with BEA JRockit 1.4.2_11; BEA WebLogic 9.1, 9.2 with Sun Java 2 JDK 5.0 (32-bit) with the Java HotSpot™ Client and Server VMs, version 1.5.0_06; BEA WebLogic 9.2 MP1 with Sun Java 2 JDK 5.0 (32-bit) with the Java HotSpot™ Client and Server VMs, version 1.5.0_06, BEA WebLogic 10 with Sun Java 2 JDK 5.0 (32-bit) with Java HotSpot™ Client and Server VMs, version 1.5.0_06 • IBM WebSphere 6.1 with IBM (32bit) SDK 5.0 SR2
	SUSE Enterprise Linux • Apache Tomcat 5.0.28 with Sun SDK 1.4.2_11 • BEA WebLogic 8.1 SP5 with BEA JRockit 1.4.2_11; BEA WebLogic 9.1, 9.2 with BEA JRockit 5.0 (R26.0.0-189_CR269406) JDK (32-bit); BEA WebLogic 9.2 MP1 with BEA JRockit 5.0 (R26.4.0 + CR302700) JDK (32-bit), BEA WebLogic 10 with BEA JRockit 5.0 (R26.4.0 + CR302700) JDK (32-bit) and all later 5.0 releases of JRockit

Software Requirements on Windows

Table 2-2 Software Requirements on Windows

Component	Requirement
AquaLogic Interaction Host Machine	• Microsoft Windows Server 2003 SP1 or R2, SP2, on x86 **Note:** If you are running AquaLogic Interaction on .NET, you must configure the portal host machine to run using 3 GB of virtual memory. For details, see "Virtual Memory Requirements for .NET Portals" on page 2-7.
Database Server Host Machine	• Microsoft SQL Server 2000 SP3a or SP4, Microsoft SQL Server 2005 (with SQL Server 2000 compatibility level), Microsoft SQL Server 2005 SP2 (with SQL Server 2000 compatibility level) • Oracle 9i (9.2.0.4 and above) in default or Oracle RAC configuration • Oracle 10g (10.1.0.3 and above) and 10g R2 (10.2.0.1 and above) in default or Oracle RAC configuration
Web Application Server	• Apache Tomcat 5.0.28 with Sun SDK 1.4.2_11 • BEA WebLogic 8.1 SP5 with BEA JRockit 1.4.2_11; BEA WebLogic 9.1, 9.2 with Sun Java 2 JDK 5.0 (32-bit) with Java HotSpot™ Client VM, version 1.5.0_06; BEA WebLogic 9.2 MP1 with Sun Java 2 JDK 5.0 (32-bit) with Java HotSpot™ Client VM, version 1.5.0_06, BEA WebLogic 10 with Sun Java 2 JDK 5.0 (32-bit) with Java HotSpot™ Client and Server VMs, version 1.5.0_06 • Microsoft IIS 6.0 with .NET Framework 1.1 SP1

Browser Requirements

The following lists describe the browser requirements for AquaLogic Interaction.

- **Administrative Users**: Internet Explorer 6.0, 7.0; Firefox 2.0
- **Browsing Users**: Internet Explorer 6.0, 7.0; Netscape 7.2, 8.0; Firefox 1.5, 2.0; Safari 2.0 (Mac only)

User and Group Requirements

Unix User and Group Requirements

We recommend that you create a user and group that will own the portal installation. The following table lists recommended values for a user, a group, and AquaLogic User Interaction directories.

Pre-install Setting	Standard Value	Notes
ALI Group Name	ali	Local group with a fixed ID
ALI User	ali	Local group with a fixed ID
PT_HOME	/opt/bea/alui	Owned by ALI user and group

The same values for these users, groups, and directories should be used across all machines hosting portal components. Local users and groups with fixed IDs are recommended. Secure deployments should avoid NIS users for machine security. Using the same local user and group for all AquaLogic User Interaction services allows an administrator to lock down host machines and audit activity.

For convenience, **preinstall.sh**, a script to create users, groups and directories, is provided in the Product Center.

The Pre-Install Script: preinstall.sh

The **preinstall.sh** script creates a user, a group and directories with permissions appropriate for BEA AquaLogic User Interaction. The script is interactive, asking you a series of questions about the values to be configured.

For a one-machine install using the standard values, the **preinstall.sh** script can be used as-is. The following values can be specified dynamically as the script runs:

Property	Default Value
INSTALL_DIRECTORY	/opt/bea/alui
USER_SHELL	/bin/sh
PLUMTREE_GROUP_NAME	ali

Property	Default Value
PLUMTREE_GROUP_ID	5000
PLUMTREE_USER_NAME	ali
PLUMTREE_USER_ID	5000

If the user or group you designate to the script to use already exists, the script does not attempt to create them.

To run the script, complete the following steps:

1. Review the **preinstall.sh** script.
2. Log in as root to become **`superuser.`**
3. Make a temporary directory for the files and allow all users to access these files by typing:

   ```
   # mkdir /tmp/plumtree
   ```

   ```
   # chmod 777 /tmp/plumtree
   ```

4. Copy the preinstall file by typing:

   ```
   # cd /tmp/plumtree
   # cp /<install_root>/scripts/preinstall.sh .
   ```

5. Run the **preinstall.sh** script by typing:

   ```
   # ./preinstall.sh
   ```

   Be sure to carefully review any output from the script.

6. Change the password of the newly created user by typing:

   ```
   # passwd ali
   ```

7. Enter the login password.
8. Log out as **`superuser`**.

Windows User Requirements

To install portal components, you must log in to the host machines as the local administrator.

Virtual Memory Requirements for .NET Portals

If you are running your portal on .NET, you must configure the AquaLogic Interaction host machine to run using 3 GB of virtual memory. To do so:

1. Open the **boot.ini** file, which is located in the **C** directory.

   The boot.ini file is hidden and read-only; for this reason, you must configure Windows to make hidden files visible. You must also enable write privileges on the boot.ini file.

2. In the boot.ini file, add a **/3GB** flag to the end of the [multi] line, which specifies the partition to boot. For example:

   ```
   multi(0)disk(0)rdisk(0)partition(2)\WINDOWS="Windows Server 2003,
   Standard" /3GB /fastdetect /NoExecute=OptOut
   ```

3. Reboot the portal host machine.

Note: You must add the /3GB flag to the boot.ini file correctly; editing this file incorrectly might negatively affect the stability of your portal machine. For this reason, we strongly advise that you refer to appropriate documentation at msdn.microsoft.com when performing this procedure. If you experience technical difficulties, contact Microsoft support.

CHAPTER 3

Quickstart Overview

This chapter provides brief, high-level instructions for the installation and upgrade of AquaLogic Interaction, and is intended to quickly guide experienced administrators through the installation or upgrade procedure.

This chapter is divided into two major sections:

- "Installation" on page 3-2. This section covers installing the AquaLogic Interaction components, scripting the database, and starting and verifying the installation. The organization of this section maps directly to detailed instructions in Chapter 4, "Installation."
- "Upgrade" on page 3-15. This section covers upgrading versions of Plumtree Corporate Portal and Plumtree Foundation to the latest version of AquaLogic Interaction. The organization of this section maps directly to detailed instructions in Chapter 5, "Upgrade."

Installation

Installing the AquaLogic Interaction Components

1. Launch the AquaLogic Interaction installer.

   On a **Unix** host, run the installer as the user created in "Unix User and Group Requirements" on page 2-5.

   On a **Windows** host, run the installer as the local administrator.

   The installer prompts you for specific information about your system and configuration. For more information, see "Installing the AquaLogic Interaction Components" on page 4-2.

2. Deploy the Image Service.

   Note: This step is unnecessary if you installed AquaLogic Interaction for .NET, or if you instructed the installer to autodeploy the Image Service to Apache.

   In your HTTP server configuration, alias the Image Service directory to the URL specified for the Image Service when the AquaLogic Interaction installer was run. Image Service files are located in **<PT_HOME>/ptimages/imageserver**.

   By default, PT_HOME is:

   – **Unix**: **/opt/bea/alui**

   – **Windows**: **C:\bea\alui**

   For more information, see "Deploying the Image Service" on page 4-13.

Scripting the Database

Refer to the section that applies to your database vendor and version:

- "Scripting a Microsoft SQL Server 2000 Database" on page 3-3
- "Scripting a Microsoft SQL Server 2005 Database" on page 3-4
- "Scripting an Oracle 9i Database on Unix" on page 3-5
- "Scripting an Oracle 9i Database on Windows" on page 3-7
- "Scripting an Oracle 10g Database on Unix" on page 3-9
- "Scripting an Oracle 10g Database on Windows" on page 3-11

Scripting a Microsoft SQL Server 2000 Database

1. Create and configure the portal database and portal database user:

   a. Create the portal database with the portal database name you provided the AquaLogic Interaction installer.

   b. Create the portal database user with the user name and password you provided the AquaLogic Interaction installer.

   c. Configure the portal database user to use SQL Server Authentication.

   d. Set the portal database user's default database to the portal database.

   e. Grant the portal database user the **public** and **db_owner** roles for the portal database.

   f. Grant the portal database user all permissions on the portal database.

   For more information on these steps, see "Creating and Configuring the Portal Database on Microsoft SQL Server 2000" on page 4-15.

2. Script the portal database:

   We recommend that you run the following scripts as the **sa** user, so that all objects created are owned by **dbo**. Scripts are found in **%PT_HOME%\6.1\sql\mssql**.

   Run the scripts in this order:

   a. create_tables_mssql.sql

   b. load_seed_info_mssql.sql

   c. stored_procs_mssql.sql

   d. postinst_mssql.sql

   For more information, see "Scripting the Portal Database" on page 4-17.

Scripting a Microsoft SQL Server 2005 Database

1. Create and configure the portal database and portal database user:

   a. Configure the SQL Server instance to use **SQL Server and Windows Authentication mode**.

   b. Create the portal database with the portal database name you provided the AquaLogic Interaction installer.

   c. Configure the portal database to use **SQL Server 2000 (80) compatibility level**.

   d. Create the portal database user with the user name and password you provided the AquaLogic Interaction installer.

   e. Configure the portal database user to use SQL Server Authentication.

   f. Set the portal database user's default database to the portal database.

   g. Grant the portal database user the **sysadmin** server role.

   For more information on these steps, see "Creating and Configuring the Portal Database on Microsoft SQL Server 2005" on page 4-16.

2. Script the portal database:

   We recommend that you run the following scripts as the **sa** user, so that all objects created are owned by **dbo**. Scripts are found in **%PT_HOME%\6.1\sql\mssql**.

   Run the scripts in this order:

   a. create_tables_mssql.sql

   b. load_seed_info_mssql.sql

   c. stored_procs_mssql.sql

   d. postinst_mssql.sql

   For more information, see "Scripting the Portal Database" on page 4-17.

Scripting an Oracle 9i Database on Unix

1. Set Oracle environment variables.

   Verify that the ORACLE_BASE, ORACLE_HOME, and ORACLE_SID environment variables are set correctly.

   Note: For Oracle 9i, the portal database scripts expect ORACLE_SID to be set to **PLUM**. If you use a different SID, you will need to edit the scripts.

   For more information, see Setting Oracle Environment Variables in "Scripting an Oracle 9i Database on Unix" on page 4-18.

2. Copy SQL scripts.

   Copy SQL scripts from **$PT_HOME/ptportal/6.1/sql/oracle_unix9.2** on the portal host to **$ORACLE_HOME/admin/PLUM/scripts** on the Oracle host.

   For more information, see Copying SQL Scripts in "Scripting an Oracle 9i Database on Unix" on page 4-18.

3. Create the portal database.

   Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to step 4.

   a. Create the **sys** password:

      ```
      $ $ORACLE_HOME/bin/orapwd file=$ORACLE_HOME/database/orapwPLUM
      password=password
      ```

   b. Create a directory **PLUM** under **$ORACLE_BASE/oradata**.

   c. Create a link to **initPLUM.ora** in **$ORACLE_HOME/database**.

   d. Start SQL*Plus using the /nolog flag and run **crdb1_oracle_unix.sql**. This script should generate no errors.

   e. Run **crdb2_oracle_unix.sql**. This script may take a significant amount of time to complete, and may generate the following errors:

      ```
      ORA-00942 table or view does not exist
      ORA-1432/ORA-1434 public synonym to be dropped does not exist
      ```

      Any other errors are not acceptable.

   f. Go to step 5.

