BEA WebLogic Mobility Server™

Installation Guide

Version 3.3
March 2006

Copyright

Copyright © 1995-2005 BEA Systems, Inc. All Rights Reserved.

Restricted Rights Legend

This software is protected by copyright, and may be protected by patent laws. No copying or other use of this software is permitted unless you have entered into a license agreement with BEA authorizing such use. This document is protected by copyright and may not be copied photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form, in whole or in part, without prior consent, in writing, from BEA Systems, Inc.

Information in this document is subject to change without notice and does not represent a commitment on the part of BEA Systems. THE DOCUMENTATION IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, BEA SYSTEMS DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE, OF THE DOCUMENT IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.

Trademarks and Service Marks

Copyright © 1995-2005 BEA Systems, Inc. All Rights Reserved.BEA, BEA JRockit, BEA WebLogic Portal, BEA WebLogic Server, BEA WebLogic Workshop, Built on BEA, Jolt, JoltBeans, SteelThread, Top End, Tuxedo, and WebLogic are registered trademarks of BEA Systems, Inc. BEA AquaLogic, BEA AquaLogic Data Services Platform, BEA AquaLogic Enterprise Security, BEA AquaLogic Service Bus, BEA AquaLogic Service Registry, BEA Builder, BEA Campaign Manager for WebLogic, BEA eLink, BEA Liquid Data for WebLogic, BEA Manager, BEA MessageQ, BEA WebLogic Commerce Server, BEA WebLogic Communications Platform, BEA WebLogic Enterprise, BEA WebLogic Enterprise Platform, BEA WebLogic Enterprise Security, BEA WebLogic Express, BEA WebLogic Integration, BEA WebLogic Java Adapter for Mainframe, BEA WebLogic JDriver, BEA WebLogic Log Central, BEA WebLogic Network Gatekeeper, BEA WebLogic Personalization Server, BEA WebLogic Personal Messaging API, BEA WebLogic Platform, BEA WebLogic Portlets for Groupware Integration, BEA WebLogic Server Process Edition, BEA WebLogic SIP Server, BEA WebLogic WorkGroup Edition, Dev2Dev, Liquid Computing, and Think Liquid are trademarks of BEA Systems, Inc. BEA Mission Critical Support, BEA Mission Critical Support Continuum, and BEA SOA Self Assessment are service marks of BEA Systems, Inc.

All other names and marks are property of their respective owners.

Contents

Introduction **1**
About This Manual 1
Intended Audience 1
Using This Guide 1
1—Install WebLogic Mobility Server on MS Windows 2000 ..... **2**
Introduction 2
Installation Prerequisites 2
Installation Procedure for Windows 4
Configure the WebLogic Mobility Server Location (Optional) 10
Create the Workshop Domain and Install the Sample Workshop Projects 12
Create the Portal Domain and Create the Sample Mobility Portal Project 24
Configure the Device Emulators 35
Next Steps **37**
2—Install WebLogic Mobility Server on Sun Solaris, RedHat Linux or HP-UX **38**
Introduction 38
Installation Prerequisites 38
Installation Procedure for Sun Solaris, RedHat Linux, and HP-UX 39
Next Steps **41**

Introduction

About This Manual

This document describes the process for installing BEA WebLogic Mobility Server™ version 3.3.

Please read this document before commencing installation to ensure you comply with the installation pre-requisites and have access to relevant installation configuration information.

Intended Audience

It is recommended that your IT department, database/development team or a technical consultant perform the tasks outlined in this document.

Begin by reading the section below, which explains how to use the guide.

Using This Guide

The document is split into two sections:

1. "Install WebLogic Mobility Server on MS Windows 2000". This section describes the installation and configuration of:

   - WebLogic Mobility Server on MS Windows 2000, including the Mobility Extension for BEA WebLogic Workshop 8.1 on MS Windows 2000
   - A BEA Sample Workshop Mobility Project used to illustrate how to use the features provided by the Mobility Extension
   - A BEA Sample Mobility Portal Project for BEA WebLogic Platform 8.1, demonstrating the features of the Mobilized BEA WebLogic Portal Framework solution

   It also describes:

   - Configuration of device emulators in BEA WebLogic Workshop
   - Creating the necessary Domains and Applications required for importing the sample projects using the BEA Configuration Wizard
   - Importing the Sample Projects into BEA WebLogic Workshop

2. "Install WebLogic Mobility Server on Sun Solaris, RedHat Linux and HP-UX". This section describes the installation and configuration of WebLogic Mobility Server on Sun Solaris, RedHat Linux and HP-UX.

Note: This is the first guide that you will use in the process of installing and running the product—once you have completed the instructions here, proceed to the *Device Repository Guide* and then the *BEA WebLogic Mobility Server Administration Guide*. However, if you have installed WebLogic Mobility Server on MS Windows 2000, it is recommended that you go through the *BEA Mobilize Your Portal Guide, the BEA Sample Workshop Mobility Project Guide* and the *BEA Sample Mobility Portal Guide* after using this guide. The *BEA Mobilize Your Portal Guide* explains how to mobilize a portal, the *BEA Sample Workshop Mobility Project Guide* provides a step-by-step exercise in mobilizing a sample workshop application, and the *BEA Sample Mobility Portal Guide* illustrates the features of a Mobilized BEA Portal Framework.

1—Install WebLogic Mobility Server on MS Windows 2000

This section explains the installation procedure for installing WebLogic Mobility Server on MS Windows 2000.

Introduction

The *mobilityServer33_win.exe* installation application is used to install WebLogic Mobility Server on MS Windows 2000.

License

A BEA WebLogic Mobility Server license file must be integrated into the *bea.license* file of your WebLogic Server.

Your sales representative should provide this file to you along with the product CDs. Please contact your sales representative if you have not yet received your license file.

Once you have updated your license, you will be able to develop and test mobile-device ready content. If you have a developer or evaluation license, the software installer will install an evaluation version of the Device Repository enabling testing on a number of popular device emulators as well as a number of popular mobile and PDA devices. A production license must be present to install and use the full Device Repository. **Note**: An invalid license will result in HTML being delivered.

Please contact a sales representative if you wish to extend your evaluation or developer license or upgrade to a production license.

Installation Prerequisites

Software Prerequisites

The following software must be installed prior to installing WebLogic Mobility Server:

Operating System

- Microsoft Windows NT4, 2000, 2003

Application Server

The application server is required in order to use WebLogic Mobility Server, but not required prior to installation

- BEA WebLogic Platform 8.1 SP2 and above

Internet Browser

- Netscape 4.75 and above
- Internet Explorer 5 and above

Database (optional)

- Oracle 9i, 10i
- Postgres 7.3.2 and above
- PointBase 4.4
- MySQL 3.53 and above
- SQL Server 2000
- Sybase Adaptive Server Enterprise 12.5
- IBM DB2 Universal Database 8.1

JDK

For WebLogic 8.x:

- Sun JDK 1.4.x or JRockit 1.4.x

Note: Java JDK/JRE 1.4.x must be on the search path, with JAVA_HOME set correctly.

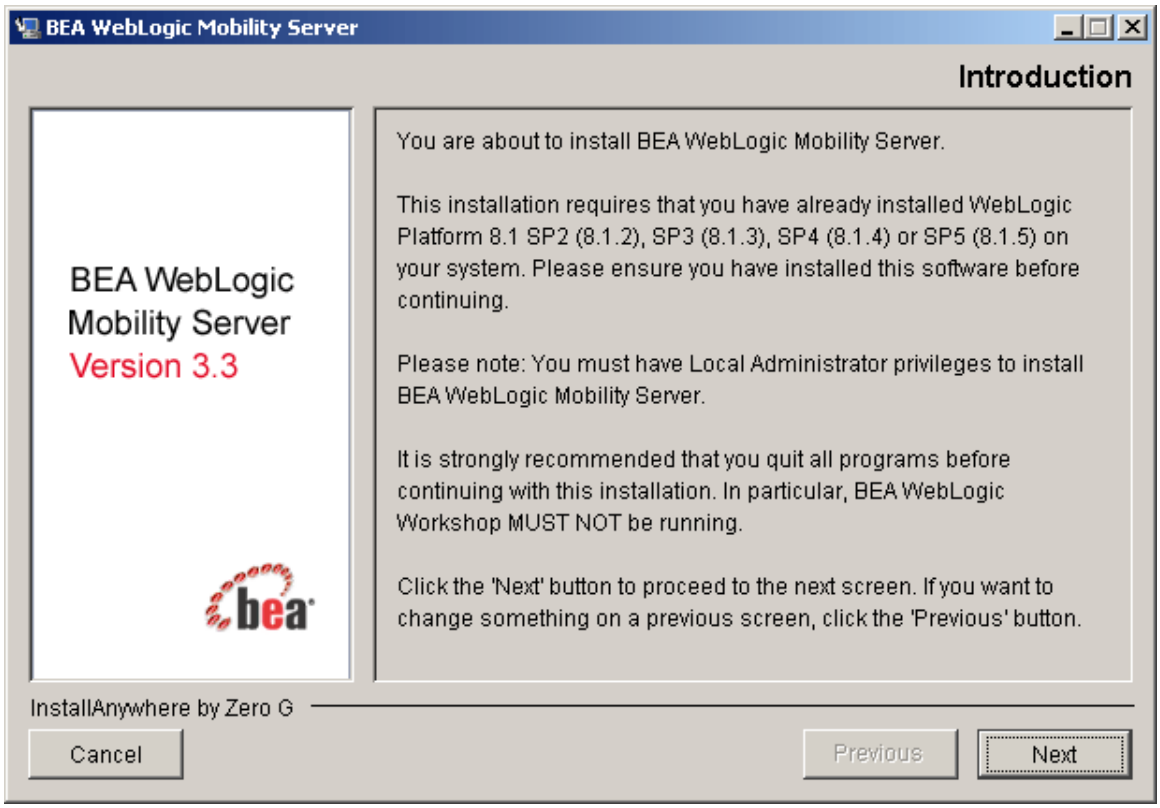
Administration Rights

This installation application requires administration rights on the machine in order to complete the installation.

Installation Procedure for Windows

1. Run the WebLogic Mobility Server installation application.
2. The installation “Introduction” dialog is displayed.

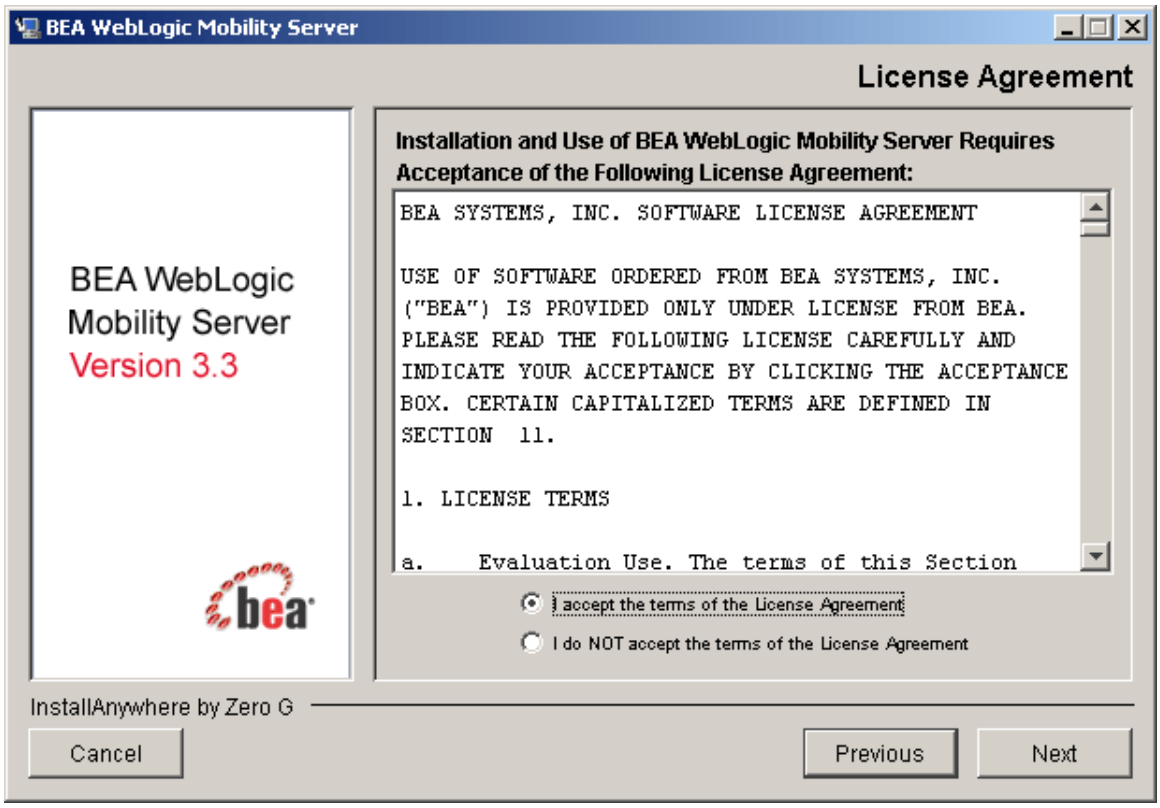
WebLogic Mobility Server Introduction dialog



3. Select **Next** to continue.

4. The “License Agreement” dialog is displayed.

License Agreement dialog

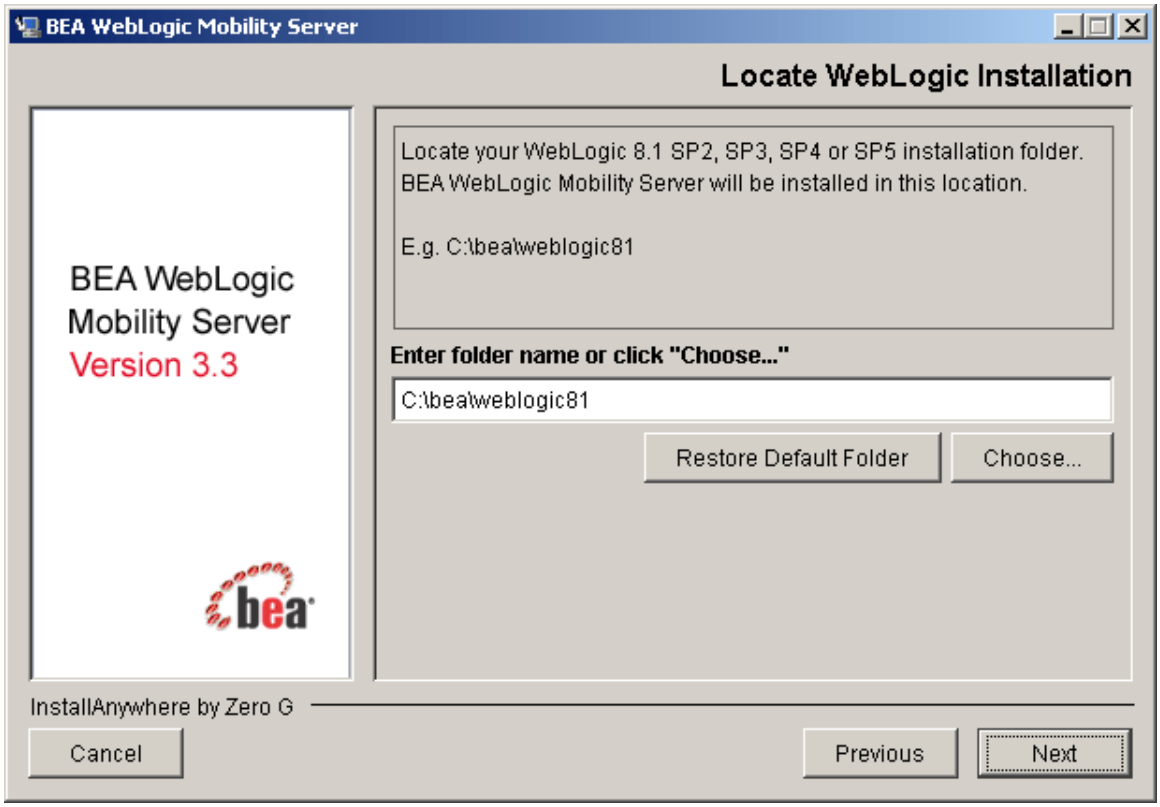


5. Read the license agreement and select the **I accept the terms of the License Agreement** radio button if you are satisfied with the terms.
6. Click **Next** to continue with the install.

