

maximo enterprise suite

Release 6
March 2006

Installation Guide

Microsoft Windows | BEA WebLogic

mro software™

make it *all* count

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Contents

About This Guide	v
Why Read This Guide?	v
Who Should Read This Guide?	v
How to Use This Guide	v
Notation Conventions.	v
Chapter Contents	vi
Related Documentation	vii
Support	vii
Chapter 1: Introducing Maximo Enterprise Suite	1-1
Overview of Installation.	1-1
Internet Connectivity	1-2
Overview of Concepts	1-2
How Does Maximo Run in an Application Server?	1-3
Single Maximo Application Deployed in a Single Application Server.	1-4
Maximo Components	1-5
Application Server	1-5
Actuate Server	1-5
Database Server.	1-5
Typical Maximo Configuration Diagram	1-6
Hardware and Software Considerations.	1-6
Third-Party Product Updates	1-8
Java Virtual Machine (JVM).	1-8
Chapter 2: Installing BEA WebLogic	2-1
Installing BEA WebLogic 8.1.4.0.	2-1
Configuring the Maximo Application Server	2-6
Installing the License Update Program	2-14
Post Installation tasks	2-17
Edit the commEnv File (Oracle Only)	2-17
Increasing the Java Heap Parameters	2-18
Verify Settings by Running startWebLogic.cmd	2-19
Starting the Server Without Being Prompted for Username and Password	2-20
Chapter 3: Installing The Actuate Application	3-1
Pre-Installation Procedures	3-1
Oracle Connectivity	3-1
MS SQL Server Connectivity	3-1
Installing Actuate8 iServer	3-2
Chapter 4: Installing The Maximo Enterprise Suite Application	4-1
Starting the Maximo Installation Program	4-2
Post Installation Tasks	4-14
How to Include the oraclethin.jar File	4-14
How to enable the Application Designer	4-14
Chapter 5: Installing The Language Utilities.	5-1
Chapter 6: Installing The Maximo Keys	6-1

- Chapter 7: Creating the Maximo Schema 7-1**
 - Preparing Microsoft SQL Server Instance 7-1
 - Setting up a SQL Server Database for Maximo 7-3
 - Preparing Oracle Instance 7-6
 - Database Character Set 7-6
 - Verifying the Oracle Instance Requirements 7-6
 - Oracle Initialization Parameters 7-7
 - Creating Maximo Tablespace(s) 7-7
 - Creating the Maximo User 7-8
 - Create the Maximo Database Objects 7-10

- Chapter 8: Deploying the EAR Files. 8-1**

- Chapter 9: Installing The Actuate Encyclopedia for Maximo 9-1**
 - Starting the Actuate iServer for Maximo 9-1
 - Installing the Actuate Integration for Maximo 9-2
 - Importing the Encyclopedia 9-8

- Chapter 10: Logging Into Maximo Start Center 10-1**
 - Maximo Enterprise Adapter Users 10-2

- Appendix A: System Server Administration. A-1**
 - Creating a Windows Service for the MAXIMOSERVER Server A-1
 - Starting and Stopping the MAXIMOSERVER Server A-3
 - Starting and Stopping the MAXIMOSERVER Service A-4
 - Removing the Application Server as a Service. A-4
 - Starting the Application Server From a Command Prompt A-4
 - Stopping the MAXIMOSERVER Server A-5

- Appendix B: Configuring JMS Options for Maximo Enterprise Adapter B-1**

- Appendix C: Enabling JMS Connection Factory for Maximo Enterprise Adapter C-1**

- Appendix D: Adding Additional Maximo Keys. D-1**

- Appendix E: Enabling Reports to Run. E-1**

About This Guide

This section briefly summarizes this document and how it can help you as a Maximo Enterprise Suite user. It also provides information on other MRO resources available to you, such as additional documentation and support.

Why Read This Guide?

This guide explains how to install the Maximo Enterprise Suite.

Who Should Read This Guide?

The guide is intended for the following people:

- ▼ Implementation analysts
- ▼ Support personnel
- ▼ System administrators

How to Use This Guide

This guide explains prerequisites and procedures for installing the Maximo Enterprise Suite. Review all the installation steps in this guide before you begin the installation process.

Notation Conventions

The following notations have special meaning:

Notation	Description
Bold text	Denotes a button, check box, or field on a screen
▼ Bulleted procedures	Instructions that you can perform in any sequence
CAUTION	Precedes information that, if ignored, can result in loss of data
NOTE	Precedes information of special importance

Notation	Description
1	Numbered procedures
>	Denotes a navigation path through menu items. For example, File > Open

Chapter Contents

The following table briefly describes each chapter in this document. Read the chapters in the order they appear and perform the tasks in sequence as written.

Chapter Name	Chapter Contents
Chapter 1: Introducing Maximo Enterprise Suite	Provides an overview of concepts and installation tasks.
Chapter 2: Installing BEA WebLogic 8.1.4.0	Describes how to install the BEA WebLogic® Server™ application Server.
Chapter 3: Installing the Actuate Application	Describes how to install the Actuate 8 iServer application.
Chapter 4: Installing Maximo Enterprise Suite	Describes how to install MXES and complete certain post installation tasks.
Chapter 5: Installing the Language Utilities	Explains how to install language-specific Help files and database scripts.
Chapter 6: Installing Maximo Keys	Explains how to access applications that you are entitled to use determined by your Maximo license purchase.
Chapter 7: Creating the Maximo Schema	Explains how to prepare an Oracle instance and a SQL Server 2000 database on the server to hold your data.
Chapter 8: Deploying EAR Files	Outlines how to deploy the EAR files using BEA WebLogic console.
Chapter 9: Installing the Actuate Encyclopedia for Maximo	Describes how to install the Encyclopedia, which is a collection of Maximo-specific reports, user profiles, and user permissions. Also explains how to import the Actuate Encyclopedia for Maximo.
Chapter 10: Logging Into Maximo Start Center	Describes how to invoke the Maximo Start Center.
Appendix A: Server System Administration	Explains how to create, start, and stop the Maximo application server as a MS Windows Service.
Appendix B: Configuring the JMS Option for Maximo Enterprise Adapter	Explains how to define JMS components such as Queues for the MEA application.

Chapter Name	Chapter Contents
Appendix C: Enabling JMS Connection Factory for MAXIMO Enterprise Adapter	Describes how to define transaction configurations for the JMS Connection Factory.
Appendix D: Adding Additional Maximo Keys	Explains how to configure additional Maximo package files that you may have purchased.
Appendix E: Enabling Reports to run	Explains how to enable additional Actuate functionalities to run Reports properly.

Related Documentation

You can find more information regarding the Maximo Enterprise Adapter for SAP R/3 in the following documents:

Document	Description
Maximo online help	Provides step by step procedures for every action in Maximo.
<i>Maximo System Administrator's Guide</i>	Explains how to customize the system, manage the database, set up accounting features of the general ledger, and use Maximo utilities.
<i>Maximo User's Guide</i>	Provides an overview of Maximo features, and describes relationships among modules.

Support

MRO Software, Inc. users with a valid Annual Customer Support Plan (ACSP) can obtain product support online at <http://support.mro.com>.

The Support Web site includes information about product releases, software patches, and documentation updates. To find the most current version of a document, refer to the Support Web site's Knowledge Base.

Introducing Maximo Enterprise Suite

1

Maximo Enterprise Suite is a comprehensive suite of products all built on a single, common platform. It combines enhanced Enterprise Asset Management functionality with new service management capabilities that together improve the effectiveness of asset management strategies.

Maximo® Enterprise Suite includes advanced IT asset management, service management, and a full-featured service desk, all based on the IT Infrastructure Library (ITIL) guidelines. Each product can be implemented separately as a stand-alone solution or readily deployed together. The solution enhances asset management and ensures service performance of production, facility, transportation and IT assets.



Maximo Enterprise Suite consists of multiple software servers that you can either install on separate server machines or the same physical server. MRO Software recommends the following dedicated servers: Application Server, Actuate Report Server and Database Server.

Overview of Installation

Use this guide to install Maximo Enterprise Suite. During this process you will complete the following tasks in the order that they appear:

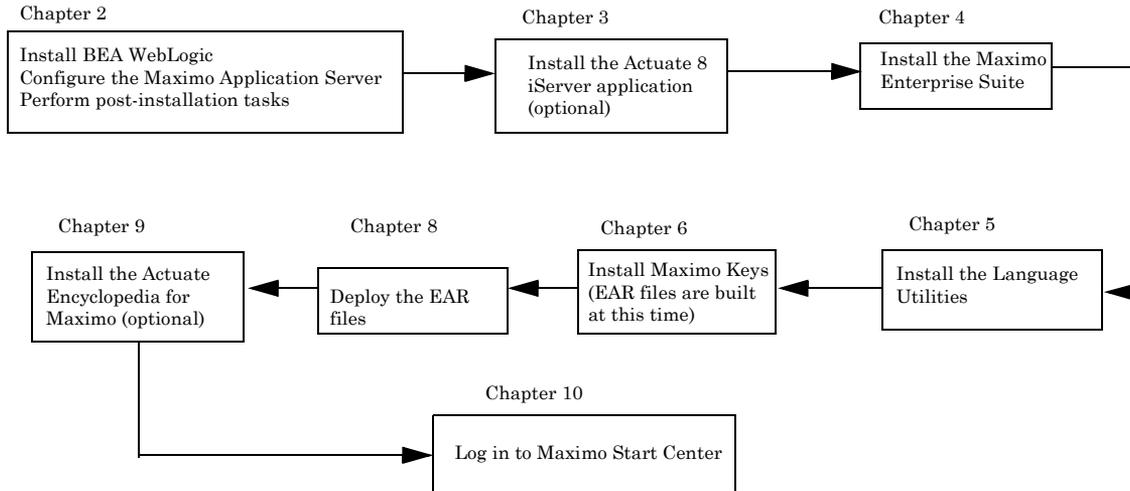
- 1 Install BEA WebLogic application server.
- 2 Install the Actuate application server.
- 3 Install Maximo Enterprise Suite.
- 4 Install the language utilities program.
- 5 Install the Maximo Keys (or packages).
- 6 Create the Maximo schema.
- 7 Deploy the Enterprise Application Archive (EAR) files.

8 Install the Actuate Encyclopedia for Maximo.

9 Log in to the Maximo Start Center.

The following diagram illustrates the software components and the order in which you must install these components to obtain a successful Maximo system installation:

Installation Flow



Internet Connectivity

The installation of Maximo and its various components require a valid and active connection to the Internet. MRO Software *strongly* recommends that you allow the online update of the MAXIMO Application Server to be completed.

Overview of Concepts

Maximo application refers to an instance of Maximo. Enterprise Application Archive (EAR) files define what constitutes a Maximo application. You can have multiple Maximo applications, in other words, multiple deployed EAR files on one application server.

An EAR file represents a Java 2 Enterprise Edition (J2EE) application that you deploy in an application server. EAR files are standard Java archive files and have the file extension **.ear**.

An EAR file can consist of:

- ▼ Web Application Archive (WAR) files that contain for example, JSP or HTML pages
- ▼ Java Enterprise Application (JAR) files that contain class files and other programming code modules

- ▼ Enterprise Java Bean (EJB) files that contain class files

MRO Software uses the term *application server* to refer to a J2EE container that provides the infrastructure to run business applications such as Maximo. BEA WebLogic is a commercial application server supported by Maximo.

When you install Maximo, you create a *new* application server (in the container sense) for the Maximo application iteration within BEA WebLogic. MRO Software refers to an application server running Maximo as the *Application Server* (initial capital letters).

Context is the name through which you access a specific web application, such as Maximo deployed on an Application Server. Maximo Enterprise Suite has the following contexts:

- ▼ /maximo — Maximo user interface
- ▼ /mbo — Maximo business objects
- ▼ /maximohelp — Maximo help
- ▼ /acweb — Actuate
- ▼ /meaweb — Maximo Enterprise Adapter

You access Maximo from the browser using the /maximo context.

For example, `http://<host name>:<port number>/maximo`. The character string maximo that appears after the port number, is the Maximo context.

How Does Maximo Run in an Application Server?

The following points summarize how Maximo is set up to run in an application server:

- ▼ The EAR files are created from the contents placed on your local drive as part of the installation process
- ▼ The Maximo application consists of the following EAR files:
 - ▼ maximo.ear – for the Maximo application
 - ▼ maximohelp.ear – for the Maximo Help application
 - ▼ acweb.ear – for the MRO Actuate Active Portal Integration application
- ▼ In order to run Maximo, you must deploy the Maximo application EAR files in the application server.
- ▼ When Maximo application EAR files are deployed in the Application Server, the server maintains a copy of the EAR files internally.
- ▼ The Maximo installation builds the EAR files based on the information you provided during the installation. Any configuration changes *require* you to rebuild and redeploy the EAR files.

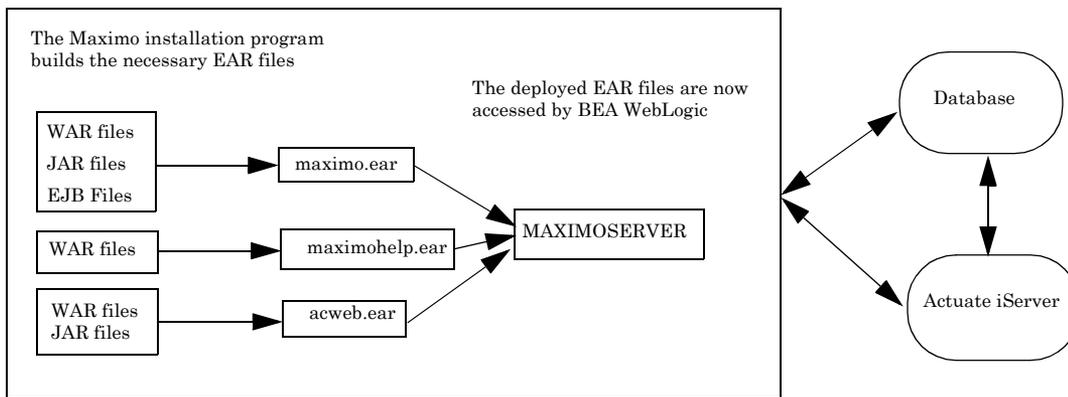
Single Maximo Application Deployed in a Single Application Server

You use your application server software to *deploy* the EAR files that the Maximo installation program builds. All three EAR files—maximo.ear, maximohelp.ear, acweb.ear, — comprise a single Maximo application (MAXIMOSERVER).

After you deploy the EAR files, a copy of each EAR file is saved in the application server software folder structure. The application server uses this copy when running and does not access the EAR files from the Maximo root folder.

The following diagram depicts the Application Server MAXIMOSERVER running Maximo in BEA WebLogic on a single physical machine.

Application Server MAXIMOSERVER running Maximo in BEA WebLogic on a single physical machine



JSP Technology

Maximo applications use JSP technology. An application server, such as the BEA WebLogic server, is used for accepting HTTP requests from client programs (web browsers) and for responding in HTML content.

When a client requests a JSP page, the application server processes the JSP page, and the web server sends the result of the JSP page in HTML content back to the client. Refer to the <http://java.sun.com/products/jsp/index.html> link for more information about JSP Technology.

XML Technology

Maximo applications uses XML files to render the layout and creation of the user interface.

EJB Technology

EJB technology enables rapid and simplified development of distributed, transactional, secure and portable applications based on Java technology.

Additional Information

If you have an active Annual Customer Service Plan (ACSP) agreement with MRO Software, you can access the Support Online Web site: <http://support.mro.com>

The Support Web site includes information on product releases, software patches, and documentation updates. To find the most current version of a document, refer to the Support Web site's Knowledge Base. To create a Support Online user account, you will need your MRO Software product serial number.

Maximo Components

The following section describes the server components in a typical Maximo environment.

Application Server

Maximo is built using J2EE (Java 2 Enterprise Edition) technology, which requires using a commercial application server. Maximo uses BEA WebLogic 8.1.4 as its application server.

The Application Server consists of Maximo Applications using JavaServer Pages (JSP), XML, and Maximo application specific business components.

The Maximo Application also installs the Active Portal, which enables you to use the Web to access reports in your Encyclopedia volume and the Management Console. This web-based capability further enables you to deploy and test reports on an Encyclopedia volume. You access reports by using a Web browser (Internet Explorer) to access the Encyclopedia volume through Active Portal.

Actuate Server

As part of Maximo, Actuate is offered as the embedded reporting tool. Actuate's Information Delivery Solution enables you to create, manage, and deliver interactive, actionable content.

However, it is your option whether or not to use Actuate as your Maximo Reporting tool. As you perform the Maximo installation (Chapter 4), if you do not choose to use Actuate, you simply skip the Actuate references and continue completing the Maximo installation program.

If you do choose to use Actuate, MRO Software recommends that you install the Actuate iServer on a separate server on the network. It generates and manages report documents and provides:

- ▼ A server-based system to generate, manage, and deliver interactive, actionable electronic reports
- ▼ Information in multiple formats including DHTML, PDF, XLS
- ▼ Open security folder integration to leverage existing e-business platform security service

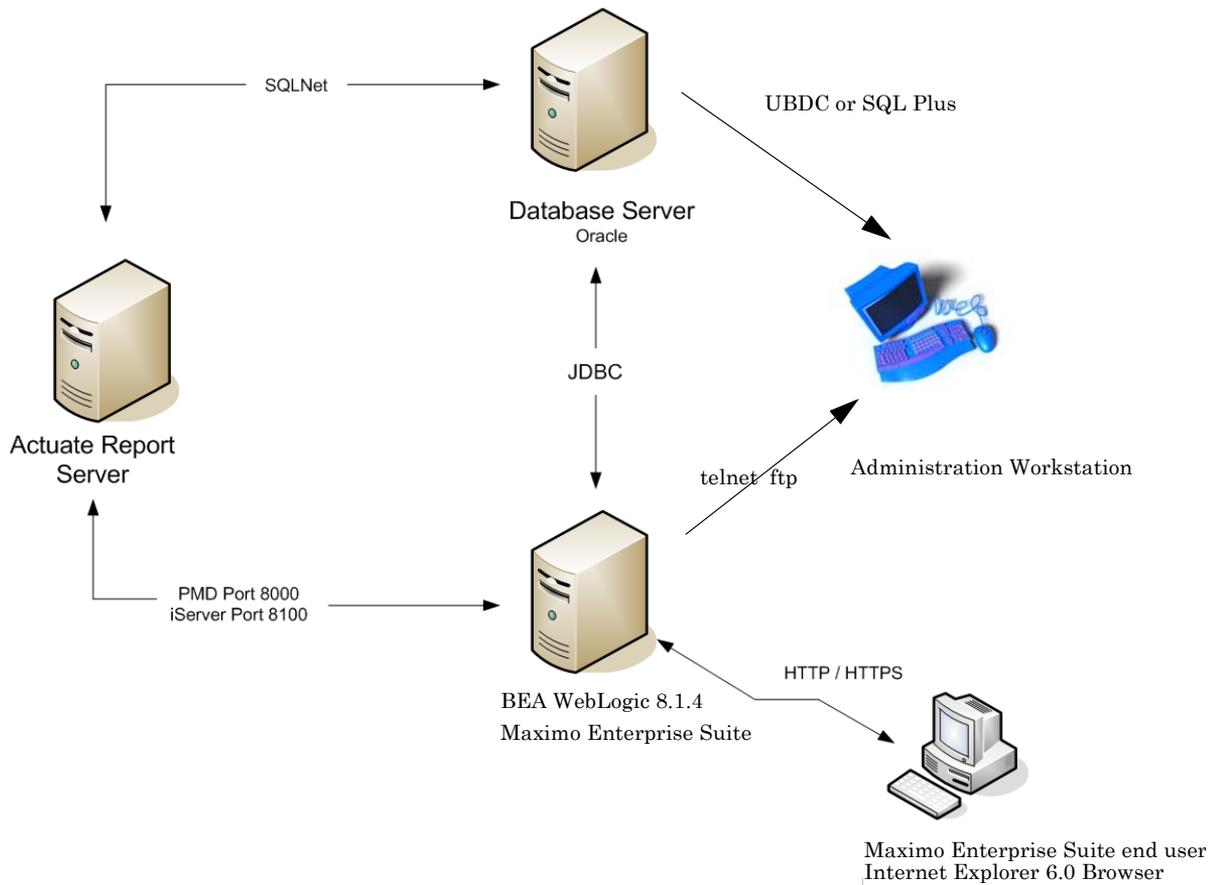
Database Server

Maximo Release 6.0 for BEA WebLogic supports:

- ▼ Oracle 9.2.0.6 (9i), or 10.1.0.3 (Standard or Enterprise Edition)
- ▼ Microsoft SQL Server 2000 SP3

Typical Maximo Configuration Diagram

The following diagram depicts a typical Maximo configuration.



Hardware and Software Considerations

For best performance, MRO Software recommends the following configuration:

- ▼ Dedicated Application Server
- ▼ Dedicated Actuate Server
- ▼ Dedicated Database Server

The following factors affect server configuration requirements:

- ▼ Maximo applications deployed
- ▼ Number of connecting client workstations
- ▼ Desired performance level

Table 1 lists hardware and software recommendations (server and workstation)

Dedicated Servers	Hardware	Software
Application Server: where you install BEA WebLogic® Server™	<ul style="list-style-type: none"> ▼ 2–4 dedicated, Intel® Pentium® processors ▼ 2GB RAM per processor ▼ 1.5GB of disk space 	<ul style="list-style-type: none"> ▼ Microsoft Windows 2000 Server® ▼ Microsoft Server 2003® ▼ BEA WebLogic 8.1.4
Database Server:	<ul style="list-style-type: none"> ▼ Refer to vendor specifications 	<ul style="list-style-type: none"> ▼ 9.2.0.6, 10.1.0.3, or 10.2.0.1 server software (either Oracle Standard or Enterprise) ▼ MS SQL Server 2000 SP3
Actuate iServer: the server you plan to use for generating reports	<ul style="list-style-type: none"> ▼ 1–2 dedicated, Intel® Pentium® processor ▼ 1GB RAM per processor ▼ 610MB of disk space 	<ul style="list-style-type: none"> ▼ Microsoft Windows 2000 Server ▼ Microsoft Server 2003 ▼ Actuate 8 iServer ▼ Database client software: <ul style="list-style-type: none"> ▼ Oracle Client Software (Oracle JDBC drivers, SQL*Plus, Oracle Networking) ▼ MS SQL Server 2000 Client (ODBC)
Administrative Workstation where you install Maximo Used for application building, workflow designer, Application designer, and other high-level functions	<ul style="list-style-type: none"> ▼ Intel® Pentium® processor ▼ 512 MB RAM ▼ SVGA 1024 x 768 resolution; if used for Application Designer 1280 x 1024 resolution 	<ul style="list-style-type: none"> ▼ Microsoft Windows 2000/XP Professional ▼ Internet Explorer 6.0® ▼ Maximo Enterprise Suite 6.0
Client Workstation	<ul style="list-style-type: none"> ▼ Intel® Pentium® processors ▼ 512 MB RAM ▼ SVGA 1024 x 768 resolution 	<ul style="list-style-type: none"> ▼ Microsoft Windows 2000/XP Professional ▼ Internet Explorer 6.0

For additional tuning and configuration information, refer to the *Maximo Enterprise Suite System Administrator's Guide*.