For more information, see Creating the Portal Database in "Scripting an Oracle 9i Database on Unix" on page 4-18.

4. Create the portal tablespace and database user.

   Note: These steps assume you are installing the portal database in an existing, running database instance. If you created the portal database in step 3, skip this step. The tablespace and database user have already been created.

   a. Use SQL*Plus to connect to your database as a user with sysdba rights.

   b. Run **create_ali_tablespace_unix.sql**. This script should generate no errors.

   c. Run **create_ali_user_oracle.sql**. This script should generate no errors.

   For more information, see Creating the Portal Tablespace and Database User in "Scripting an Oracle 9i Database on Unix" on page 4-18.

5. Script the portal database.

   a. Use SQL*Plus to connect to your database using the portal database user you created in step 3 or step 4.

   b. Run **init_ali_db_oracle.sql**. This script should generate no errors.

   For more information, see Scripting the Portal Database in "Scripting an Oracle 9i Database on Unix" on page 4-18.

Scripting an Oracle 9i Database on Windows

1. Set Oracle environment variables.

   Verify that the ORACLE_BASE, ORACLE_HOME, and ORACLE_SID environment variables are set correctly.

   Note: For Oracle 9i, the portal database scripts expect ORACLE_SID to be set to **PLUM**. If you use a different SID, you will need to edit the scripts.

   For more information, see Setting Oracle Environment Variables in "Scripting an Oracle 9i Database on Windows" on page 4-22.

2. Copy SQL scripts.

   Copy SQL scripts from **%PT_HOME%\ptportal\6.1\sql\oracle_nt9.2** on the portal host to **%ORACLE_BASE%\admin\PLUM\plumtreescripts** on the Oracle host.

   For more information, see Copying SQL Scripts in "Scripting an Oracle 9i Database on Windows" on page 4-22.

3. Create the portal database.

   Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to step 4.

   a. Update the registry with the **RegisterSIDPLUM.reg** script.

   b. Create a directory **PLUM** under **%ORACLE_BASE%\oradata**.

   c. Copy **initPLUM.ora** to **%ORACLE_HOME%\database**.

   d. Run **CreateService.bat** with the arguments **PLUM** and `<password>`

      ```
      > CreateService.bat PLUM <password>
      ```

   e. Start SQL*Plus using the /nolog flag and run **crdb1_oracle_nt.sql**. This script should generate no errors.

   f. Run **crdb2_oracle_nt.sql**. This script may take a significant amount of time to complete, and may generate the following errors:

      ```
      ORA-00942 table or view does not exist
      ORA-1432/ORA-1434 public synonym to be dropped does not exist
      ```

      Any other errors are not acceptable.

g. Go to step 5.

For more information, see Creating the Portal Database in "Scripting an Oracle 9i Database on Windows" on page 4-22.

4. Create the portal tablespace and database user.

   Note: These steps assume you are installing the portal database in an existing, running database instance. If you created the portal database in step 3, skip this step. The tablespace and database user have already been created.

   a. Use SQL*Plus to connect to your database as a user with sysdba rights.

   b. Run **create_ali_tablespace_nt.sql**. This script should generate no errors.

   c. Run **create_ali_user_oracle.sql**. This script should generate no errors.

   For more information, see Creating the Portal Tablespace and Database User in "Scripting an Oracle 9i Database on Windows" on page 4-22.

5. Script the portal database.

   a. Use SQL*Plus to connect to your database using the portal database user you created in step 3 or step 4.

   b. Run **init_ali_db_oracle.sql**. This script should generate no errors.

   For more information, see Scripting the Portal Database in "Scripting an Oracle 9i Database on Windows" on page 4-22.

6. Start the Oracle Listener for the portal database.

   For more information, see Starting the Oracle Listener for the Portal Database in "Scripting an Oracle 9i Database on Windows" on page 4-22.

Scripting an Oracle 10g Database on Unix

Caution: For installations of AquaLogic Interaction on HP-UX, it is necessary to adjust Oracle's recommended kernel settings. The value of shmseg must be set higher than 300 to prevent Oracle memory allocation issues when search repair is run or multiple jobs are executed concurrently.

1. Set Oracle environment variables.

   Verify that the ORACLE_BASE, ORACLE_HOME, and ORACLE_SID environment variables are set correctly.

   Note: For Oracle 10g, the portal database scripts expect ORACLE_SID to be set to **PLUM10**. If you use a different SID, you will need to edit the scripts.

   For more information, see Setting Oracle Environment Variables in "Scripting an Oracle 10g Database on Unix" on page 4-26.

2. Copy SQL scripts.

   Copy SQL scripts from **$PT_HOME/ptportal/6.1/sql/oracle_unix10** on the portal host to **$ORACLE_BASE/admin/PLUM10/plumtreescripts** on the Oracle host.

   For more information, see Copying SQL Scripts in "Scripting an Oracle 10g Database on Unix" on page 4-26.

3. Create the portal database.

   Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to step 4.

   a. Create the **sys** password:

      ```
      $ $ORACLE_HOME/bin/orapwd file=$ORACLE_HOME/database/orapwPLUM10
      password=password
      ```

   b. Create a directory **PLUM10** under **$ORACLE_BASE/oradata**.

   c. Create a link to **initPLUM10.ora** in **$ORACLE_HOME/database**.

   d. Start SQL*Plus using the /nolog flag and run **crdb1_oracle_unix.sql**. This script should generate no errors.

e. Run **crdb2_oracle_unix.sql**. This script may take a significant amount of time to complete, and may generate the following errors:

```
ORA-00942 table or view does not exist
ORA-1432/ORA-1434 public synonym to be dropped does not exist
```

Any other errors are not acceptable.

f. Go to step 5.

For more information, see Creating the Portal Database in "Scripting an Oracle 10g Database on Unix" on page 4-26.

4. Create the portal tablespace and database user.

Note: These steps assume you are installing the portal database in an existing, running database instance. If you created the portal database in step 3, skip this step. The tablespace and database user have already been created.

a. Use SQL*Plus to connect to your database as a user with sysdba rights.

b. Run **create_ali_tablespace_unix.sql**. This script should generate no errors.

c. Run **create_ali_user_oracle.sql**. This script should generate no errors.

For more information, see Creating the Portal Tablespace and Database User in "Scripting an Oracle 10g Database on Unix" on page 4-26.

5. Script the portal database.

a. Use SQL*Plus to connect to your database using the portal database user you created in step 3 or step 4.

b. Run **init_ali_db_oracle.sql**. This script should generate no errors.

For more information, see Scripting the Portal Database in "Scripting an Oracle 10g Database on Unix" on page 4-26.

Scripting an Oracle 10g Database on Windows

1. Set Oracle environment variables.

   Verify that the ORACLE_BASE, ORACLE_HOME, and ORACLE_SID environment variables are set correctly.

   Note: For Oracle 10g, the portal database scripts expect ORACLE_SID to be set to **PLUM10**. If you use a different SID, you will need to edit the scripts.

   For more information, see Setting Oracle Environment Variables in "Scripting an Oracle 10g Database on Windows" on page 4-30.

2. Copy SQL scripts.

   Copy SQL scripts from **%PT_HOME%\ptportal\6.1\sql\oracle_nt10** on the portal host to **%ORACLE_BASE%\admin\PLUM10\plumtreescripts** on the Oracle host.

   For more information, see Copying SQL Scripts in "Scripting an Oracle 10g Database on Windows" on page 4-30.

3. Create the portal database.

   These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to step 4.

   a. Update the registry with the **RegisterSIDPLUM10.reg** script.

   b. Create a directory **PLUM10** under **%ORACLE_BASE%\oradata**.

   c. Copy **initPLUM10.ora** to **%ORACLE_HOME%\database**.

   d. Run **CreateService.bat** with the argument **PLUM10** `<password>`:

      ```
      > CreateService.bat PLUM10 <password>
      ```

   e. Start SQL*Plus using the /nolog flag and run **crdb1_oracle_nt.sql**. This script should generate no errors.

   f. Run **crdb2_oracle_nt.sql**. This script may take a significant amount of time to complete, and may generate the following errors:

      ```
      ORA-00942 table or view does not exist
      ORA-1432/ORA-1434 public synonym to be dropped does not exist
      ```

      Any other errors are not acceptable.

g. Go to step 5.

For more information, see Creating the Portal Database in "Scripting an Oracle 10g Database on Windows" on page 4-30.

4. Create the portal tablespace and database user.

Note: These steps assume you are installing the portal database in an existing, running database instance. If you created the portal database in step 3, skip this step. The tablespace and database user have already been created.

a. Use SQL*Plus to connect to your database as a user with sysdba rights.

b. Run **create_ali_tablespace_nt.sql**. This script should generate no errors.

c. Run **create_ali_user_oracle.sql**. This script should generate no errors.

For more information, see Creating the Portal Tablespace and Database User in "Scripting an Oracle 10g Database on Windows" on page 4-30.

5. Script the portal database.

a. Use SQL*Plus to connect to your database using the portal database user you created in step 3 or step 4.

b. Run **init_ali_db_oracle.sql**. This script should generate no errors.

For more information, see Scripting the Portal Database in "Scripting an Oracle 10g Database on Windows" on page 4-30.

6. Start the Oracle Listener for the portal database.

For more information, see Starting the Oracle Listener for the Portal Database in "Scripting an Oracle 10g Database on Windows" on page 4-30.

Starting and Verifying the Installation

1. Start the Automation Service, Document Repository Service, and Search.

   Note: It is important that third-party virus scanners do not attempt to scan the search service archives. For more information, see the note in "Starting AquaLogic Interaction Services and Search" on page 4-34.

2. Run the diagnostics script and resolve any issues it finds.

   On **Unix**, the script is **<PT_HOME>/ptportal/bin/diagnostic.sh**.

   On **Windows**, the script is **<PT_HOME>\ptportal\bin\diagnostic.bat**. The script can also be launched by clicking **Start | All Programs | BEA | Portal Diagnostic**.

   For more information, see "Running the Diagnostics Script" on page 4-35.

3. Start the portal.

   Start the portal by browsing to the server.pt application at the External Portal URL you provided the AquaLogic Interaction installer. For example:

   ```
   http://myportal.domain.com/portal/server.pt
   ```

4. Log in to the portal as Administrator with no password.

   Caution: You should change the default Administrator password as soon as possible. Make sure that you document the change and/or inform the appropriate portal administrators.

Importing the Search Cluster Manager Migration Package

Import the **SearchClusterAdminUI.pte** file, which is located in the following location on the Search host machine:

Windows: <PT_HOME>\ptsearchserver\6.1\serverpackages\

Unix: <PT_HOME>/ptsearchserver/6.1/serverpackages/

For details, see "Importing the Search Cluster Manager Migration Package" on page 4-36.

Note: You may need to log out and back in to the portal in order to see the Search Cluster Manager appear in portal administration's Admin Utilities drop-down menu.

Importing the Content Upload Migration Package

Note: You only need to import the Content Upload migration package if you performed a clean (non-upgrade) install of AquaLogic Interaction and installed the Content Upload Service.

Import the **contentupload.pte** file, which is located in the following location on the Content Upload Service host machine:

Windows: <PT_HOME>\ptupload\6.1\serverpackages\

Unix: <PT_HOME>/alui/ptupload/6.1/serverpackages/

For details, see "Importing the Content Upload Migration Package" on page 4-36.

Preparing the Portal for General Use

When you first deploy your portal, there are a number of tasks you must complete to prepare the portal for general use. These tasks are described in the *Administrator Guide for AquaLogic Interaction* because they are tasks you will likely perform more than once to maintain your portal. Refer to the *Administrator Guide for AquaLogic Interaction* for the following set-up tasks:

1. Configure display, navigation, and branding for the default experience definition and any additional experience definitions.
2. Change the default Administrator password and delegate administrator roles.
3. Populate the portal with administrative users and browsing users. Configure groups, users, user profiles, and Access Control Lists (ACLs) to enable managed access.
4. Populate the portal with documents. Configure ACLs to manage access.
5. Set up automated system maintenance, such as user synchronization, search updates, document refresh, and housekeeping jobs.