   Note: The **Next** button is unavailable if the terms are not accepted.

7. The “Choose Install Folder” dialog is displayed.

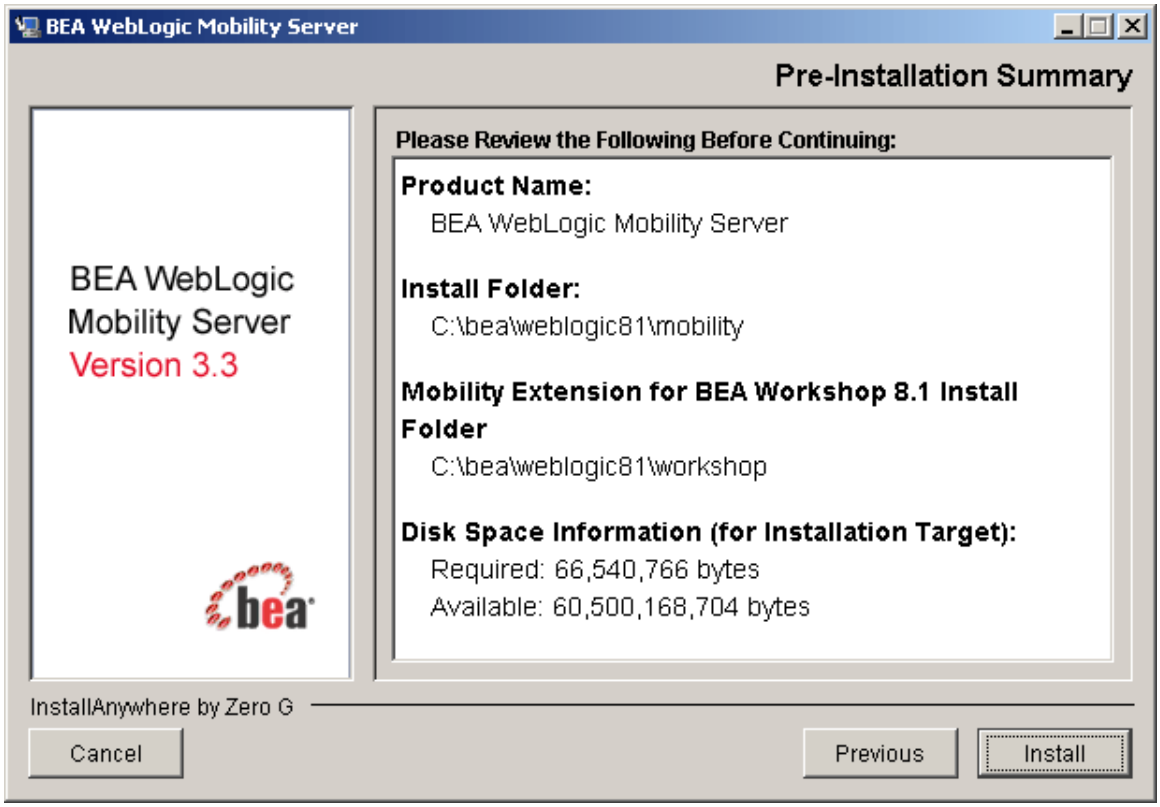
Choose Install Folder dialog



8. Select the folder where you would like to install WebLogic Mobility Server. Click **Next** to continue.

9. The “Pre-Installation Summary” dialog is displayed.

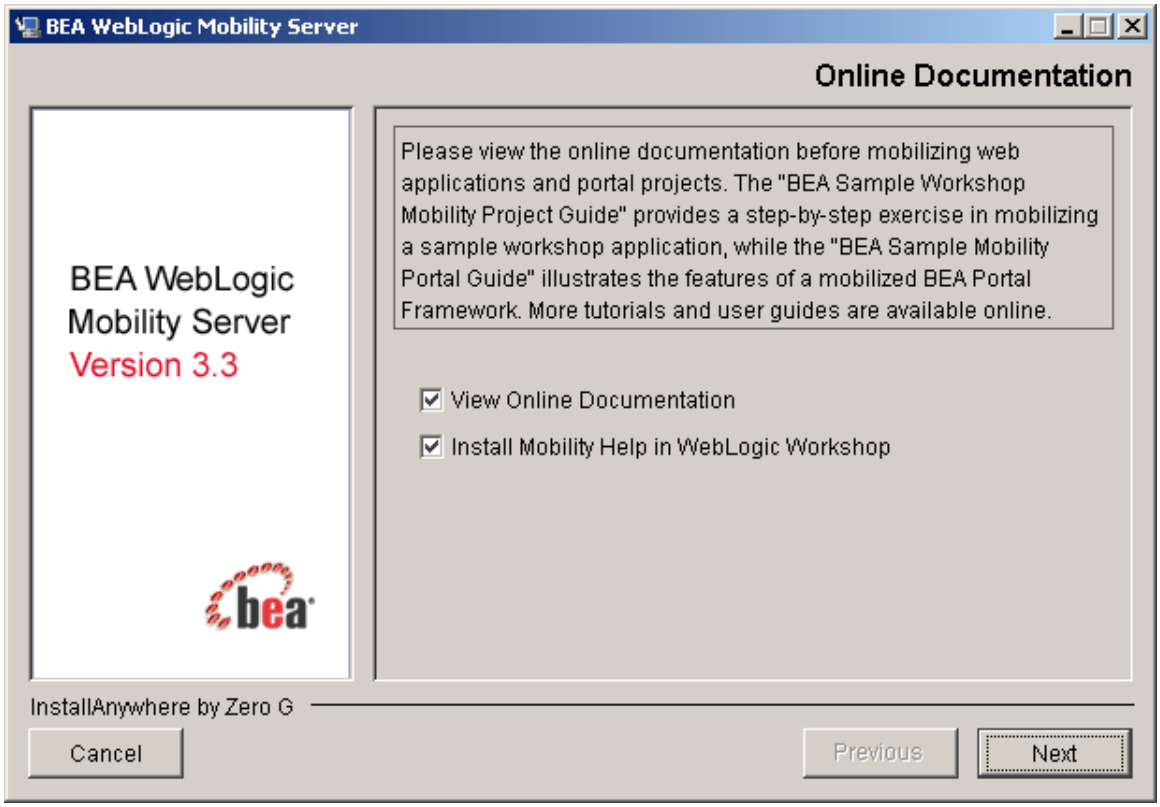
Pre-Installation Summary dialog



10. Review the installation configuration information. If the information is correct, click **Install**. Otherwise, click **Previous** to go back through the screens and modify the provided information

11. When the installation completes, the “View Release Notes?” dialog is displayed.

View Online Documentation dialog

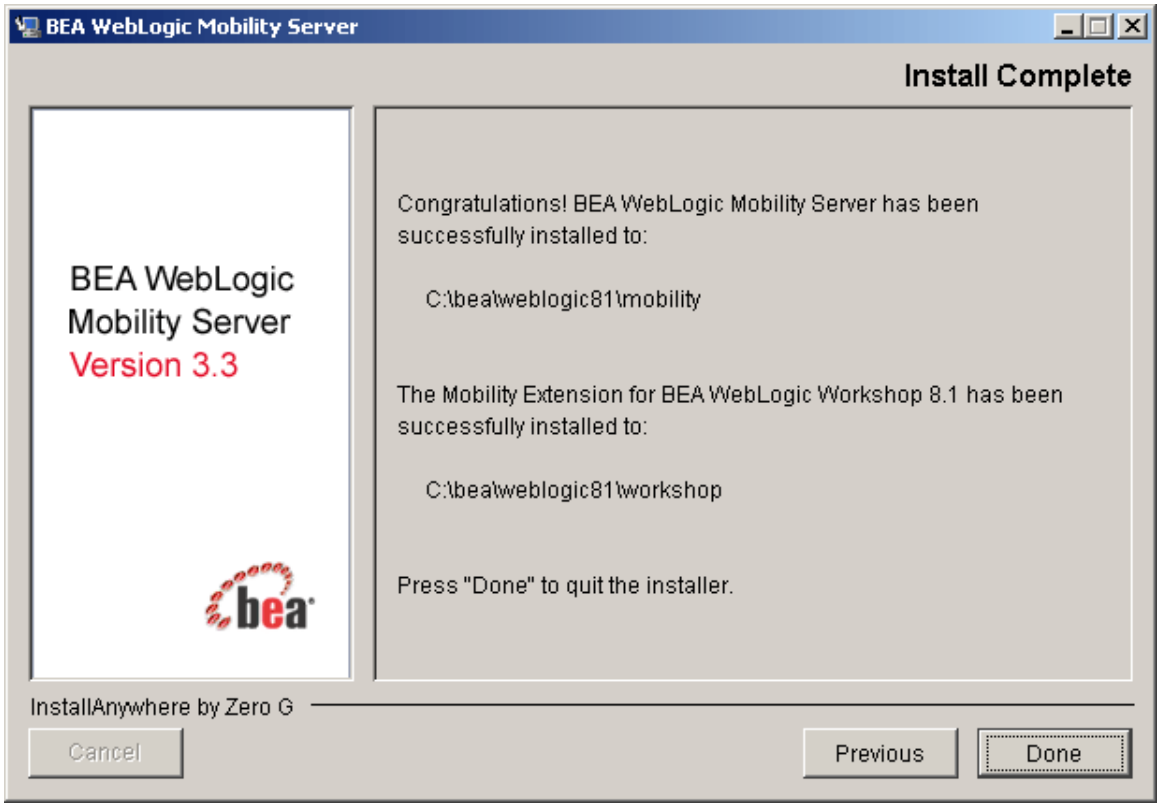


12. Indicate if you would like to view the Online Documentation and install the Mobility Help in WebLogic Workshop. Click **Next**.

    Note: If you select the **View Online Documentation** check box, the online help will display in your Internet browser.

13. The “Install Complete” dialog will be displayed following a successful install.

Installation Complete Screen



14. Click **Done** to exit the installer.

Configure the WebLogic Mobility Server Location (Optional)

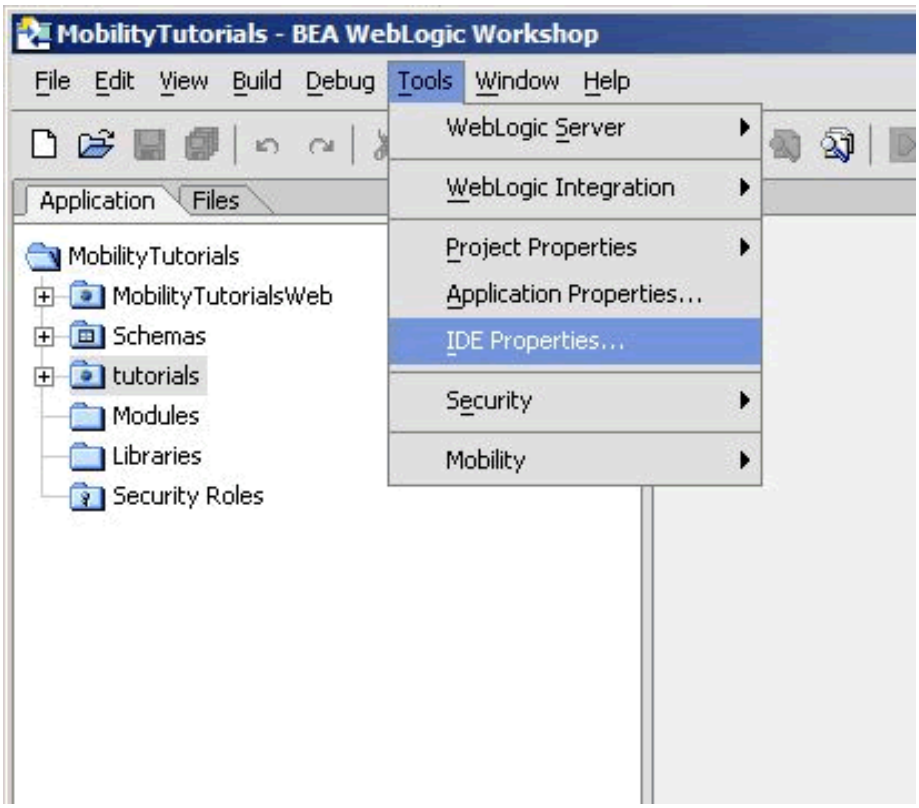
The location of the WebLogic Mobility Server installation was pre-configured during the installation to **<bea installation directory>\weblogic81\mobility**. For advanced users who may have multiple installations of WebLogic Mobility Server, this section describes how to re-configure the WebLogic Mobility Server location for use with the Mobility Sample Projects for BEA Workshop and BEA Portal.

Note: Please note that this step is optional.