Third-Party Product Updates

MRO Software supports Maximo with later product updates as they are released by third-party vendors. Our policy is to validate products with the latest third-party product updates at time of release certification. MRO Software has certified the following third-party product updates:

- ▼ Windows 2000 Server/Advanced Server Service Pack 4
- ▼ Windows XP Professional Service Pack 2
- ▼ Windows 2000 Professional Service Pack 4
- ▼ Internet Explorer 6.0: Service Pack 1
- ▼ BEA WebLogic 8.1.4
- ▼ Oracle 10.2.0.1 (Oracle Standard or Enterprise)
- ▼ Oracle 10.1.0.3 (Oracle Standard or Enterprise)
- ▼ Oracle 9.2.0.6 (Oracle Standard or Enterprise)
- ▼ Microsoft SQL Server 2000: SP3

Java Virtual Machine (JVM)

The Maximo Enterprise Suite (MXES) automatic update program used in the product installation, *requires* that a **Java Virtual Machine (JVM)** to be installed and present on the Maximo server. If no JVM is present, the install appears to start and the load scroll bar climbs to 100% but the install does not launch. A tested JVM can be downloaded from http://java.sun.com/products/archive/j2se/1.4.2_07/index.html. Once the JVM is installed, continue with the automatic update process.

Installing BEA WebLogic

2

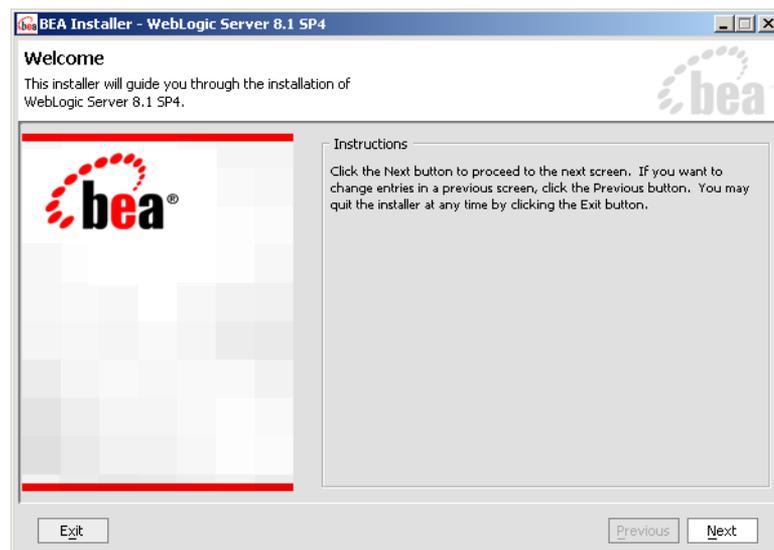
This chapter explains how to perform the following tasks:

- ▼ Install BEA WebLogic 8.1.4.0
- ▼ Configure the Maximo Application Server
- ▼ Install the BEA WebLogic License Update program
- ▼ Post Installation tasks

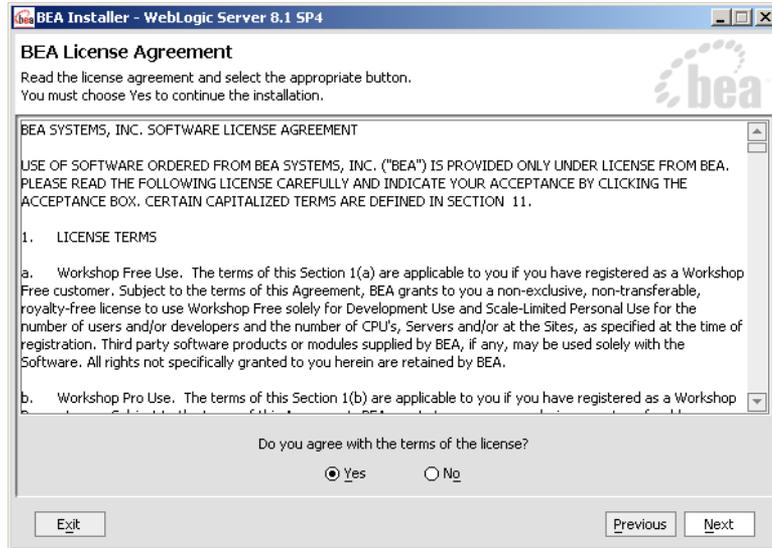
Installing BEA WebLogic 8.1.4.0

Complete the following steps to install BEA WebLogic 8.1.4.0. For best performance, MRO Software recommends installing BEA WebLogic Server on a dedicated application server.

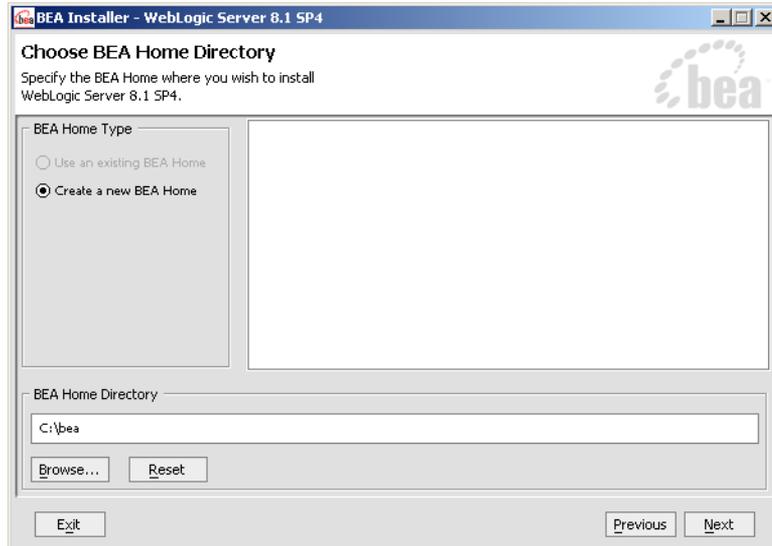
- 1 Insert the BEA WebLogic Application CD-ROM in your CD drive and from the root CD directory, double click **server814_win32.exe**.
- 2 The Preparing the installer dialog box opens, followed by the Welcome dialog box. Click **Next**.



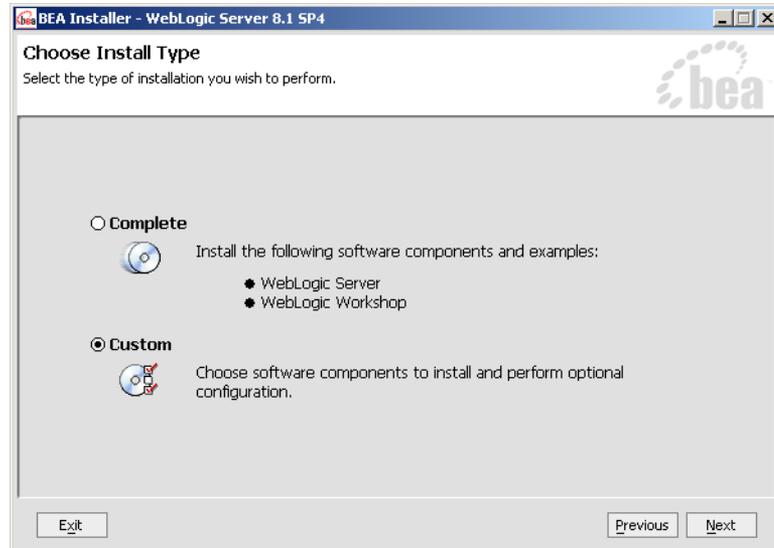
3 Select **Yes** and click **Next**.



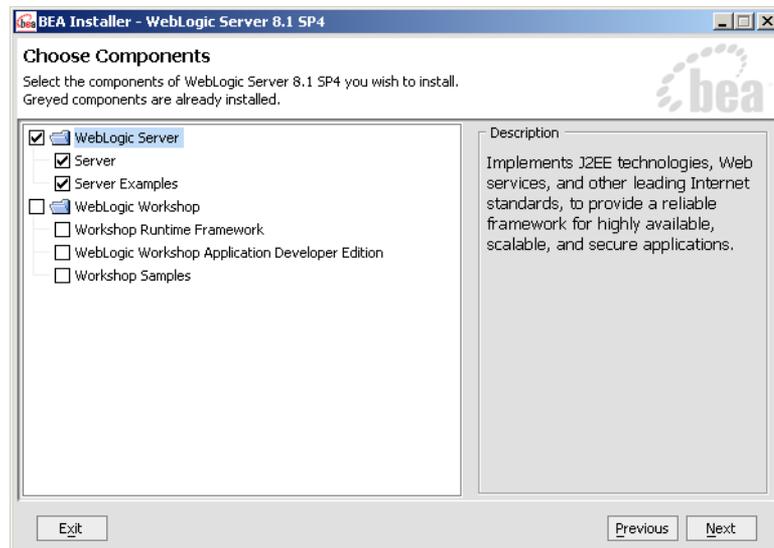
4 Select **Create a new BEA Home** option and accept the default BEA Home Directory (c:\bea). Click **Next**



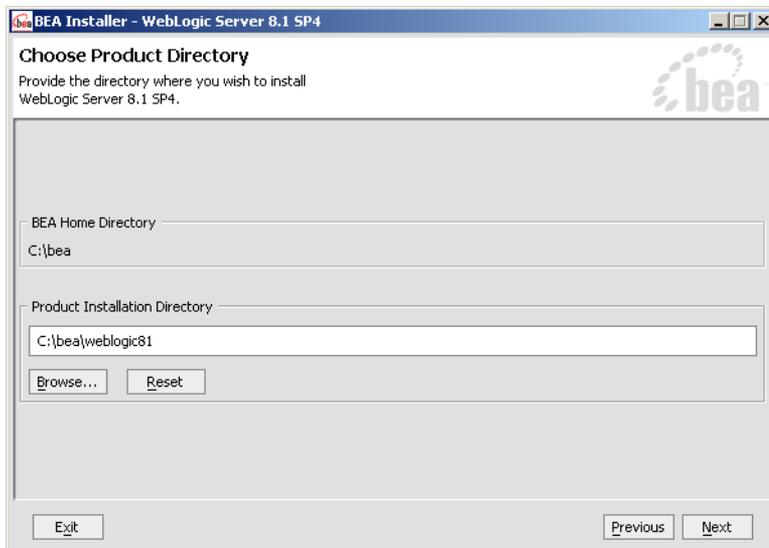
- 5 Select **Custom**, as the Install Type and click **Next**.



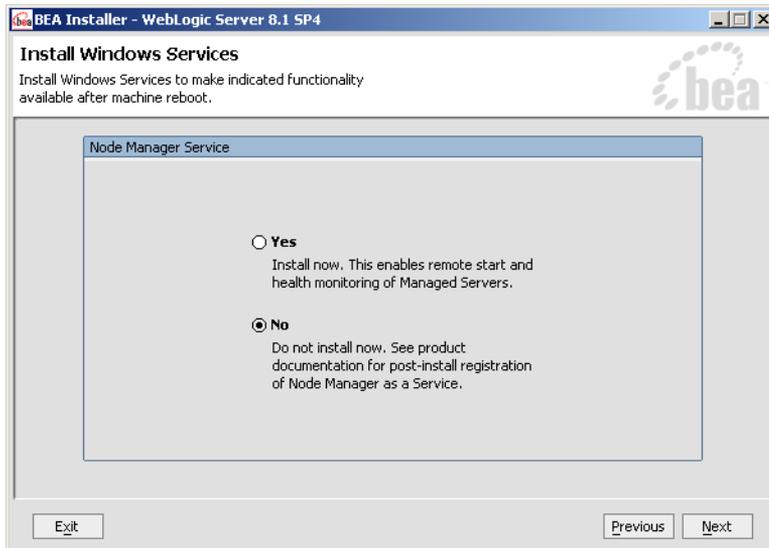
- 6 Select only **WebLogic Server** (includes Server and Server examples) and deselect WebLogic Workshop. Click **Next**.



- 7 Accept the default (c:\bea\weblogic81) installation location and click **Next**.



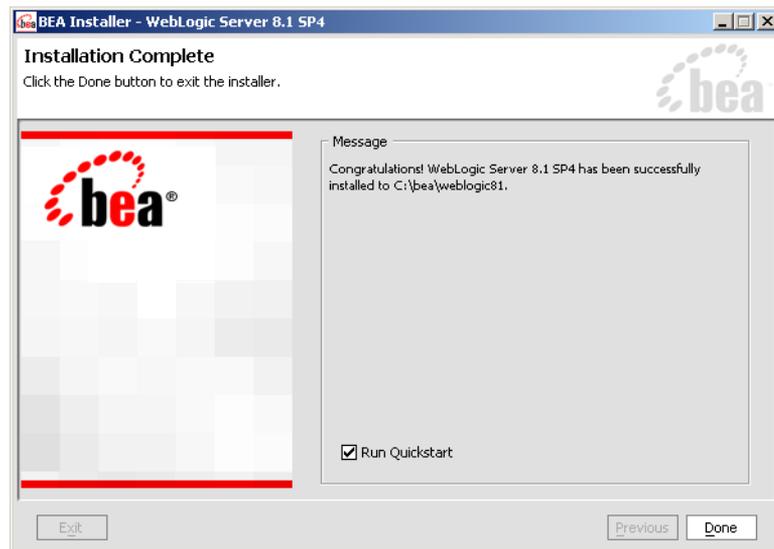
- 8 Select **No** to install the Node Manager as a Service and click **Next**.



Allow the installation progress bar to complete.



9 Check the **Run Quickstart** check-box. Click **Done**.



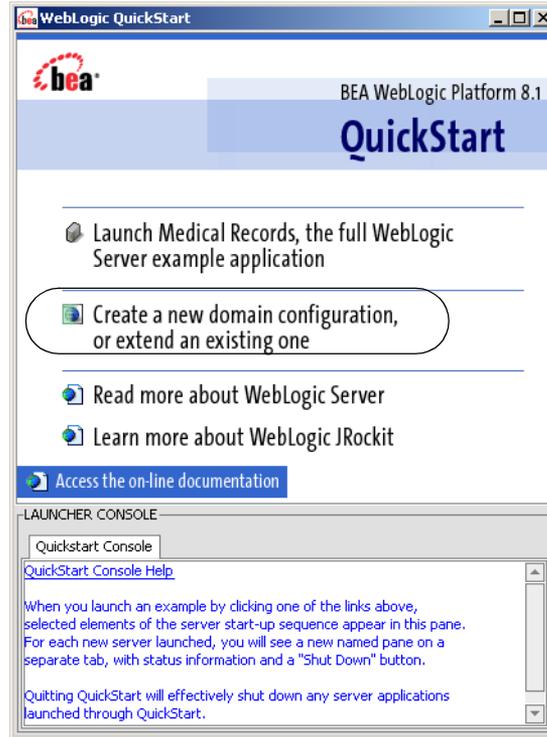
In a few seconds the QuickStart window opens. Continue with the next section to configure the Maximo Application Server.

Configuring the Maximo Application Server

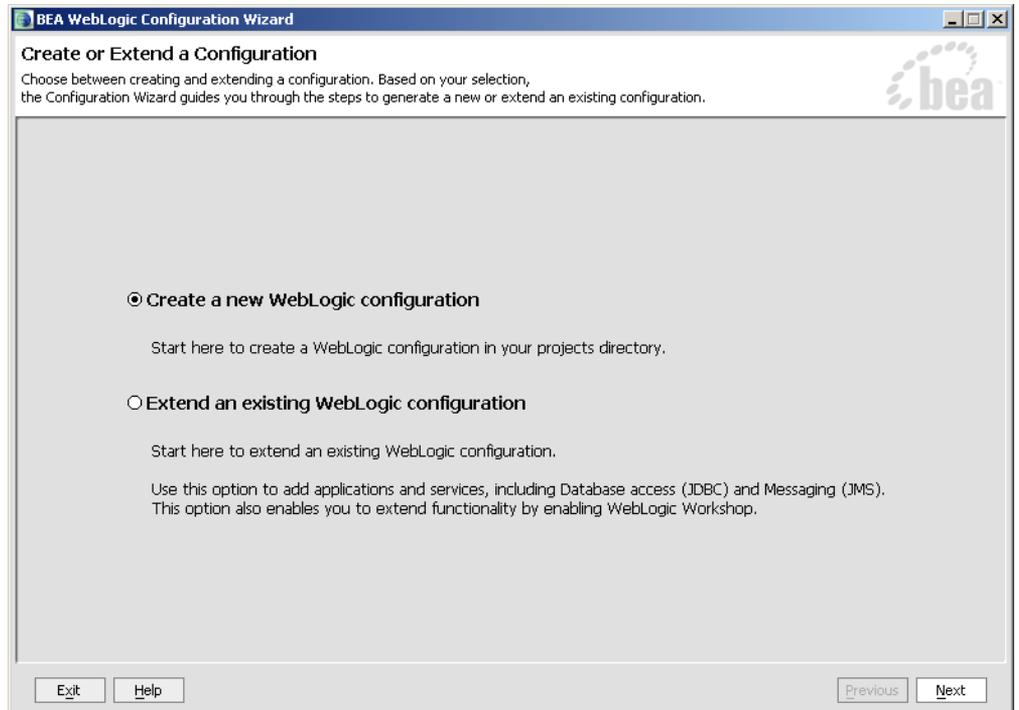
You can also invoke the Configuration Wizard from the Windows Start menu: Start > All Programs > BEA WebLogic Platform 8.1 > Configuration Wizard.

Complete the following steps.

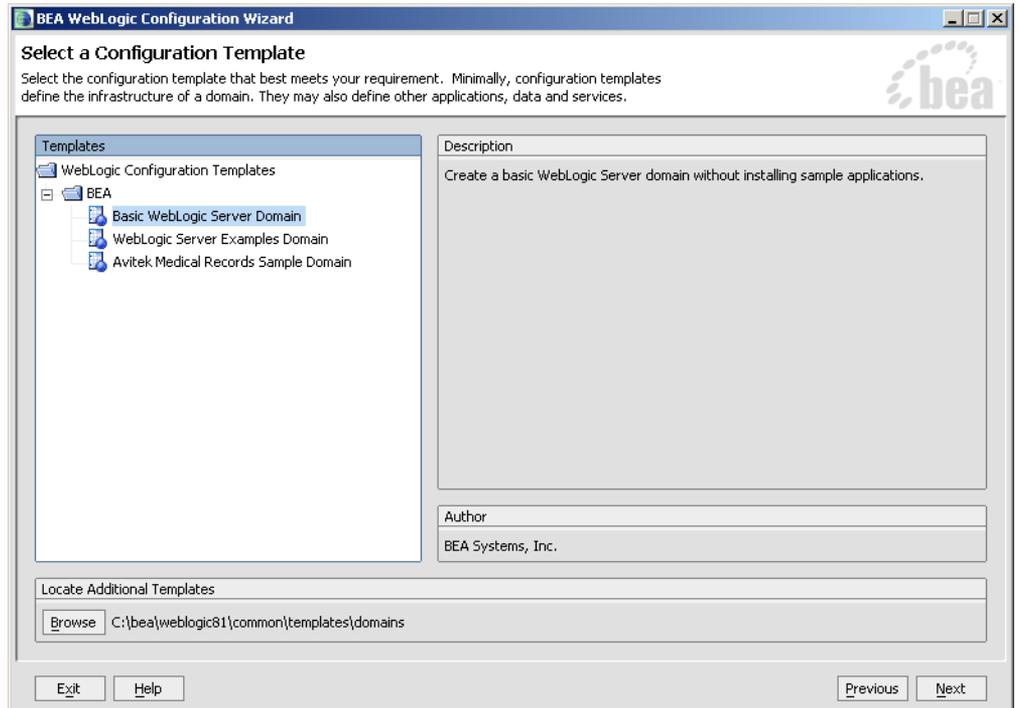
- 1 Click the **Create a new domain configuration** link.



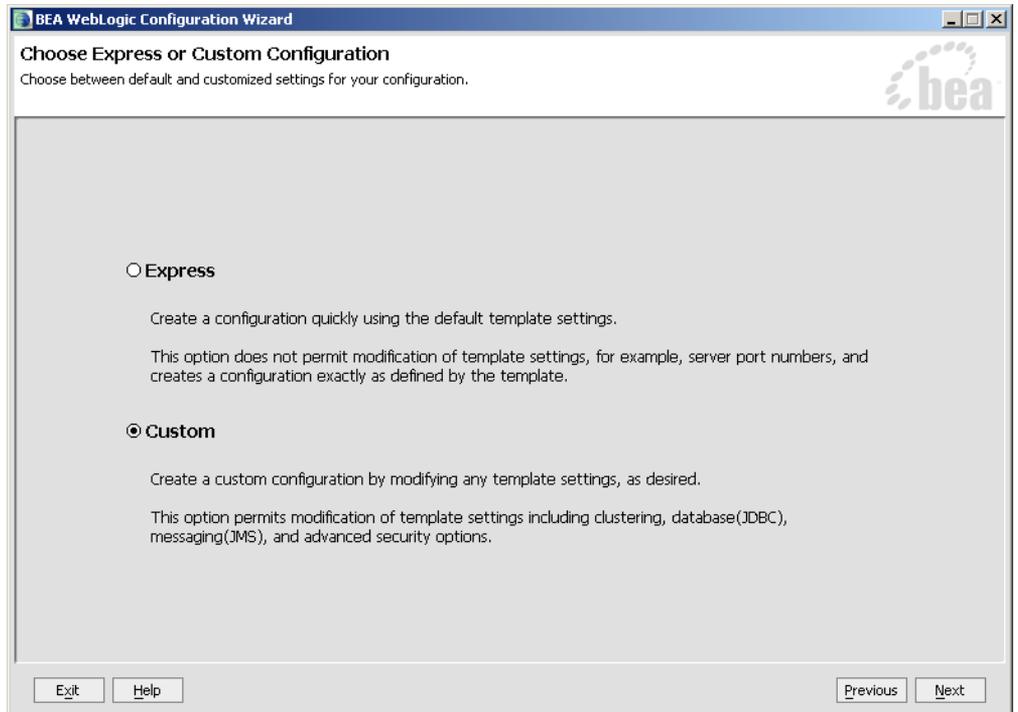
2 Select **Create a new WebLogic configuration** and click **Next**.



3 From the Configuration Template window, select only **Basic WebLogic Server Domain** and click **Next**.



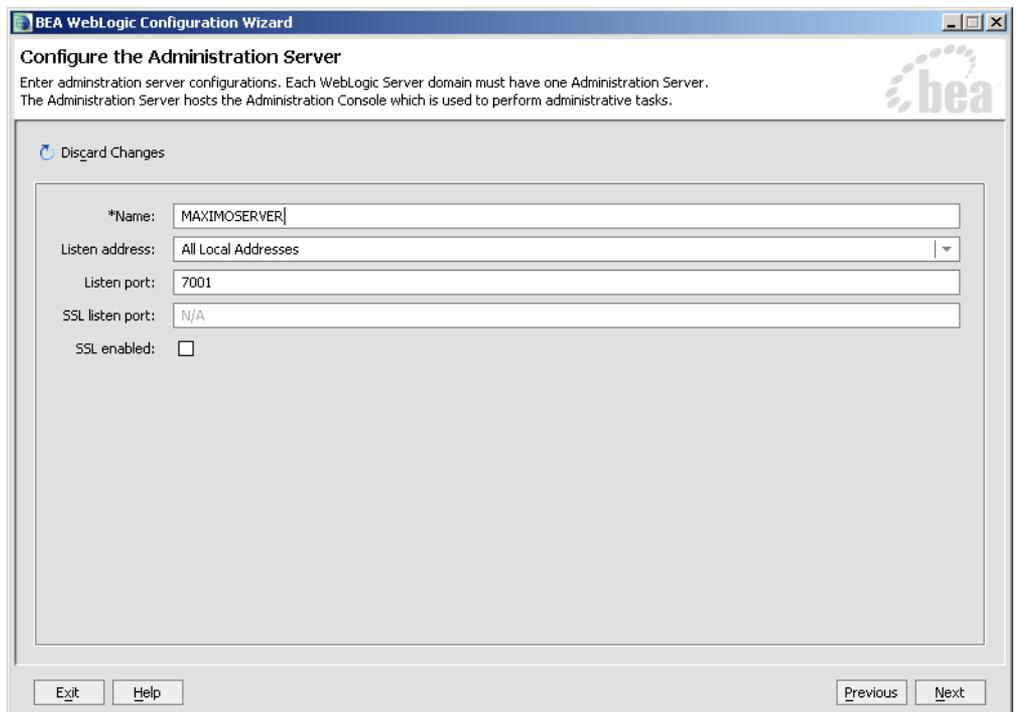
4 Select **Custom** and click **Next**.