Upgrade

This section provides brief, high level instructions for the process of upgrading versions of Plumtree Corporate Portal and Plumtree Foundation to the latest version of the portal (AquaLogic Interaction).

Upgrade Paths

This section provides the paths that are available to upgrade your portal to AquaLogic Interaction 6.1.

Notes:

- Unless otherwise noted, when upgrading to an AquaLogic Interaction 6.1 maintenance pack, follow the procedure for upgrading from your current version to AquaLogic Interaction 6.1.
- All upgrade paths are between two systems of the same operating system brand, but not necessarily the same operating system version. Check current hardware and software requirements and make any required upgrades to operating system or database software prior to proceeding with the portal upgrade.

Upgrade Path	Upgrade References
AquaLogic Interaction 6.1 to AquaLogic Interaction 6.1 MP2	Follow the procedures in "Upgrading from AquaLogic Interaction 6.1 to an AquaLogic Interaction 6.1 Maintenance Pack" on page 3-16
Foundation 6.0 to AquaLogic Interaction 6.1	Follow the procedures in "Upgrading from Foundation 6.0 to AquaLogic Interaction 6.1" on page 3-16.
Corporate Portal 5.0.4J to AquaLogic Interaction 6.1 (Unix only)	Follow the procedures in "Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1" on page 3-17.
Corporate Portal 5.0.2, 5.0.3, 5.0.4 to AquaLogic Interaction 6.1 (Windows)	Follow the procedures in "Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1" on page 3-17.

Upgrading from AquaLogic Interaction 6.1 to an AquaLogic Interaction 6.1 Maintenance Pack

To upgrade from AquaLogic Interaction 6.1 to an AquaLogic Interaction 6.1 Maintenance Pack:

1. **Important**: Stop the Search service on all Search nodes before starting the upgrade. Do not restart any upgraded Search services until all nodes have been upgraded.
2. Install the AquaLogic Interaction 6.1 MP2 Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
3. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 3-20

Upgrading from Foundation 6.0 to AquaLogic Interaction 6.1

To upgrade from Foundation 6.0 to AquaLogic Interaction 6.1:

1. Install the AquaLogic Interaction 6.1 Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
2. Run the 6.0 to 6.1.sql database script. For details, see "Running the 6.0 to 6.1 Database Upgrade Script" on page 3-17.
3. Start the AquaLogic Interaction 6.1 Administrative Portal and verify the installation. For details, see "Starting and Verifying the Installation" on page 3-13.
4. Import the Search Cluster Manager migration package. For details, see "Importing the Search Cluster Manager Migration Package" on page 3-13.
5. Rebuild the Search Index. For details, see "Rebuilding the Search Index" on page 3-20.
6. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 3-20.

Running the 6.0 to 6.1 Database Upgrade Script

To run the 6.0 to 6.1 database upgrade script:

1. Back up the portal database.
2. Locate the **upgrade6.0to6.1_<your_database_type>.sql** script in the installation folder of the version 6.1 Administrative Portal server.
3. Run the database upgrade script.

Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1

To upgrade from Corporate Portal 5.0.x to AquaLogic Interaction 6.1:

1. Install the AquaLogic Interaction 6.1 Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
2. Upgrade the portal database from Corporate Portal 5.0.x to Foundation 6.0 specifications. For details, see "Upgrading the Database from Corporate Portal 5.0.x to Foundation 6.0 Specifications" on page 3-18.
3. Run the 6.0 to 6.1 SQL database script. For details, see "Running the 6.0 to 6.1 Database Upgrade Script" on page 3-17.
4. Start the AquaLogic Interaction 6.1 Administrative Portal and verify the installation. For details, see "Starting and Verifying the Installation" on page 3-13.
5. **(Optional)** Resolve missing mandatory portlets. Perform this step only if you upgraded your portal from 5.0.x to 6.1 and mandatory portlets are not appearing properly in your 6.1 portal. For details, see"Resolving Missing Mandatory Portlets" on page 3-20.
6. Import the Search Cluster Manager migration package. For details, see "Importing the Search Cluster Manager Migration Package" on page 3-13.
7. Rebuild the Search Index. For details, see "Rebuilding the Search Index" on page 3-20.
8. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 3-20.

Upgrading the Database from Corporate Portal 5.0.x to Foundation 6.0 Specifications

This section describes the procedure for upgrading the portal database to AquaLogic Interaction 6.x specifications. For a detailed explanation of the database upgrade procedure, see "Upgrading the Database from Corporate Portal 5.0.x to Foundation 6.0 Specifications" on page 5-4.

To upgrade the database from Corporate Portal 5.0.x to Foundation 6.0 specifications:

1. Upgrade database software.

   If necessary, have your DBA upgrade database software to the currently supported version. For current database version requirements, see "Software Requirements" on page 2-2.

   Note: When upgrading to Oracle 9i or 10g, verify that the new database character set is UTF8 and the new database national character set is AL16UTF16.

2. Run the duplicate names database script.

   On Oracle databases, the following scripts may need to be run to fix duplicate portal document names:

   - find_dup_doc_names_oracle.sql
   - fix_dup_doc_names_oracle.sql

   These scripts are located in **<PT_HOME>/ptportal/6.1/sql** in the directory appropriate to your version of Oracle.

3. Run the database upgrade tool.

   On a **Unix** portal, the database upgrade tool is located at **<PT_HOME>/ptportal/6.1/bin/dbupgradetool.sh**. The tool is a command line utility and needs to be run twice. The first time it is run it collects parameters for the upgrade. The second time it is run it performs the upgrade.

   On a **Windows** portal, the database upgrade tool is located at **<PT_HOME>\ptportal\6.1\bin\dbupgradetool.bat**. If you have a .NET portal, a GUI upgrade utility will be launched. If you have a Java portal, a command line utility will be launched. The command line utility needs to be run twice. The first time it is run it collects parameters for the upgrade. The second time it is run it performs the upgrade.

   For details on using the database upgrade tool, see "Running the Database Upgrade Tool" on page 5-5.

4. Export data from the database.

   Export the data from the portal schemas using tools provided by your database vendor.

5. Create the new database schema.

   On **Oracle** databases:

   a. Drop and recreate the portal schema owner.

   b. Grant connect, resource, and dba rights on the portal tablespaces to the newly created portal schema owner.

   c. Run the **create_tables_oracle.sql** script. The script is located in **<PT_HOME>/ptportal/6.1/sql**, under the directory appropriate to your operating system and version of Oracle.

   On **SQLServer** databases:

   a. Create a new database. This database can be your new portal database, or it can serve as a temporary store for portal data.

   b. Script the new database with the portal schema. To do this, run **<PT_HOME>/ptportal/6.1/sql/mssql/create_tables_mssql.sql**

6. Import data to the database.

   Using tools provided by your database vendor, import the data you exported in step 4 into the newly scripted database.

   Note: On **SQLServer** databases, the portal data will now be in a new database. You must now either modify connection information for all servers that use the portal database, or move the portal database back to the original database by dropping the original, recreating the original using the table script in step 5, and then exporting the data from the temporary database to the original database.

7. Update stored procedures and system-specific parameters.

   Run the following two scripts against the portal database. The scripts are located in **<PT_HOME>/ptportal/6.1/sql**, under the directory appropriate to your operating system and database version.

   On **Oracle**, run:

   a. **stored_procs_oracle.sql**

   b. **postinst_oracle.sql**

On **SQLServer,** run:

a. **stored_procs_mssql.sql**

b. **postinst_mssql.sql**

Resolving Missing Mandatory Portlets

If you upgraded your portal from 5.0.x to 6.1 and find that mandatory portlets are not appearing properly in your 6.1 portal, run the following database script on your 6.1 database to resolve the issue. If you upgraded from 5.0.x to 6.0 and mandatory portlets are appearing properly in your 6.0 portal, skip this step:

```
UPDATE PTPages SET TopicPos=0 WHERE TopicPos!=0 AND ObjectId IN (SELECT
ObjectId FROM PTPages p, (SELECT FolderId, MIN(TopicPos) AS MinTopicPos FROM
PTPages WHERE FolderId<0 GROUP BY FolderId) a WHERE p.FolderId=a.FolderId
AND p.TopicPos=a.MinTopicPos)
```

Rebuilding the Search Index

In portal administration's Search Service Manager, schedule the next search repair to occur either in the past or in the very near future. Then, in the administrative folder that contains the search update agents that are registered with the Automation Service, schedule one of the search update agents to run in the past or in the very near future. The next search update agent that runs will rebuild the search index.

Note: We *do not* recommend clicking Run Once from the administrative folder or selecting Run Once from the job editor. If you click Run Once from the administrative folder, the job log will be lost after the operation completes, which may inhibit troubleshooting if the rebuild fails. If you select Run Once from within the job editor, the search update agent will not be scheduled to run again in the future.

Completing the AquaLogic Interaction Component Upgrade

Now that you have installed version 6.1 of the Administrative Portal, scripted the database and performed other necessary upgrade steps, you can complete the AquaLogic Interaction component upgrade. You do this by installing all other AquaLogic Interaction 6.1 components on their respective hosts. On each host, first stop any existing Corporate Portal 5.0.x, Foundation 6.0 or AquaLogic 6.1 services. Run the AquaLogic Interaction 6.1 installer on each host and select Custom Install to select the AquaLogic Interaction 6.1 components that you want to install. For

detailed instructions on launching the installer and completing its screens, see “Installing the AquaLogic Interaction Components” on page 4-2.

If your portal deployment includes one or more AquaLogic User Interaction products (such as Collaboration, Publisher, Analytics, and so on) upgrade those products now. Refer to each product’s associated installation and upgrade guide for instructions on upgrading those products.

CHAPTER 4

Installation

This chapter describes how to install AquaLogic Interaction. If you are upgrading AquaLogic Interaction, see Chapter 5, "Upgrade."

To install AquaLogic Interaction:

1. Verify that you have met the prerequisites for installation. For details, see Chapter 2, "Installation Prerequisites."
2. Install the AquaLogic Interaction components. For details, see "Installing the AquaLogic Interaction Components" on page 4-2.
3. Script the AquaLogic Interaction portal database. For details, see "Scripting the Database" on page 4-14.
4. Start and verify the installation. For details, see "Starting and Verifying the Installation" on page 4-34.
5. Import the Search Cluster Manager migration package. For details, see "Importing the Search Cluster Manager Migration Package" on page 4-36.
6. If you performed a new (non-upgrade) install of AquaLogic Interaction and installed the Content Upload Service, import the Content Upload migration package. For details, see "Importing the Content Upload Migration Package" on page 4-36.
7. Perform tasks in the portal to prepare the portal for general use. For details, see "Preparing the Portal for General Use" on page 4-37.

Installing the AquaLogic Interaction Components

This section describes how to install the AquaLogic Interaction components. The AquaLogic Interaction components are:

1. Image Service
2. Search
3. Document Repository Service
4. Administrative Portal
5. Automation Service
6. API Service
7. Portal Server
8. Content Upload Service

When performing a clean install, you can install the AquaLogic Interaction components in any order; however, you should not start any of the components until all components are installed. If you want to test components as you install them, the order in which they are listed above is recommended.

The AquaLogic Interaction components can be installed on different hosts. For details on provisioning hosts for the various AquaLogic Interaction components, see the *Deployment Guide for BEA AquaLogic User Interaction*.

Note: The portal database must be scripted and running prior to starting the Administrative Portal.

Launching the AquaLogic Interaction Installer on Unix

The AquaLogic Interaction installer is a graphical, X-Windows client when run in interactive mode. If you are running the installer on a remote terminal, make sure your DISPLAY is set appropriately.

To launch the AquaLogic Interaction installer on a Unix host:

1. Log in to the Unix host as the user created in "Unix User and Group Requirements" on page 2-5.
2. Copy the installer to a temporary location and run it as follows:

   ```
   $ ./AquaLogicInteraction_v6-1_mp2
   ```

Complete the installation wizard pages according to the settings you planned when you completed the configuration worksheets.