To configure the WebLogic Mobility Server location:

1. Open BEA WebLogic Workshop.

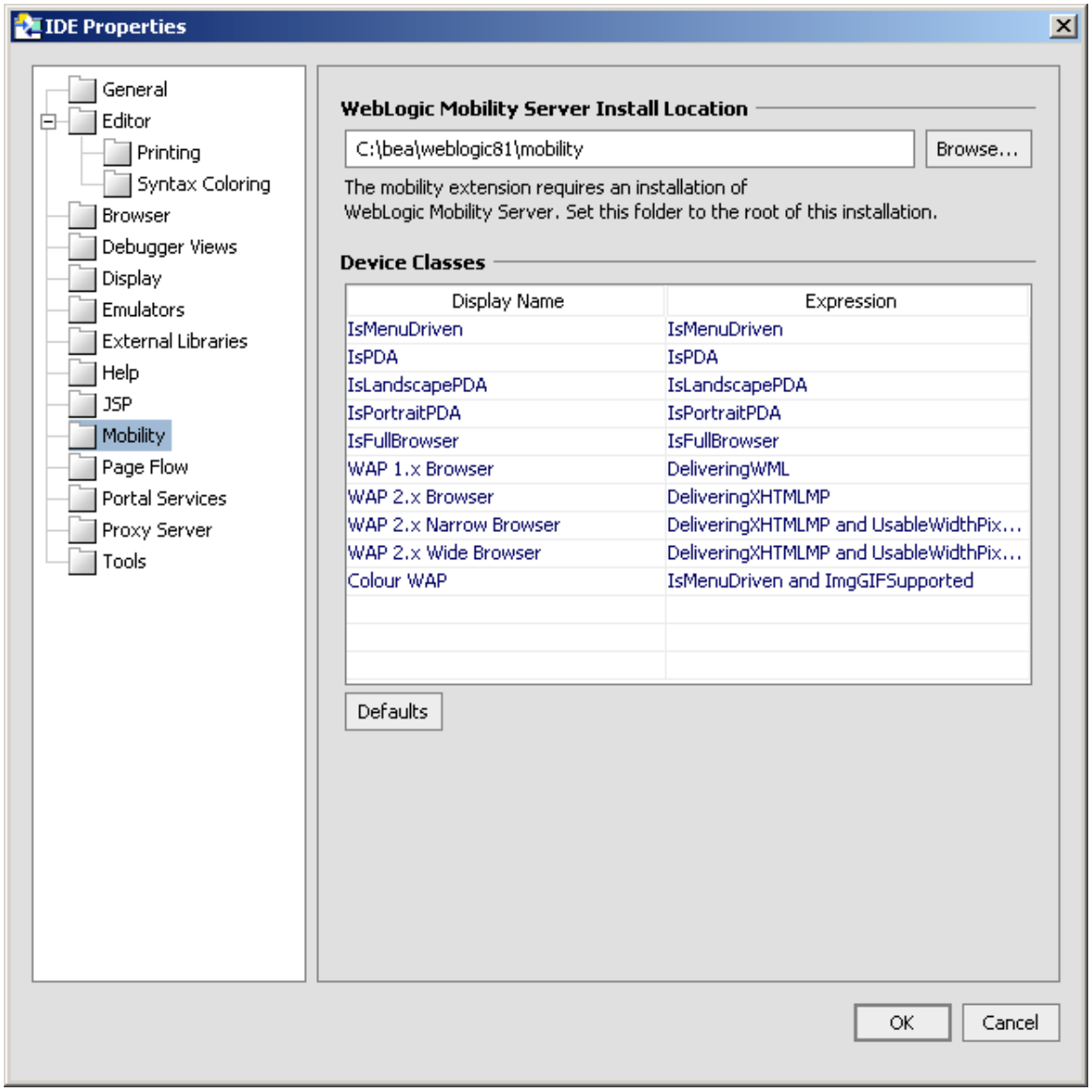
IDE Properties



2. From within your BEA Workshop Environment, choose **Tools → IDE Properties**.

3. The IDE Properties dialog is displayed.

WebLogic Mobility Server Location



4. Select the **Mobility** folder.
5. The location of the WebLogic Mobility Server installation was pre-configured during the installation to **<bea installation directory>\weblogic81\mobility** and displays in the **WebLogic Mobility Server Install Location** field.

   To change the location to point at a different WebLogic Mobility Server installation, enter the location of the WebLogic Mobility Server installation in the **WebLogic Mobility Server Install Location** field or click **Browse** to browse to the location. This will enable access to device diagnostic and device management tools from within BEA WebLogic Workshop.
6. Click **OK**.

Create the Workshop Domain and Install the Sample Workshop Projects

Introduction

This section describes creating a BEA Workshop Domain, creating a new application, and then importing the provided Sample Workshop Projects into the newly created domain.

Create the Mobility Domain

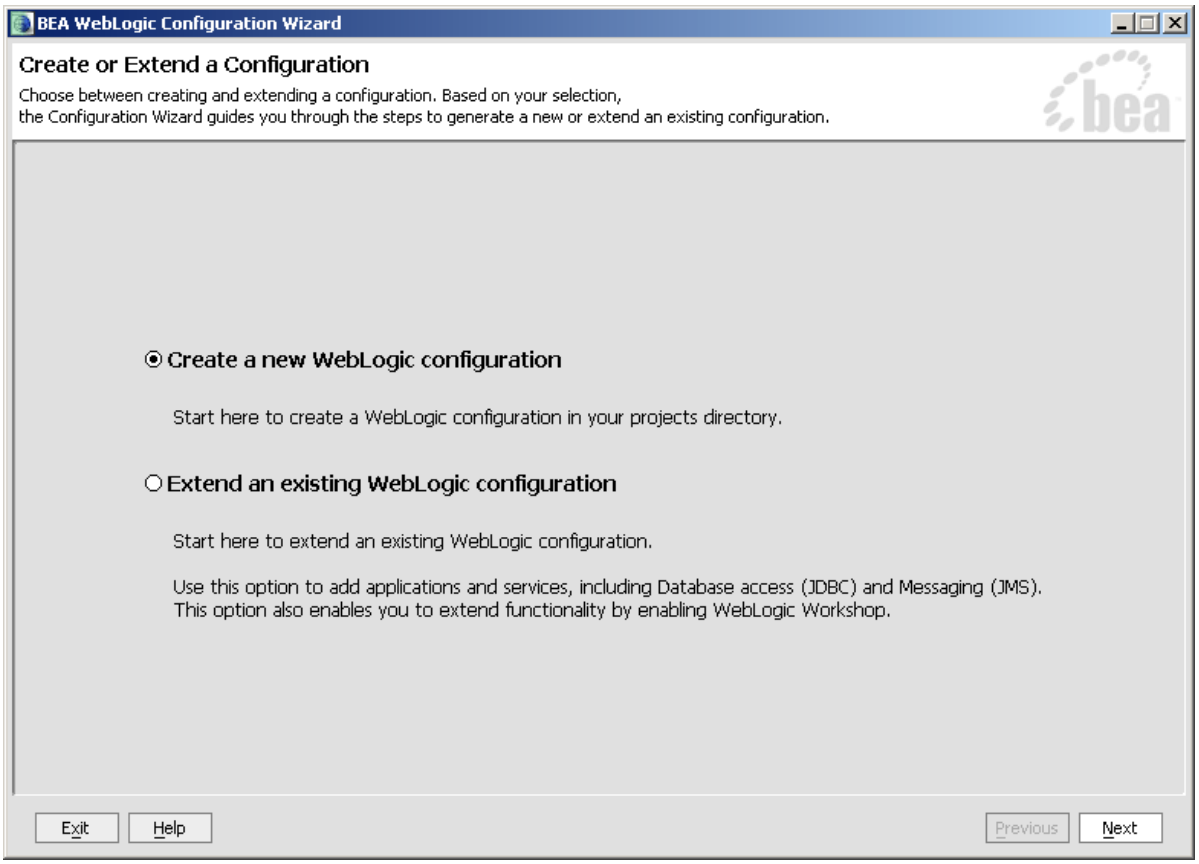
To create the Mobility Domain:

1. Launch the BEA WebLogic Configuration wizard from the Windows Start menu; choose **Start → Programs → <BEA install directory> → Configuration Wizard**

   If you have BEA Workshop open, you can also launch it from the tools menu; choose **Tools → WebLogic Server → Configuration Wizard**

7. The "Configuration Wizard – Create a new WebLogic Configuration" dialog is displayed.

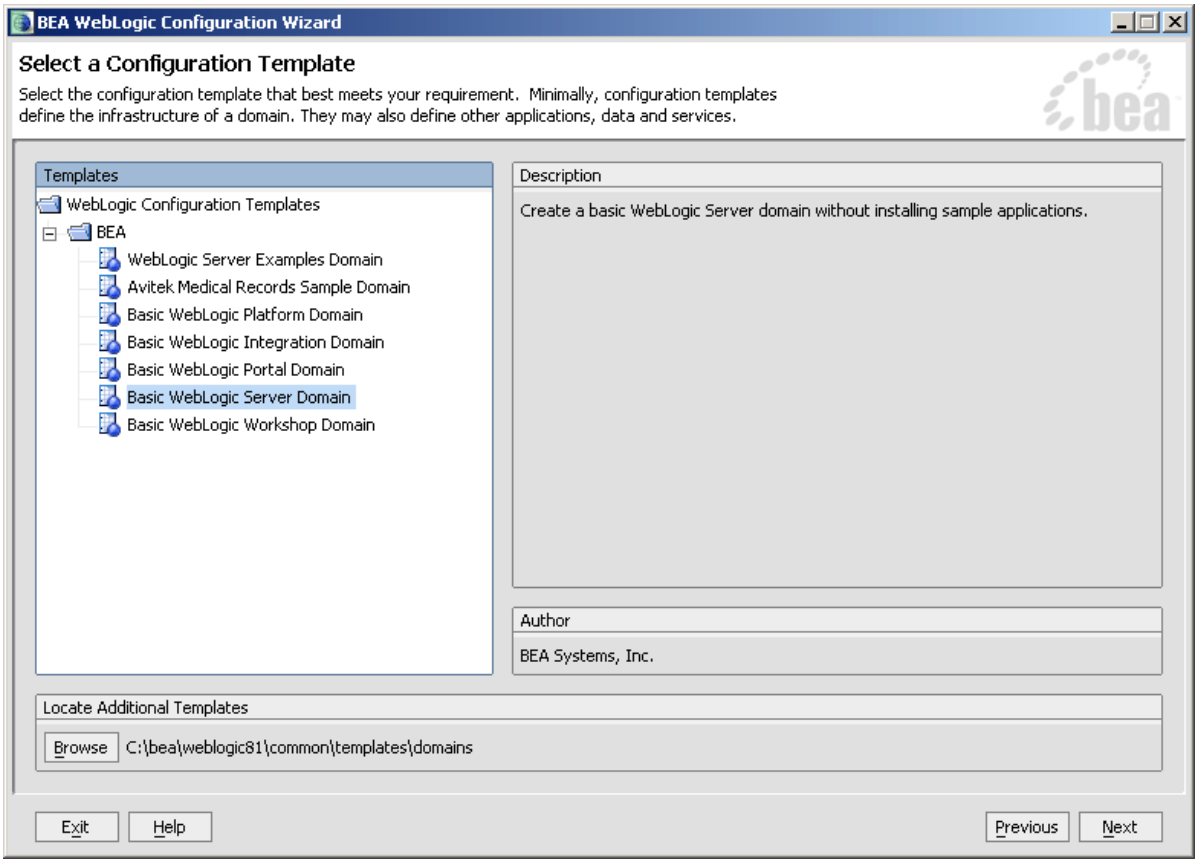
Configuration Wizard – Create a new WebLogic Configuration



8. Select **Create a new WebLogic configuration** and click **Next**.

9. The “Select a Configuration Template” dialog is displayed.

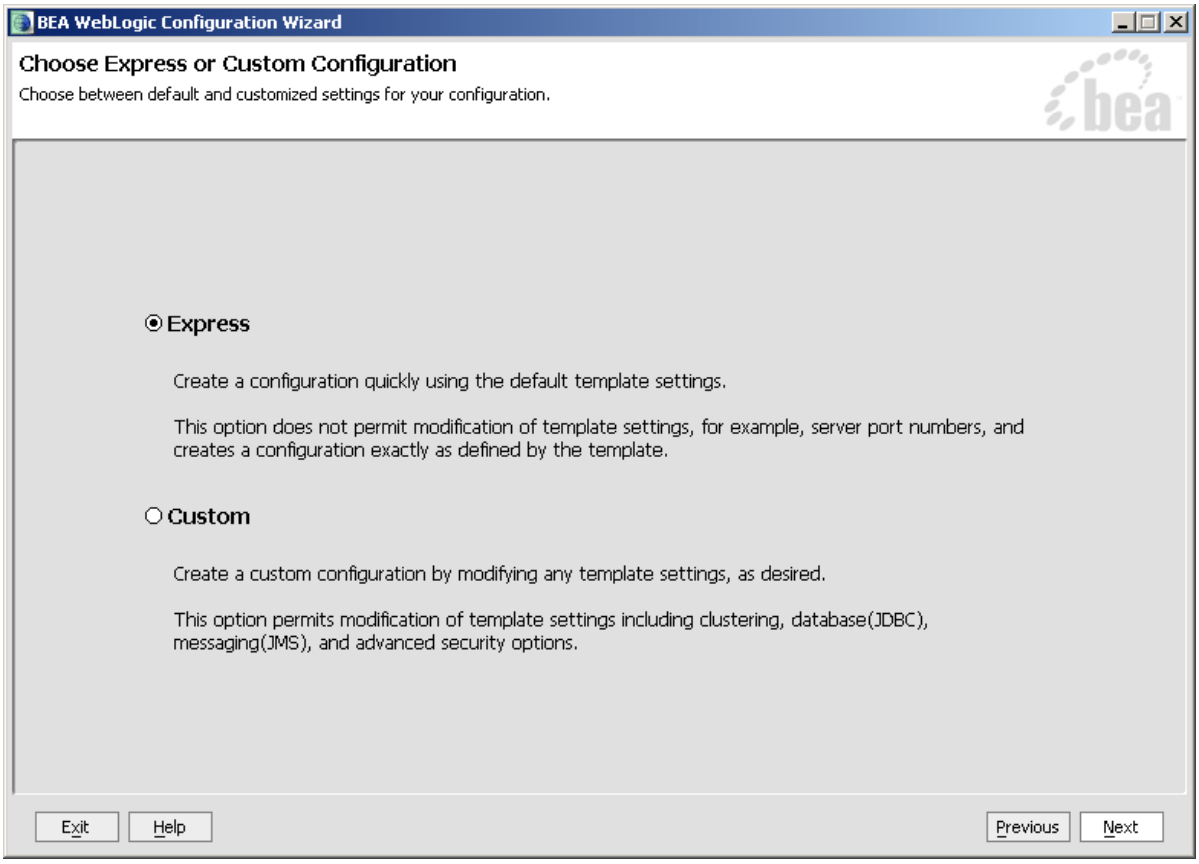
Configuration Wizard – Basic WebLogic Workshop Domain



10. Select **Basic WebLogic Workshop Domain** and click **Next**.

11. The “Choose Express or Custom Configuration” dialog is displayed.

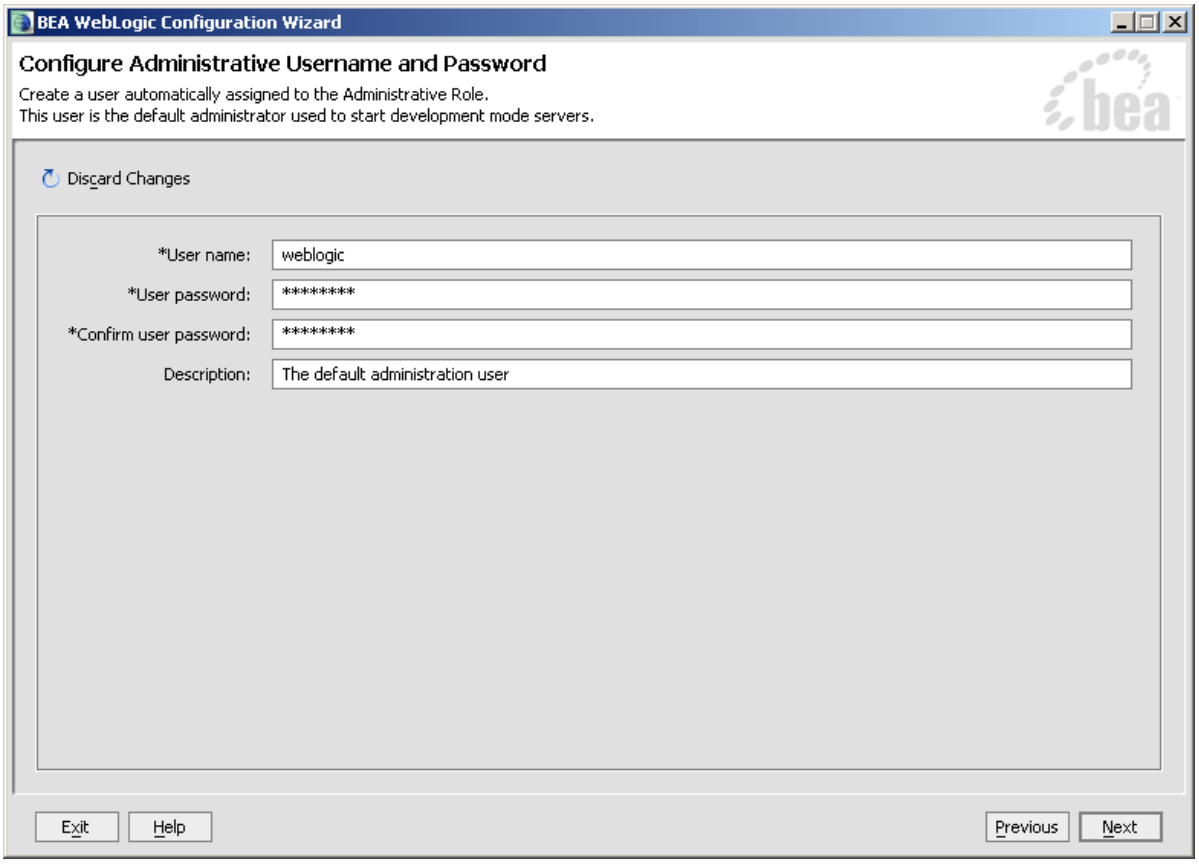
Configuration Wizard – Express Configuration