5 Type **MAXIMOSERVER** in the Name field and accept all other default values and click **Next**.

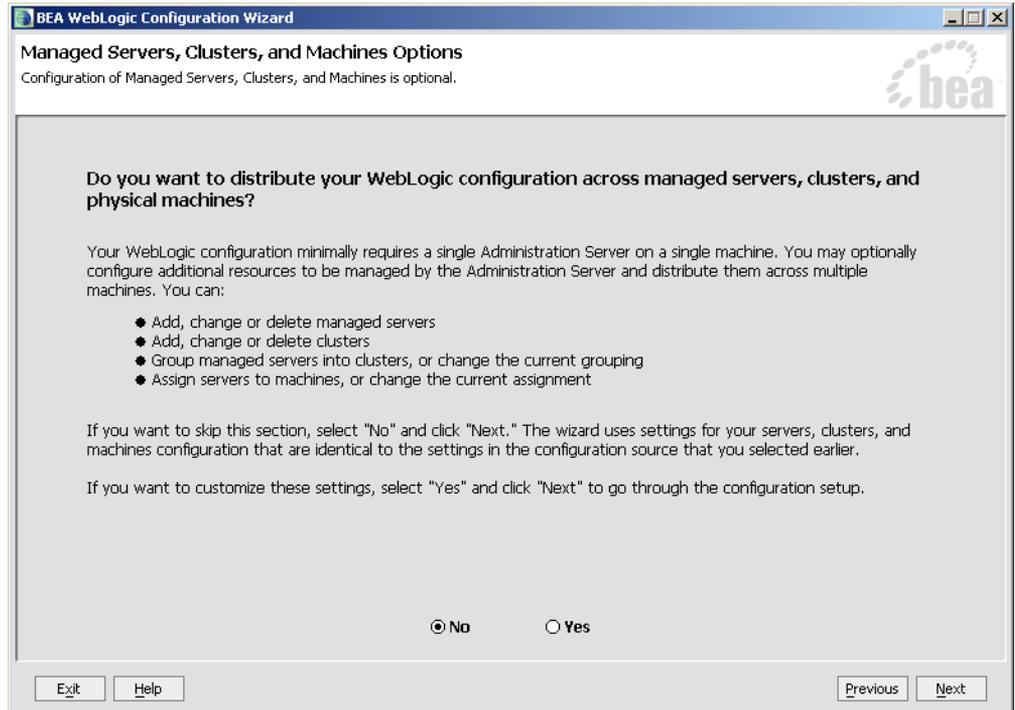
By default, the Listen Port number is 7001. You can specify a different port number or accept the default value.

Record this port number on page 4-1. You will need it during Maximo installation.

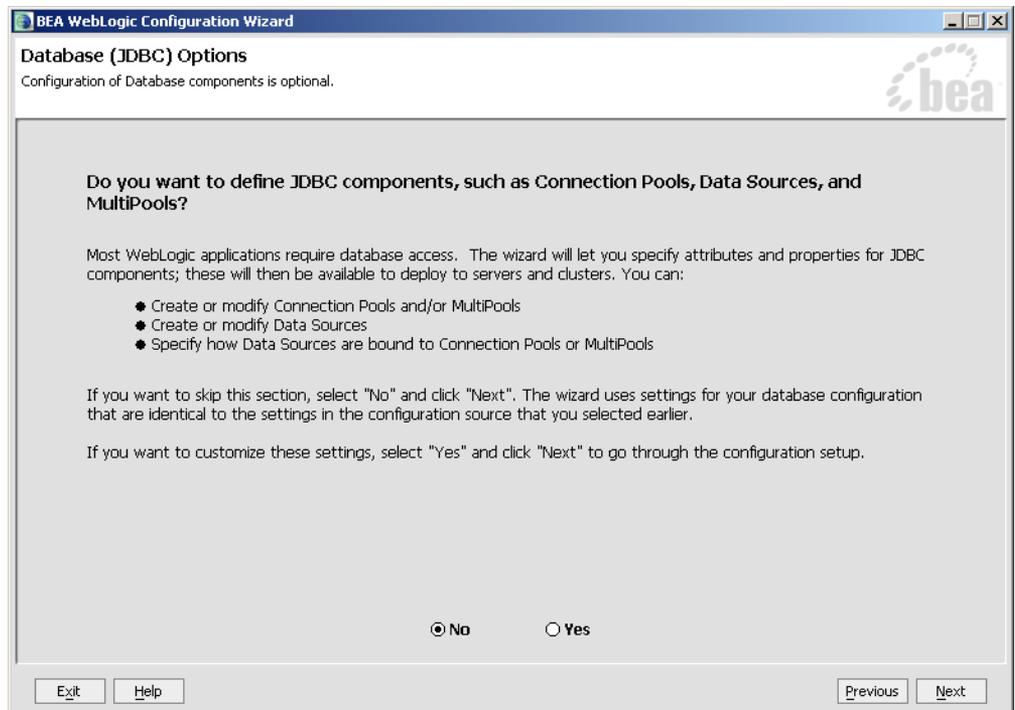


6 Select **No** in the Managed Servers dialog box and click **Next**.

Refer to the Maximo System Administrator's guide if you want to distribute your WebLogic configuration across managed servers.



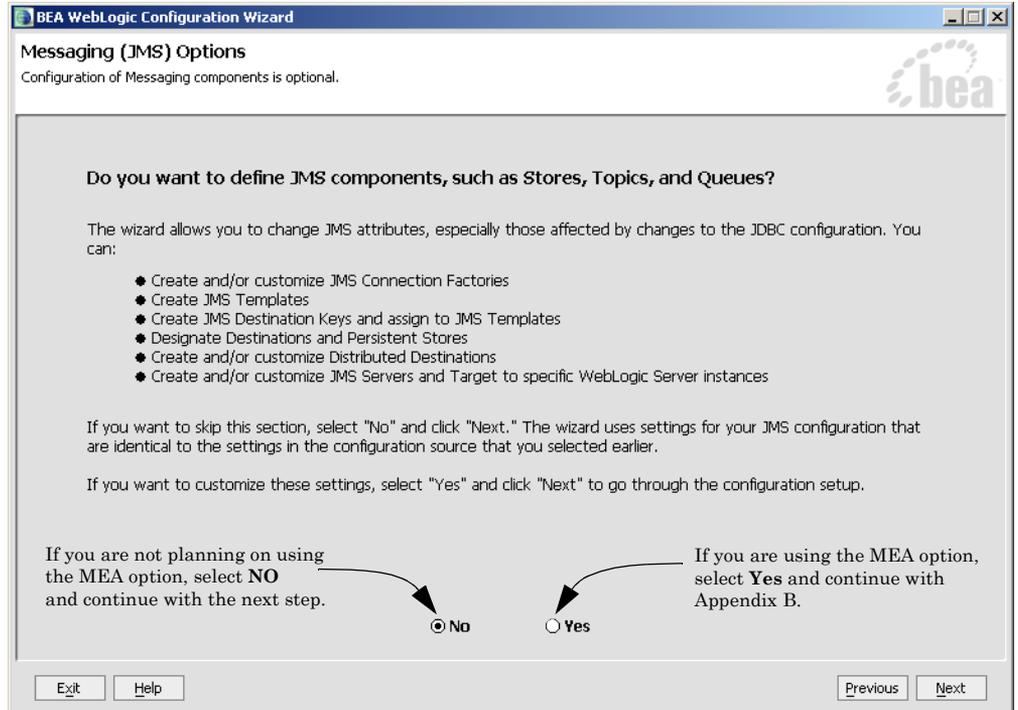
7 Select **No** in the Database (JDBC) Options dialog box and click **Next**.



8 Consider the following options before continuing with this step:

If you have received the Maximo Enterprise Adapter Packaging Key and plan to implement the Maximo Enterprise Adapter, you need to define the required Java Message Service (JMS) Options at this time. Select **Yes**, click **Next**, and continue with “Configuring JMS Options for Maximo Enterprise Adapter”, on page B-1. Details on the Maximo Enterprise Adapter can be found within the Maximo Enterprise Adapter System Administrator's Guide.

However, If you have not received the Maximo Enterprise Adapter Packaging Key or are *not* planning to implement the Maximo Enterprise Adapter, select **No** and click **Next** to continue with the next step.



- 9 Specify a username and a password. The username and password must be 8 characters long. Click **Next**.

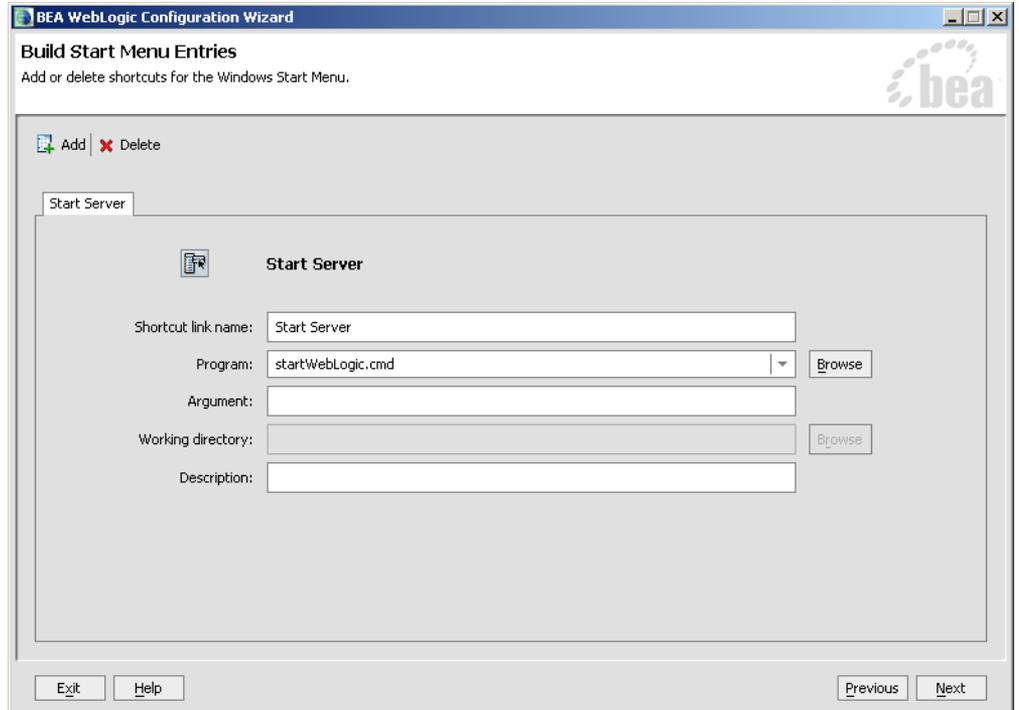
The screenshot shows the 'BEA WebLogic Configuration Wizard' window. The title bar reads 'BEA WebLogic Configuration Wizard'. The main heading is 'Configure Administrative Username and Password'. Below the heading, it says 'Create a user automatically assigned to the Administrative Role. This user is the default administrator used to start development mode servers.' There is a 'Discard Changes' link. The form contains four input fields: '*User name:' with '12345678', '*User password:' with '*****', '*Confirm user password:' with '*****', and 'Description:' with 'The default administration user'. At the bottom, there are radio buttons for 'No' (selected) and 'Yes'. Navigation buttons 'Exit', 'Help', 'Previous', and 'Next' are at the bottom.

- 10 Select **Yes** to create a Start Menu, and **No** to install the server (MAXIMOSERVER) as a Windows Service. Click **Next**.

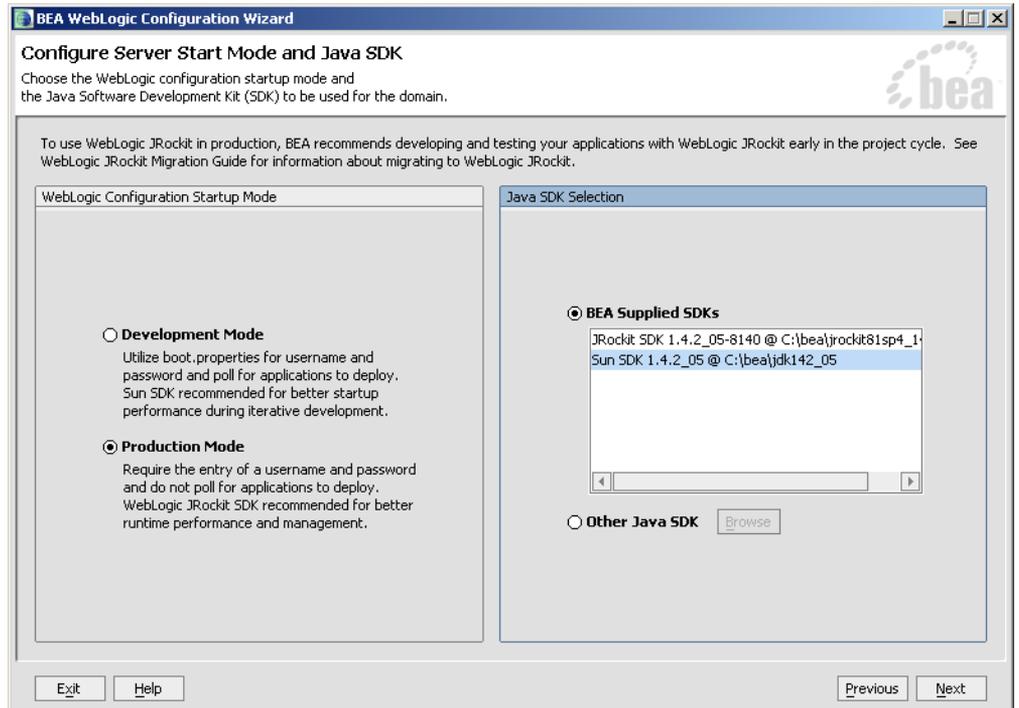
See Appendix A about creating and running MAXIMOSERVER as a Windows Service.

The screenshot shows the 'BEA WebLogic Configuration Wizard' window. The title bar reads 'BEA WebLogic Configuration Wizard'. The main heading is 'Configure Windows Options'. Below the heading, it says 'Choose whether or not to add a Windows Start Menu Shortcut and install the server as a Windows service.' There are two panels. The left panel is titled 'Create Start Menu' and has two radio button options: 'Yes' (selected) with a folder icon and 'Add a shortcut in the Start Menu.', and 'No' with a document icon and 'Do not add a shortcut in the Start Menu.'. The right panel is titled 'Install Administrative Server as a Windows Service' and has two radio button options: 'Yes' with a green checkmark icon and 'I have administrative privileges and want to register my administrative server as a service.', and 'No' (selected) with a red X icon and 'Do not register my administrative server as a service now. See product documentation for post-install registration of a server as a service.'. Navigation buttons 'Exit', 'Help', 'Previous', and 'Next' are at the bottom.

11 Accept the default values that appear in the Build Start Menu Entries and click **Next**.

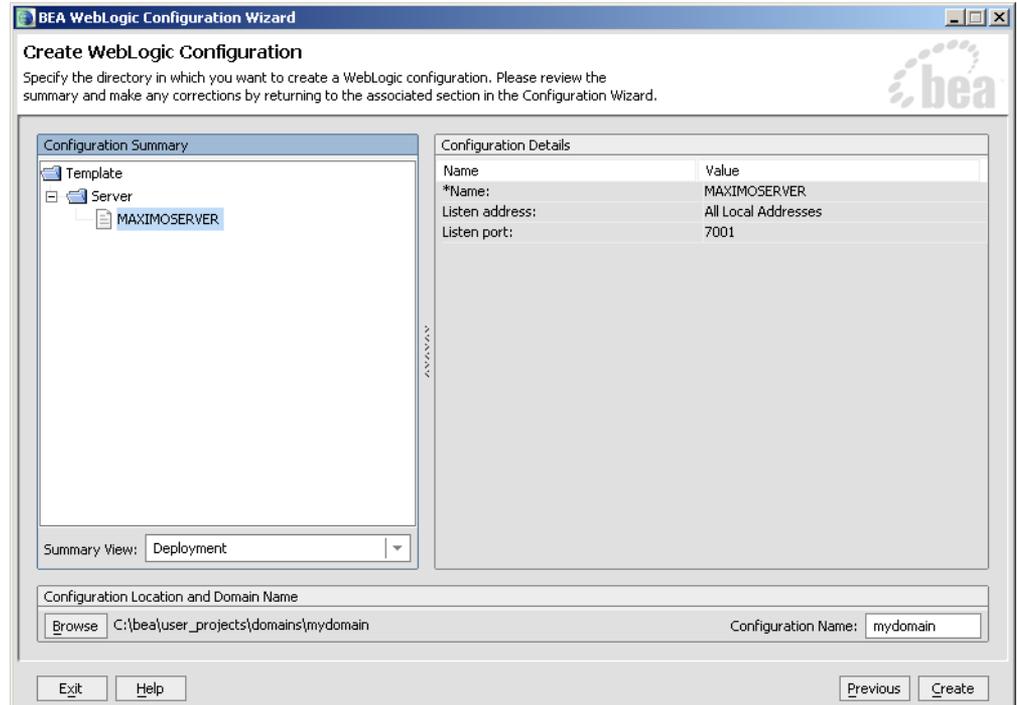


12 Select **Production Mode** and the **Sun SDK 1.4.2_05** and click **Next**.

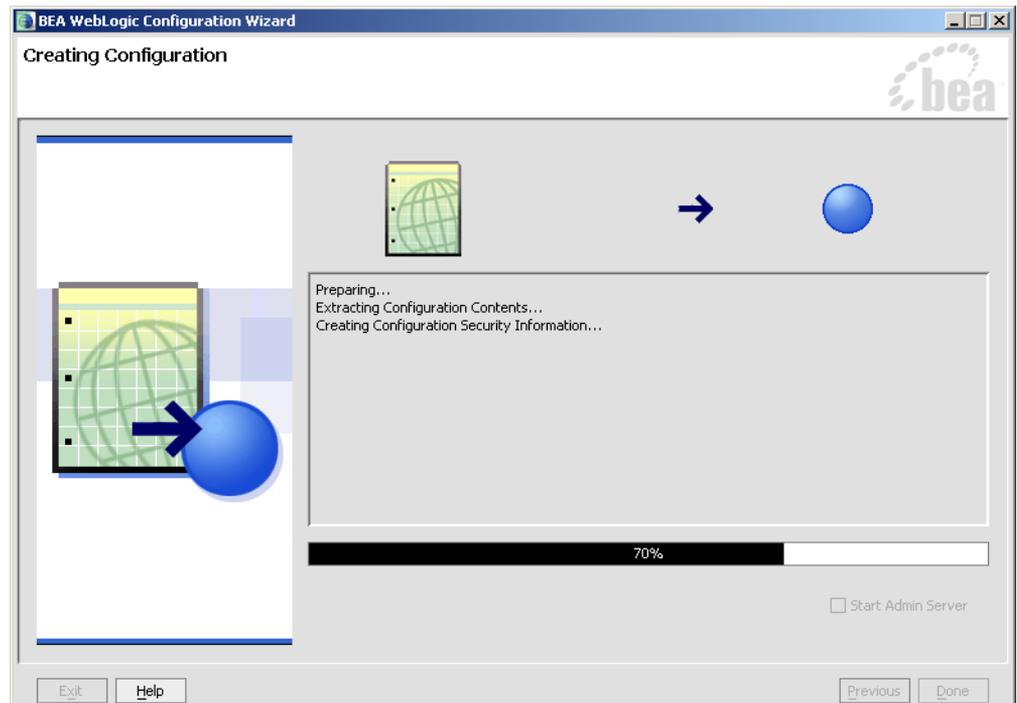


13 Select **MAXIMOSERVER** as your template and click **Create**.

You can specify a different configuration name instead of the default *mydomain*. However, this name *cannot* be the same as the Application Server name (MAXIMOSERVER).



14 Once the program has completed configuring MAXIMOSERVER, click **Done**. Do *not* check the Start Admin Server check-box at this time.



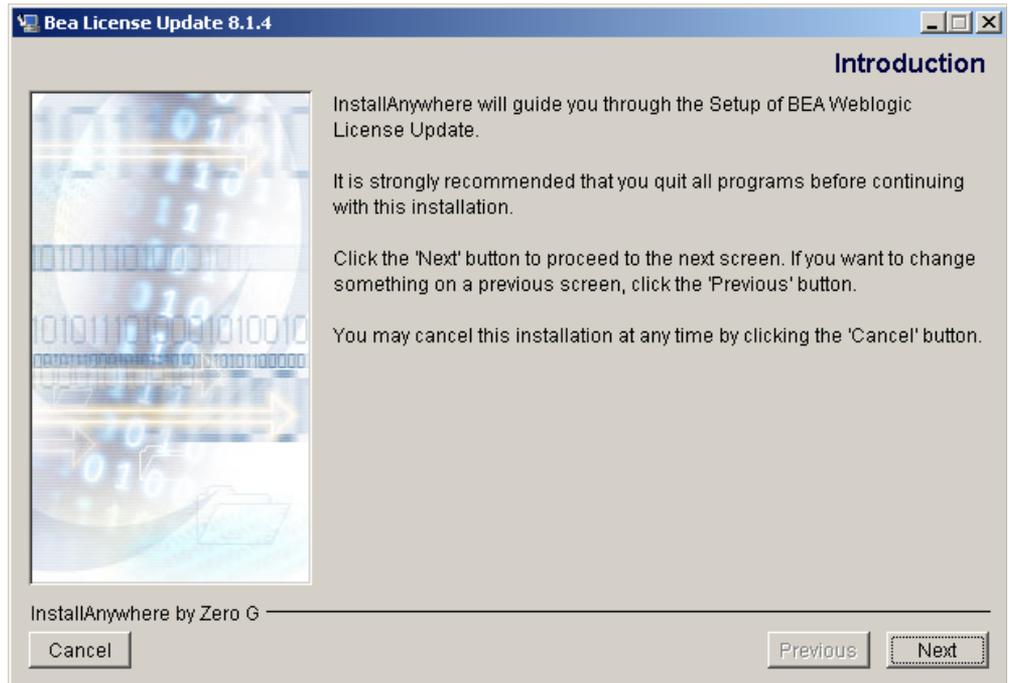
15 Close the QuickStart window.

Congratulations, you have installed and configured your Maximo Application Server. Continue with the next section to install the BEA WebLogic License Update program.