Completing the Installer Wizard Pages on Unix

The following tables describe the AquaLogic Interaction installer wizard pages. The installer wizard pages that appear vary according to the selections you choose.

Note: If the installer setting does not apply to your Web application server or to the AquaLogic Interaction components you are installing, the installer does not display the wizard page.

Table 4-1 AquaLogic Interaction Installer Wizard Pages for Unix

Wizard Page	Description
Introduction	This installer wizard page provides a brief description of the installer and describes how to run the installer in silent mode.
Installation Folder	Accept the default installation folder or select a different folder in which to install AquaLogic Interaction. Default: `/opt/bea`
Upgrade Information	Indicates previously installed versions of portal products.

Table 4-1 AquaLogic Interaction Installer Wizard Pages for Unix

Wizard Page	Description
Upgrade Option	Select either **Upgrade** or **New Install**. If you select **Upgrade**, the installer skips subsequent configuration pages and instead uses values from a previous installation to fill in the information. The XML configuration file structure is also changed. **Note:** If you choose to upgrade the portal, the installer upgrades all of the components it detects needing an upgrade. If you want to install a specific component on a machine with multiple portal components, you should perform a **New Install**.
Choose Install Set	Select either **Complete** or **Custom**. If you select **Complete**, a full set of AquaLogic Interaction components is installed. If you select **Custom**, you can select individual portal components to install according to your deployment plan.
Fully Qualified Domain Name and Ports	Enter the fully qualified domain name and port numbers for the portal server. Do not include the "http://" prefix. Example domain name: `portal.mycompany.com` Example HTTP port: `80` Example HTTPS port: `443`
Content Upload Service - Application Port	Indicate either **http** or **https**. Enter the port that the Content Upload Service should use to handle requests.
API Service - Application Port	Indicate either **http** or **https**. Enter the port that the API Service should use to handle requests.
External Portal URL	Enter the URL to the portal server that browsers outside of the local network would use. Example: `http://portal.mydomain.com:80/portal`
API Service URL	Enter the URL to the API Service including the port number. Example: `http://wsserver.mydomain.com:80`
Image Service URL	Enter the URL for the Image Service, including the port number if it is not 80 or 443: Example: `http://web-apps.portal.com:8082/imageserver`

Table 4-1 AquaLogic Interaction Installer Wizard Pages for Unix

Wizard Page	Description
Search Cluster Contact Node Host and Port	Enter the host name and port for the AquaLogic Interaction Search node through which the portal initiates contact with the Search Cluster. Example host name: `back-end-services.portal.com` Example port: `15250` Click **Help** for further details on this installer wizard page.
Stand-alone or Cluster	Select whether you would like to install a **Single Stand-alone Search Node** or add/replace a **Search Cluster Node**. Selecting to install the stand-alone search node installs a single node on the local machine. If you want to support failover, select to add/replace nodes for a search cluster.
Search Nodes	Select to add a new search node or replace an existing node. **Note:** Selecting to replace an existing node removes all information about the node that you are replacing from the system.
Adding New Search Node	Enter the name and port number of the new search node. The search node is installed into **/opt/bea/alui/ptsearchserver/6.1**.
Search Cluster Files	Select the location of the search cluster files. You must have permission to access and write to the location where you want to install these files. Search cluster files are only installed if they do not already exist in the location that you select. Example: `/opt/bea/alui/ptsearchserver/6.1/cluster/`
Search Cluster Manager Port	Enter the port that the Search Cluster Manager will use. Example: `15300`
Default Automation Service Computer	Enter the host name for the host computer for the default Automation Service. This runs administrative jobs by default. Example: `back-end-services.portal.com`
Automation Service Port	Enter the Automation Service port for the automation service being installed. Example: `7777`
Portal Database Connection Information	Specify connection information, such as host name, port, database name or service name, and administrative user information.

Table 4-1 AquaLogic Interaction Installer Wizard Pages for Unix

Wizard Page	Description
Document Repository Service - Application Port	Enter the port for the Document Repository Service being installed. Example: `8020`
Document Repository Service Host and Port	Enter the host name and port for the host computer for the Document Repository Service. Example host name: `back-end-services.portal.com` Example port: `8020`
Pre-Installation Summary	Review the list of components to be installed. Click **Install.**
Install Complete	Click **Done**.

Launching the AquaLogic Interaction Installer on Windows

To launch the AquaLogic Interaction installer on a Windows host:

1. Log into the Windows host as the local Administrator.
2. Copy the **AquaLogicInteraction_v6-1_mp2.exe** installer to a temporary location.
3. Close all unnecessary windows and applications.
4. Double-click **AquaLogicInteraction_v6-1_mp2.exe** to launch the installer.

Complete the installation wizard pages according to the settings you planned when you completed the configuration worksheets.

Completing the Installer Wizard Pages on Windows

The following tables describe the AquaLogic Interaction installer wizard pages. The installer wizard pages that appear vary according to the selections you choose.

Note: If the installer setting does not apply to your Web application server or to the AquaLogic Interaction components you are installing, the installer does not display the wizard page.

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Introduction	This installer wizard page provides a brief description of the installer and describes how to run the installer in silent mode.
Installation Folder	Accept the default installation folder or select a different folder in which to install AquaLogic Interaction. Default: `C:\bea\alui`
Upgrade Information	Indicates previous installed versions of portal products.

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Upgrade Option	Select either **Upgrade** or **New Install**. If you select **Upgrade**, the installer will automatically upgrade all of the components it detects needing an upgrade. The installer will skip most subsequent pages and request only the settings that cannot be extracted from the previous installation (for example, the type of install (.NET or Java) and the API Service information). The XML configuration file structure is also changed. **Note:** If you want to install a newer version of specific components on a machine with multiple portal components, you should perform a New Install. If you select **New Install**, you will proceed with the full set of appropriate installer pages. **Note:** If you choose to upgrade the portal, the installer upgrades all of the components it detects needing an upgrade. If you want to install a specific component on a machine with multiple portal components, you should perform a New Install.
Choose Install Set	Select either **Complete** or **Custom**. If you select **Complete**, a full set of AquaLogic Interaction components are installed. If you select **Custom**, you can select individual portal components to install according to your deployment plan.
Web Application Environment: .NET or Java	Select **.NET (IIS)** or **Java**.
Auto-Deployment to a Java Web Application Server	Select a web application server type to enable auto-deployment of the Portal, or select **Manual** to manually deploy the Portal to a web application server.
Tomcat Deployment Information	Enter the directory in which Web application configuration files reside. Example: `C:\jakarta-tomcat-5.0.28\conf\Catalina\localhost`
Specify WebLogic Deployment Information	Enter the WebLogic home directory, domain home, host name, port, domain, server, administrator user and administrator user password. **Note:** WebLogic domain and server names are case-sensitive. If the letter casing you enter does not match the running WebLogic domain and server, auto-deployment fails. Click **Help** for further details on this installer wizard page.

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Specify WebSphere Deployment Information	Enter the WebSphere home directory, host name, SOAP port and application server name. **Note:** If you change the default host or application server, the host and application server you enter must already exist.
Image Service: Auto-Deployment to Apache	Select **Apache** to have the Image Service automatically deployed to Apache. Select **Manual** if you prefer to use a Web server other than Apache.
Apache Deployment Information	Enter the Apache configuration directory. Example directory: `C:\Program Files\Apache Group\Apache2\conf\` Enter the Apache Windows service name. Example name: `Apache2`
Select IIS Web Site	Select **Use Default Web Site** if you want the component or components being installed deployed to port 80, the default HTTP port. Select **Use another Web site** if using port 80 would mean sharing the port with other applications and you do not want to do this.
Specify IIS Web Site Information	If you choose to deploy the portal to a Web site other than the default Web site, enter the IIS Web site name, HTTP and HTTPS ports you want to use for accessing the portal. Example Web site name: `ALI` Example HTTP port: `8082` Example HTTPS port: `9092` **Note:** If the name you enter is not the name of an existing IIS Web site, a new Web site is created. If the Web site already exists, the secure and non-secure ports will be changed to the entries made in the installer.
Image Service Compression on IIS	The **Enable Image Service HTTP Compression** checkbox is selected by default. Deselect the checkbox if you do not wish to use HTTP compression.

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Fully Qualified Domain Name and Ports	Enter the fully qualified domain name and port numbers for the Portal. Do not include the "http://" prefix. Example domain name: `portal.mycompany.com` Example HTTP port: `80` Example HTTPS port: 443
Content Upload Service - Application Port	Indicate either **http** or **https**. Enter the port that the Content Upload Service should use to handle requests. Example port: `11910`
API Service - Application Port	Indicate either **http** or **https**. Enter the port that the API Service should use to handle requests. Example port: `11905`
External Portal URL	Enter the URL to the portal that browsers outside of the local network would use. Example: `http://portal.mydomain.com:80/portal`
API Service URL	Enter the URL to the API Service including the port number. Example: `http://wsserver.mydomain.com:11905`
Image Service URL	Enter the URL for the Image Service, including the port number if it is not 80 or 443: Example: `http://web-apps.portal.com:8082/imageserver`
Search Cluster Contact Node Host and Port	Enter the host name and port for the AquaLogic Interaction Search node through which the portal initiates contact with the Search Cluster. Example host name: `back-end-services.portal.com` Example port: `15250` Click **Help** for further details on this installer wizard page.
Stand-alone or Cluster	Select whether you would like to install a **Single Stand-alone Search Node** or add/replace a **Search Cluster Node**. Selecting to install the stand-alone search node installs a single node on the local machine. If you want to support failover, select to add/replace nodes for a search cluster.

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Search Nodes	Select to add a new search node or replace an existing node. **Note:** Selecting to replace an existing node removes all information about the node that you are replacing.
Adding New Search Node	Enter the name and port number of the new search node. The search node is installed into **C:\bea\alui\ptsearchserver\6.1**.
Search Cluster Files	Select the location of the search cluster files. You must have permission to access and write to the location where you want to install these files. Search cluster files are only installed if they do not already exist in the location that you select. Example: C:\`opt\bea\alui\ptsearchserver\6.1\cluster\`
Search Node User Name and Password	Enter the Windows user name that the search node will run as. This user must be in the Domain\User format and must have write access to the search cluster specified on the search cluster location that you specified on the Search Cluster Files installer wizard page. **Note:** The installer does not validate the user information that you specify.
Search Cluster Manager Port	Enter the port that the Search Cluster Manager will use. Example: `15300`
Default Automation Service Computer	Enter the host name for the host computer for the default Automation Service. Example: `back-end-services.portal.com`
Automation Service Port	Enter the Automation Service port. Example: `7777`
Portal Database	Select **SQL Server** or **Oracle**.
Portal Database Connection Information	Specify connection information, such as host name, port, database name or service name, and administrative user information.
Document Repository Service - Application Port	Indicate either **http** or **https**. Specify the port that the Document Repository's Web components should use to handle requests. Example: `8020`

Table 4-2 AquaLogic Interaction Installer Wizard Pages for Windows

Wizard Page	Description
Document Repository Service Host and Port	Enter the host name and port for the host computer for the Document Repository Service. Example host name: `back-end-services.portal.com` Example port: `8020`
Pre-Installation Summary	Review the list of components to be installed. Click **Install.**
Install Complete	Choose to restart the system now or restart it manually. The system must be restarted to complete the installation. Click **Done**.

Deploying the Image Service

Note: This step is unnecessary if you installed AquaLogic Interaction for .NET, or if you instructed the installer to autodeploy the Image Service to Apache.

The Image Service is a collection of static, non-secure files that should be served by an HTTP server, such as Apache HTTP Server. The Image Service files are located in **<PT_HOME>/ptimages/imageserver**.

This directory should be aliased in your HTTP server configuration so that the URL specified for the Image Service when the installer was run is correct. For example, if you were running an Apache HTTP Server on port 8082, and you had specified http://webserver:8082/imageserver as your Image Service URL, you might configure Apache HTTP server as follows:

Note: This is only an example. In a production environment the imageserver directory should be aliased to the Web server by a knowledgeable Web server administrator.