12. Select “**Express**” and click **Next**

13. The “Configure Administrative Username and Password” dialog is displayed.

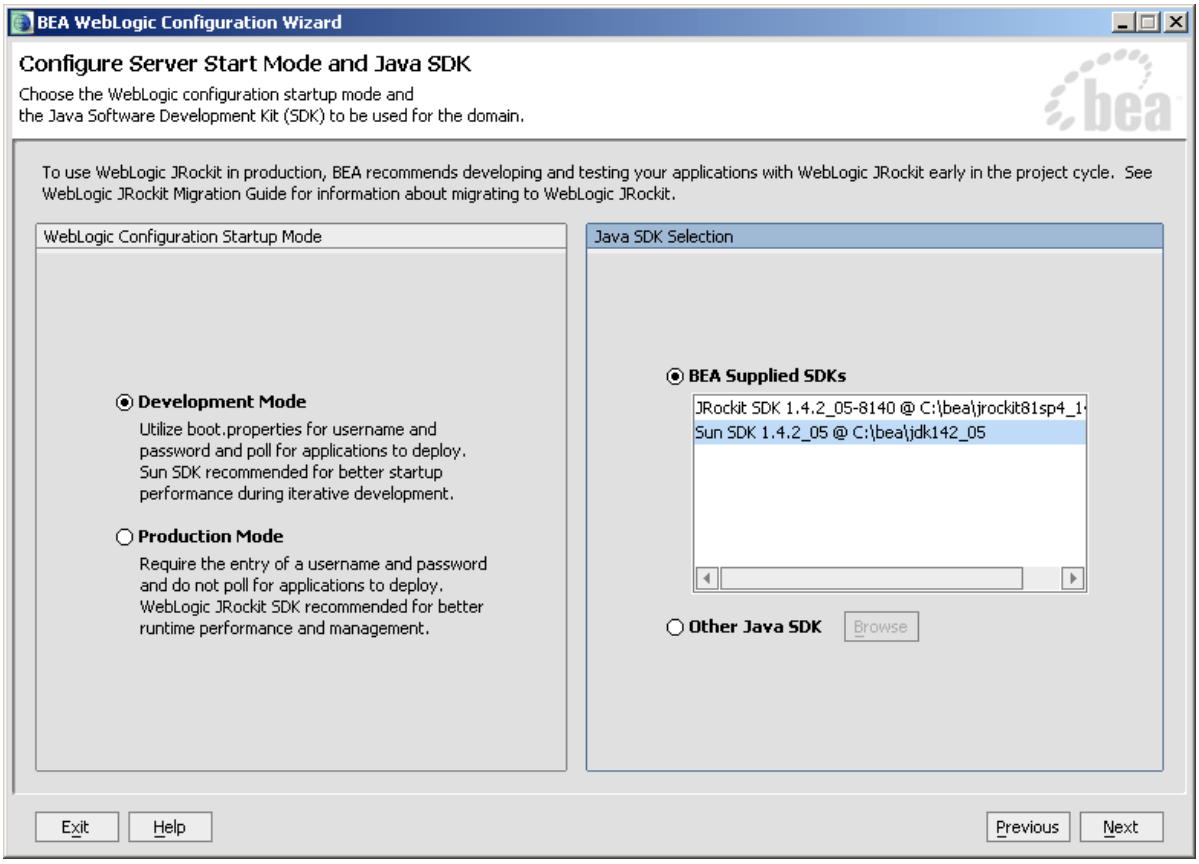
Configuration Wizard – User Name and Password



14. Enter “weblogic” for the username and “weblogic” for the password and click **Next**.

15. The “Configure Server Start Mode and Java SDK” dialog is displayed.

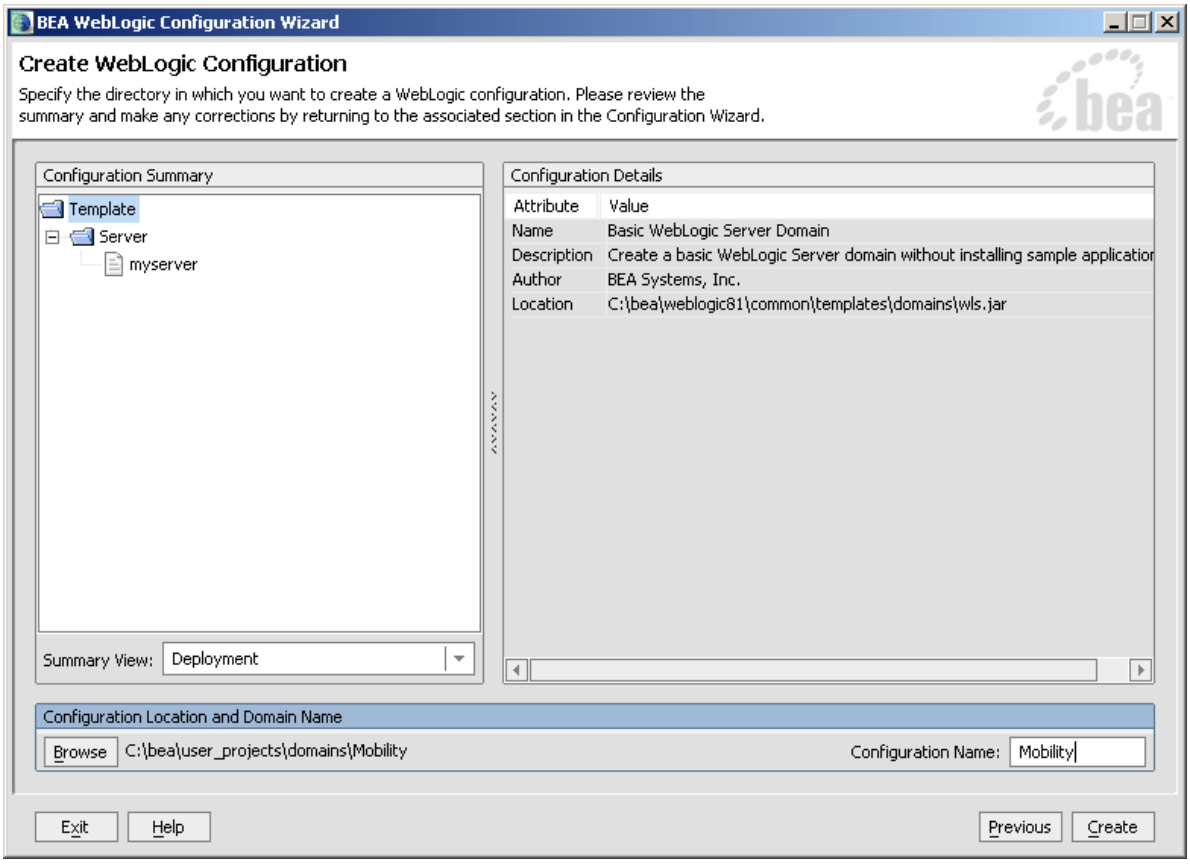
Configuration Wizard – Start Mode



16. Select **Development Mode** within the **WebLogic Configuration Startup Mode** section.
17. Select **Sun JDK** within the **Java SDK Selection** section and click **Next**.

18. The “Create WebLogic Configuration” is displayed.

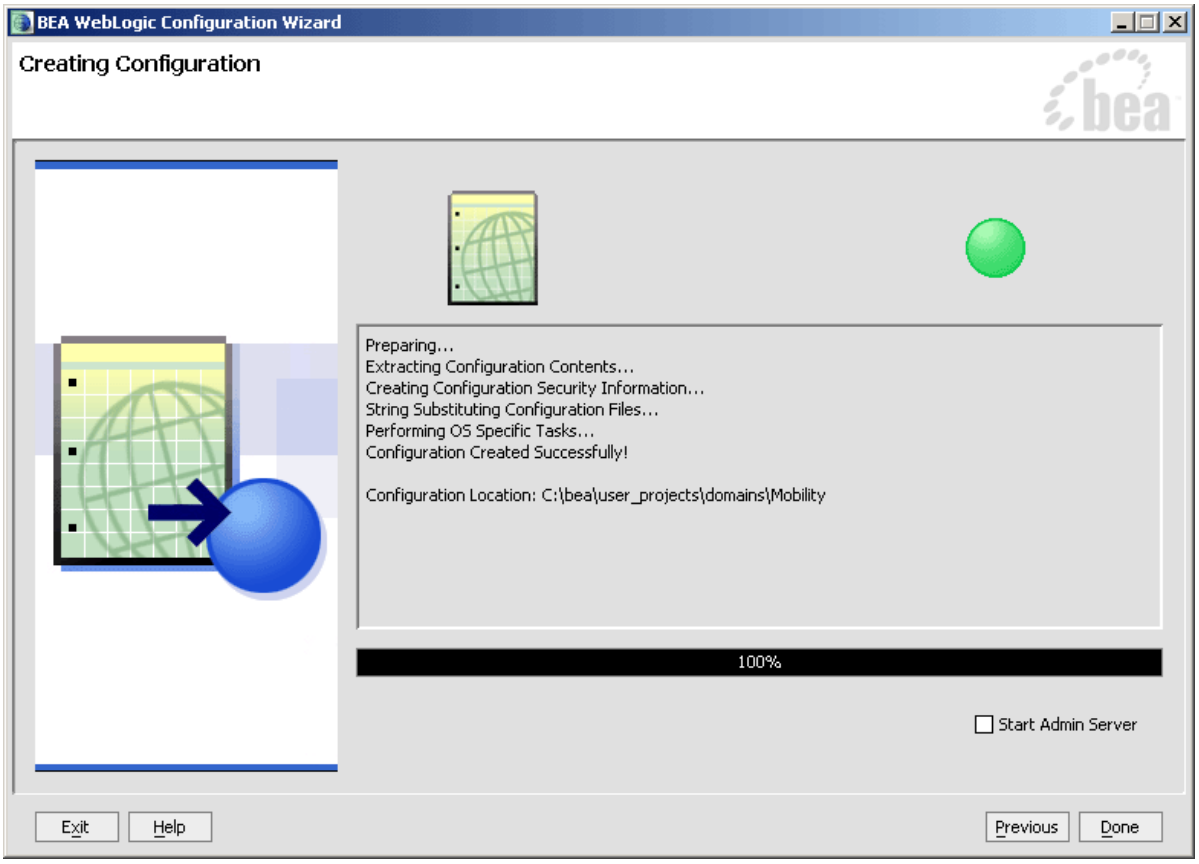
Configuration Wizard – Mobility



19. Enter “Mobility” in the **Configuration Name** field and click **Create**.

20. The configuration wizard will now create the domain.

Configuration Wizard – Creating Configuration



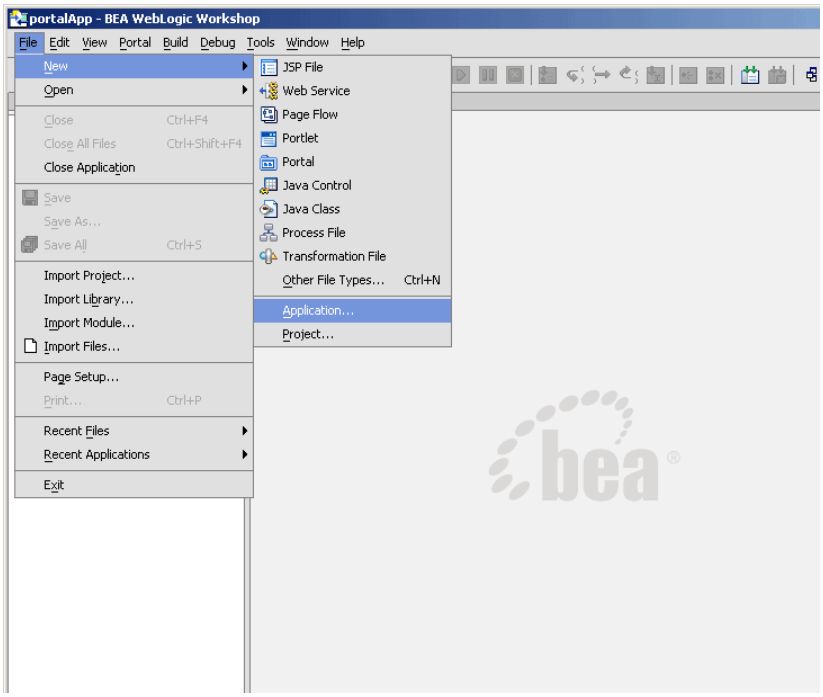
21. When it completes, click **Done** on the Creating Configuration screen.

Create the Mobility Application

To create the Mobility application:

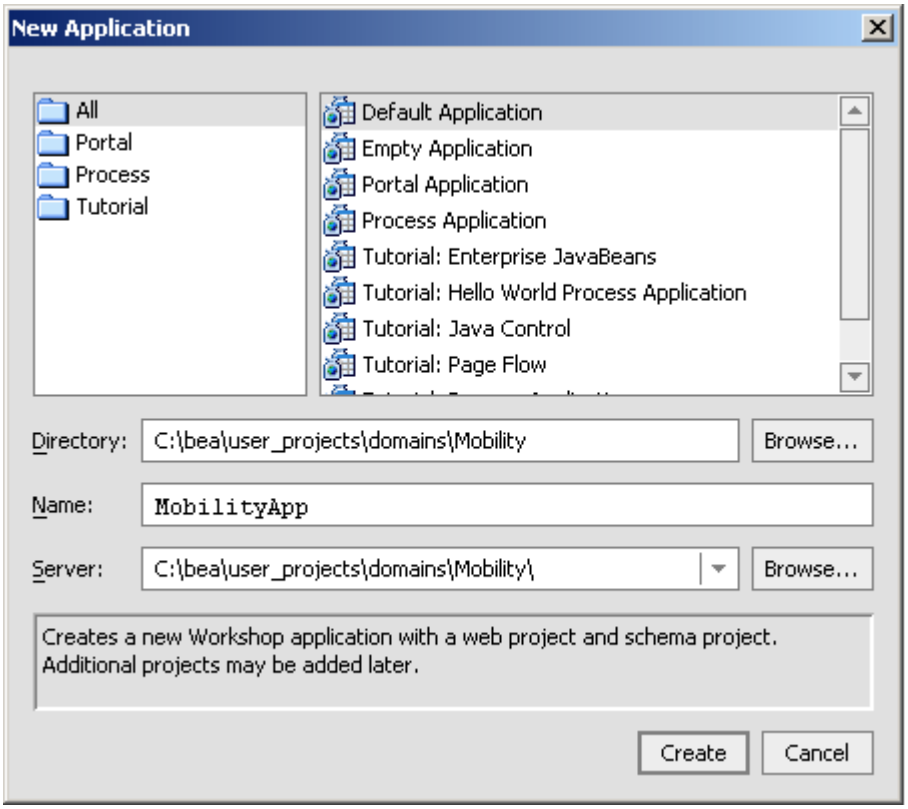
1. To create a new application in Workshop, choose **File → New→ Application**

Create New Application



2. The “New Application” dialog is displayed.

New Application Dialog



3. From the window:
   - Select Default Application.
   - Click **Browse** next to the **Directory** field and browse the **Domains** directory, selecting your newly created “Mobility” domain.
   - Enter “MobilityApp” in the **Name** field – this is the application where you will import the sample mobility application.
   - Click **Browse** next to the **Server** field and select the *config.xml* file inside the newly created “Mobility” domain.
4. Once you have filled in the fields as above, click **Create** and the application will be created

Now that you have created a new domain and a new application, you can import the sample Workshop mobility project.