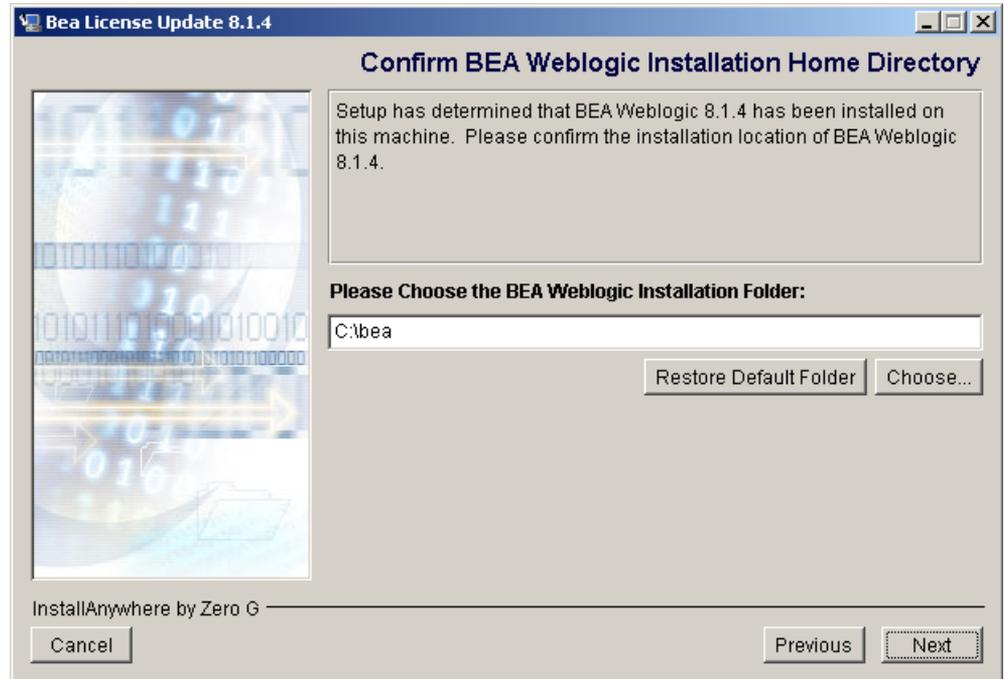
Installing the License Update Program

This program creates a valid license file so you can run Maximo with BEA WebLogic 8.1.4.0. To do so, complete the following steps:

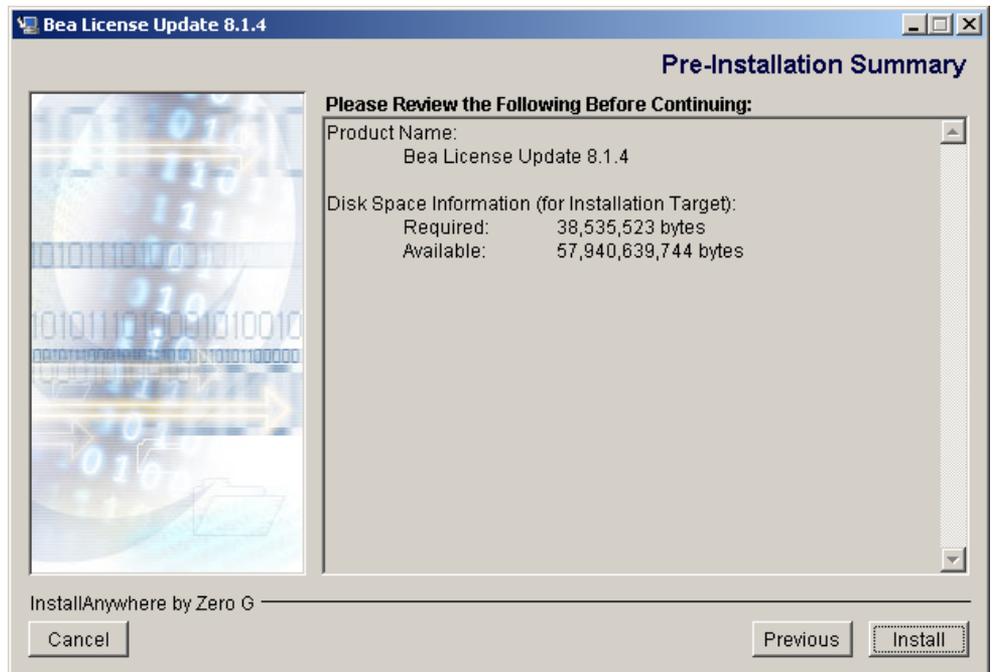
- 1 From the BEA WebLogic 8.1.4.0 CD root directory, double click **BEA814LicUpd56.exe**.
- 2 Click **Next** in the Introduction dialog box.



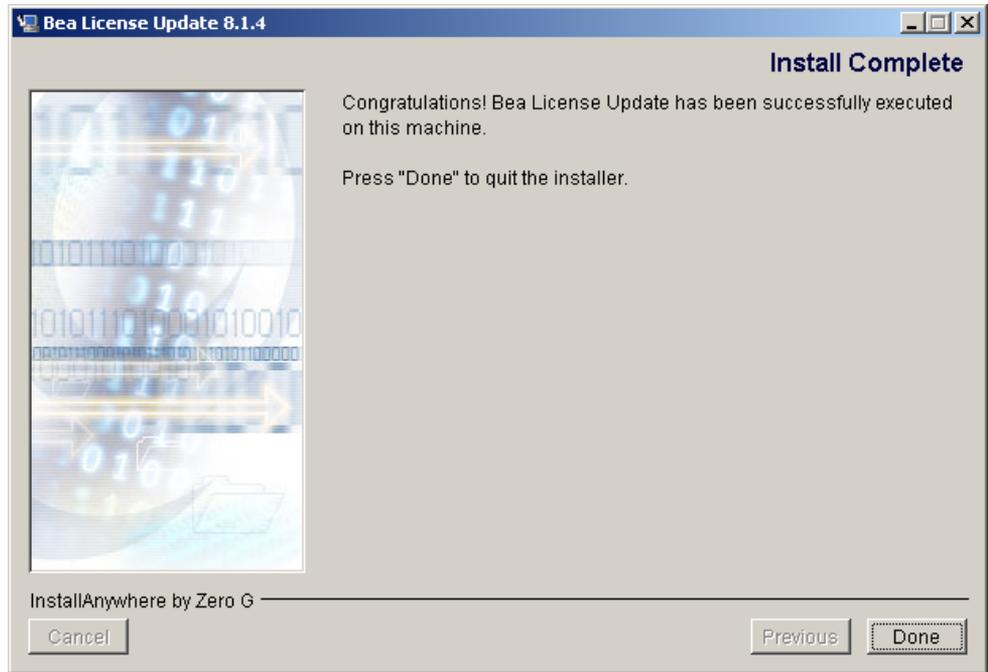
- 3 Accept the default WebLogic installation folder (c:\bea) and click **Next**.



- 4 Click **Install** in the Pre-Installation summary dialog box.



5 Click **Done** in the Install Complete dialog box.



Post Installation tasks

Complete the following tasks:

- ▼ Edit the `commEnv.cmd` file (Oracle Only)
- ▼ Increase the Java heap parameters.
- ▼ Verify settings by running `startWeblogic.cmd`.
- ▼ Include user name and password to start the MAXIMOSERVER automatically.

Edit the `commEnv` File (Oracle Only)

You must use the Oracle thin drivers from the Maximo installation to connect to Oracle 9i and 10g databases. In this section, you edit the `commEnv.cmd` file in the `/bea` folder, where you installed BEA WebLogic. later, in “Post Installation Tasks”, on page 4-12., after installing Maximo, you will copy the **oraclethin.jar** file from the `\lib` folder in Maximo to the `\lib` folder in BEA. Complete the following steps:

- 1 Using Windows Explorer navigate to:

```
<drive_letter>:\<bea_installation_location>\weblogic81\common\bin
```

For example: `C:\bea\weblogic81\common\bin`

- 2 Right-click and edit (do not double-click) the **commEnv.cmd** file as follows:
- 3 Using your text editor, search for **classpath=%java_home%**
- 4 Type the following after the equal (=) sign:

```
%WL_HOME%\server\lib\oraclethin.jar;
```

commEnv.cmd File

```

commEnv.cmd - Notepad
File Edit Format Help

:bea
if "%PRODUCTION_MODE%" == "true" goto bea_prod_mode
set JAVA_VM=-jrockit
set MEM_ARGS=-Xms96m -Xmx256m
set JAVA_OPTIONS=%JAVA_OPTIONS% -Xverify:none
goto continue
:bea_prod_mode
set JAVA_VM=-jrockit
set MEM_ARGS=-Xms128m -Xmx256m
goto continue

:sun
if "%PRODUCTION_MODE%" == "true" goto sun_prod_mode
set JAVA_VM=-client
set MEM_ARGS=-Xms32m -Xmx200m
set JAVA_OPTIONS=%JAVA_OPTIONS% -Xverify:none
goto continue
:sun_prod_mode
set JAVA_VM=-server
set MEM_ARGS=-Xms32m -Xmx200m -XX:MaxPermSize=128m
goto continue

:continue

@rem set up WebLogic Server's class path
set
WEBLOGIC_CLASSPATH=%WL_HOME%\server\lib\oraclethin.jar;%JAVA_HOME%\lib\tools.jar;
r\lib\weblogic_sp.jar;%WL_HOME%\server\lib\weblogic.jar

```

This command is case-sensitive

- 5 Save and close the file.

Increasing the Java Heap Parameters

Complete the following steps to set the Java Heap parameters to improve performance.

- 1 Using Windows Explorer navigate to:
 - <BEA_installation_drive>\bea\user_projects\domains\mydomain
- 2 Open and edit the **startweblogic.cmd** file as follows:
 - a Place your cursor at the end of the file
 - b Search *up* for **set server_name**
 - c Enter the following parameter exactly as stated below under the **SERVER_NAME** parameter:

```
set MEM_ARGS=-Xms512m -Xmx1024m -XX:MaxPermSize=256m
```

These parameters are case sensitive. Ensure to include the minus (-) sign before each parameter and to include the *m* after each value.

startWebLogic.cmd File

```

startWebLogic.cmd - Notepad
File Edit Format Help
set PRODUCTION_MODE=true

set JAVA_VENDOR=Sun

set JAVA_HOME=C:\bea\jdk142_
for %%i in ("%JAVA_HOME%") do

@REM Call commEnv here AFTER
environmental settings.

call "%WL_HOME%\common\bin\c

@REM Set SERVER_NAME to the name of the server you wish to start up.

set SERVER_NAME=MAXIMOSERVER

set MEM_ARGS=-Xms512m -Xmx1024m -XX:MaxPermSize=256m

set
CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;%JAVA_HOME%\jre\lib\
rt.jar;%WL_HOME%\server\lib\webservices.jar;%CLASSPATH%

@REM Call webLogic Server

echo .
echo CLASSPATH=%CLASSPATH%
echo .
echo PATH=%PATH%
echo .
echo *****
echo * To start webLogic Server, use a username and *
echo * password assigned to an admin-level user. For *
echo * server administration, use the webLogic Server *
echo * console at http:\<[hostname]:[port]\console *
echo *****

%JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS%

```

- 3 Save and close the file.

Verify Settings by Running startWebLogic.cmd

To ensure that the edits that you made to the above mentioned WebLogic files were accurate, complete the following steps:

- 1 From a command prompt, change directory path to:


```
<BEA_installation_drive>\bea\user_projects\domains\mydomain
```
- 2 Type **startWebLogic.cmd** and press Enter.
- 3 When prompted, type the username and password that you specified in Step 9 on page 2-11.

Once the phrase:

```
"<server started in RUNNING Mode>"
```

displays, the WebLogic Server is running.

Starting the Server Without Being Prompted for Username and Password

If you are working in Production mode and do not want to be prompted for the WebLogic user name and password, create a **boot.properties** file. This will store the username and password in an encrypted format.

Place the following two lines in a text file:

```
username=<specify an existing username>
```

```
password=<specify an existing password>
```

The username and password values must match an existing user account in the Authentication provider for the default security realm, and must belong to a role that has permission to start and stop a server.

These are the same values that you specified in Step 9 on page 2-11.

If you save the file as **boot.properties** and locate it in the *mydomain* folder (for example: c:\bea\user_projects\domains\mydomain), the server automatically uses this file during its subsequent startup cycles.

The first time you use this file to start a server, the server reads the file and then overwrites it with an encrypted version of the username and password. For more information, refer to BEA's document web site at:

<http://e-docs.bea.com/wls/docs81/ConsoleHelp/startstop.html#BootIdentityFiles>

Installing The Actuate Application

3

If you are using Actuate for reporting in Maximo, this chapter explains how to install the Actuate 8 iServer application. If you are not going to use Actuate, skip to Chapter 4.

Pre-Installation Procedures

The following sections describe the pre-installation procedures.

Oracle Connectivity

You must install the following Oracle Client Software on your Actuate Server before installing Actuate:

- ▼ Oracle JDBC Drivers
- ▼ SQL*Plus
- ▼ Oracle Networking (in Oracle 9i or 10g)

You must setup and test Oracle Networking connectivity to the Maximo database.

You must also create a TNS name for your Maximo connect string as you will need this information in Step 10 on page 4-5.

Please review Oracle installation documentation for further details. Oracle documentation is available online at <http://otn.oracle.com/documentation/content.html>.

MS SQL Server Connectivity

If your Actuate application connects to Microsoft SQL Server, you must install Microsoft SQL Server client software before installing Actuate.

You must also create a DNS name for your Maximo connect string as you will need this information in Step 10 on page 4-5.

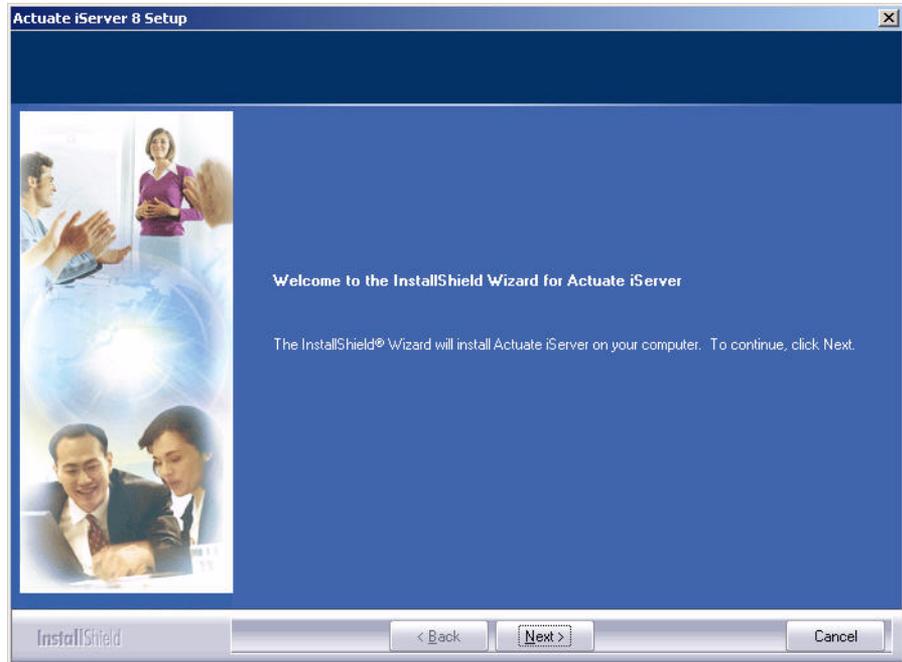
Install the following products:

- ▼ Microsoft SQL Server ODBC Drivers
- ▼ SQL Server Client Network Utility.

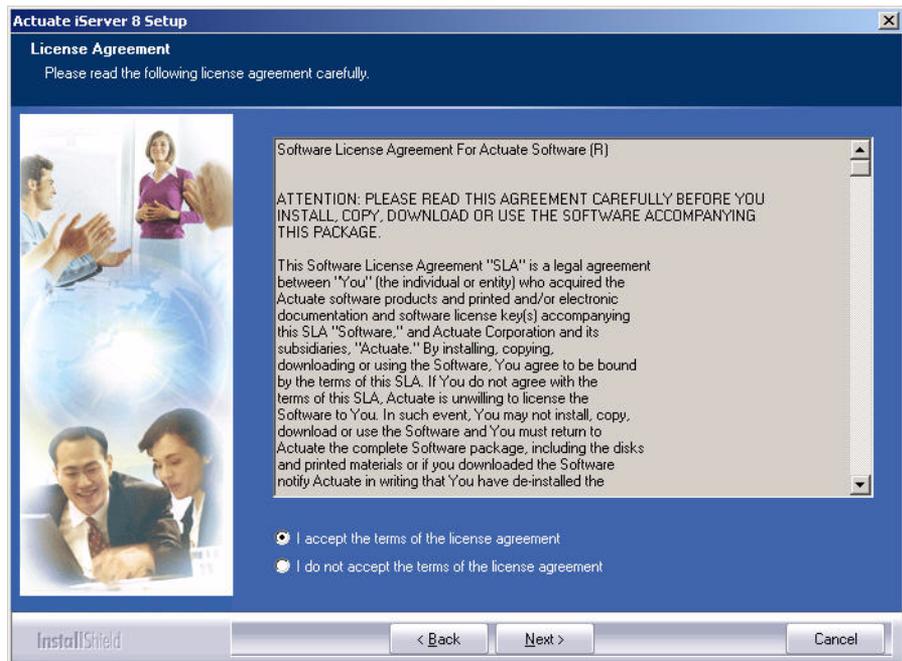
Installing Actuate8 iServer

This section describes how to install Actuate 8 iServer. For best performance, MRO Software recommends installing Actuate iServer on a dedicated server.

- 1 Log in to Windows as a user with Administrative rights.
- 2 Insert the Actuate 8 iServer for Windows CD-ROM into the CD drive. From the \iserver folder on your CD double-click the **setup.exe**.
- 3 Click **Next** in the Welcome dialog box.



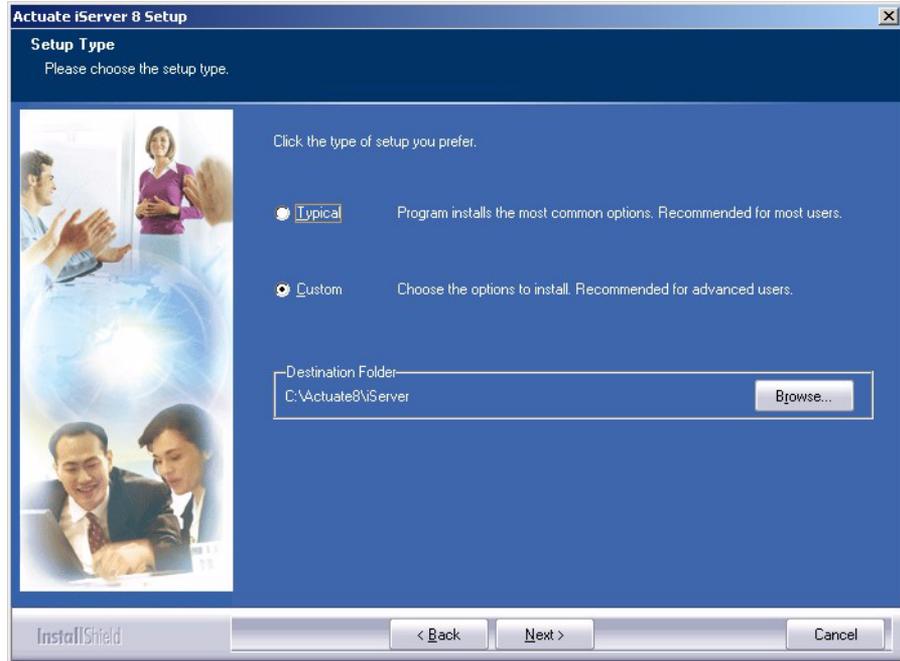
- 4 Accept the terms of the License Agreement and click **Next**.



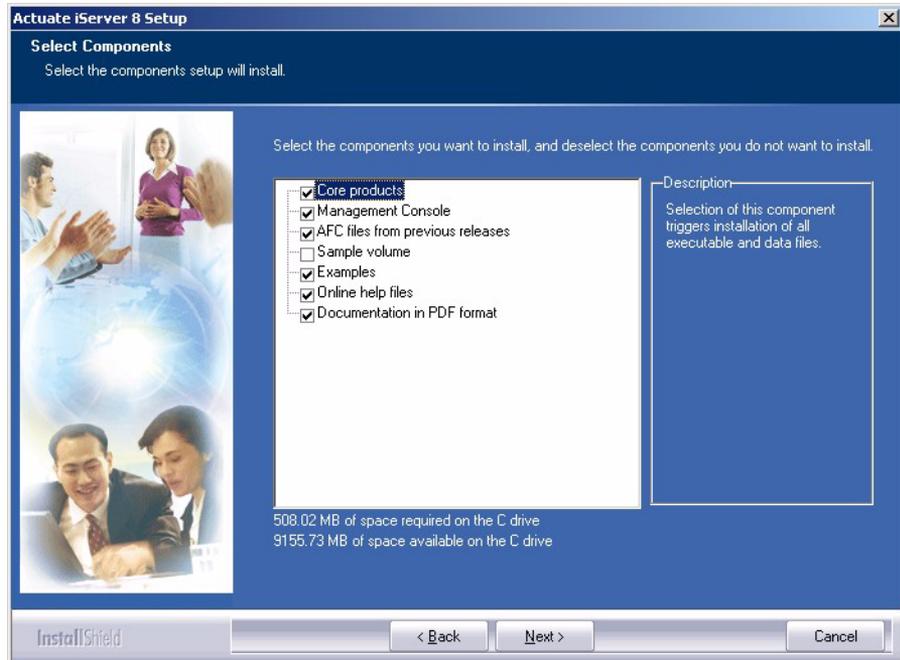
- 5 Select **Custom** and read the following warning before clicking **Next**.

WARNING

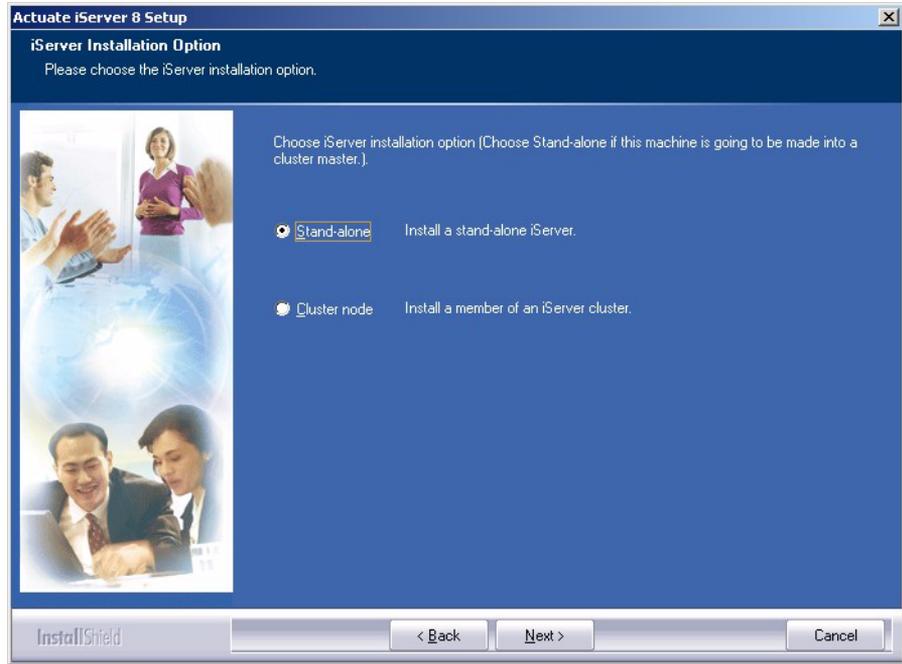
Default value for the Destination Folder is **\Program Files\Actuate8\iserver**; however, you must ensure that the Destination Folder path does not have any *spaces* in the path name. For example **c:\Actuate8\iserver**. Click **Browse** to select the new path.



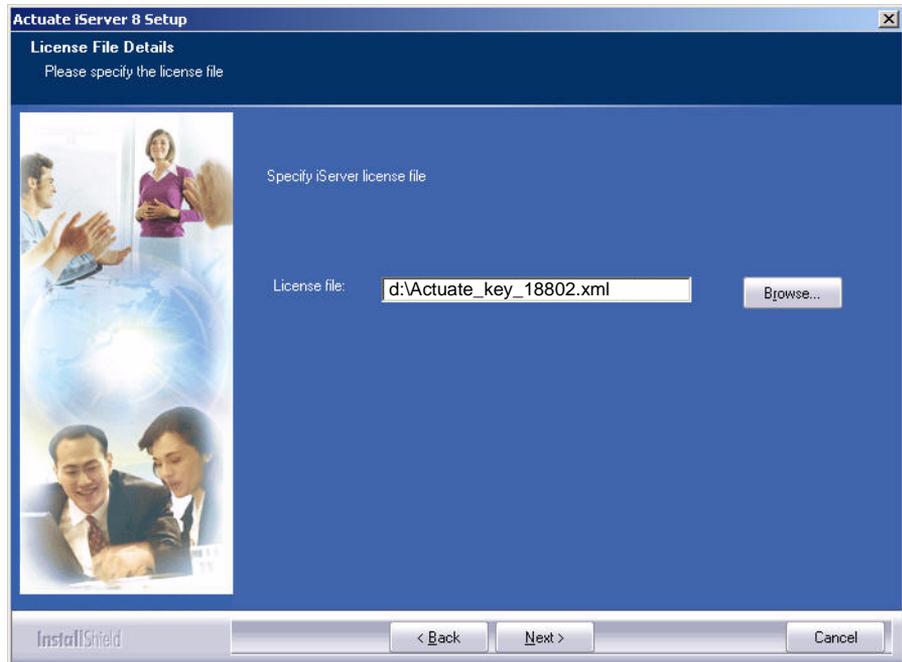
- 6 Select all components *except* Sample Volume and click **Next**.