1. In a text editor, open the file

   <APACHE_HOME>/conf/httpd.conf

2. Alias your <PT_HOME>/ptimages/imageserver directory to /imageserver/ on the Web server by adding the following:

   Alias /imageserver/ "<PT_HOME>/ptimages/imageserver/"

3. Create a Directory entry for the imageserver directory:

   ```
   <Directory "<PT_HOME>/ptimages/imageserver">
   Options Indexes MultiViews
   AllowOverride None
   Order allow,deny
   Allow from all
   </Directory>
   ```

4. Save httpd.conf and exit the text editor.

5. **(Unix only)** Verify /opt/bea/alui/ptimages/imageserver is readable by Apache HTTP Server:

   ```
   $ chmod a+r /opt
   $ chmod a+r /opt/bea

   $ chmod a+r /opt/bea/alui
   $ chmod a+r /opt/bea/alui/ptimages
   $ chmod -R a+r /opt/bea/alui/ptimages/imageserver
   ```

6. When Apache HTTP Server is restarted, http://webserver:8082/imageserver/ should point to <PT_HOME>/ptimages/imageserver/.

Scripting the Database

This section describes how to create the AquaLogic Interaction portal database. The procedure involves reviewing, editing, and executing SQL scripts against an Oracle 9i or 10g, or Microsoft SQL Server database. It is expected that the person setting up the AquaLogic Interaction database has a strong understanding of database system administration.

To set up the AquaLogic Interaction portal database, follow the steps in the subsection appropriate to your environment:

- To create the portal database on Microsoft SQL Server, see "Scripting a Microsoft SQL Server Database" on page 4-15.
- To create the portal database on Oracle 9i:
  - on Unix, see "Scripting an Oracle 9i Database on Unix" on page 4-18.
  - on Windows, see "Scripting an Oracle 9i Database on Windows" on page 4-22.
- To create the portal database on Oracle 10g:
  - on Unix, see "Scripting an Oracle 10g Database on Unix" on page 4-26.
  - on Windows, see "Scripting an Oracle 10g Database on Windows" on page 4-30.

Scripting a Microsoft SQL Server Database

To script a Microsoft SQL Server database:

1. Follow the instructions for creating and configuring the Portal database for your version of Microsoft SQL Server.
2. Script the portal database by following the instructions in "Scripting the Portal Database" on page 4-17.

Creating and Configuring the Portal Database on Microsoft SQL Server 2000

To set up the Portal database on Microsoft SQL Server 2000:

1. Create the Portal database:
   a. Set the Portal database name to the name you specified for the Portal database when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   b. Verify that the initial size of the Portal database is sufficient for your AquaLogic Interaction deployment. For a relatively small installation, configure a database that is at least 100 MB. For a large enterprise with as many as 20,000 users, configure a database that is as large as 1 GB.
2. Create the Portal database user:
   a. Create the Portal database user with the user name you designated when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   b. Configure the Portal database user to use **SQL Server Authentication**.
   c. Set the Portal database user password to the password you designated when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   d. Set the Portal database user's default database to the Portal database.
   e. Grant the Portal database user the **public** and **db_owner** roles for the Portal database.
   f. On the Portal database **Properties | Permissions** tab, grant the Portal database user all permissions on the Portal database.

Creating and Configuring the Portal Database on Microsoft SQL Server 2005

To set up the Portal database on Microsoft SQL Server 2005:

1. Configure the SQL Server instance to use **SQL Server and Windows Authentication mode**.
2. Create the Portal database:
   a. Set the Portal database name to the name you specified for the Portal database when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   b. Verify that the initial size of the Portal database is sufficient for your AquaLogic Interaction deployment. For a relatively small installation, configure a database that is at least 100 MB. For a large enterprise with as many as 20,000 users, configure a database that is as large as 1 GB.
   c. Configure the Portal database to use **SQL Server 2000 (80) compatibility level**.
3. Create the Portal database user:
   a. Create the Portal database user with the user name you designated when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   b. Configure the Portal database user to use **SQL Server Authentication**.
   c. Set the Portal database user password to the password you designated when you completed the worksheets provided in the *Installation Worksheet for AquaLogic Interaction 6.1 MP2*.
   d. Set the Portal database user's default database to the Portal database.
   e. Grant the Portal database user the **sysadmin** server role.

Scripting the Portal Database

Run the portal database scripts as the sa user on the portal database created above.

Note: When database objects are created by the sa user, objects are owned by dbo. See Knowledge Base article DA_319052 for a discussion of the benefits of dbo object ownership.

1. To delete previous tables (if they exist) and create the tables required for the new portal components, run the **<PT_HOME>\ptportal\6.1\sql\mssql\create_tables_mssql.sql** script.
2. To create the portal objects required by the portal, run the **<PT_HOME>\ptportal\6.1\sql\mssql\load_seed_info_mssql.sql** script.
3. To create the stored procedures required by the portal, run the **<PT_HOME>\ptportal\6.1\sql\mssql\stored_procs_mssql.sql** script.
4. To set configuration information required by the portal, run the **<PT_HOME>\ptportal\6.1\sql\mssql\postinst_mssql.sql** script.

Scripting an Oracle 9i Database on Unix

This section describes how to script an Oracle 9i database on Unix.

Setting Oracle Environment Variables

The following environment variables need to be set:

- **ORACLE_BASE**: ORACLE_BASE should be set to the root directory of your Oracle installation. For example,

  ```
  $ export ORACLE_BASE=/opt/oracle
  ```

- **ORACLE_HOME**: ORACLE_HOME should be set to the home directory of your Oracle installation. For example,

  ```
  $ export ORACLE_HOME=$ORACLE_BASE/ora92
  ```

- **ORACLE_SID**: ORACLE_SID should be set to the system ID (SID) of your database instance. The default SID expected in the SQL scripts is PLUM on Oracle 9i. If you use a SID other than the default, the scripts will need to be edited. To set ORACLE_SID on Oracle 9i:

  ```
  $ export ORACLE_SID=PLUM
  ```

These variables can be set automatically when your Oracle user logs in by modifying the **.profile** script for your Oracle user. For more information, consult your system administrator.

Copying SQL Scripts

When you install the Portal Server or Administrative Portal, the installer generates Oracle 9i scripts for creating and populating the database in the following directory:

<PT_HOME>/ptportal/6.1/sql/oracle_unix9.2

It is recommended that the scripts for your version of Oracle are copied to the following directory:

$ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts

Creating the Portal Database

Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to "Creating the Portal Tablespace and Database User" on page 4-28.

1. Log into the portal database host machine as the owner of the Oracle system files.
2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-18.
3. Create the **sys** password:

   ```
   $ $ORACLE_HOME/bin/orapwd file=$ORACLE_HOME/database/orapwPLUM
   password=password
   ```

4. Create the PLUM10 directory under **$ORACLE_BASE/oradata**:

   ```
   $ mkdir -p $ORACLE_BASE/oradata/PLUM
   ```

5. Create a link to **initPLUM10.ora** in **$ORACLE_HOME/database**

   ```
   $ cd $ORACLE_HOME/database
   $ ln -s $ORACLE_BASE/admin/PLUM/plumtreescripts/initPLUM.ora
   ```

6. If this is a re-creation of a database or a retry of a prior failed attempt, delete the old database file. Verify that the database is not running, and then:

   ```
   $ rm $ORACLE_BASE/oradata/$ORACLE_SID/*.*
   ```

7. From $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts, start **sqlplus**:

   ```
   $ cd $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts
   $ sqlplus /nolog
   ```

   Your prompt will change to SQL>.

8. Run the **crdb1_oracle_unix.sql** script to create and start the new database instance:

   ```
   SQL> @crdb1_oracle_unix.sql
   ```

   This script should generate no errors. The database should now be running. When the script completes, verify the following data files have been created in **$ORACLE_BASE/oradata/$ORACLE_SID**:

   – systPLUM.dbf
   – undo1A.dbf
   – temp1A.dbf (single disk installation only.)

Output from the script is saved in the file **crdb1.lst** in the plumtreescripts directory.

9. From **sqlplus**, run the **crdb2_oracle_unix.sql** script to create tablespaces, create the portal database user, and perform low level database tuning.

   ```
   SQL> @crdb2_oracle_unix.sql
   ```

   This script can take a significant amount of time to complete. The following errors may be generated:

   ```
   ORA-00942 table or view does not exist
   ORA-1432/ORA-1434 public synonym to be dropped does not exist
   ```

   These errors are acceptable. Any other errors are not acceptable.

   When the script completes, verify the following data files have been created in **$ORACLE_BASE/oradata/$ORACLE_SID**:

   – PLUMtbl1.dbf

   – PLUMtmp1.dbf

   – PLUMidx1.dbf

   Output from the script is saved in the file **crdb2.lst** in the plumtreescripts directory.

Creating the Portal Tablespace and Database User

Note: The following steps assume you have an existing database instance already running. If you created your database in "Creating the Portal Database" on page 4-19, you should skip to "Scripting the Portal Database" on page 4-21.

To create a shared AquaLogic Interaction database:

1. Log into the AquaLogic Interaction database host machine as the owner of the Oracle system files.

2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-18.

3. Connect to your database as a user with sysdba rights. From $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts, start **sqlplus**:

   ```
   $ cd $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts
   ```

   ```
   $ sqlplus /nolog
   ```

   Your prompt will change to SQL>.

   ```
   SQL> conn / as sysdba
   ```

4. Run **create_ali_tablespace_unix.sql** to create the ALUI tablespaces:

   ```
   SQL> @create_ali_tablespace_unix.sql
   ```

5. Run **create_ali_user_oracle.sql** to create the schema user the portal will use:

   ```
   SQL> @create_ali_user_oracle.sql
   ```

Scripting the Portal Database

The following steps initialize the new portal database:

1. Run the **init_ali_db_oracle.sql** script to create ALUI tables, indexes, and stored procedures. Exit **sqlplus** and log back in as the portal database user you just created. You should still be in the $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts directory:

   ```
   $ sqlplus portal_database_user/password
   ```

   The prompt should be SQL>. Now, run the **init_ali_db_oracle.sql** script:

   ```
   SQL> @init_ali_db_oracle.sql
   ```

   Output from the script is saved in the following files in the plumtreescripts directory:

   – create_tables_oracle.lst

   – stored_procs_oracle.lst

   – load_seed_info.lst

   – postinst.lst

2. If desired, create an Oracle SPFILE. Refer to Oracle documentation for the benefits of using an SPFILE.

   Exit **sqlplus** and log back in using the /nolog parameter:

   ```
   $ sqlplus /nolog
   ```

   The prompt should be SQL>. Now, run the **create_spfile_oracle_unix.sql** script:

   ```
   SQL> @create_spfile_oracle_unix.sql
   ```

Scripting an Oracle 9i Database on Windows

This section discusses how to script an Oracle 9i database on Windows.

Setting Oracle Environment Variables

The following environment variables need to be set:

- **ORACLE_BASE**: ORACLE_BASE should be set to the root directory of your Oracle installation. For example, c:\oracle
- **ORACLE_HOME**: ORACLE_HOME should be set to the home directory of your Oracle installation. For example, c:\oracle\ora92
- **ORACLE_SID**: ORACLE_SID should be set to the system ID (SID) of your database instance. The default SID expected in the SQL scripts is PLUM on Oracle 9i. If you use a SID other than the default, the scripts will need to be edited.

After setting the environment variables, initialize the environment variables by rebooting the operating system.

Copying SQL Scripts

When you install the Portal Server or Administrative Portal, the installer generates Oracle 9i scripts for creating and populating the database in the following directory:

<PT_HOME>\ptportal\6.1\sql\oracle_nt9.2

It is recommended that the scripts for your version of Oracle are copied to the following directory:

%ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts

Creating the Portal Database

Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to "Creating the Portal Tablespace and Database User" on page 4-24.