Import the Sample Workshop Mobility Project

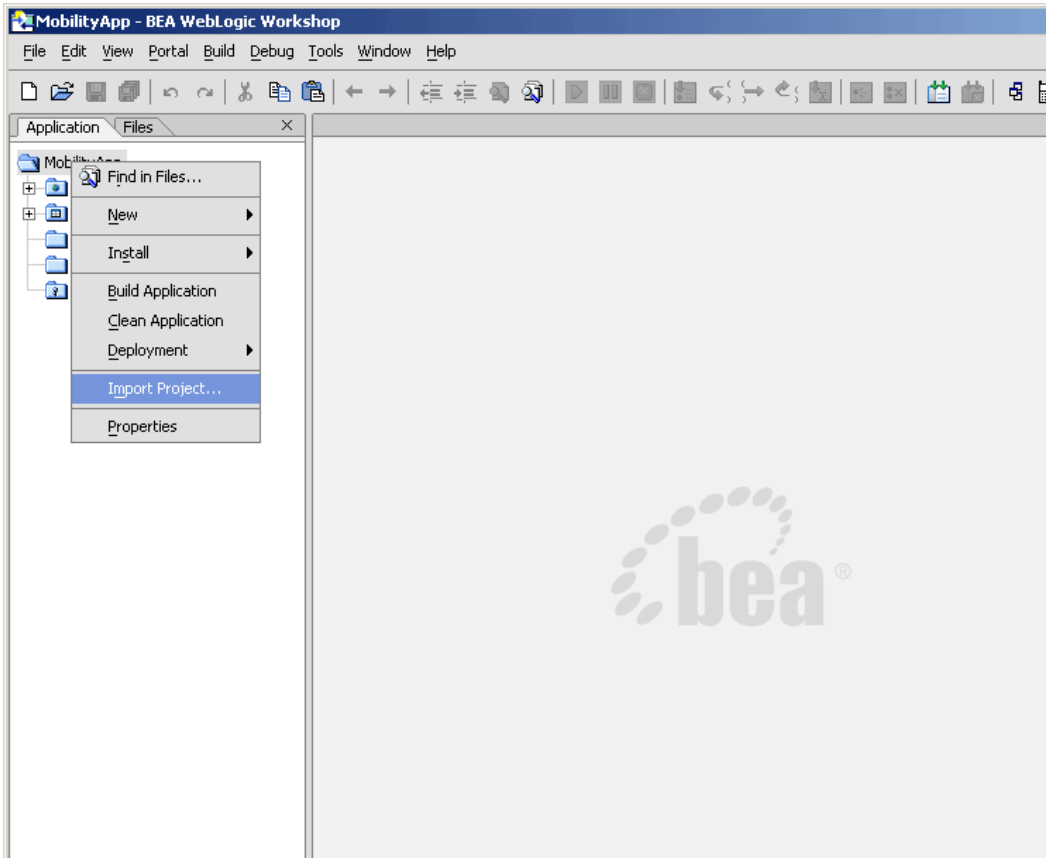
The sample Workshop Mobility project is located in the **<bea>\weblogic81\mobility\samples\BEAWorkshop** directory.

Two versions of the project called `restaurantWeb` and `restaurantWeb_After` were installed during the Mobility Extension installation. The `restaurantWeb` project has not yet been mobilized, while the `restaurantWeb_After` project has already been fully mobilized.

You can install the `restaurantWeb` project as described below and then follow the steps described in the *BEA Sample Workshop Mobility Project Guide* to mobilize it.

1. Right-click the newly created “MobilityApp” application in the Application tree window.

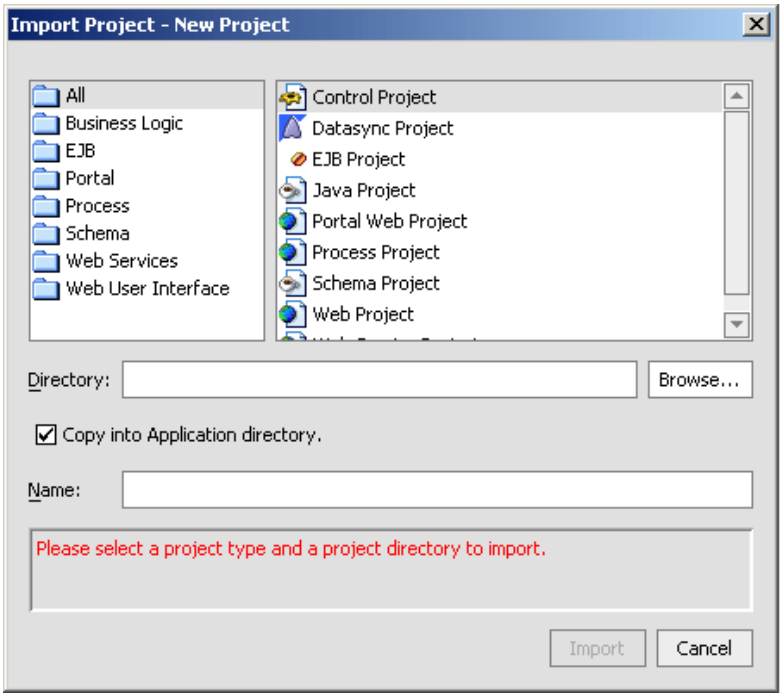
Import Project



2. Choose **Import Project**.

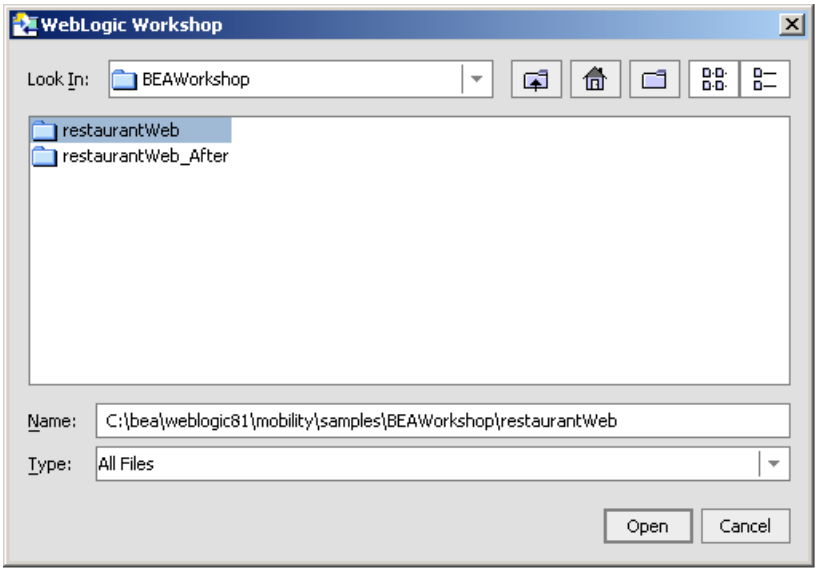
3. The “Import Project – New Project” dialog is displayed.

Import New Project



4. Click Browse next to the Directory: field and browse to the “**<bea>\weblogic81\mobility\samples\BEAWorkshop**” directory.

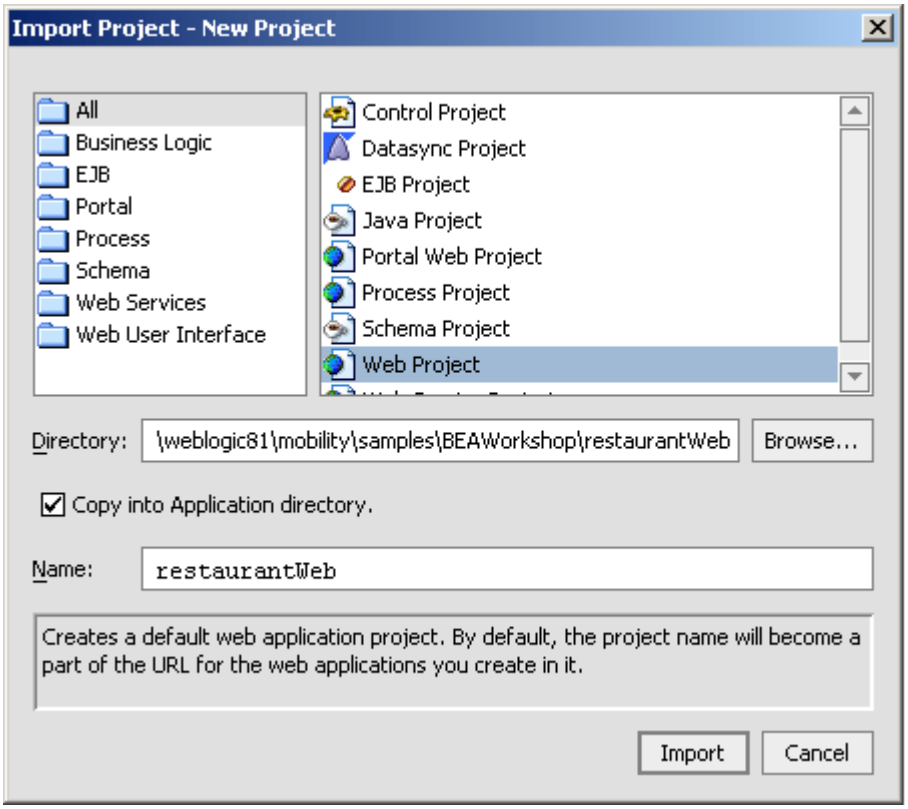
Locate restaurantWeb



5. Select “restaurantWeb” and click **Open**.

6. Back on the “Import Project - New Project” dialog, the Directory will now be filled in, with a default Name for the application set to “restaurantWeb”.

Import restaurantWeb project



7. Select **Web Project** from the right hand pane.
8. Ensure that the **Copy into Application Directory** check box is selected.
9. Click **Import**.

You can also choose to import the `restaurantWeb_After` project to see the final version. The *BEA Sample Workshop Mobility Project Guide* document explains the steps to mobilize the `restaurantWeb` project to reach the same results as in the `restaurantWeb_After` project.

Create the Portal Domain and Create the Sample Mobility Portal Project

Introduction

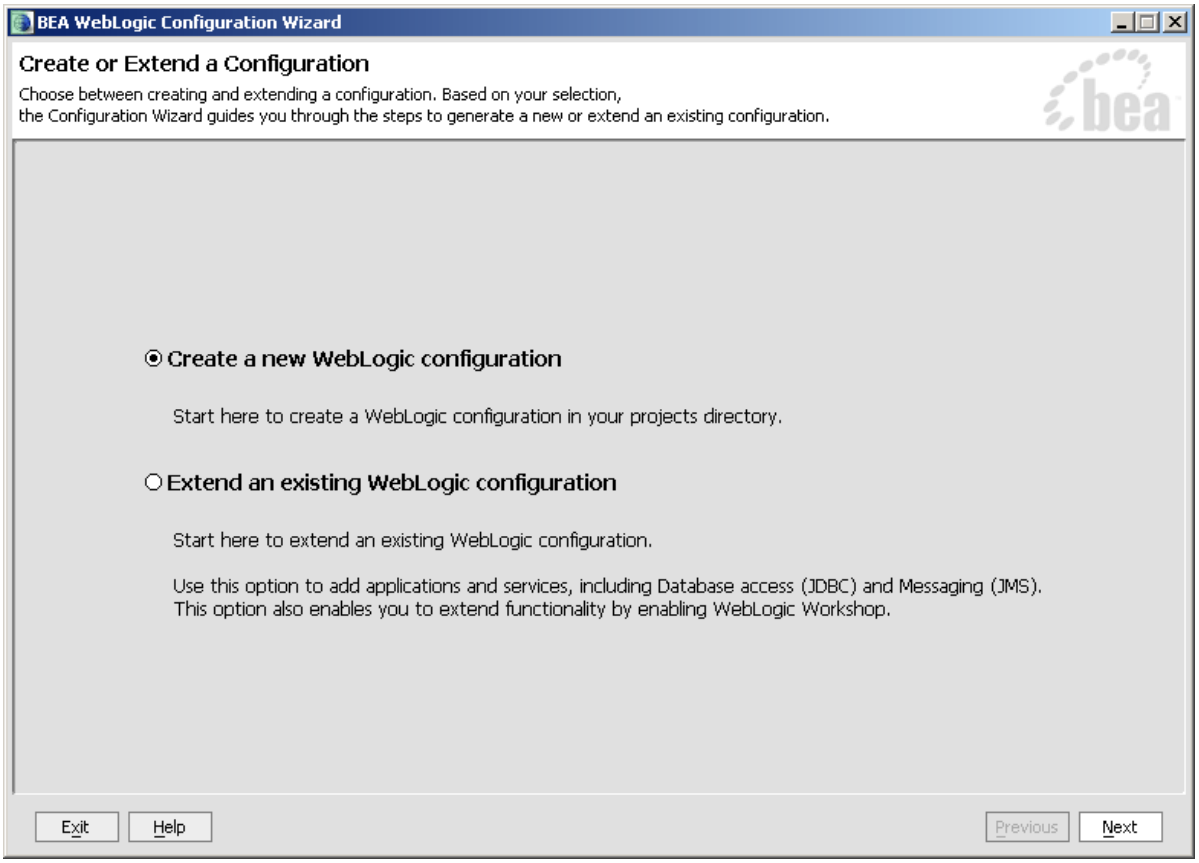
This section describes creating a BEA Portal Domain, creating a new application, and then creating a Sample Mobility Portal Project in the newly created domain using the supplied template.