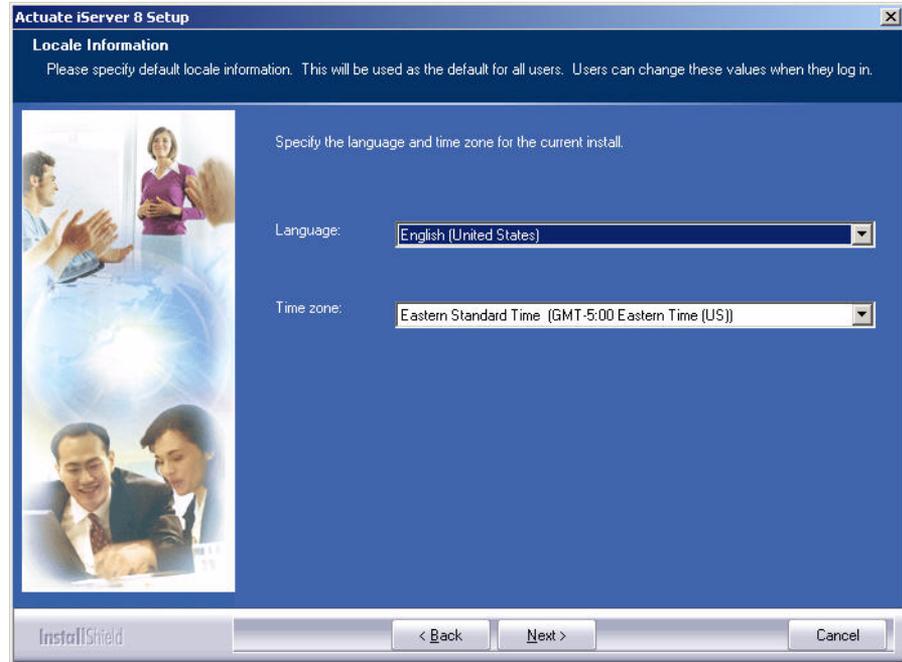
7 Select **Stand-alone** and click **Next**.



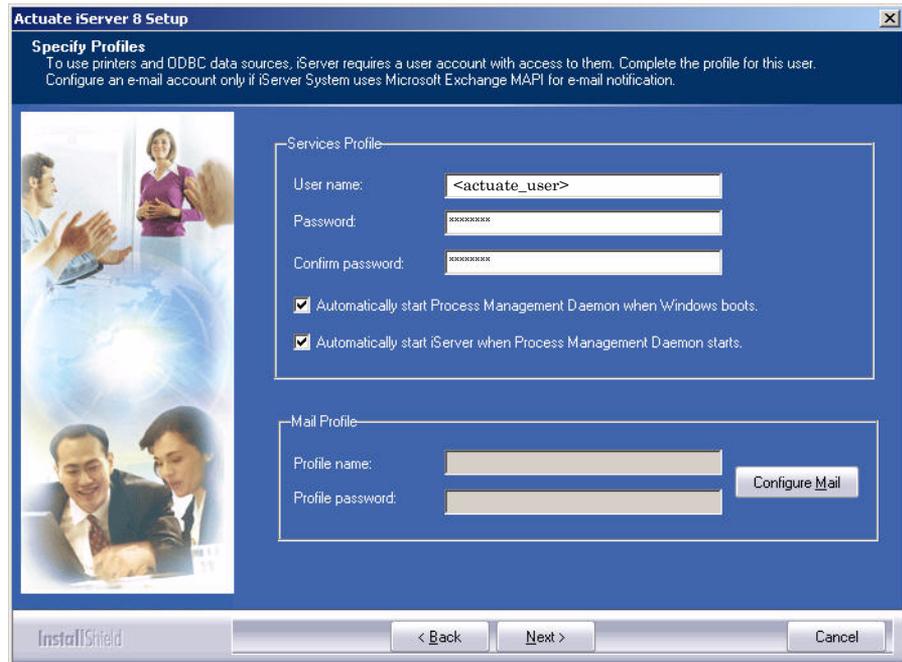
8 Click the browse button and navigate to the location of the xml file, in this example: **Actuate_key_18802.xml**. This file resides under the root CD folder on your *Actuate Release 8 iServer for Windows* CD-ROM. Click **Next**.



- 9 Accept the default values that appear in your Locale Information dialog box and click **Next**.



- 10 Enter a user that is in the *Administrator Group* and ensure that both check-boxes in the Services Profile frame are *checked*. Click **Next**.

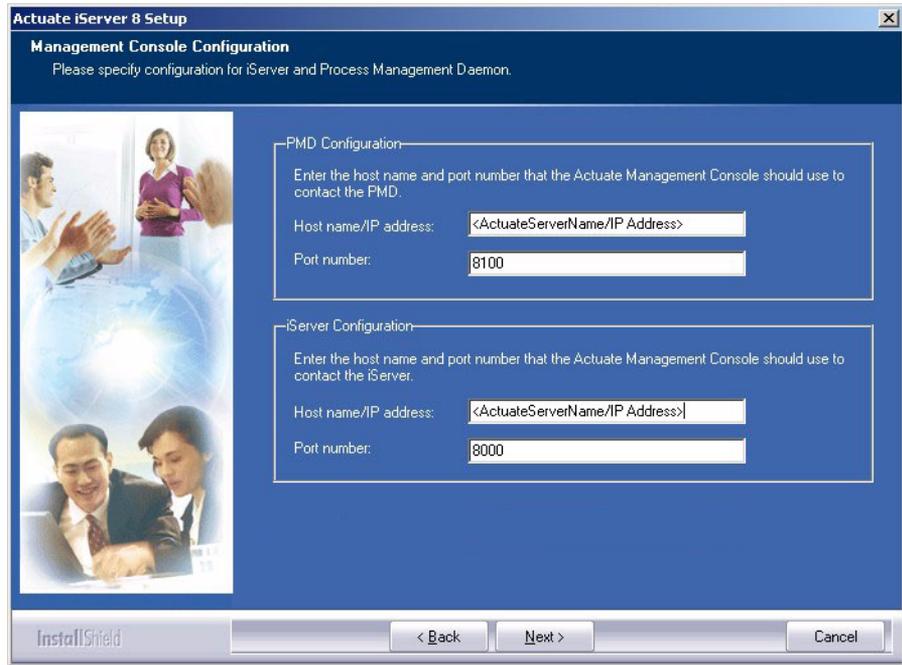


- 11 Enter the following values in the Server Configuration dialog box.

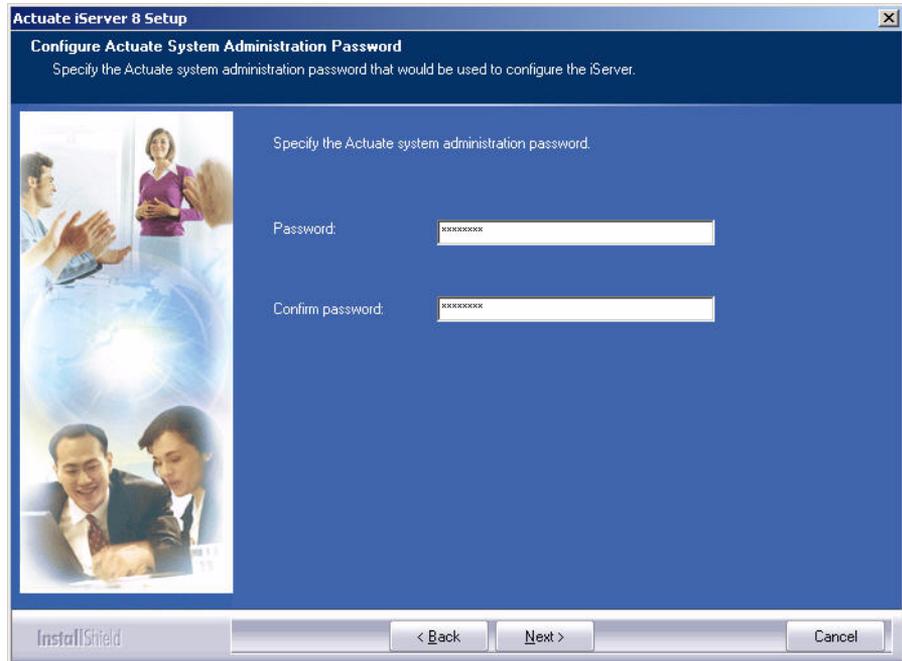
PMD Configuration. The Process Management Daemon enables you to perform Administrative tasks within iServer, but does not connect to the Maximo Encyclopedia Volume.

- a The host name or the IP address of the machine where you are installing Actuate iServer.

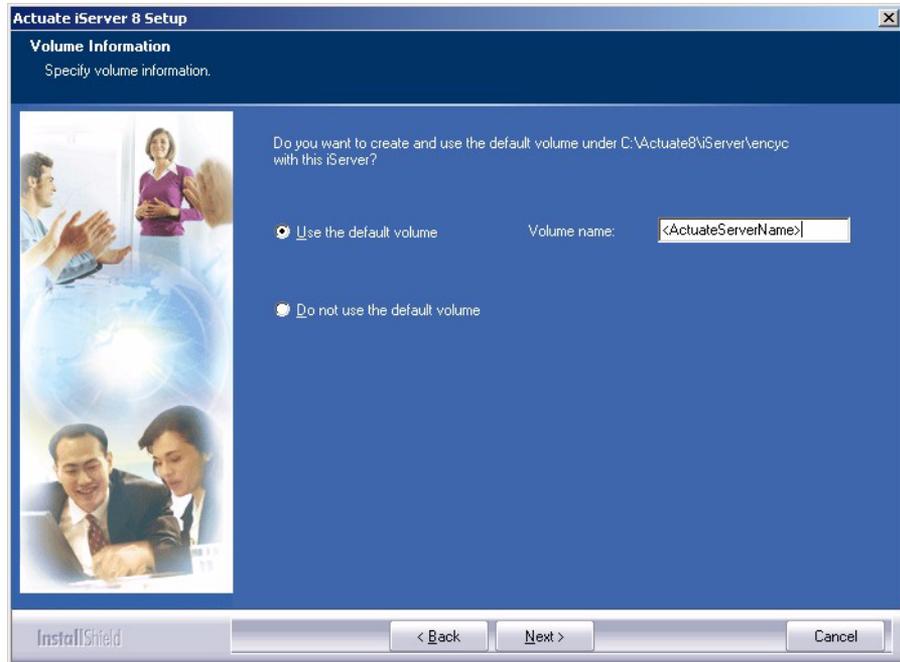
- b Accept the default port number 8100.
- c **iServer Configuration.** The iServer Configuration enables you to connect to the Maximo Encyclopedia Volume.
- d The host name or the IP address of the machine where you are installing Actuate iServer (same as above).
- e Accept the default port number 8000.
- f Click **Next**.



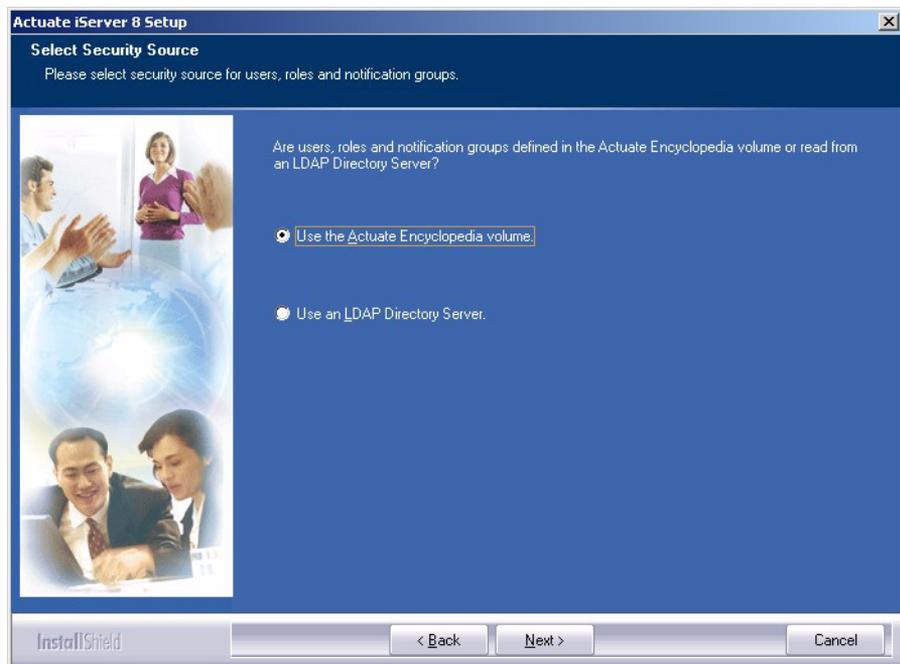
12 Specify a password for your Actuate administrator and click Next.



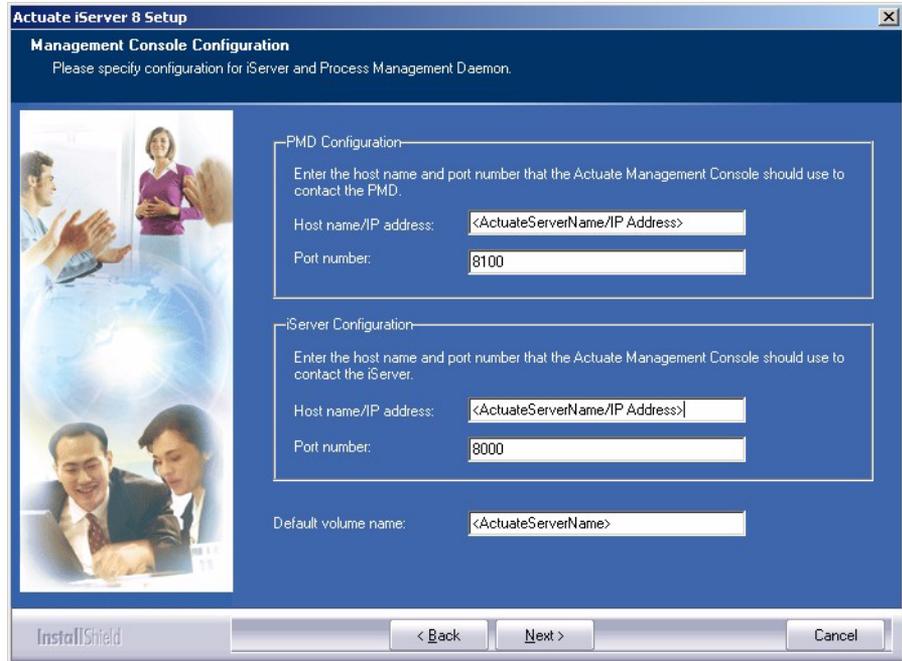
- 13 Select **Use the default volume** and type the computer name or IP address. Click **Next**.



- 14 Select **Use the Actuate Encyclopedia volume** and click **Next**.

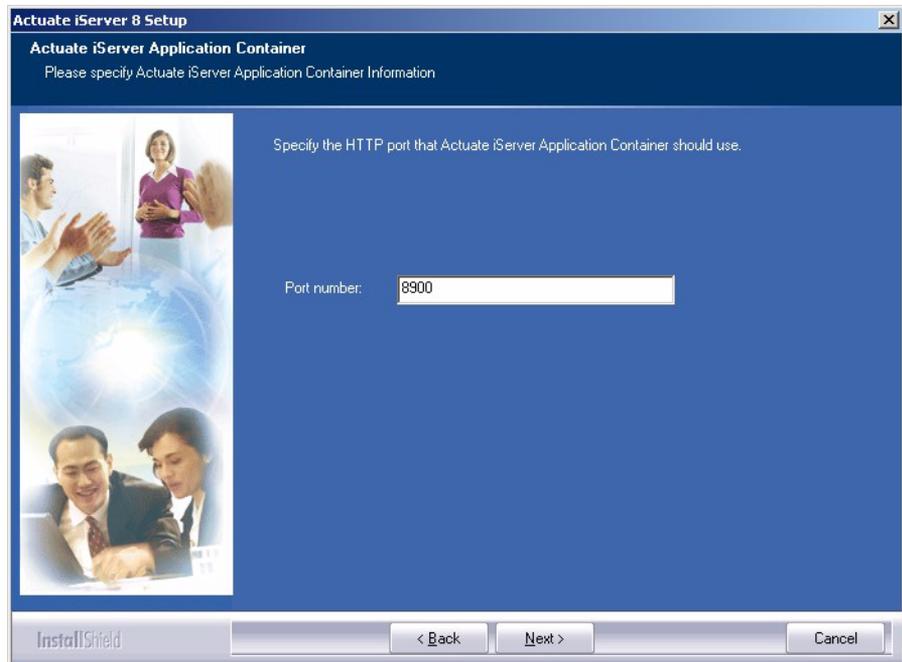


- 15 Enter the computer name where requested and accept the default port numbers. Click **Next**.



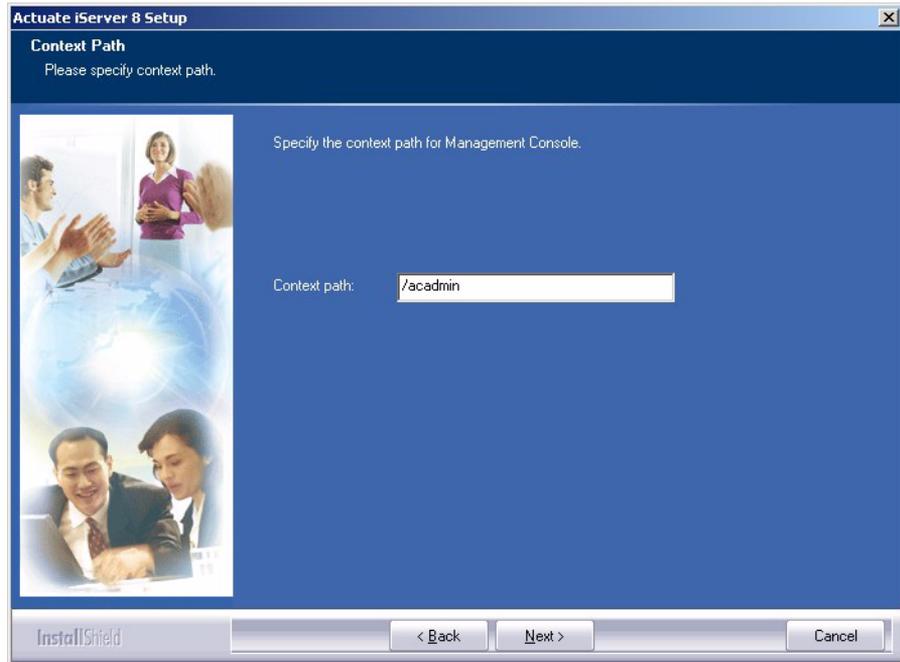
- 16 Accept the default HTTP port number (8900), or specify another port number and click **Next**.

You open the Actuate Administrative console via a browser, using this port number. For example: `http://<actuate_computer>:8900/acadmin`.



- 17 Accept the default context path (/acadmin) or specify another context name and click **Next**. You open the Actuate Administrative Console via a browser, using this context.

For example: `http://<actuate_computer>:8900/acadmin`



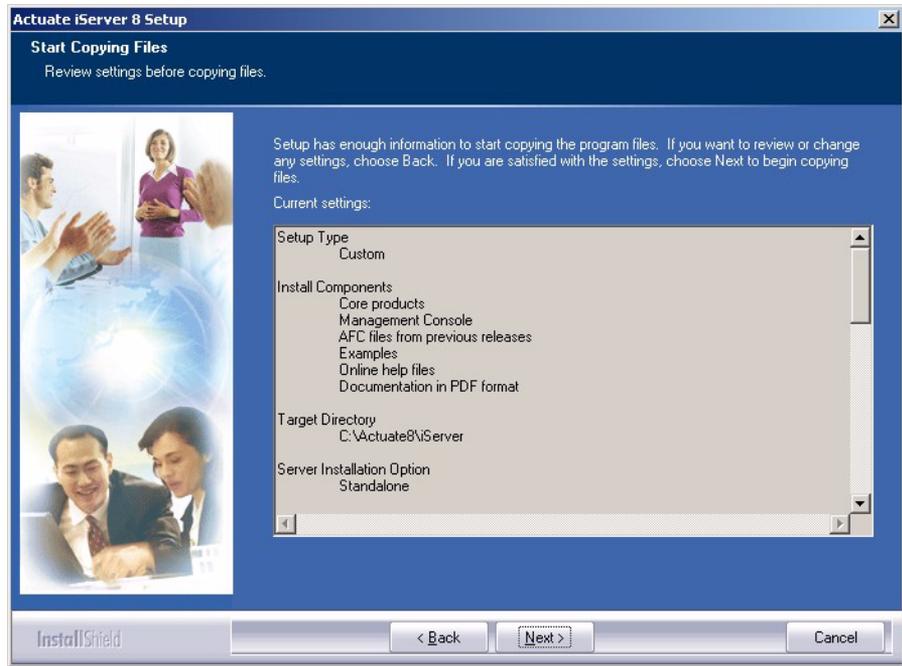
Record the port number and the context path that you created. You will need these to access the Web-based Actuate Administrative Console Step 12 on page 9-9.

The above two steps enable system administrators to access, generate, and manage reports using Actuate's web-based console.

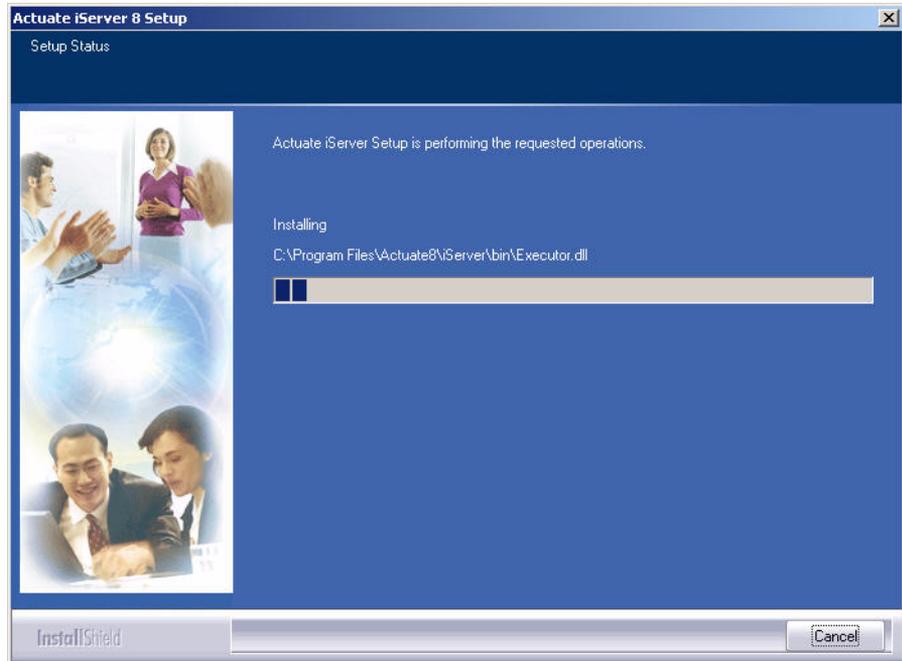
- 18 Accept the default values for the program folder and click **Next**.