1. Log into the portal database host machine.
2. Verify that ORACLE_BASE, ORACLE_HOME, and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-30.
3. Run the **RegisterSIDPLUM.reg** registry script. The script is found in the scripts directory you created in "Copying SQL Scripts" on page 4-22, and can be run from the command line:

   ```
   > regedit RegisterSIDPLUM.reg
   ```

4. Create a directory **PLUM** under **%ORACLE_BASE%\oradata**.
5. Copy **initPLUM.ora** to **%ORACLE_HOME%\database**.
6. Run the **CreateService.bat** script with your SID and the portal database user password as arguments:

   ```
   > CreateService.bat PLUM <password>
   ```

7. From %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts, start **sqlplus** with the /nolog flag:

   ```
   > cd %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts
   ```

   ```
   > sqlplus /nolog
   ```

   Your prompt will change to SQL>.

8. Run the **crdb1_oracle_nt.sql** script:

   ```
   SQL> @crdb1_oracle_nt.sql
   ```

   This script should generate no errors.

   When the script completes, make sure the following data files have been created in %ORACLE_BASE%\database:

   – systPLUM.dbf
   – undo1A.dbf
   – temp1A.dbf (single disk installation only)

   Output from this script is saved in the file **crdb1.LST**.

9. Run the **crdb2_oracle_nt.sql** script:

   ```
   SQL> @crdb2_oracle_nt.sql
   ```

   This script may take a significant amount of time to complete, and may generate the following errors:

   ```
   ORA-00942 table or view does not exist
   ORA-1432/ORA-1434 public synonym to be dropped does not exist
   ```

   Any other errors are not acceptable.

   When the script completes, verify the following data files have been created in %ORACLE_HOME%\database:

   – plumdata1.dbf

   – plumidx1.dbf

   – plumtmp1.dbf

   Output from this script is saved in the file **crdb2.LST**.

Creating the Portal Tablespace and Database User

Note: The following steps assume you have an existing database instance already running. If you created your database in "Creating the Portal Database" on page 4-23, you should skip to "Scripting the Portal Database" on page 4-25.

To create a shared AquaLogic Interaction database:

1. Log into the AquaLogic Interaction database host machine as the owner of the Oracle system files.

2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-26.

3. Connect to your database as a user with sysdba rights. From %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts, start **sqlplus**:

   ```
   > cd %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts
   ```

   ```
   > sqlplus /nolog
   ```

   Your prompt will change to SQL>.

   ```
   SQL> conn / as sysdba
   ```

4. Run **create_ali_tablespace_nt.sql** to create the ALUI tablespaces:

   ```
   SQL> @create_ali_tablespace_nt.sql
   ```

5. Run **create_ali_user_oracle.sql** to create the schema user the portal will use:

   ```
   SQL> @create_ali_user_oracle.sql
   ```

Scripting the Portal Database

The following steps initialize the new portal database:

1. Run the **init_ali_db_oracle.sql** script to create ALUI tables, indexes, and stored procedures. Exit **sqlplus** and log back in as the portal database user you just created. You should still be in the %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts directory:

   ```
   > sqlplus portal_database_user/password
   ```

   The prompt should be SQL>. Now, run the **init_ali_db_oracle.sql** script:

   ```
   SQL> @init_ali_db_oracle.sql
   ```

   Output from the script is saved in the following files in the plumtreescripts directory:

   – create_tables_oracle.lst

   – stored_procs_oracle.lst

   – load_seed_info.lst

   – postinst.lst

2. If desired, create an Oracle SPFILE. Refer to Oracle documentation for the benefits of using an SPFILE.

   Exit **sqlplus** and log back in using the /nolog parameter:

   ```
   > sqlplus /nolog
   ```

   The prompt should be SQL>. Now, run the **create_spfile_oracle_nt.sql** script:

   ```
   SQL> @create_spfile_oracle_nt.sql
   ```

Starting the Oracle Listener for the Portal Database

Verify that the Oracle Listener has been started for the portal database.

Scripting an Oracle 10g Database on Unix

This section describes how to script an Oracle 10g Database on Unix.

Caution: For installations of AquaLogic Interaction on HP-UX, it is necessary to adjust Oracle's recommended kernel settings. The value of shmseg must be set higher than 300 to prevent Oracle memory allocation issues when search repair is run or multiple jobs are executed concurrently.

Setting Oracle Environment Variables

The following environment variables need to be set:

- **ORACLE_BASE**: ORACLE_BASE should be set to the root directory of your Oracle installation. For example,

  ```
  $ export ORACLE_BASE=/opt/oracle
  ```

- **ORACLE_HOME**: ORACLE_HOME should be set to the home directory of your Oracle installation. For example,

  ```
  $ export ORACLE_HOME=$ORACLE_BASE/product/10.1.0/db_1
  ```

- **ORACLE_SID**: ORACLE_SID should be set to the system ID (SID) of your database instance. The default SID expected in the SQL scripts is PLUM10 on Oracle 10g. If you use a SID other than the default, the scripts will need to be edited.

  To set ORACLE_SID on Oracle 10g:

  ```
  $ export ORACLE_SID=PLUM10
  ```

These variables can be set automatically when your Oracle user logs in by modifying the **.profile** script for your Oracle user. For more information, consult your system administrator.

Copying SQL Scripts

When you install the Portal Server or Administrative Portal, the installer generates Oracle 10g scripts for creating and populating the database in the following directory:

<PT_HOME>/ptportal/6.1/sql/oracle_unix10

It is recommended that the scripts for your version of Oracle are copied to the following directory:

$ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts

Creating the Portal Database

Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to "Creating the Portal Tablespace and Database User" on page 4-28.

1. Log into the portal database host machine as the owner of the Oracle system files.
2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-18.
3. Create the **sys** password:

   ```
   $ $ORACLE_HOME/bin/orapwd file=$ORACLE_HOME/database/orapwPLUM10
   password=password
   ```

4. Create the PLUM or PLUM10 directory under **$ORACLE_BASE/oradata**:

   ```
   $ mkdir -p $ORACLE_BASE/oradata/PLUM10
   ```

5. Create a link to **initPLUM.ora** in **$ORACLE_HOME/database**

   ```
   $ cd $ORACLE_HOME/database
   $ ln -s $ORACLE_BASE/admin/PLUM10/plumtreescripts/initPLUM10.ora
   ```

6. If this is a re-creation of a database or a retry of a prior failed attempt, delete the old database file. Verify that the database is not running, and then:

   ```
   $ rm $ORACLE_BASE/oradata/$ORACLE_SID/*.*
   ```

7. From $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts, start **sqlplus**:

   ```
   $ cd $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts
   $ sqlplus /nolog
   ```

   Your prompt will change to SQL>.

8. Run the **crdb1_oracle_unix.sql** script to create and start the new database instance:

   ```
   SQL> @crdb1_oracle_unix.sql
   ```

   This script should generate no errors. The database should now be running. When the script completes, verify the following data files have been created in **$ORACLE_BASE/oradata/$ORACLE_SID**:

   – systPLUM10.dbf

   – undo1A.dbf

   – temp1A.dbf (single disk installation only.)

Output from the script is saved in the file **crdb1.lst** in the plumtreescripts directory.

9. From **sqlplus**, run the **crdb2_oracle_unix.sql** script to create tablespaces, create the portal database user, and perform low level database tuning.

   ```
   SQL> @crdb2_oracle_unix.sql
   ```

   This script can take a significant amount of time to complete. The following errors may be generated:

   ```
   ORA-00942 table or view does not exist
   ORA-1432/ORA-1434 public synonym to be dropped does not exist
   ```

   These errors are acceptable. Any other errors are not acceptable.

   When the script completes, verify the following data files have been created in **$ORACLE_BASE/oradata/$ORACLE_SID**:

   – PLUM10tbl1.dbf

   – PLUM10tmp1.dbf

   – PLUM10idx1.dbf

   Output from the script is saved in the file **crdb2.lst** in the plumtreescripts directory.

Creating the Portal Tablespace and Database User

Note: The following steps assume you have an existing database instance already running. If you created your database in "Creating the Portal Database" on page 4-27, you should skip to "Scripting the Portal Database" on page 4-29.

To create a shared AquaLogic Interaction database:

1. Log into the AquaLogic Interaction database host machine as the owner of the Oracle system files.

2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-26.

3. Connect to your database as a user with sysdba rights. From $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts, start **sqlplus**:

   ```
   $ cd $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts
   ```

   ```
   $ sqlplus /nolog
   ```

   Your prompt will change to SQL>.

   ```
   SQL> conn / as sysdba
   ```

4. Run **create_ali_tablespace_unix.sql** to create the ALUI tablespaces:

   ```
   SQL> @create_ali_tablespace_unix.sql
   ```

5. Run **create_ali_user_oracle.sql** to create the schema user the portal will use:

   ```
   SQL> @create_ali_user_oracle.sql
   ```

Scripting the Portal Database

The following steps initialize the new portal database:

1. Run the **init_ali_db_oracle.sql** script to create ALUI tables, indexes, and stored procedures. Exit **sqlplus** and log back in as the portal database user you just created. You should still be in the $ORACLE_BASE/admin/$ORACLE_SID/plumtreescripts directory:

   ```
   $ sqlplus portal_database_user/password
   ```

   The prompt should be SQL>. Now, run the **init_ali_db_oracle.sql** script:

   ```
   SQL> @init_ali_db_oracle.sql
   ```

   Output from the script is saved in the following files in the plumtreescripts directory:

   – create_tables_oracle.lst

   – stored_procs_oracle.lst

   – load_seed_info.lst

   – postinst.lst

2. If desired, create an Oracle SPFILE. Refer to Oracle documentation for the benefits of using an SPFILE.

   Exit **sqlplus** and log back in using the /nolog parameter:

   ```
   $ sqlplus /nolog
   ```

   The prompt should be SQL>. Now, run the **create_spfile_oracle_unix.sql** script:

   ```
   SQL> @create_spfile_oracle_unix.sql
   ```

Scripting an Oracle 10g Database on Windows

Setting Oracle Environment Variables

The following environment variables need to be set:

- **ORACLE_BASE**: ORACLE_BASE should be set to the root directory of your Oracle installation. For example, c:\oracle
- **ORACLE_HOME**: ORACLE_HOME should be set to the home directory of your Oracle installation. For example, c:\oracle\ora10
- **ORACLE_SID**: ORACLE_SID should be set to the system ID (SID) of your database instance. The default SID expected in the SQL scripts is PLUM10 on Oracle 10g. If you use a SID other than the default, you will need to edit the scripts.

After setting the environment variables, initialize the environment variables by rebooting the operating system.

Copying SQL Scripts

When you install the Portal Server or Administrative Portal, the installer generates Oracle 10g scripts for creating and populating the database in the following directory:

<PT_HOME>\ptportal\6.1\sql\oracle_nt10

It is recommended that the scripts for your version of Oracle are copied to the following directory:

%ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts

Creating the Portal Database

Note: These steps create a new, dedicated portal database. If you are creating the portal tablespace within an existing database, skip to "Creating the Portal Tablespace and Database User" on page 4-24.

1. Log into the portal database host machine.
2. Verify that ORACLE_BASE, ORACLE_HOME, and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-30.
3. Run the **RegisterSIDPLUM10.reg** registry script. The script is found in the scripts directory you created in "Copying SQL Scripts" on page 4-22, and can be run from the command line:

   ```
   > regedit RegisterSIDPLUM10.reg
   ```

4. Create a directory **PLUM10** under **%ORACLE_BASE%\oradata**.
5. Copy **initPLUM10.ora** to **%ORACLE_HOME%\database**.
6. Run the **CreateService.bat** script with your SID and portal database user password as arguments:

   ```
   > CreateService.bat PLUM10 <password>
   ```

7. From %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts, start **sqlplus** with the /nolog flag:

   ```
   > cd %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts
   ```

   ```
   > sqlplus /nolog
   ```

   Your prompt will change to SQL>.

8. Run the **crdb1_oracle_nt.sql** script:

   ```
   SQL> @crdb1_oracle_nt.sql
   ```

   This script should generate no errors.

   When the script completes, make sure the following data files have been created in %ORACLE_BASE%\database:

   – systPLUM.dbf
   – undo1A.dbf
   – temp1A.dbf (single disk installation only)

   Output from this script is saved in the file **crdb1.LST**.