Create the MobilityPortal Domain

To create the MobilityPortal Domain:

1. Launch the BEA WebLogic Configuration wizard from the Windows Start menu. Choose **Start → Programs → <BEA install directory> → Configuration Wizard.** If you have BEA Workshop open, you can also launch it from the tools menu; choose **Tools → WebLogic Server → Configuration Wizard**.
2. The "Create or Extend a Configuration" dialog is displayed**.**

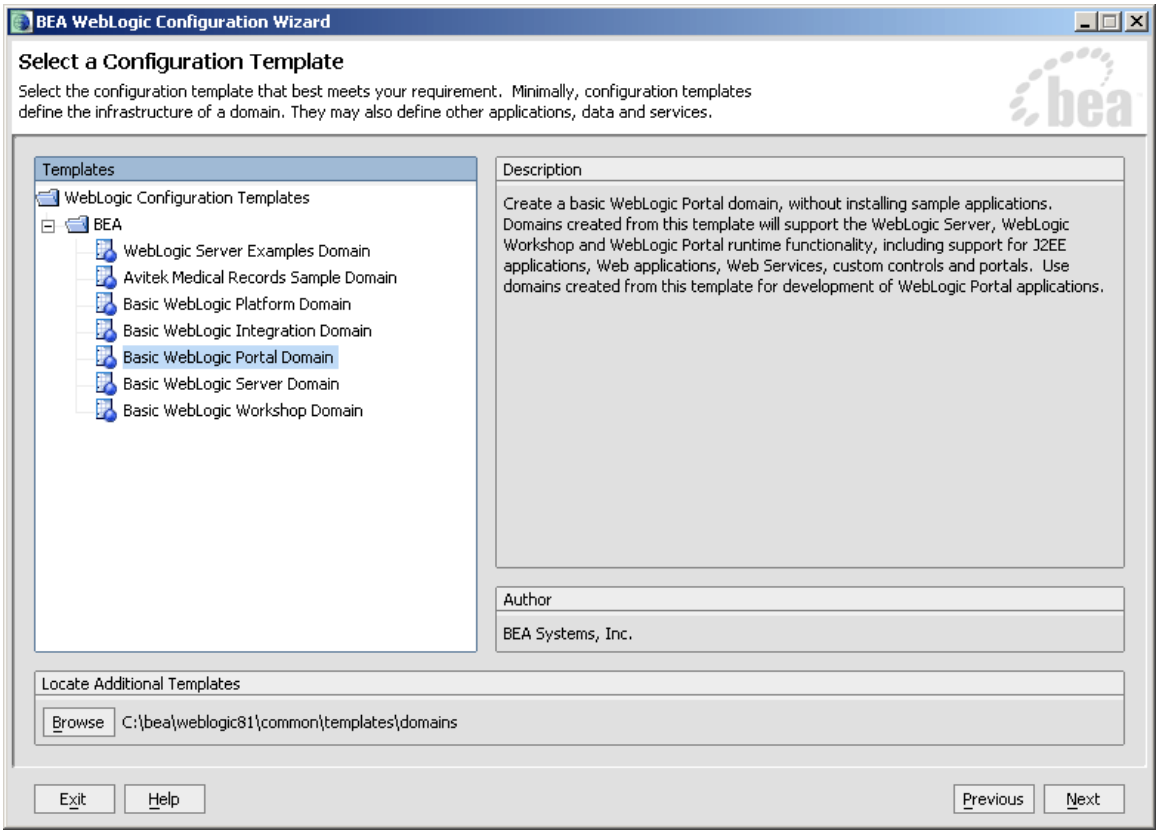
Configuration Wizard – Create a new WebLogic Configuration



3. Select **Create a new WebLogic configuration** and click **Next**.

4. The “Select a Configuration Template” dialog is displayed.

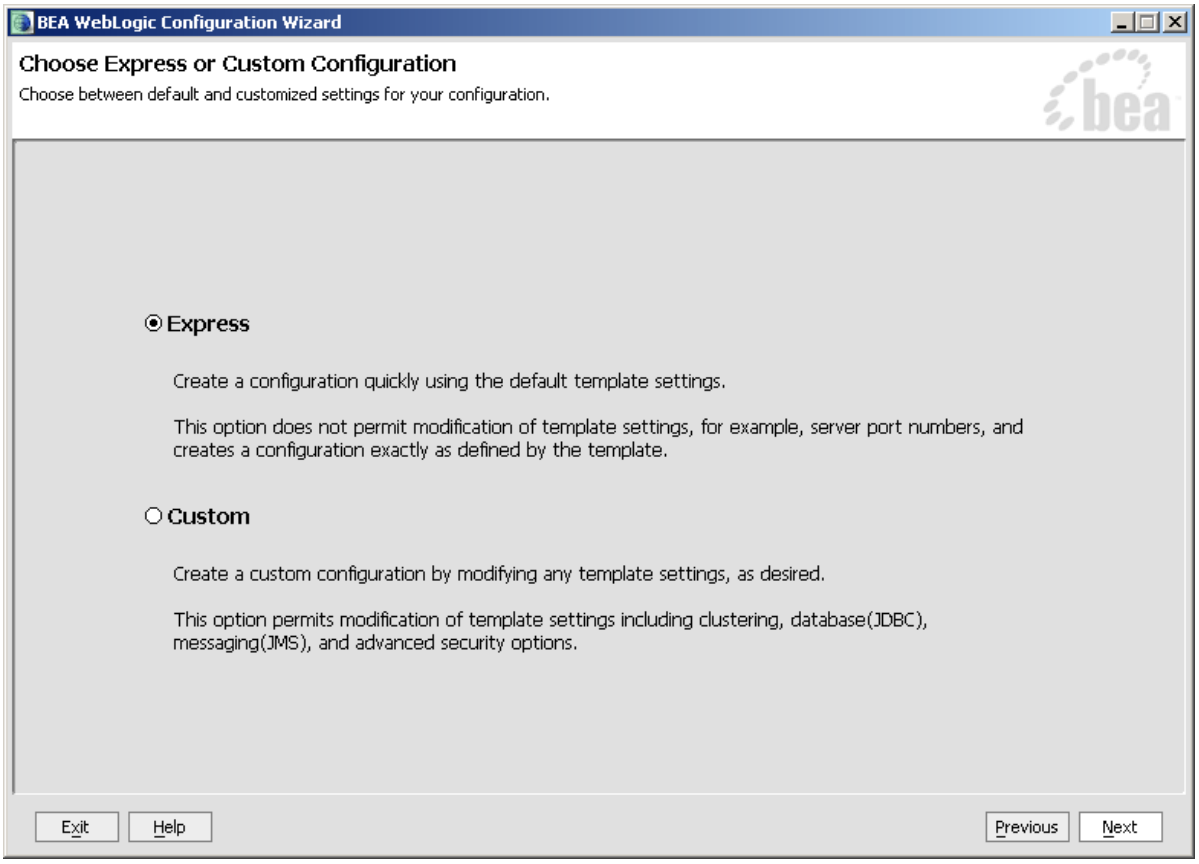
Configuration Wizard – Basic WebLogic Portal Domain



5. Select **Basic WebLogic Portal Domain** and click **Next**.

6. The “Choose Express or Custom Configuration” dialog is displayed.

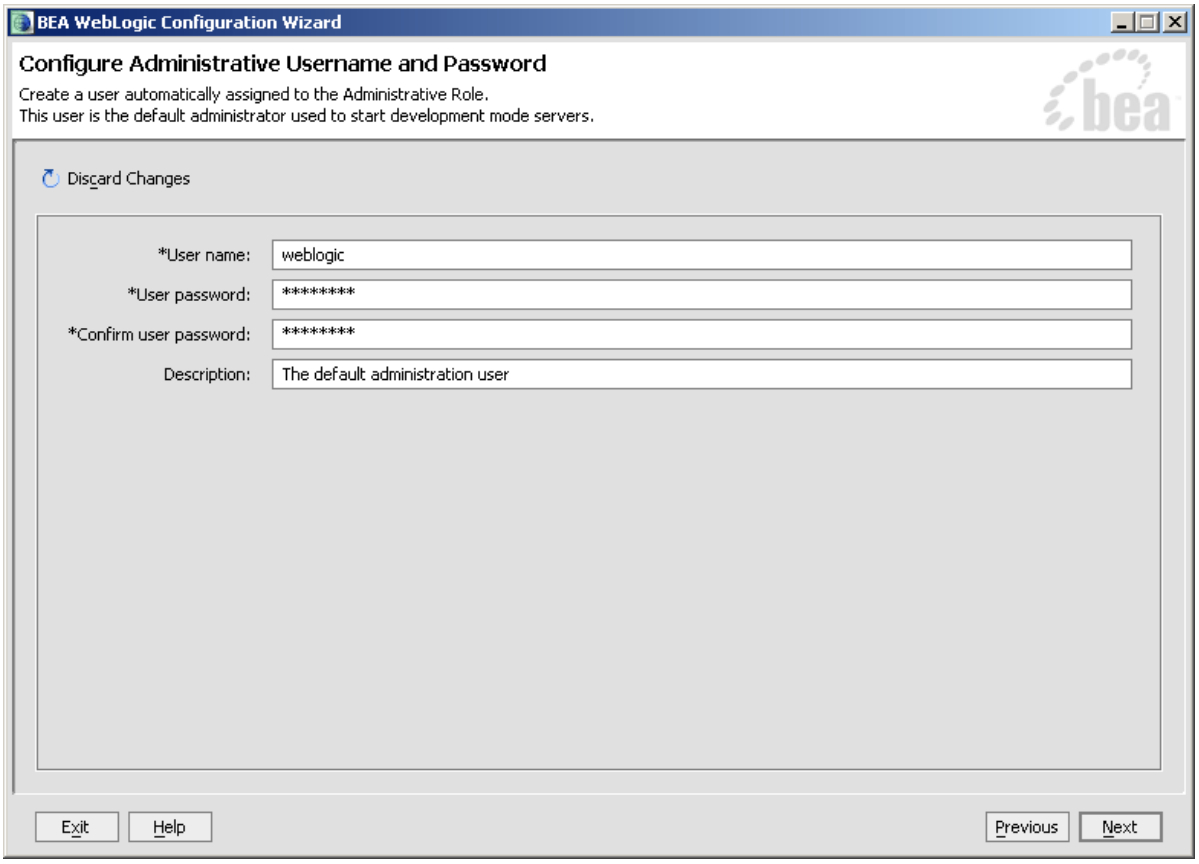
Configuration Wizard – Express Configuration



7. Select **Express** and click **Next**.

8. The “Configure Administrative Username and Password” dialog is displayed.

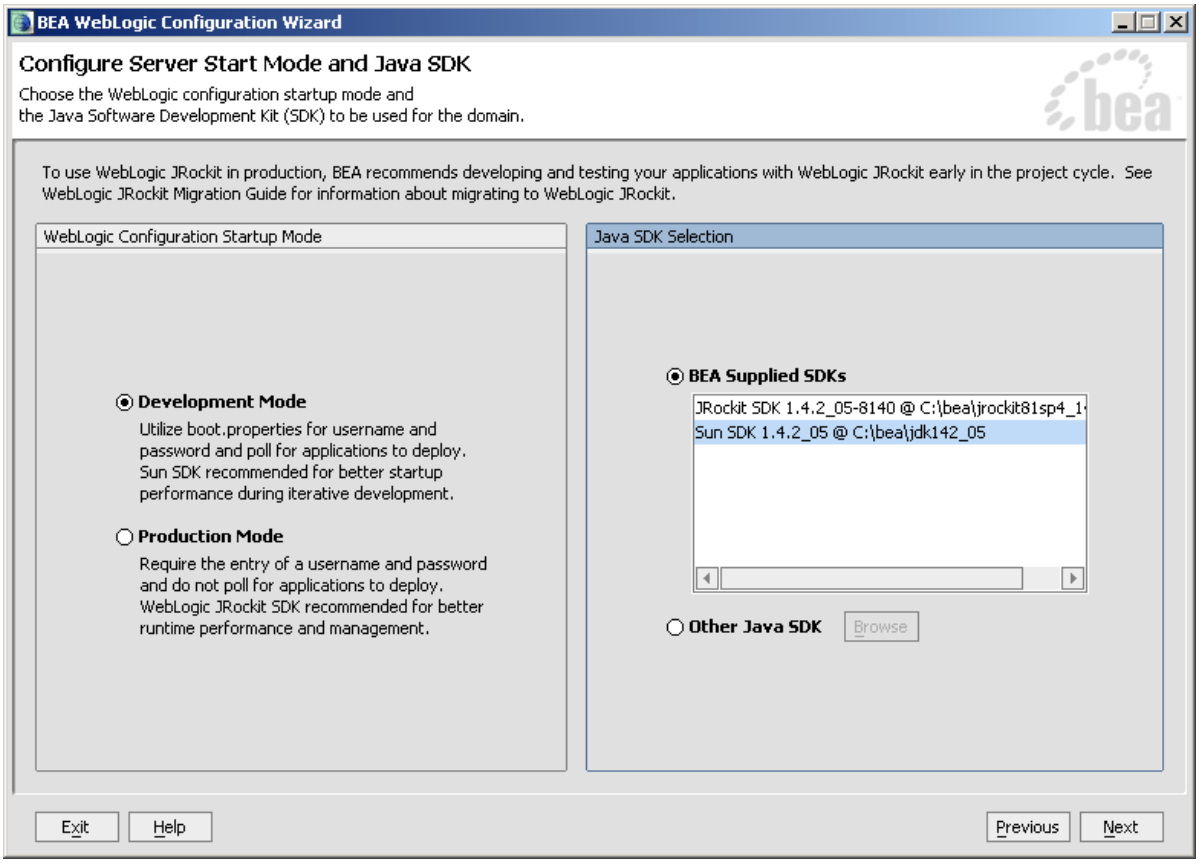
Configuration Wizard – User Name and Password



9. Enter “*weblogic*” for the username and “*weblogic*” for the password and click **Next**.

10. The “Configure Server Start Mode and Java SDK” dialog is displayed.

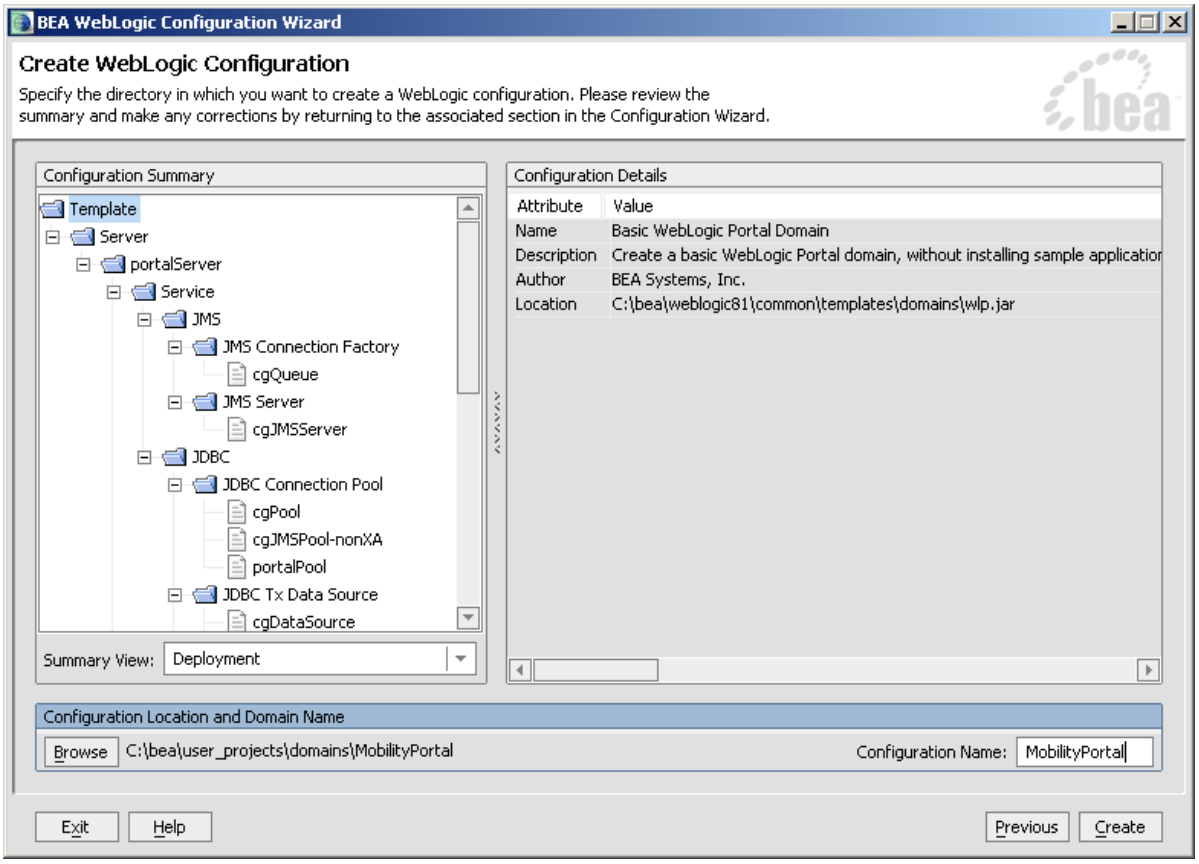
Configuration Wizard – Start Mode



11. Select **Development Mode** within the **WebLogic Configuration Startup Mode** section.
12. Select the **Sun JDK** within the **Java SDK Selection** section and click **Next**.