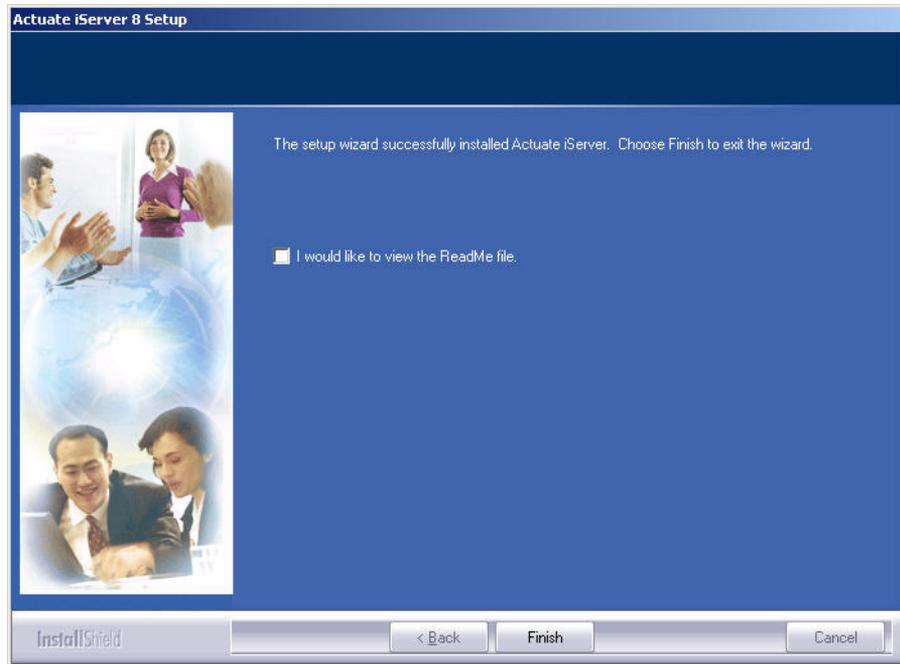
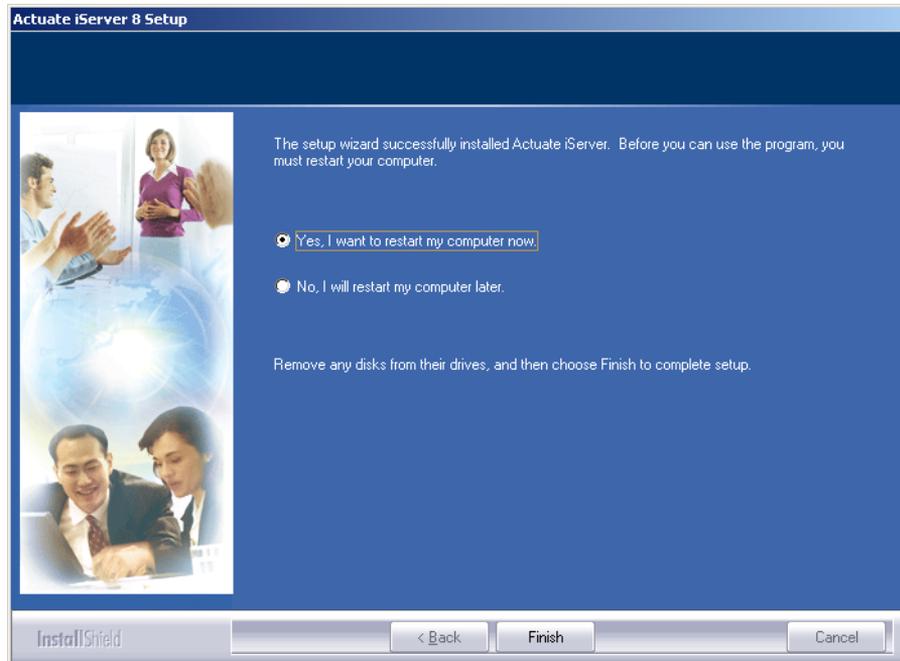
19 Click **Next** in the Summary dialog box.



20 Allow for the installation program to copy all the files.



21 Close the setup.txt file.

22 Uncheck the ReadMe check-box and click **Finish**.**23** Restart the computer.

You are now ready to install Maximo Enterprise Suite.

Installing The Maximo Enterprise Suite Application

4

This chapter explains how to install the Maximo Enterprise Suite application.

Complete the following worksheet by recording certain names and values that will help you during installation. The page and step numbers in the right column of the worksheet indicate where you need the requested information.

Record the information here...	Use the information here...
Maximo-related	
Serial number	Step 7 on page 4-3
Maximo install folder	Step 8 on page 4-4
SMTP host name	Step 11 on page 4-5
Work flow administrator email	Step 12 on page 4-6
Maximo administrator email	Step 12 on page 4-6
Application server name	Step 13 on page 4-6
Listen Port number	Step 13 on page 4-6
Database-related	
Database server name	Step 10 on page 4-5
Database port number	Step 10 on page 4-5
Database Name	Step 10 on page 4-5
Database/Schema owner	Step 10 on page 4-5
Database owner name and password	Step 10 on page 4-5
Actuate-related	
Actuate iServer name	Step 16 on page 4-7
iServer port number	Step 16 on page 4-7
TNS (Oracle) or DNS (MS SQL Server) on the Actuate iServer	Step 16 on page 4-7

Starting the Maximo Installation Program

You install Maximo onto a Windows workstation designated as the MXES Administration Workstation. This is where the Enterprise Archive (EAR) files are built and subsequently deployed to the application server.

You use the Administration Workstation to install program patches, product upgrades, or just running Configure Database and similar utilities in which case you must stop the application server from running.

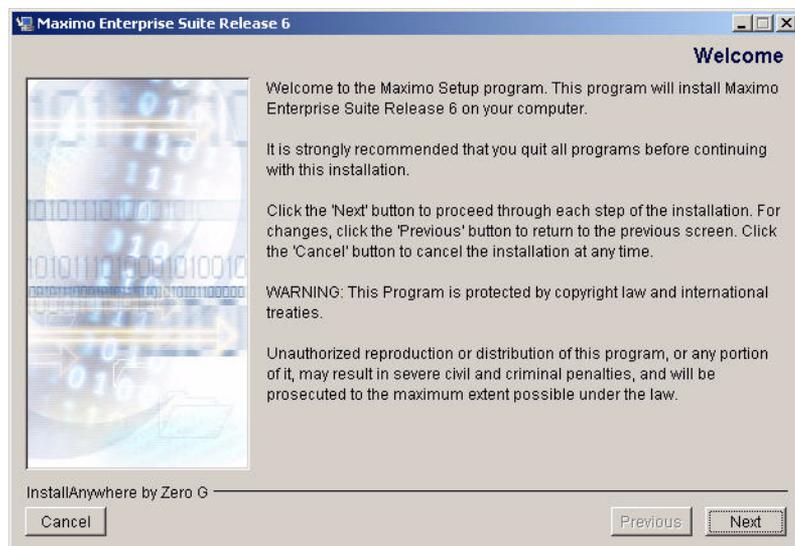
To install the Maximo Application, complete the following steps:

- 1 Log in to Windows as Administrator or as a user with administrative rights.
- 2 Insert the Maximo Enterprise Suite installation CD-ROM into the CD drive.
- 3 From the root CD drive, double-click **maximo60.exe**.
- 4 Select the appropriate language from the drop-down list. If your language is not available from the list, select English; if it is Japanese or Chinese, see Note 2 below. Click **OK**.

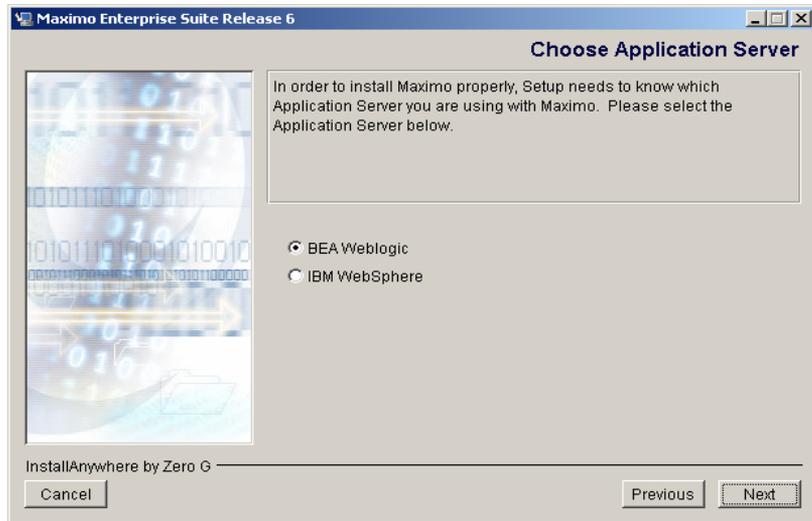
NOTE 1 Selecting a language only changes the installation screens into that language but does not affect the underlying files that gets installed.

NOTE 2 The installation screens are translated into: Spanish, Portuguese, Japanese, and Simplified Chinese. In order to see Japanese or Chinese you must have those fonts installed on your system.

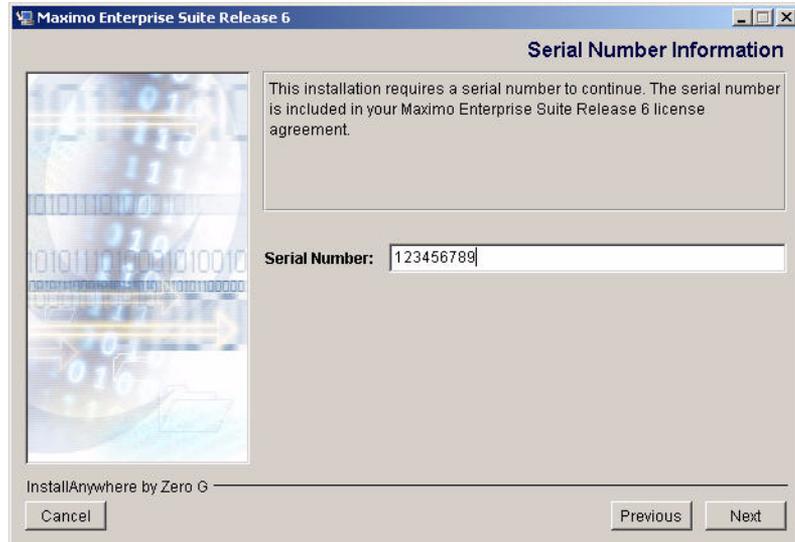
- 5 Click **Next** in the Welcome dialog box.



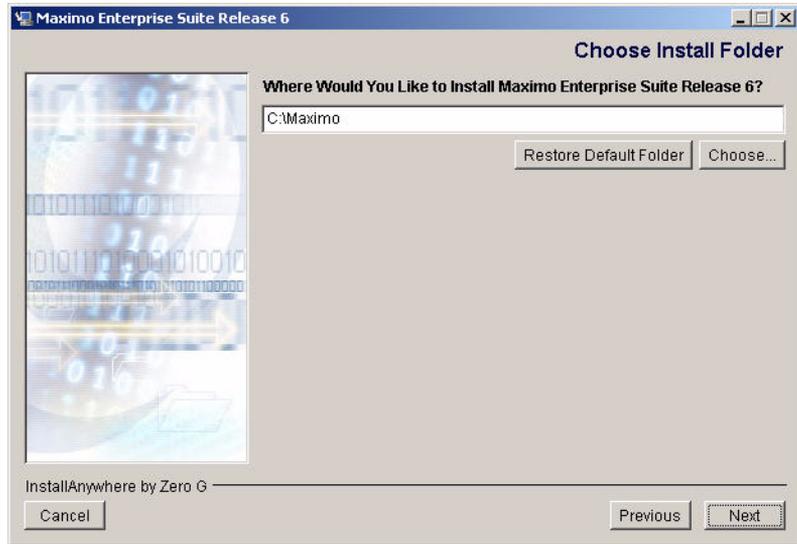
- 6 Select the appropriate application server, in this case, BEA WebLogic.



- 7 Enter the serial number included in your Maximo license agreement and click **Next**.



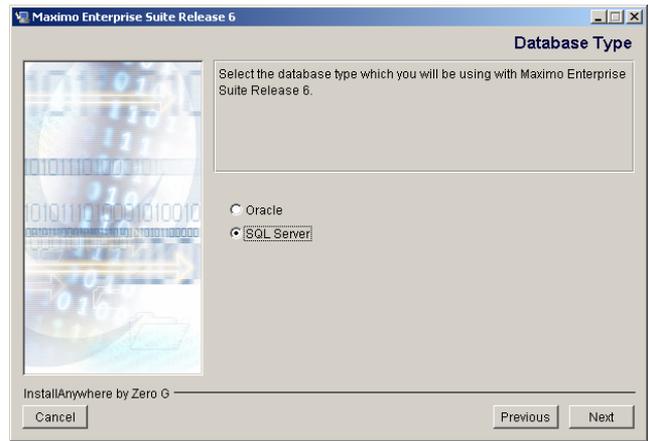
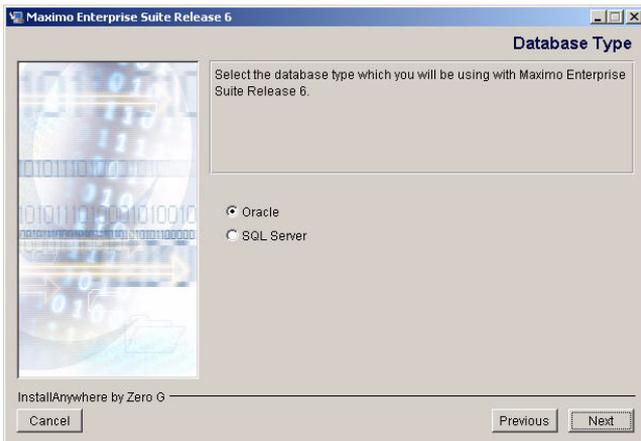
- 8 Enter the name of the folder where the installation program will install Maximo. The default value is C:\Maximo. Click **Next**.



- 9 Select the appropriate database and click **Next**.

If you are connecting to an Oracle database...

If you are connecting to a SQL Server Database...



10 Depending on your database type, enter the following database-related information, and click **Next**.

If you are connecting to an Oracle database...

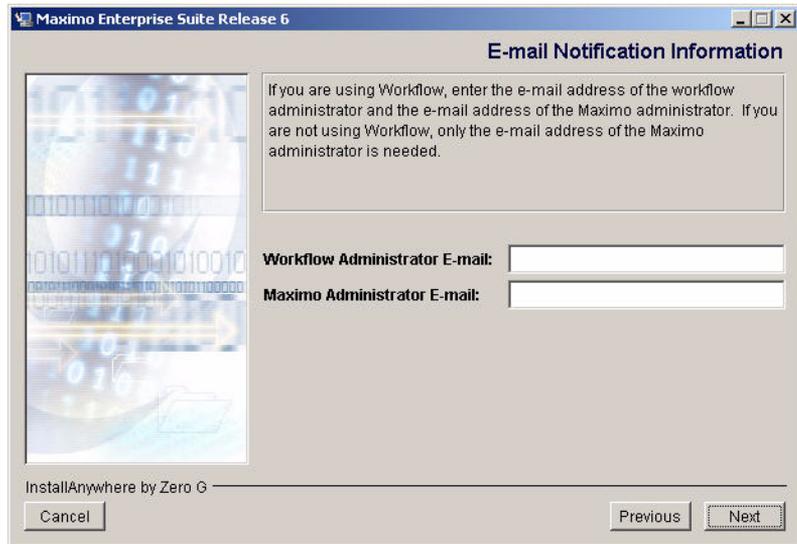
If you are connecting to a SQL Server Database...

	Oracle	SQL Server
Database server name	Enter the Oracle host name	Enter the SQL Server host name
Port number	1521 (Default)	1433 (default)
Database name	Enter the Oracle system identifier	Enter the SQL Server database name
Database owner	Maximo (default)	Maximo (default)
Database owner's password	Maximo (default)	Maximo (default)

11 Enter the host name of the machine running the SMTP server. Click **Next**.

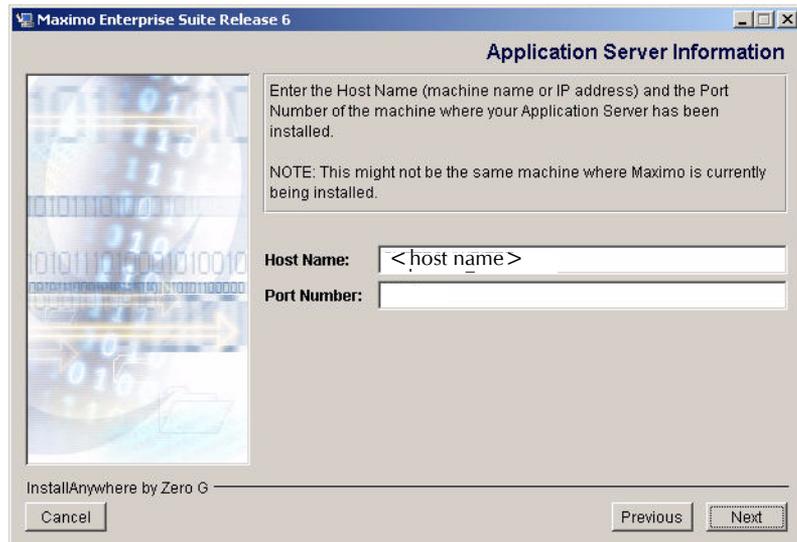
You must enter this in order to run reports. Contact your Network Administrator if you don't know the host name of the machine running the SMTP server.

- 12 Enter the following e-mail notification information.
 - a If you are using Workflow, enter the e-mail address of the Workflow Administrator, otherwise, leave it blank.
 - b Enter the e-mail address of the Maximo administrator.
 - c Click **Next**.

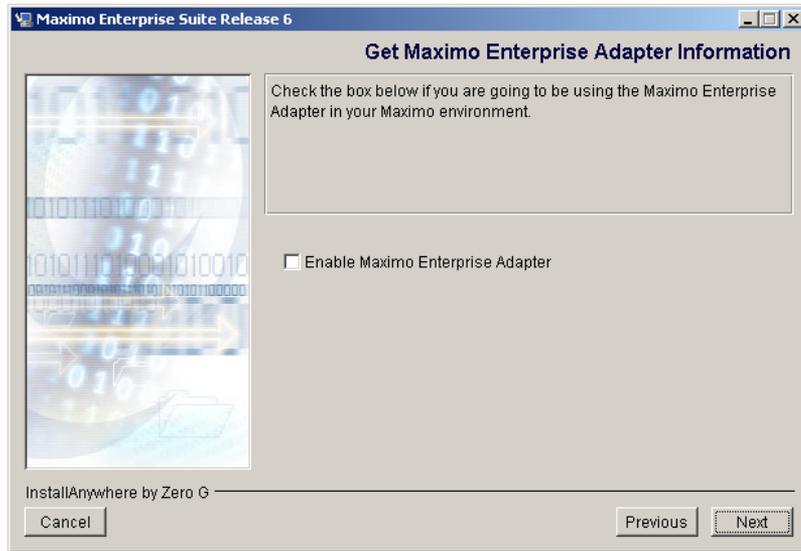


- 13 Enter the host name or IP address and the port number of the machine where your BEA WebLogic Server is installed. Click **Next**.

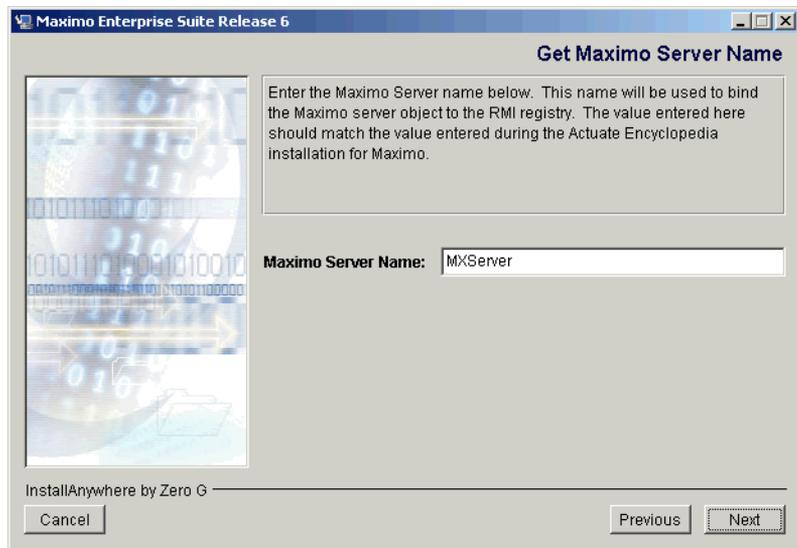
Use the port number that you specified in Step 5 on page 2-8 (default 7001).



- 14 If you have purchased the Maximo Enterprise Adapter Key, then check the Enable Maximo Enterprise Adapter check-box, otherwise accept default (unchecked) and click **Next**.



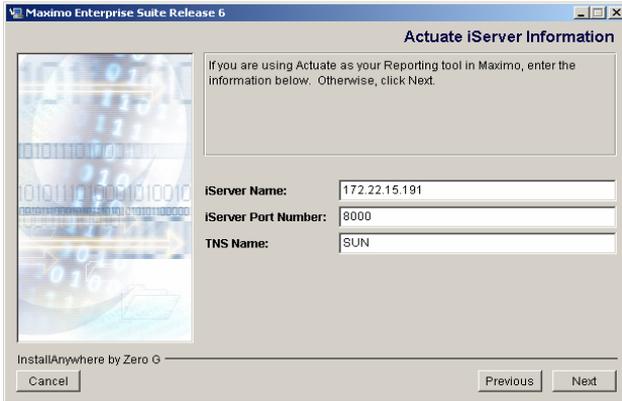
- 15 Accept the default Maximo Server name (MXServer) and click **Next**.



- 16 If you are using Actuate as your Reporting tool in MXES, specify the following information; otherwise, click Next through the following three steps and complete installing the product.
- a iServer Name: enter the Actuate iServer IP address or server name.
 - b iServer Port Number: accept default, **8000**.
 - c Enter the database name.

d Click **Next**.

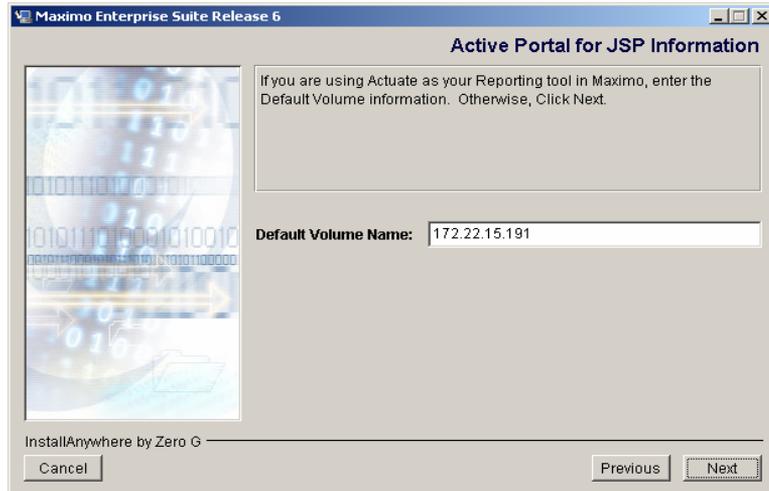
If you are connecting to an Oracle database...