9. Run the **crdb2_oracle_nt.sql** script:

   ```
   SQL> @crdb2_oracle_nt.sql
   ```

   This script may take a significant amount of time to complete, and may generate the following errors:

   ```
   ORA-00942 table or view does not exist
   ORA-1432/ORA-1434 public synonym to be dropped does not exist
   ```

   Any other errors are not acceptable.

   When the script completes, verify the following data files have been created in %ORACLE_BASE%\database:

   – plumdata1.dbf

   – plumidx1.dbf

   – plumtmp1.dbf

   Output from this script is saved in the file **crdb2.LST**.

Creating the Portal Tablespace and Database User

Note: The following steps assume you have an existing database instance already running. If you created your database in "Creating the Portal Database" on page 4-31, you should skip to "Scripting the Portal Database" on page 4-33.

To create a shared AquaLogic Interaction database:

1. Log into the AquaLogic Interaction database host machine as the owner of the Oracle system files.

2. Verify that ORACLE_BASE, ORACLE_HOME and ORACLE_SID are set appropriately. For details, see "Setting Oracle Environment Variables" on page 4-30.

3. Connect to your database as a user with sysdba rights. From %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts, start **sqlplus**:

   ```
   > cd %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts
   ```

   ```
   > sqlplus /nolog
   ```

   Your prompt will change to SQL>.

   ```
   SQL> conn / as sysdba
   ```

4. Run **create_ali_tablespace_nt.sql** to create the ALUI tablespaces:

   ```
   SQL> @create_ali_tablespace_nt.sql
   ```

5. Run **create_ali_user_oracle.sql** to create the schema user the portal will use:

   ```
   SQL> @create_ali_user_oracle.sql
   ```

Scripting the Portal Database

The following steps initialize the new portal database:

1. Run the **init_ali_db_oracle.sql** script to create ALUI tables, indexes, and stored procedures. Exit **sqlplus** and log back in as the portal database user you just created. You should still be in the %ORACLE_BASE%\admin\%ORACLE_SID%\plumtreescripts directory:

   ```
   > sqlplus portal_database_user/password
   ```

   The prompt should be SQL>. Now, run the **init_ali_db_oracle.sql** script:

   ```
   SQL> @init_ali_db_oracle.sql
   ```

   Output from the script is saved in the following files in the plumtreescripts directory:

   – create_tables_oracle.lst

   – stored_procs_oracle.lst

   – load_seed_info.lst

   – postinst.lst

2. If desired, create an Oracle SPFILE. Refer to Oracle documentation for the benefits of using an SPFILE.

   Exit **sqlplus** and log back in using the /nolog parameter:

   ```
   > sqlplus /nolog
   ```

   The prompt should be SQL>. Now, run the **create_spfile_oracle_nt.sql** script:

   ```
   SQL> @create_spfile_oracle_nt.sql
   ```

Starting the Oracle Listener for the Portal Database

Verify that the Oracle Listener has been started for the portal database.

Starting and Verifying the Installation

This section describes how to start AquaLogic Interaction and verify operation.

Starting AquaLogic Interaction Services and Search

Start the AquaLogic Interaction services and Search in the following order. All services may not be applicable to your portal installation.

To start AquaLogic Interaction services and Search on **Unix**:

1. Start the Search daemon:
   a. cd to **/opt/bea/alui/ptsearchserver/6.1/bin**
   b. run **./searchserverd.sh start**
2. Start the Search Cluster Manager daemon:
   a. cd to **/opt/bea/alui/ptsearchserverl/6.1/adminui/bin**
   b. run **./clusterui.sh start**
3. Start the Automation daemon:
   a. cd to **/opt/bea/alui/ptportal/6.1/bin**
   b. run **./automationserverd.sh start**
4. Start the Document Repository daemon:
   a. cd to **/opt/bea/alui/ptdr/6.1/bin**
   b. run **./drserverd.sh start**
5. Start the Content Upload daemon:
   a. cd to **/opt/bea/alui/ptupload/6.1/bin**
   b. run **./contentuploadd.sh start**
6. Start the API daemon:
   a. cd to **/opt/bea/alui/ptws/6.1/bin**
   b. run **./apiserviced.sh start**

To start AquaLogic Interaction services and Search on **Windows**:

1. Click Start > Control Panel > Administrative Tools > Services.
2. Start **BEA ALI Search <host_name>**, where <host_name> is the name of the machine where Search is installed.

   Note: It is important that third-party virus scanners do not attempt to scan the search service archives.
3. Start **BEA ALI Search Cluster Manager**.
4. Start **BEA ALI Automation Service**.
5. Start **BEA ALI Document Repository Service**.
6. Start **BEA ALI Content Upload Service**.
7. Start **BEA ALI API Service**.

Running the Diagnostics Script

Run the Diagnostic Script before starting your portal for the first time. It tests basic portal startup functionality. If there are issues with your AquaLogic Interaction installation, the Diagnostics Script will generate a list of warnings and recommendations on how to correct the issues.

Run the Diagnostics Script, follow the recommendations, and correct any issues before starting your portal for the first time.

- On **Unix**, the script is **<PT_HOME>/ptportal/6.1/bin/diagnostic.sh**.
- On **Windows**, the script is **<PT_HOME>\ptportal\6.1\bin\diagnostic.bat**. The script can also be launched by clicking **Start | All Programs | BEA | Portal Diagnostic**.

Starting the Portal

Start the portal by browsing to the server.pt application at the external portal URL you provided the AquaLogic Interaction installer. For example:

```
http://myportal.domain.com:80/portal/server.pt
```

Log in to the portal as Administrator with no password.

Caution: You should change the default Administrator password as soon as possible. Make sure that you document the change and/or inform the appropriate portal administrators.

Importing the Search Cluster Manager Migration Package

This section describes how to import the Search Cluster Manager migration package.

Use the **Migration - Import Utility** (click Administration->Select Utility->Migration - Import) to import the **SearchClusterAdminUI.pte** file, which is located in the following location on the Search host machine:

On **Unix:** <PT_HOME>/ptsearchserver/6.1/serverpackages/

On **Windows:** <PT_HOME>\ptsearchserver\6.1\serverpackages\

If necessary, adjust any import settings.

For details on using the Migration - Import utility, see the online help or *Administration Guide for BEA AquaLogic Interaction*.

Note: You may need to log out and back in to the portal in order to see the Search Cluster Manager. It appears in the **Select Utility** menu.

Importing the Content Upload Migration Package

This section describes how to import the Content Upload migration package.

Note: You only need to import the Content Upload migration package if you performed a new (non-upgrade) install of AquaLogic Interaction and installed the Content Upload Service.

Use the **Migration - Import Utility** (click Administration->Select Utility->Migration - Import) to import the **contentupload.pte** file, which is located in the following location on the Content Upload Service host machine:

On **Unix:** <PT_HOME>/ptupload/6.1/serverpackages/

On **Windows:** <PT_HOME>\ptupload\6.1\serverpackages\

If necessary, adjust any import settings.

For details on using the Migration - Import utility, see the online help or *Administration Guide for BEA AquaLogic Interaction*.

Preparing the Portal for General Use

When you first deploy your portal, there are a number of tasks you must complete to prepare the portal for general use. These tasks are described in the *Administrator Guide for* AquaLogic Interaction because they are tasks you will likely perform more than once to maintain your portal. Refer to the *Administrator Guide for* AquaLogic Interaction for the following set-up tasks:

1. Configure display, navigation, and branding for the default experience definition and any additional experience definitions.
2. Change the default Administrator password and delegate administrator roles.
3. Populate the portal with administrative users and browsing users. Configure groups, users, user profiles, and Access Control Lists (ACLs) to enable managed access.
4. Populate the portal with documents. Configure ACLs to manage access.
5. Set up automated system maintenance, such as user synchronization, search updates, document refresh, and housekeeping jobs.

CHAPTER 5

Upgrade

This chapter describes the process of upgrading versions of Plumtree Corporate Portal and Plumtree Foundation to the latest version of the portal (AquaLogic Interaction).

Upgrade Paths

This section provides the paths that are available to upgrade your portal to AquaLogic Interaction 6.1.

Note: When upgrading to an AquaLogic Interaction 6.1 maintenance pack, it is not necessary to upgrade to AquaLogic Interaction 6.1 first. Unless otherwise noted, follow the procedure for upgrading from your current version to AquaLogic Interaction 6.1, but use the installer for the maintenance pack instead of the installer for AquaLogic Interaction 6.1.

Note: All upgrade paths are between two systems of the same operating system brand, but not necessarily the same operating system version. Check current hardware and software requirements and make any required upgrades to operating system or database software prior to proceeding with the portal upgrade.

Upgrade Path	Upgrade References
AquaLogic Interaction 6.1 to an AquaLogic Interaction 6.1 Maintenance Pack	Follow the procedures in "Applying an AquaLogic Interaction 6.1 Maintenance Pack" on page 5-2
Foundation 6.0 to AquaLogic Interaction 6.1	Follow the procedures in "Upgrading from Foundation 6.0 to AquaLogic Interaction 6.1" on page 5-2.

Corporate Portal 5.0.4J to AquaLogic Interaction 6.1 (Unix)	Follow the procedures in "Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1" on page 5-3.
Corporate Portal 5.0.2, 5.0.3, 5.0.4 to AquaLogic Interaction 6.1 (Windows)	Follow the procedures in "Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1" on page 5-3.

Applying an AquaLogic Interaction 6.1 Maintenance Pack

To apply an AquaLogic Interaction 6.1 Maintenance Pack:

1. **Important**: Stop the Search service on all Search nodes before starting the upgrade. Do not restart any upgraded Search services until all nodes have been upgraded.
2. Install the AquaLogic Interaction Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
3. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 5-9.

Upgrading from Foundation 6.0 to AquaLogic Interaction 6.1

To upgrade from Foundation 6.0 to AquaLogic Interaction 6.1:

1. Install the Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
2. Run the 6.0 to 6.1.sql database script. For details, see Running the 6.0 to 6.1 SQL Database Upgrade Script.
3. Import the Search Cluster Manager migration package. For details, see "Importing the Search Cluster Manager Migration Package" on page 4-36.
4. Rebuild the Search Index. For details, see "Rebuilding the Search Index" on page 5-8.
5. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 5-9

Running the 6.0 to 6.1 SQL Database Upgrade Script

To run the 6.0 to 6.1 SQL database upgrade script:

1. Back up the portal database.
2. Locate the upgrade6.0to6.1_<your_database_type>.sql script in the installation folder of the version 6.1 Administrative Portal server. By default, the script is located in **<PT_HOME>\ptportal\6.1\sql\<your_database_type>**.
3. Run the database upgrade script.

Upgrading from Corporate Portal 5.0.x to AquaLogic Interaction 6.1

To upgrade from Corporate Portal 5.0.x to AquaLogic Interaction 6.1:

1. Install the Administrative Portal and Search components. For details on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.
2. Upgrade the portal database from Corporate Portal 5.0.x to Foundation 6.0 specifications. For details, see "Upgrading the Database from Corporate Portal 5.0.x to Foundation 6.0 Specifications" on page 5-4.
3. Run the 6.0 to 6.1.sql database script. For details, see "Running the 6.0 to 6.1 SQL Database Upgrade Script" on page 5-3.
4. Start the AquaLogic Interaction 6.1 Administrative Portal and verify the installation. For details, see "Starting and Verifying the Installation" on page 4-34.
5. **(Optional)** Resolve missing mandatory portlets. Perform this step only if you upgraded your portal from 5.0.x to 6.1 and mandatory portlets are not appearing properly in your 6.1 portal. For details, see "Resolving Missing Mandatory Portlets" on page 5-8.
6. Import the Search Cluster Manager migration package. For details, see "Importing the Search Cluster Manager Migration Package" on page 4-36.
7. Rebuild the Search Index. For details, see "Rebuilding the Search Index" on page 5-8.
8. Complete the AquaLogic Interaction component installation. For details, see "Completing the AquaLogic Interaction Component Upgrade" on page 5-9

Upgrading the Database from Corporate Portal 5.0.x to Foundation 6.0 Specifications

This section describes the procedure for upgrading the portal database to AquaLogic Interaction 6.x specifications. The basic steps described in this section are:

1. Upgrade database software, if necessary.
2. Run the duplicate names database script.
3. Run the database upgrade tool.
4. Export data from the database.
5. Create a new database schema.
6. Import data to the database.
7. Update stored procedures and system-specific parameters.