13. The “Create WebLogic Configuration” dialog is displayed.

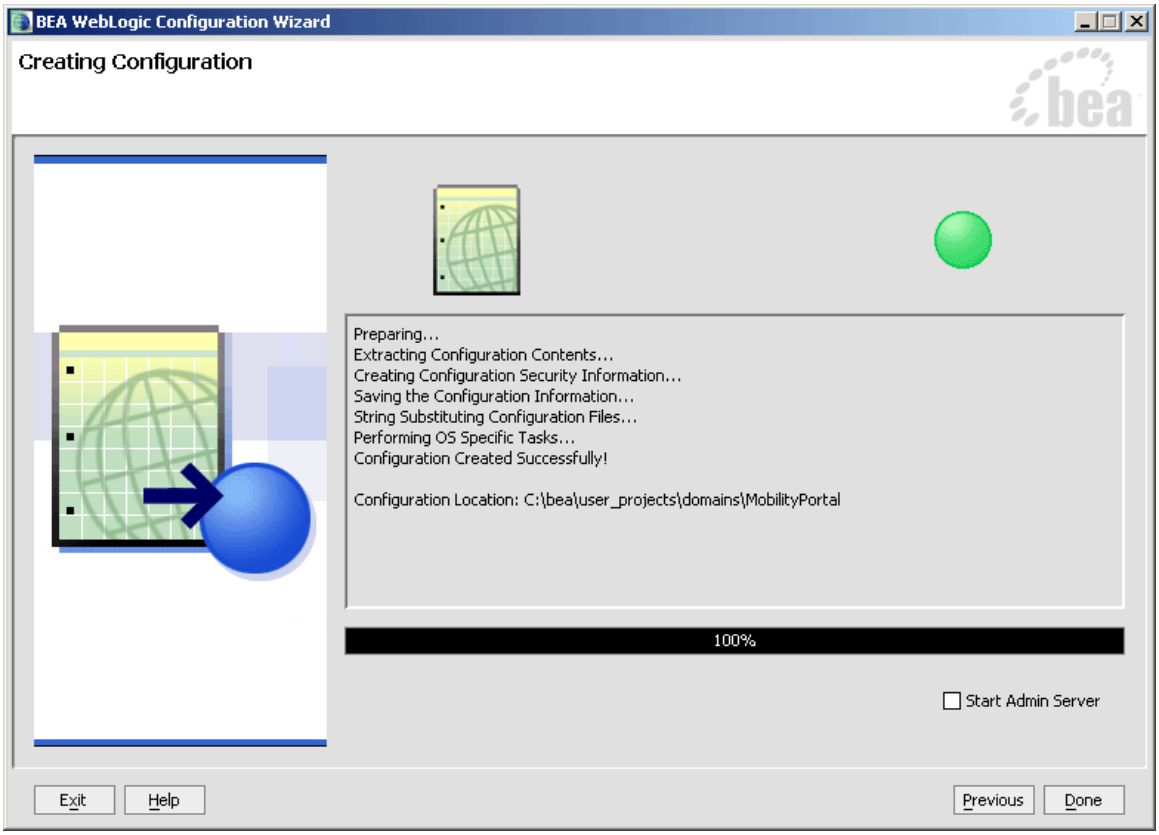
Configuration Wizard – Mobility Portal



14. Set the **Configuration Name** to “MobilityPortal” and click **Create**.

15. The configuration wizard will now create the domain.

Configuration Wizard – Creating MobilityPortal Configuration



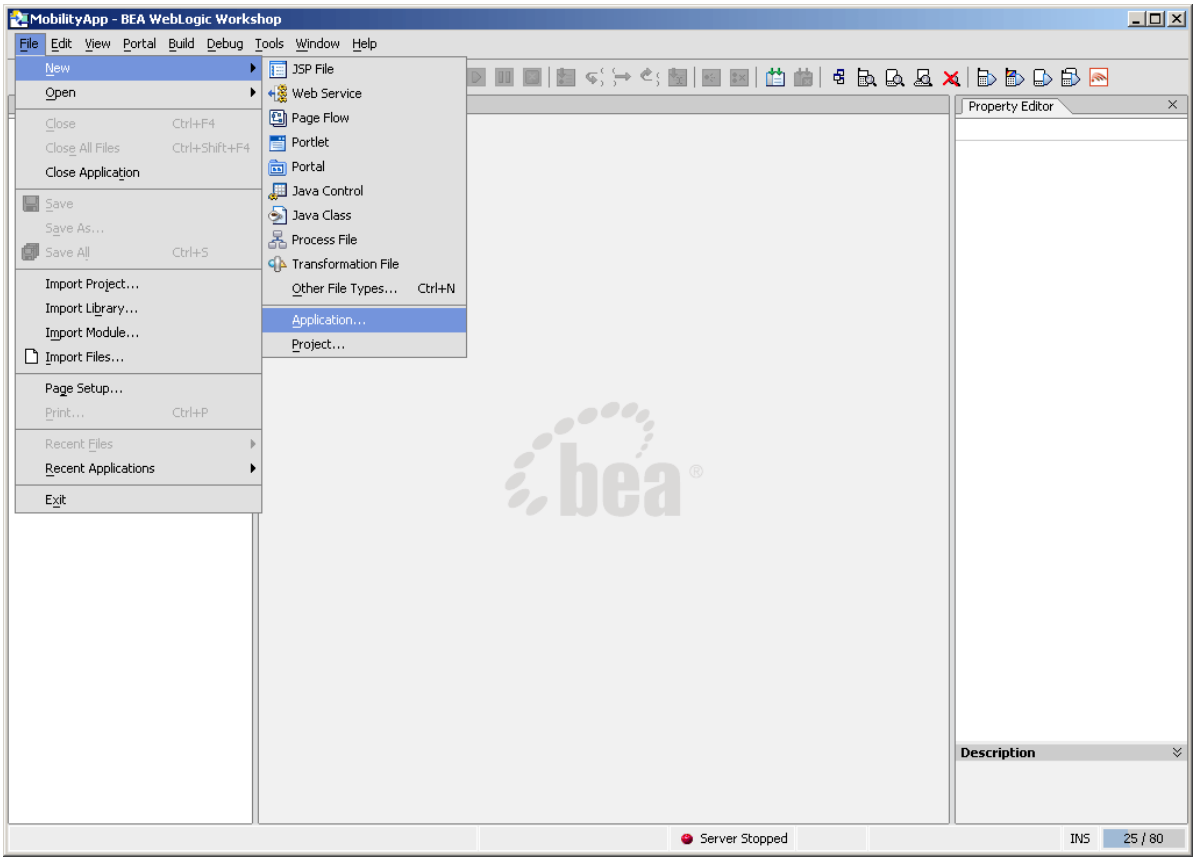
16. When it completes, click **Done** on the Creating Configuration screen.

Create the MobilityPortalApp Application

To create the MobilityPortalApp application:

2. To create a new application in Workshop, choose **File → New → Application**
2. The New Application dialog is displayed.

Create New Application



3. From the New Application window:

- Select Portal Application.

  Note: Do not select **Default Application** as per earlier.

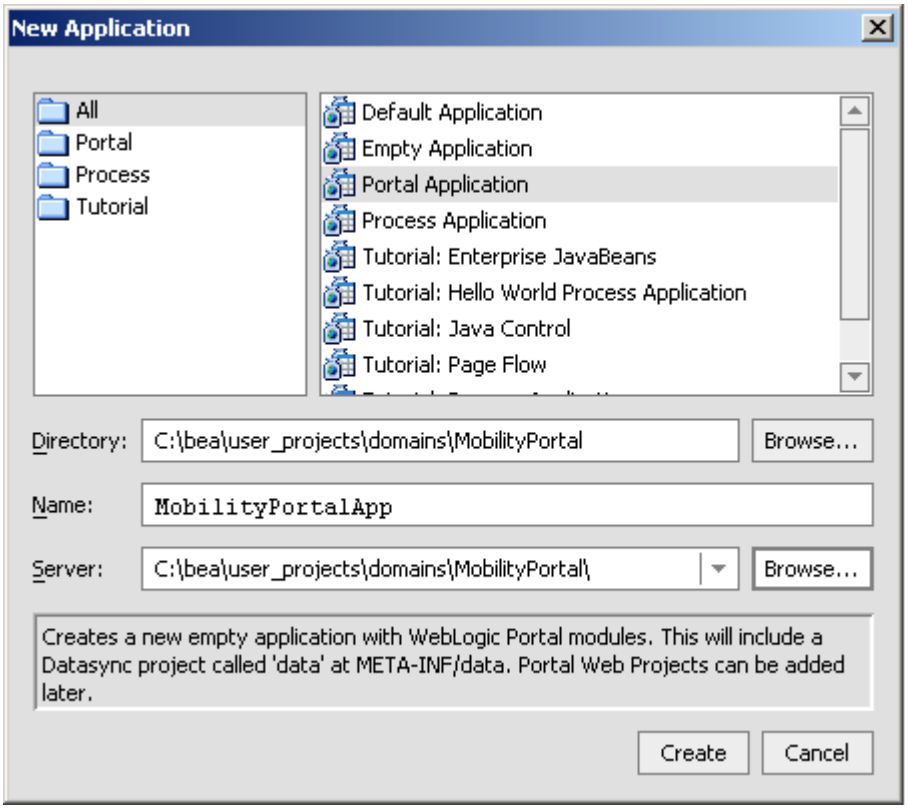
- Click **Browse** next to the **Directory** field and browse the Domains directory, selecting your newly created “MobilityPortal” domain.

- Enter “MobilityPortalApp” in the **Name** field – this is the application where you will import the sample mobility portal application.

- Click **Browse** next to the **Server** field and select the *config.xml* file inside the newly created “MobilityPortal” domain.

4. Once you have filled in the fields as above, click **Create** and the application will be created.

Create Portal Application Dialog



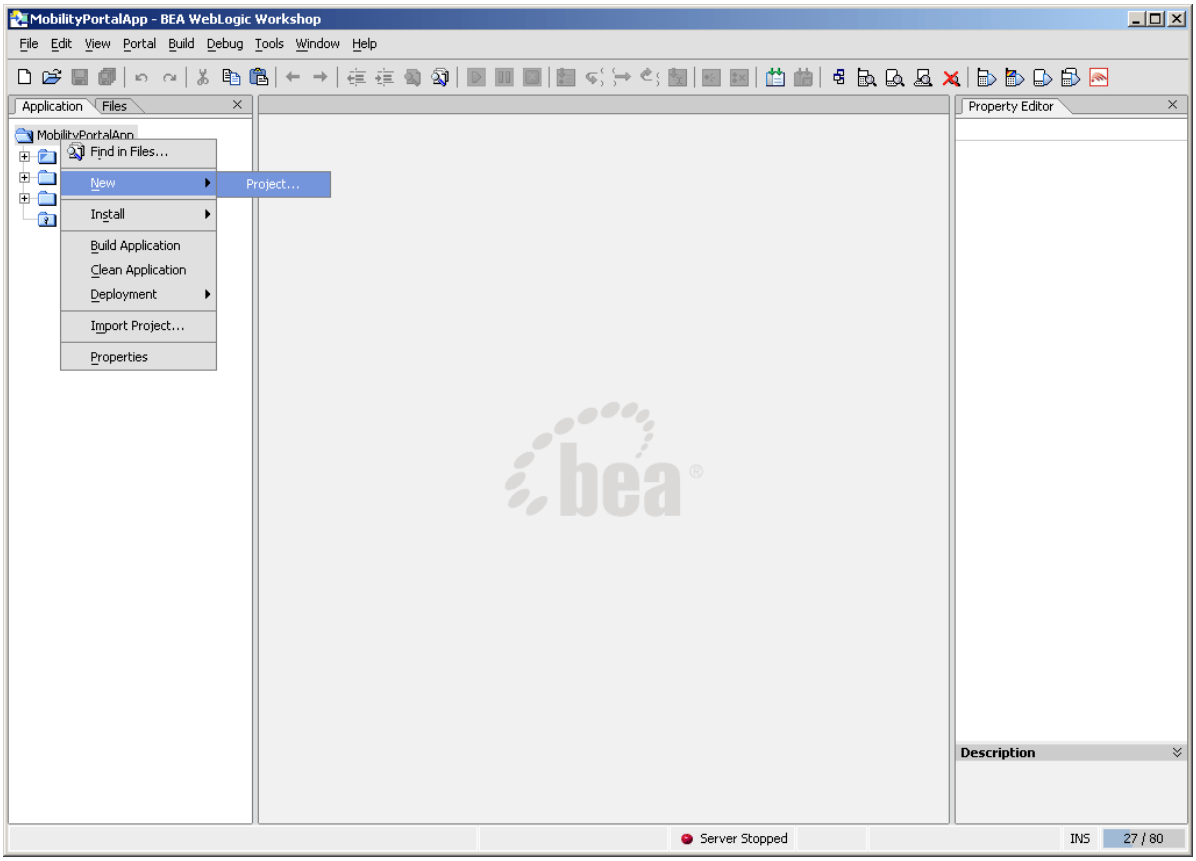
Now that you have created a new Domain and a new Portal Application, you can import the sample Workshop mobility portal project.

Create the Sample Workshop Mobility Portal Project

When WebLogic Mobility Server was installed, a Sample Mobile Portal Project template was created. Create the sample Workshop mobility portal project using this template as described below and then refer to the *BEA Sample Mobility Portal Guide* for an explanation of the features of the sample portal.