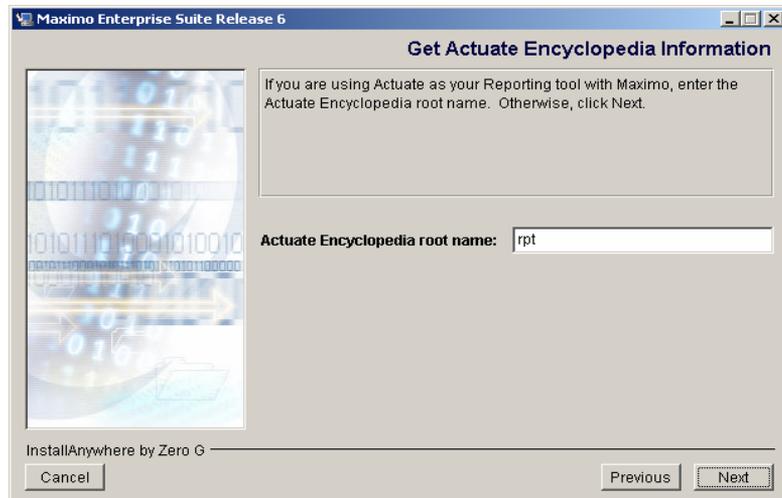
If you are connecting to a SQL Server Database...



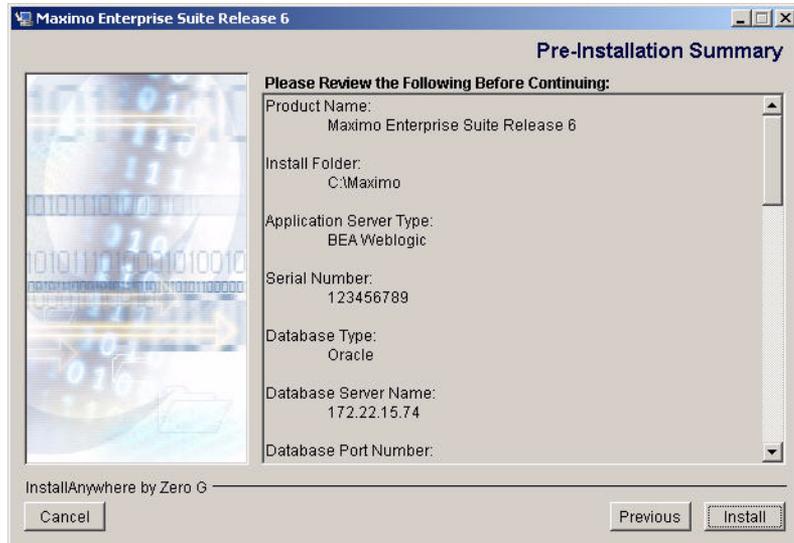
17 Enter the host name of the Actuate iServer. Click **Next**.



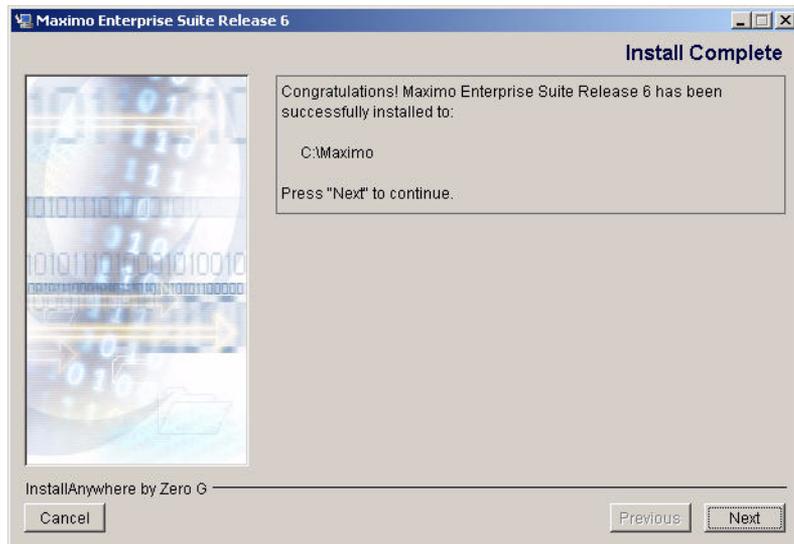
18 Accept the default value that appears in the Actuate Encyclopedia root name text box (rpt) and click **Next**.



19 Click **Install** in the Pre-Installation Summary dialog box.



20 Once the installation is complete, click **Next** in the Install Complete dialog box.

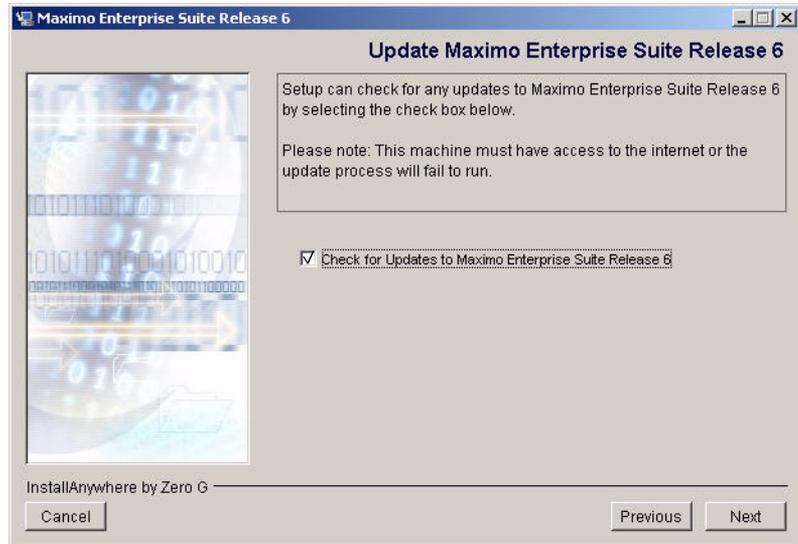


CAUTION Ensure that you have installed the required JVM as stated in Chapter 1.

21 Check the Update check-box and click **Next**.

NOTE Since the release of the Maximo 6.0 product media, product upgrades are available. These product upgrades contain both code enhancements and support for additional platforms.

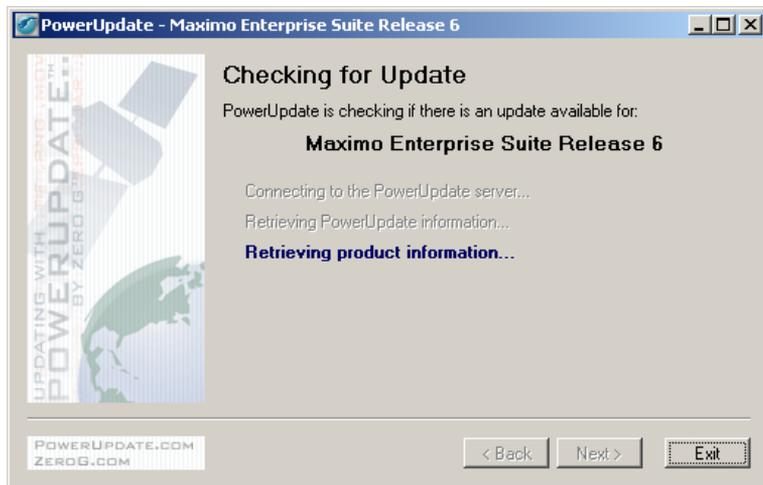
MRO Software *strongly* recommends that you allow the update process to complete.



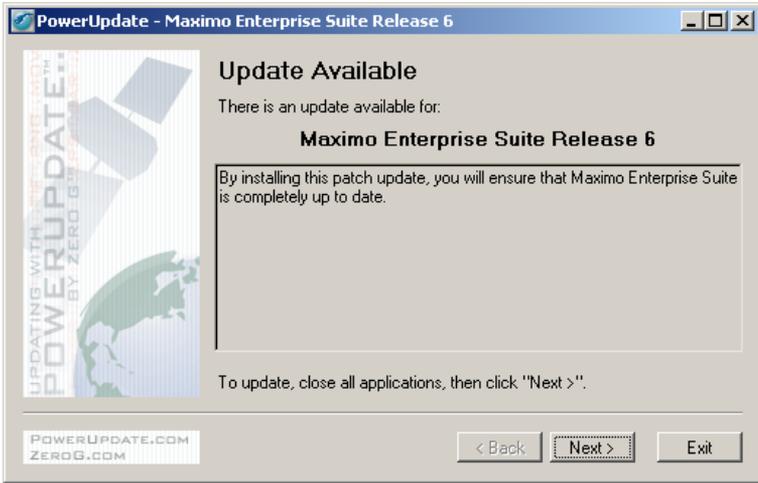
- a Click **Next** in the Welcome dialog box.



Allow for the updates to complete.



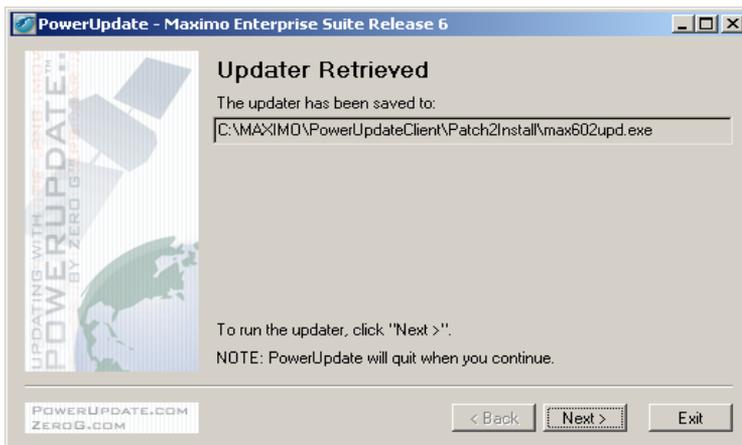
- b Click **Next** in the Update Available dialog box.



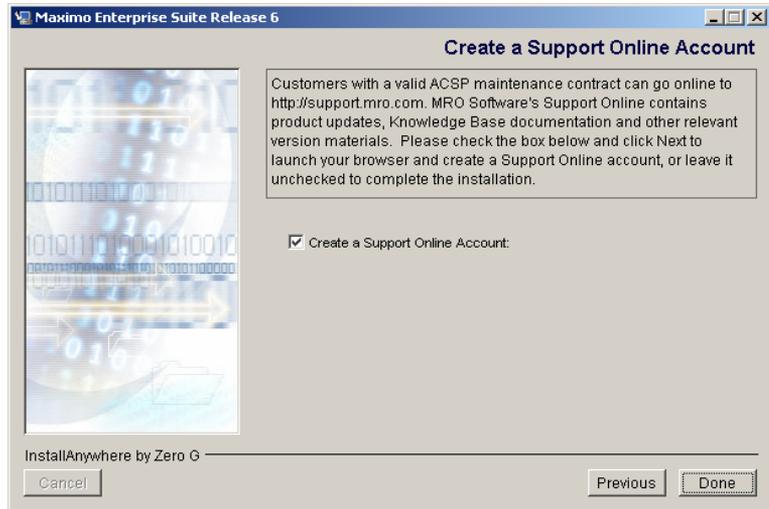
Once the update program retrieves all the necessary files, the following dialog box opens.



- c Click **Next** in the Updater Retrieved dialog box.

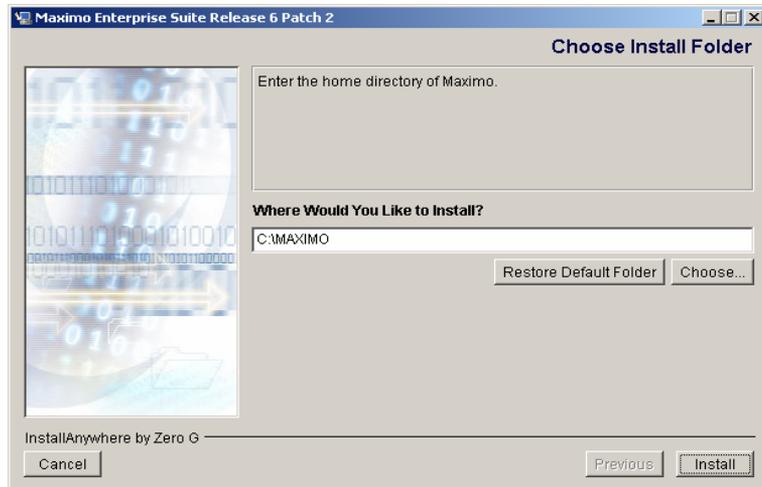


- d Check Create a Support Online Account and click **Done**.



- e From the MRO Software Support Online page, click **Sign up** and follow the online instructions

22 Choose the Maximo installation location (default c:\MAXIMO) and click **Install**.



23 Click **Done**.



24 Remove the CD-ROM from its drive.

Post Installation Tasks

In this section you perform two general tasks:

- ▼ Copy the `oraclethin.jar` file from the Maximo folder to the BEA folder.
- ▼ Enable the Application Designer and the new Help files.

How to Include the `oraclethin.jar` File

Earlier in Chapter 2, you edited the `commEnv` file in WebLogic. Now that you have installed Maximo, you *must* copy the **`oraclethin.jar`** file to the `/lib` folder in BEA. Complete the following steps:

- 1 Navigate to:
`<drive_letter>:\<Maximo_installation_location>\applications\maximo\lib`

for example: `c:\maximo\applications\maximo\lib`

- 2 Copy the **`oraclethin.jar`** file to:
`<drive_letter>:\bea_installation_location\weblogic81\server\lib`

for example: `c:\bea\weblogic81\server\lib`

How to enable the Application Designer

You must now manually enable the Application Designer and the new Help files to take advantage of the new updates that you downloaded. Complete the following steps.

- 1 Enable the Application Designer by running **`pkginstall.bat`** from the `<maximo>\tools\maximo` directory.
- 2 To update your online help files download the **`en.zip`** file from product support online (<http://support.mro.com>) Knowledge Base website to the Maximo application server.
 - a Unzip the `en.zip` file.
 - b Copy the `en` folder to the following location:
`<maximo>\applications\maximohelp\helpweb\webmodule`

Installing The Language Utilities

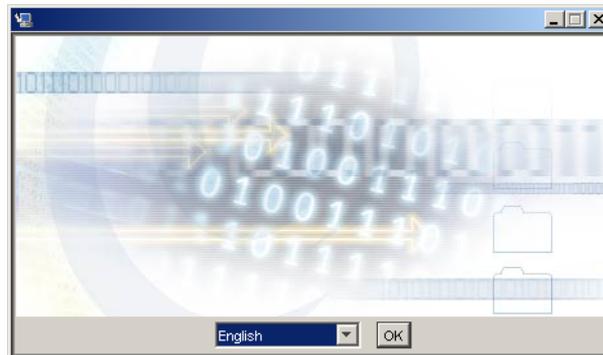
5

This program installs language-specific Help files and database scripts. You install the Language Utilities after the Maximo Enterprise Suite is installed.

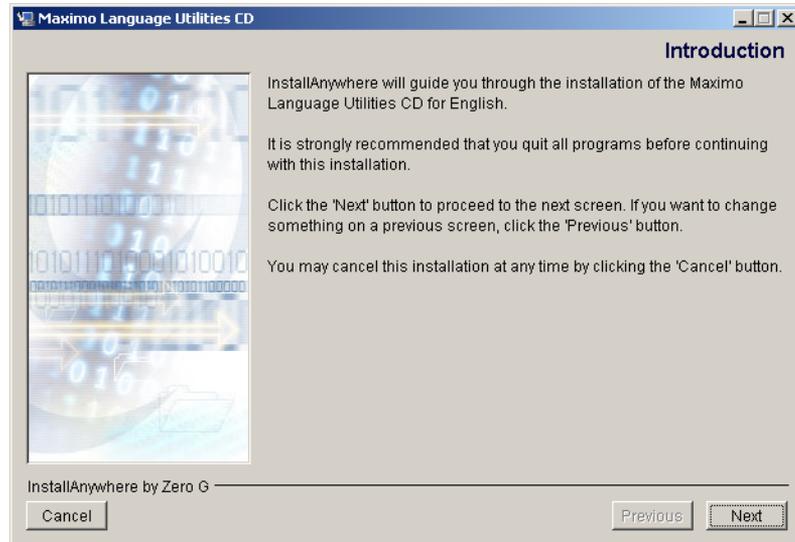
- 1 Insert the Maximo Language Utilities CD-ROM into the CD drive.
- 2 From the root CD drive, double-click **maxlangen.exe** (or maxlang.exe).
- 3 Select the appropriate language from the drop-down list. If your language is not available from the list, select English; if it is Japanese or Chinese, see Note 2 below. Click **OK**.

NOTE 1 Selecting a language only changes the installation screens into that language but does not affect the underlying files that gets installed.

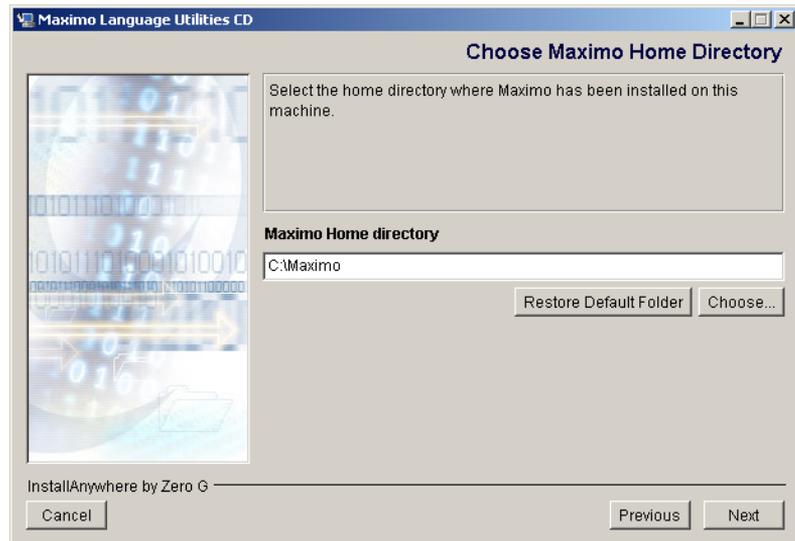
NOTE 2 The installation screens are translated into: Spanish, Portuguese, Japanese, and Simplified Chinese. In order to see Japanese or Chinese you must have those fonts installed on your system.



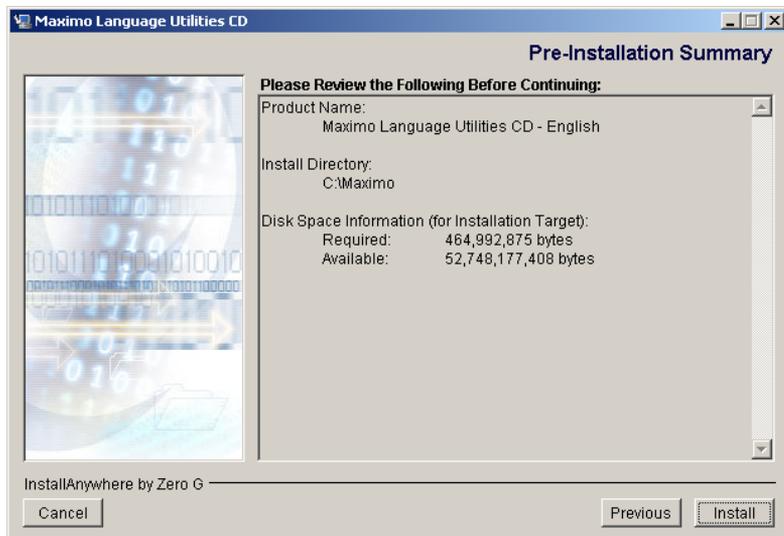
- 4 Click **Next** in the Introduction dialog box.



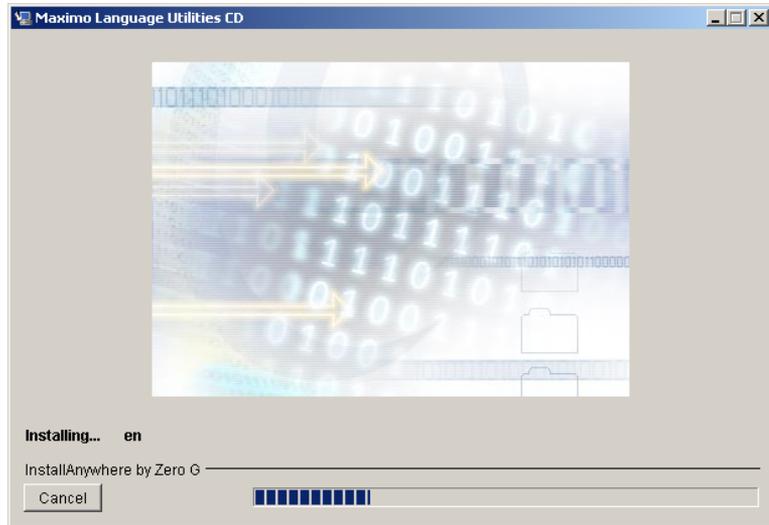
- 5 Verify that the default value (c:\Maximo) is the **Maximo** Home Directory and click **Next**.



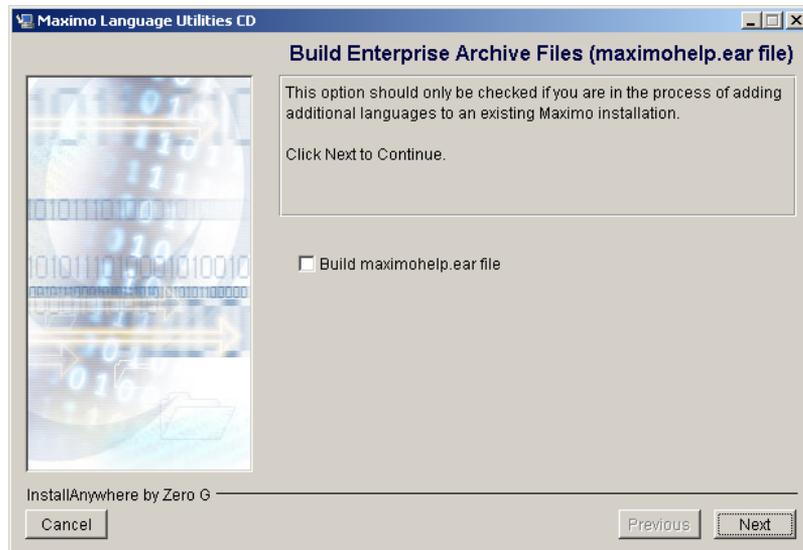
- 6 Click **Install** in the Pre-Installation Summary dialog box.



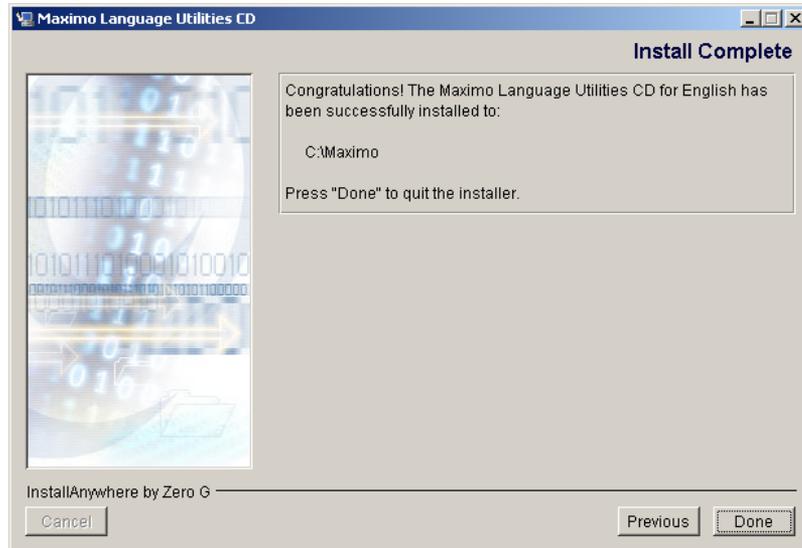
Allow the installation progress bar to complete.



- 7 If you are performing the steps in this Chapter because you are adding additional languages to an existing Maximo installation, check the *Build maximohelp.ear file* check-box and click Next, otherwise accept default (unchecked) and click **Next**.