Upgrading Database Software

If necessary, have your DBA upgrade database software to the currently supported version. For current database version requirements, see "Software Requirements" on page 2-2.

Note: When upgrading to Oracle 9i or 10g, ensure that the new database character set is UTF8 and the new database national character set is AL16UTF16.

Running the Duplicate Names Database Script

In earlier versions of the portal, document names were case sensitive; a document name in all caps would be considered a different document than one with the same name in all lower case. In AquaLogic Interaction 6.x, document names are case insensitive, which means document names considered unique in earlier versions of the portal may now be considered duplicates.

If there is a concern that your Oracle database contains duplicate document names, BEA provides two scripts that you scan run before you run the Database Upgrade Tool. It is important to note that running these scripts is optional and that they support Oracle databases only. The scripts are located in <PT_HOME>/ptportal/6.1/sql.

- **find_dup_doc_names_oracle.sql** – This script finds duplicate document names in the database and creates new names for the duplicates by appending the string "(dup x)", where "x" is the number of the duplicate. The new document names are stored in a new

table (PTCARDS_NEWNAMES), so the original PTCARDS table is left untouched. The script can only handle document names that are duplicated five or fewer times.

- **fix_dup_doc_names_oracle.sql** – This script updates the duplicate document names in the PTCARDS table with the new card names stored in PTCARDS_NEWNAMES. It then drops the PTCARDS_NEWNAMES table. You must run **find_dup_doc_names_oracle.sql** before running this script.

Running the Database Upgrade Tool

The command line Database Upgrade Tool is used to upgrade a portal database to 6.x specifications.

To successfully perform an upgrade, you must supply data needed by the upgrade process (such as the location of various files). You supply this data through a text file. This text file is the **upgradedata.properties** file and is created in:

```
[PT_HOME]/settings/portal/upgradedata.properties
```

The first time you run the Database Upgrade Tool, it creates the upgradedata.properties text file that contains descriptions of the required data. You edit the upgradedata.properties file in a text editor. After entering all necessary parameters, you run the Database Upgrade Tool a second time. The Database Upgrade Tool reads the parameters from the upgradedata.properties file, and performs the upgrade.

Note: Your system must be properly configured to run the portal in order to use this application, as it relies on your portal configuration to know how to connect to the database and complete the upgrade.

1. Run the Database Upgrade Tool from $PORTAL_HOME/bin/dbupgradetool.sh.
2. This script takes two parameters:
   - Admin User Name - type the name of the Administrator user that you created when you installed your 5.0.x portal (not another user in the Administrators group). The default name is “Administrator,” but you may have changed the name for security purposes after installation.

     Note: The Admin User Name is case sensitive.
   - Password - type the password for the Administrator user. If this user has an empty password, do not type anything.

3. Provide values for the parameters in the upgradedata.properties file. You may not see all of these parameters because you see only the parameters associated with the types of objects in your portal.

   Note: File paths are in the format `/directory/subdir/filename.xxx` and cannot have a space at the end of the path nor quotes around the path name. A correct example would be:
   `File_Path = /opt/plumtree/ptedir/yourfilename.pte`

   – LOG_FILE_PATH - Enter the path to the log file to be created by the upgrade. The upgrade writes status information to this file.

   – SQL_FILE_PATH - Enter the path to the SQL file to be created by the upgrade. The upgrade creates a SQL script in this file that corresponds to the work done by the upgrade. This parameter is optional. Leave it blank to indicate that no SQL file should be generated.

     Note: The Database Upgrade Tool modifies data regardless of whether it is also generating an SQL Script.

4. Run the Database Upgrade Tool again to begin upgrading the database. The upgrade can run for a few seconds or a few hours, depending on the size of your database. If the Database Upgrade Tool encounters errors or data inconsistencies, it does not stop. Instead it logs the errors to the file specified in Step 3.

5. When the database upgrade completes, you are notified of the status. If the upgrade completed successfully (without errors), skip to Step 7.

   Note: If PTGROUPMEMBERSHIP has a materialized view you may see an error regarding inability to drop a view. This can be ignored.

6. If there were errors, you should examine the log file, identify solutions, restore the database to its previous state, fix the problems, and re-run the Database Upgrade Tool.

   Note: You must restore the database to its original 5.0.x state before you re-run the Database Upgrade Tool. The Database Upgrade Tool modifies the database to determine all possible errors. Therefore, even if the upgrade did not complete successfully, the database is at least partially upgraded to 6.1 specifications.

7. If you changed the database credentials, change them back to use the AquaLogic Interaction database user.

Exporting Data from the Database

Export the data from the portal schemas using tools provided by your database vendor.

Creating the New Database Schema

To create the new database schema, follow the instructions appropriate for your database type.

Creating the New Database Schema on an Oracle Database

1. Drop and recreate the portal schema owner.
2. Grant connect, resource, and dba rights on the portal tablespaces to the newly created portal schema owner.
3. Run the **create_tables_oracle.sql** script.

   On a **Unix** installation the script is located at:

   ```
   <PT_HOME>/ptportal/6.1/sql/oracle_unix9.2
   ```

   or

   ```
   <PT_HOME>/ptportal/6.1/sql/oracle_unix10
   ```

   On a **Windows** installation and **Oracle 9i**, the script is located at:

   ```
   <PT_HOME>\ptportal\6.1\sql\oracle_nt9.2
   ```

   or

   ```
   <PT_HOME>\ptportal\6.1\sql\oracle_nt10
   ```

Creating the New Database Schema on a SQLServer Database

1. Create a new database. This database can be your new portal database, or it can serve as a temporary store for portal data.
2. Script the new database with the portal schema. To do this, run

   ```
   <PT_HOME>\ptportal\6.1\sql\mssql\create_tables_mssql.sql
   ```

Importing Data to the Database

Using tools provided by your database vendor, import the data you exported into the newly scripted database.

Note: On **SQLServer** databases, the portal data will now be in a new database. You must either modify connection information for all servers that use the portal database, or move the portal database back to the original database by dropping the original, recreating the original using the table script in "Creating the New Database Schema on a SQLServer Database" on page 5-7, and then exporting the data from the temporary database to the original database.

Updating Stored Procedures and System-Specific Parameters

To update stored procedures and system-specific parameters in the new portal database, you must run two sql scripts. The scripts are located in **<PT_HOME>/ptportal/6.1/sql** under the directory appropriate to your operating system and database version.

On an **Oracle** database, run:

- **stored_procs_oracle.sql**
- **postinst_oracle.sql**

On a **SQLServer** database, run:

- **stored_procs_mssql.sql**
- **postinst_mssql.sql**

Resolving Missing Mandatory Portlets

If you upgraded your portal from 5.0.x to 6.1 and find that mandatory portlets are not appearing properly in your 6.1 portal, run the following database script on your 6.1 database to resolve the issue. If you upgraded from 5.0.x to 6.0 and mandatory portlets are appearing properly in your 6.0 portal, skip this step:

```
UPDATE PTPages SET TopicPos=0 WHERE TopicPos!=0 AND ObjectId IN (SELECT
ObjectId FROM PTPages p, (SELECT FolderId, MIN(TopicPos) AS MinTopicPos FROM
PTPages WHERE FolderId<0 GROUP BY FolderId) a WHERE p.FolderId=a.FolderId
AND p.TopicPos=a.MinTopicPos)
```

Rebuilding the Search Index

To rebuild the search index:

1. Log in to the portal as the administrator.
2. Navigate to Administration.
3. From the Select Utility drop-down menu, select **Search Service Manager**.
4. Schedule the next search repair to occur either in the past or in the very near future.
5. Click **Finish**.
6. Navigate to the administrative folder that contains the search update agents that are registered with the Automation Service.

7. Schedule one of the search update agents to run in the past or in the very near future
8. Click **Finish**.

   The next search update agent that runs will rebuild the search index.

Note: We *do not* recommend clicking Run Once from the administrative folder or selecting Run Once from the Job Editor. If you click Run Once from the administrative folder, the job log will be lost after the operation completes, which may inhibit troubleshooting if the rebuild fails. If you select Run Once from within the Job Editor, the Search Update Agent will not be scheduled to run again in the future.

Completing the AquaLogic Interaction Component Upgrade

Now that you have installed version 6.1 of the Administrative Portal, scripted the database and performed other necessary upgrade steps, you can complete the AquaLogic Interaction component upgrade. You do this by installing all other AquaLogic Interaction 6.1 components on their respective hosts. On each host, first stop any existing Corporate Portal 5.0.x, Foundation 6.0 or AquaLogic 6.1 services. Run the AquaLogic Interaction 6.1 installer on each host and select Custom Install to select the AquaLogic Interaction 6.1 components that you want to install. For detailed instructions on launching the installer and completing its screens, see "Installing the AquaLogic Interaction Components" on page 4-2.

If your portal deployment includes one or more AquaLogic User Interaction products (such as Collaboration, Publisher, Analytics, and so on) upgrade those products now. Refer to each product's associated installation and upgrade guide for instructions on upgrading those products.

APPENDIX A

Uninstalling

This chapter describes how to uninstall the components of AquaLogic Interaction.

To uninstall AquaLogic Interaction:

1. Start the uninstaller:
   - For Windows, use **Add/Remove Programs** to remove AquaLogic Interaction.
   - For Unix, run **uninstall AquaLogic_Interaction** in the folder **<install folder>/uninstall/ptportal/6.1**.
2. On the Uninstall AquaLogic Interaction page, click **Next**.
3. On the Uninstall Options page, choose whether you want to perform a complete uninstall of AquaLogic Interaction or to uninstall specific features. Then click **Next**.
4. On the Uninstall Complete page, review any items that could not be removed.

APPENDIX B

Troubleshooting

This appendix provides information on troubleshooting the installation and configuration process.

Troubleshooting Common Installation and Configuration Problems

The following table describes common installation and configuration problems and provides solutions to them.

Table B-1 Common Installation and Configuration Problems and Solutions

Problem Description and Details	Cause and Solution
• **Problem:** Errors occur when users try to log in to the portal after upgrading AquaLogic Interaction.	**Cause:** You did not re-install the Interaction component of AquaLogic Interaction Analytics on the portal server after upgrading AquaLogic Interaction. **Solution:** Re-install the Interaction component of AquaLogic Interaction Analytics on the portal server after upgrading AquaLogic Interaction. If upgrading AquaLogic Interaction requires upgrading Analytics, perform the Analytics upgrade after upgrading AquaLogic Interaction.
• **Problem:** Rebuilding the search index fails while upgrading Search. If you are running Logging Spy during the upgrade, Logging Spy displays an error message that doc2text has failed or cannot be invoked. If you are not running Logging Spy during upgrade, either the Search Update Agent or crawler job log displays an error message.	**Cause:** After installing AquaLogic Interaction 6.1, the path which has Oracle's own OEM of the OutsideIn libraries clash with AquaLogic Interaction's 6.1 libraries. **Solution:** On Windows servers, the AquaLogic Interaction portal or Administrative Portal Server should not be installed on the same server as an Oracle database; this is because both AquaLogic Interaction and Oracle install OutsideIn libraries and reference them via the PATH environment variable. The AquaLogic Interaction portal requires its version of the OutsideIn libraries. If Oracle has been installed first, its reference to its OutsideIn libraries will be listed first which would cause the AquaLogic Interaction portal to fail. If the AquaLogic Interaction Portal or Administrative Portal Server must be installed on the same Windows server as an Oracle database, you must move AquaLogic Interaction's reference to its OutsideIn libraries in front of Oracle's in the PATH environment variable. In order to do this, edit the PATH environment variable and move AquaLogic Interaction's reference to the its OutsideIn libraries, %OUTSIDEIN_PATH%, to the front of the PATH environment variable. Note that performing this action may disable some features of Oracle that depend on its version of the OutsideIn libraries.

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