1. Right click the newly created “MobilePortalApp” application in the Application tree window.

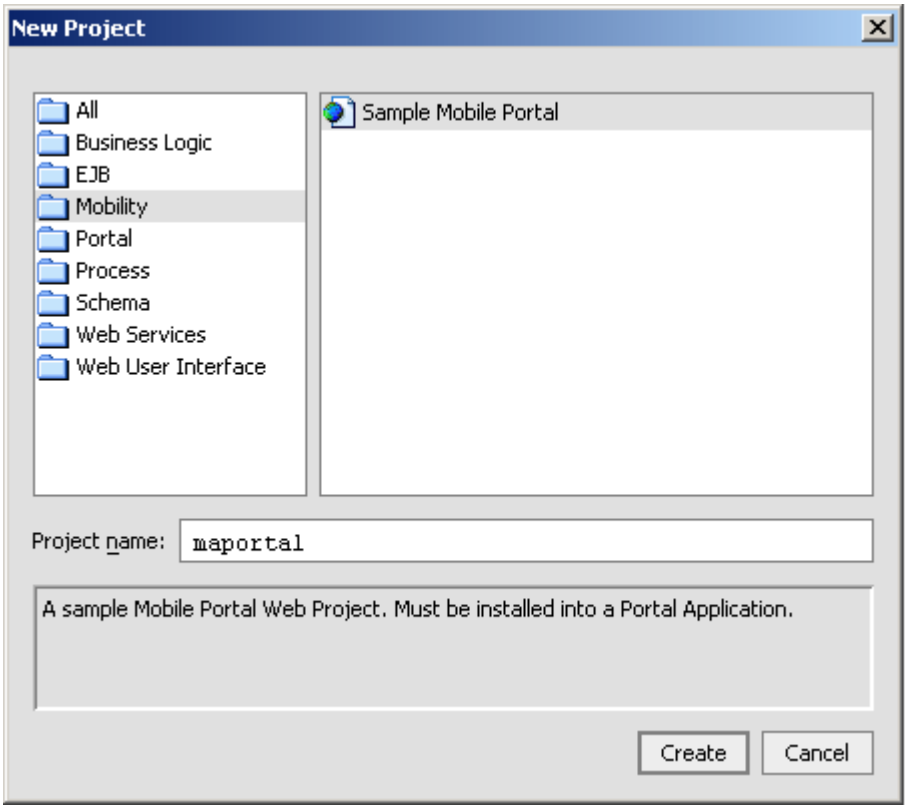
New Portal Project



2. Choose **New → Project**.

3. The “New Project” dialog is displayed.

Create New Project



4. Select “Mobility” and “Sample Mobile Portal”.
5. Enter “maportal” in the **Project Name** field.
6. Click **Create**.

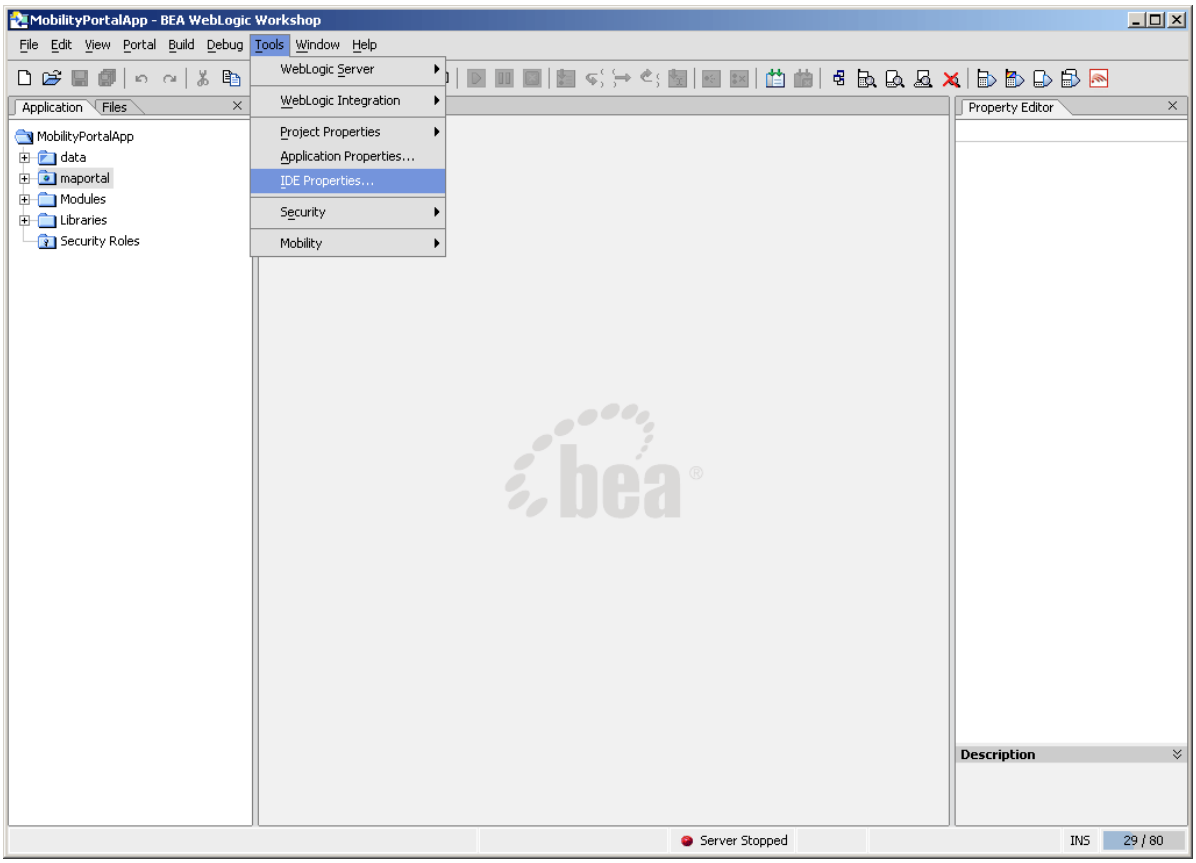
The *BEA Sample Mobility Portal Guide* document explains the features of the “maportal” sample project.

Configure the Device Emulators

This section describes how to configure the emulators for use within BEA Workshop. You can use the device emulators to see how the mobilized content will look on a particular device (for example phones, PDAs). Several emulators are available for download free of charge on the Internet. This section describes how to configure the emulators for use within BEA Workshop.

1. To configure the tools and emulators for usage within the BEA Workshop environment, select IDE properties from the Tools Menu. Choose **Tools → IDE Properties**

Select IDE Properties

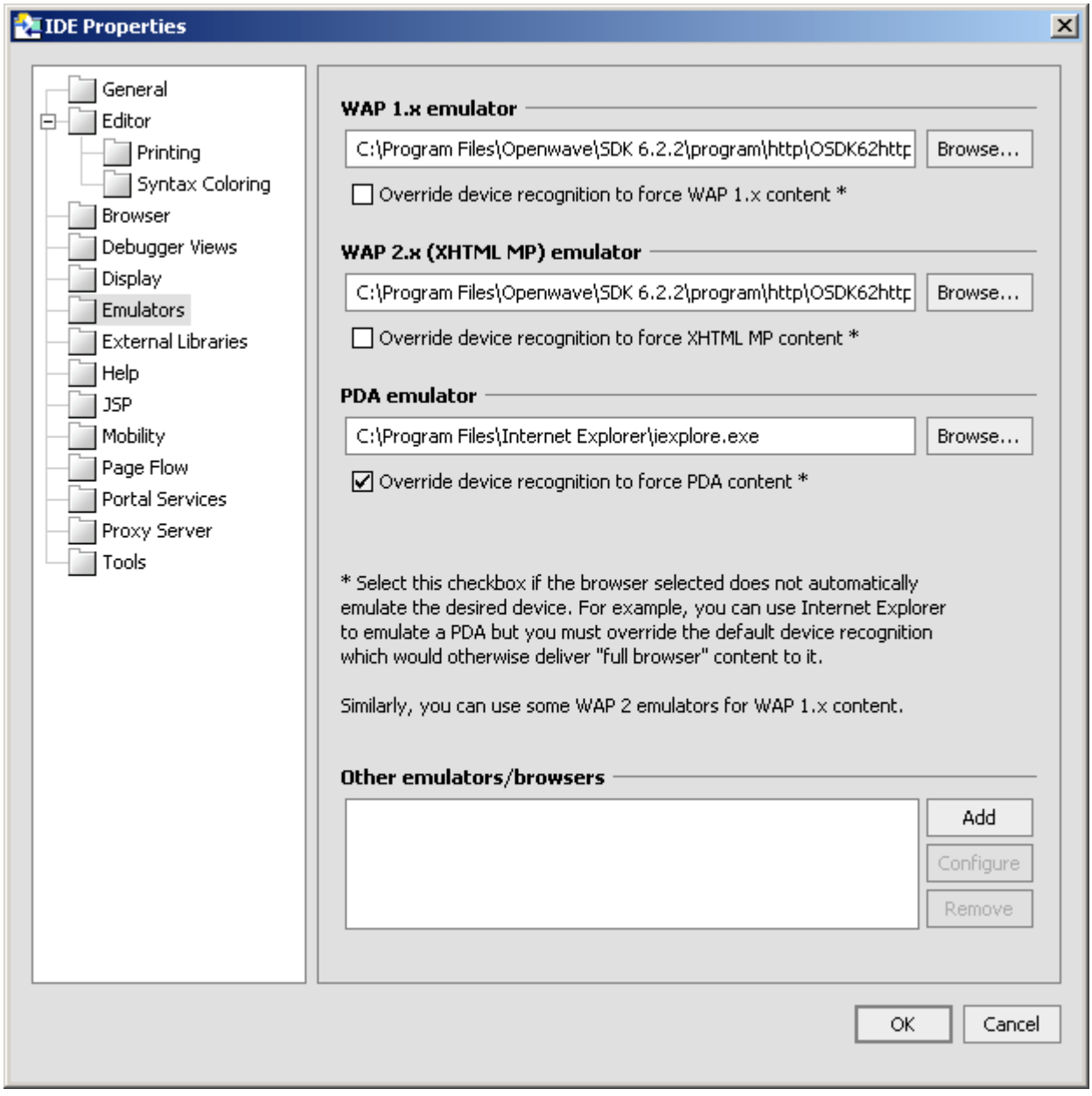


2. Now configure the emulators:
3. Select the **Emulators** tab.
4. Select WAP1.x emulator by browsing to the appropriate emulator executable file.

   Note: It is recommended that you use the Openwave Emulator, which can emulate WAP 1.x and XHTML-MP devices. However, emulators from Nokia, Ericsson, or others can also be used. If using an Openwave Emulator, select the *OSDK62http.exe* (for version 6.2) or the *OSDK61http.exe* (for version 6.1) in the installation directory where the emulator is installed, for example **C:\Program Files\Openwave\SDK 6.1\program\http**.
5. Select WAP2.0 emulator by browsing to the appropriate emulator executable file.

6. Select PDA emulator by browsing to the appropriate emulator executable file.
   - You can find a PDA emulator at <bea>\weblogic81\mobility\tools\emulators*PDA.exe*
   - Alternatively, to set up MS Internet Explorer to function as a PDA emulator, browse to your *iexplore.exe* in the PDA emulator text box as can be seen in the diagram below and select the **Override device recognition to force PDA content** check box.

Setting up Internet Explorer as a PDA Emulator



Next Steps

Now that you have successfully installed WebLogic Mobility Server, you are almost ready to begin mobilizing your own web applications and portal projects.

Before you do, it is recommended that you go through the *BEA Mobilize Your Portal Guide, the BEA Sample Workshop Mobility Project Guide* and the *BEA Sample Mobility Portal Guide* after using this guide. The *BEA Mobilize Your Portal Guide* explains how to mobilize a portal, the *BEA Sample Workshop Mobility Project Guide* provides a step-by-step exercise in mobilizing a sample workshop application, and the *BEA Sample Mobility Portal Guide* illustrates the features of a Mobilized BEA Portal Framework.

2—Install WebLogic Mobility Server on Sun Solaris, RedHat Linux or HP-UX

This chapter explains the installation procedure for installing WebLogic Mobility Server on Sun Solaris, Redhat Linux, and HP-UX 11.

Introduction

- The *mobilityServer33_linux.bin* installation application is used to install WebLogic Mobility Server on RedHat Linux
- The *mobilityServer33_solaris.bin* installation application is used to install WebLogic Mobility Server on Sun Solaris
- *The mobilityServer33_hpux.bin inst*allation application is used to install WebLogic Mobility Server on HP-UX

License

A BEA WebLogic Mobility Server license file must be integrated into the bea.license file of your WebLogic Server.

Your sales representative should provide this file to you along with the product CDs. Please contact your sales representative if you have not yet received your license file.

Once you have updated your license, you will be able to develop and test mobile-device ready content. If you have a developer or evaluation license, the software installer will install an evaluation version of the Device Repository enabling testing on a number of popular device emulators as well as a number of popular mobile and PDA devices. A production license must be present to install and use the full Device Repository. **Note**: An invalid license will result in HTML being delivered.

Please contact a sales representative if you wish to extend your evaluation or developer license or upgrade to a production license.

Installation Prerequisites

Software Prerequisites

The following software must be installed prior to installing WebLogic Mobility Server:

- A supported operating system, from the following list:
  - Sun Solaris 10
  - RedHat Linux 2.1, 3.0
  - HP-UX 11
- An application server: BEA WebLogic Platform 8.1 SP2, SP3, SP4 or SP5
- An Internet Browser:
  - Netscape 4.75 or higher, or
  - Internet Explorer 5 or higher

- A database, from the following list (optional):
  - Oracle 9i, 10i
  - PointBase 4.4
  - Postgres 7.3.2+
  - MySQL 3.53 and above
  - SQL Server 2000
  - Sybase Adaptive Server Enterprise 12.5
  - IBM DB2 Universal Database 8.1
- Java JDK/JRE 1.4.x must be on the search path, with JAVA_HOME set correctly
- A PDF viewer—either Adobe Acrobat Reader 4.0.x – 7.0.x or Xpdf is required on the search path; otherwise an error message will be displayed when you attempt to view PDF documents

Installation Procedure for Sun Solaris, RedHat Linux, and HP-UX

1. Open an **xterm**, **telnet**, or **console window** and run the WebLogic Mobility Server installation application:
   - For RedHat Linux, use the *mobilityServer33_linux.bin* installer
   - For Sun Solaris, use the *mobilityServer33_solaris.bin* installer
   - For HP-UX, use the *mobilityServer33_hpux.bin* installer
2. The first stage of the installation is the "Introduction". Press <**Enter**> to continue.
3. The "Supported Platforms" screen then is displayed. Please read this and ensure that the installation environment meets the stated requirements. Press <**Enter**> to continue.
4. The following stage of the installation is "Choose Product Features". Enter the value **1** to select the WebLogic Mobility Server 3.3 installation, or the value **2** to select the WebLogic Mobility Server Client Applications installation.
5. The "License Agreement" screen is displayed next. Read the license agreement text and enter the value **Y** if you accept the terms of the license agreement, or the value **N** if you do not

   Note: Selecting "N" will cancel the installation after prompting you to confirm cancellation.
6. The "Choose Java Virtual Machine" stage is next. You must select a Java Virtual Machine for use by the installed application.
   - Enter the value **1** to select the specified default JVM
   - Enter the value **2** to select another Java VM. **Note**: This must be Java VM version 1.4. You will then be prompted to enter the absolute path to the Java VM executable and confirm that the path you have entered is correct by entering **Y**
7. The "Choose Install Folder" stage is next. You must enter an absolution path to the location where WebLogic Mobility Server should be installed. Alternatively, press <**Enter**> to accept the default location as shown. You must then confirm the Install Folder location by entering **Y**.

   Note: You must have write and execute permissions for the chosen installation folder.

8. The “Pre-Installation Summary” stage is next. Review the displayed installation configuration settings to ensure they are correct. If you are satisfied with the configuration settings, press <**Enter**> to continue. Otherwise, type **back** to return to a previous step and modify the configuration settings.
9. The “Installation Complete” message will display following a successful install. Press <**Enter**> to exit the installer.

Next Steps

Configuration of a WebLogic Mobility Server-Enabled Web Application

Please see the *BEA WebLogic Mobility Server Administration Guide* for details on:

- Creating the deployment environment for a mobilized web application
- Configuring the WebLogic Mobility Server servlet filter
- Configuring the web application's Web Deployment Descriptor (*web.xml* file) for the WebLogic Mobility Server servlet filter

Mobilize Your Own Applications

Once you have installed and configured the product and the Device Repository, you will be ready to mobilize your own web applications. Please see the *BEA WebLogic Mobility Server User Guide*, specifically the "Working with Diagnostics" section, for information on configuring and using the Diagnostics tools.