8 Click **Done**.



You are now ready to install the Maximo Keys program.

Installing The Maximo Keys

6

Maximo keys enable access to applications that you are entitled to use determined by your Maximo license purchase.

The EAR files are built at this time. Complete the following steps:

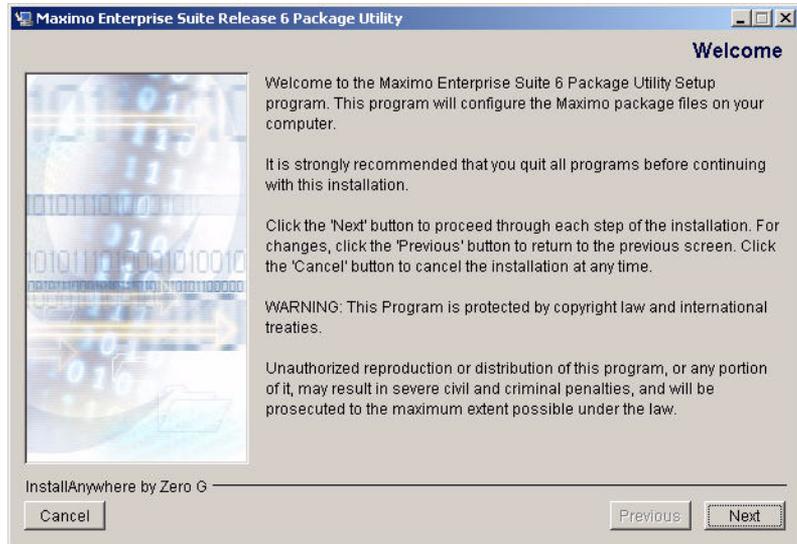
- 1 Insert the Maximo Key CD-ROM into the CD drive.
- 2 From the root CD drive, double-click **setup.exe**.
- 3 Select the appropriate language from the drop-down list. If your language is not available from the list, select English; if it is Japanese or Chinese, see Note 2 below. Click **OK**.

NOTE 1 Selecting a language only changes the installation screens into that language but does not affect the underlying files that gets installed.

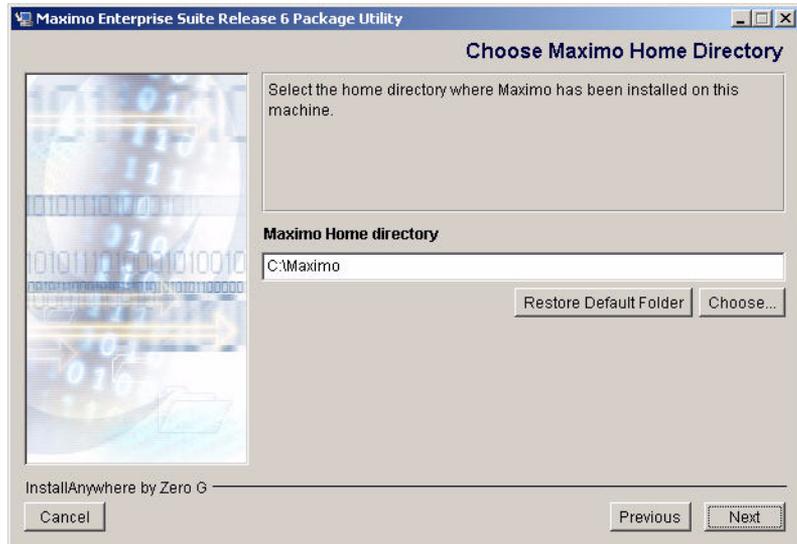
NOTE 2 The installation screens are translated into: Spanish, Portuguese, Japanese, and Simplified Chinese. In order to see Japanese or Chinese you must have those fonts installed on your system.



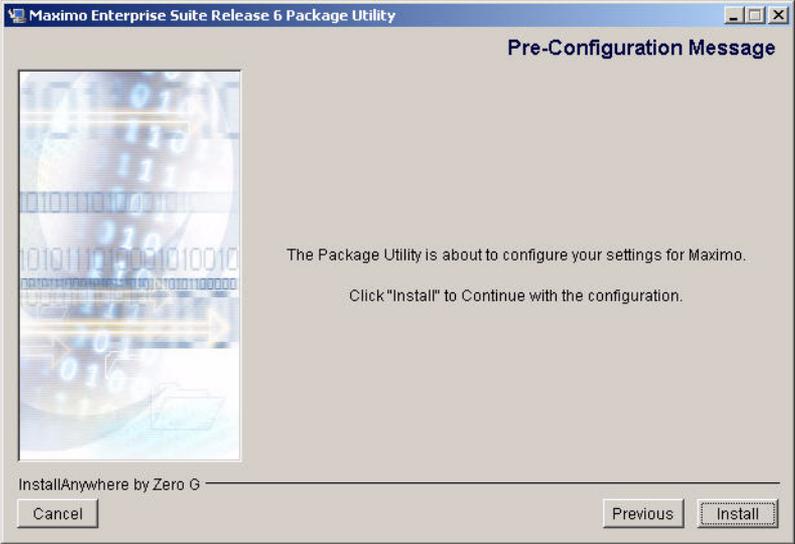
4 Click **Next** in the Welcome dialog box.



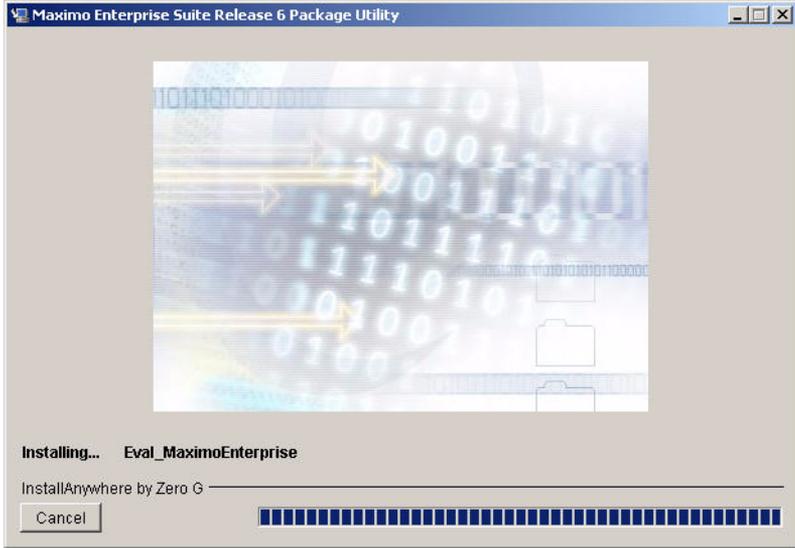
5 Verify that the default value (c:\Maximo) is the **Maximo** Home Directory and click **Next**.



6 Click **Install** in the Pre-Configuration Message box.

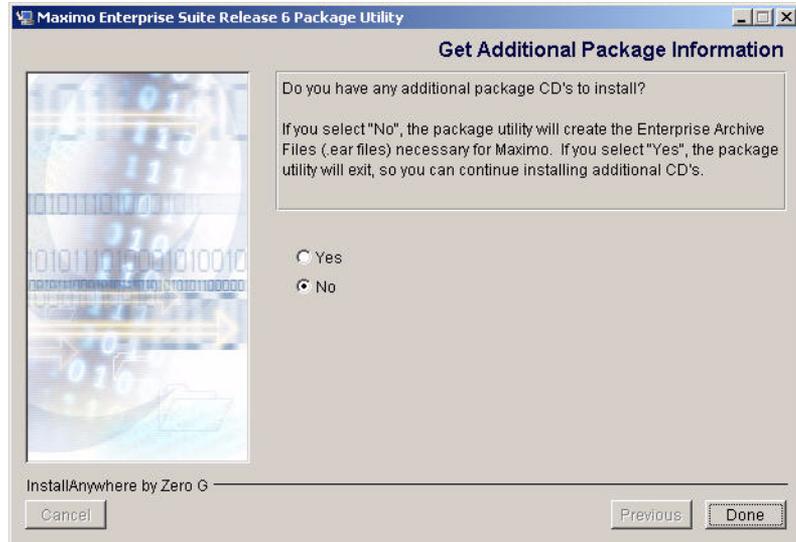


Allow the installation progress bar to complete.



7 If you are installing additional packages, you *must* at this time select **Yes** and the program will exit allowing you to add the other Packages (or Keys). See "Adding Additional Maximo Keys", on page D-1..

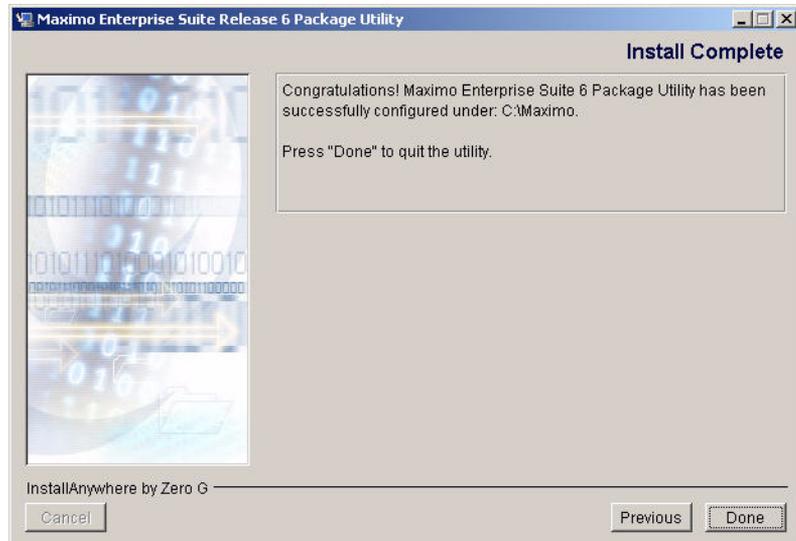
Once all packages are installed select **No** and click **Done**.



Three message boxes appear indicating that the EAR files are being built:



8 Click **Done**.



Creating the Maximo Schema

7

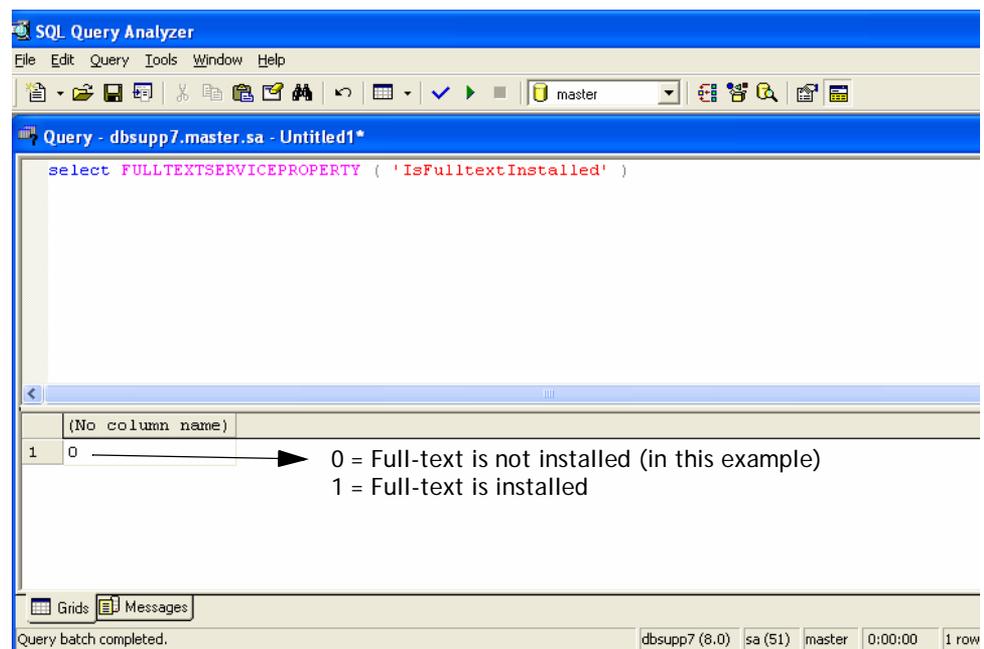
In this chapter, you prepare an Oracle instance or a Microsoft SQL Server instance on the server to hold your data. The following commands are guidelines for configuration changes. For more details on these commands, refer to your Oracle or SQL Server documentation. The parameters are only suggestions; you might need to adjust them depending on server disk space and site requirements.

Preparing Microsoft SQL Server Instance

Full-text Search is a settings that you must install during the installation of Microsoft SQL Server 2000. To determine if Full-text Search is installed on your existing MS SQL Server database, perform the following steps:

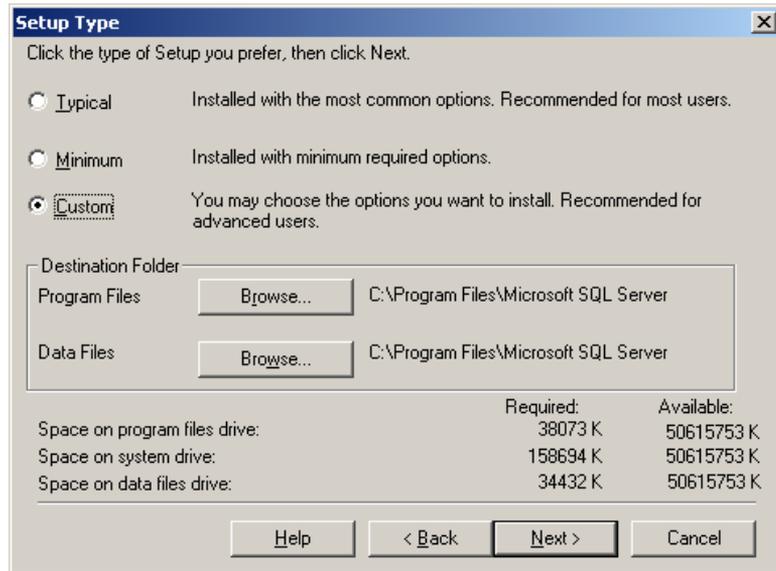
- 1 Open SQL Query Analyzer from the Tools menu.
- 2 Type the following command:

```
select FULLTEXTSERVICEPROPERTY ( 'IsFulltextInstalled' )
```

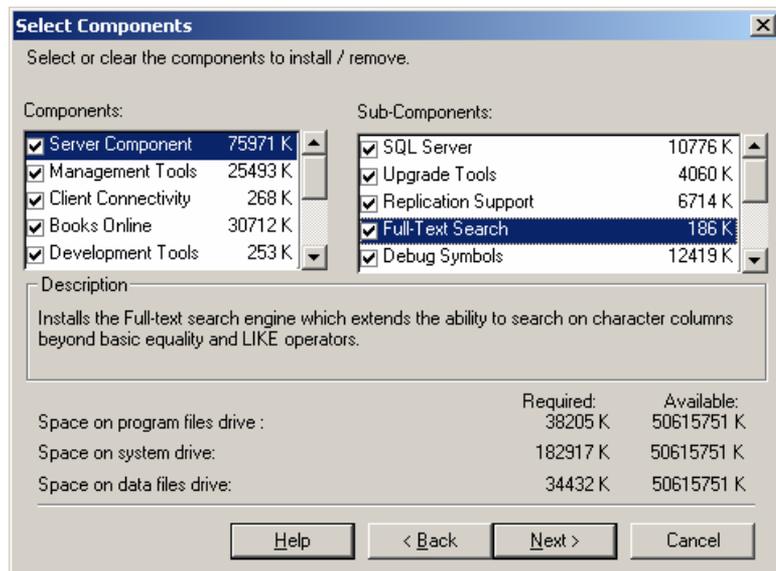


In the event that you did not install Full-text Search (the resulting value is zero), you must do so at this time. The following steps provide a general guideline describing how you can change this and other settings after having installed SQL Server.

- 1 Insert the Microsoft SQL Server 2000 CD-ROM onto the server where you had it installed originally.
- 2 Navigate through the installation dialog boxes and from the Setup Type dialog box, select **Custom**.



- 3 Ensure to check the **Full-Text Search** option.

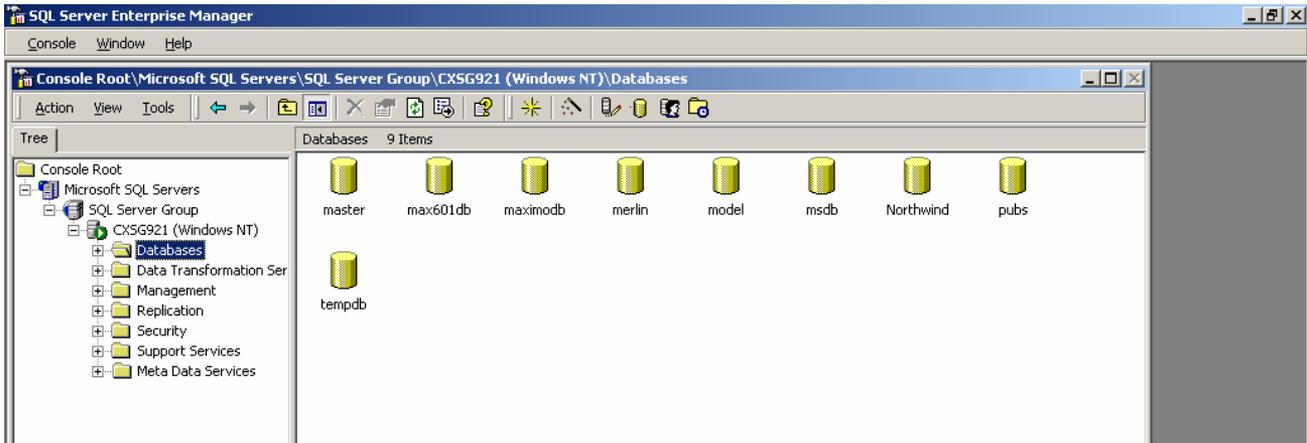


- 4 Step through the remainder of the steps and Finish the installation process by selecting to restart the server.

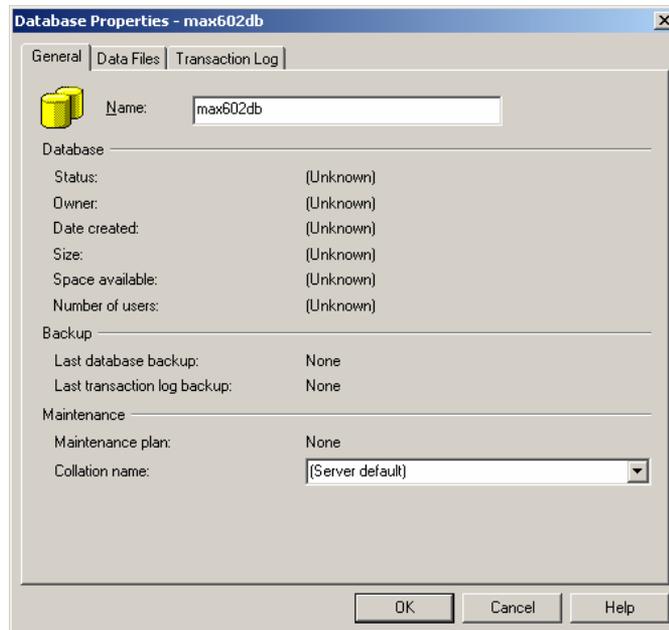
Setting up a SQL Server Database for Maximo

Complete the following steps to create a SQL Server Database.

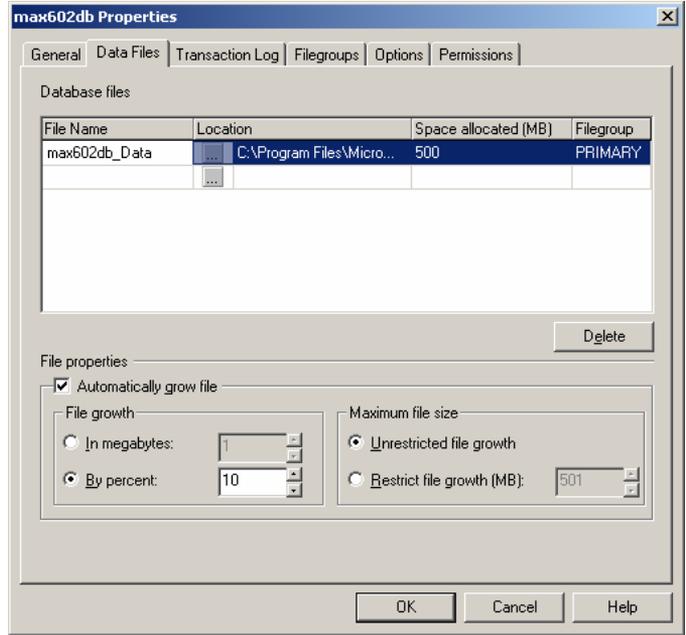
- 1 Open SQL Server Enterprise Manager (from Program Files >> Microsoft SQL Server).
- 2 Right Click the **Databases** folder from the tree view, and select New Database.



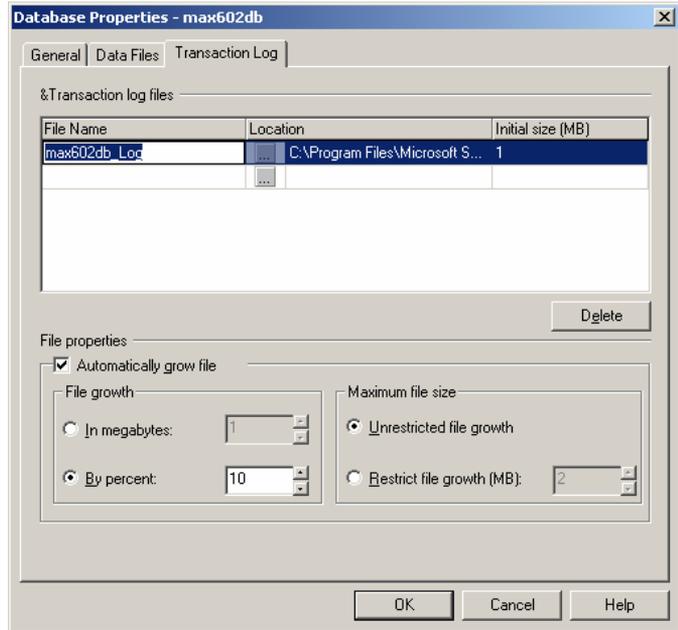
- 3 In the Database Properties dialog box, in the General tab, specify a unique database name (for example max602db).



- 4 From the Data Files tab, change the Space allocated size to **500** (MB) and check the **Automatically grow file** check box.

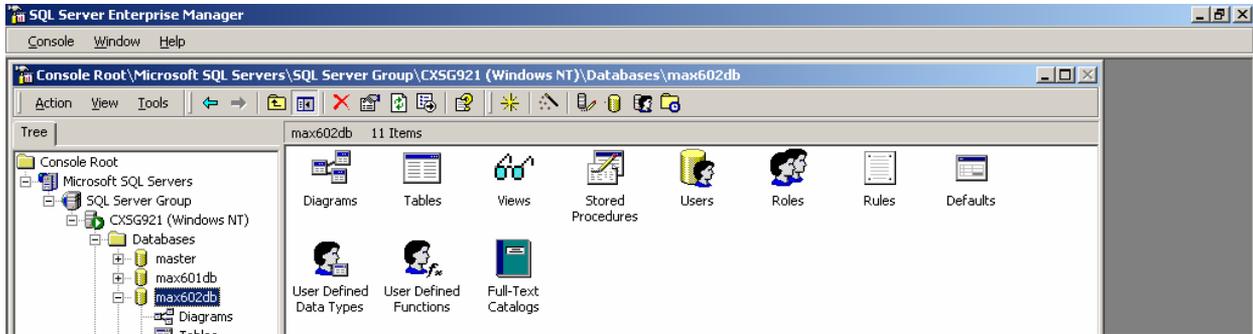


- 5 If you prefer, from the Transaction Log tab modify the settings to accommodate your production environment.

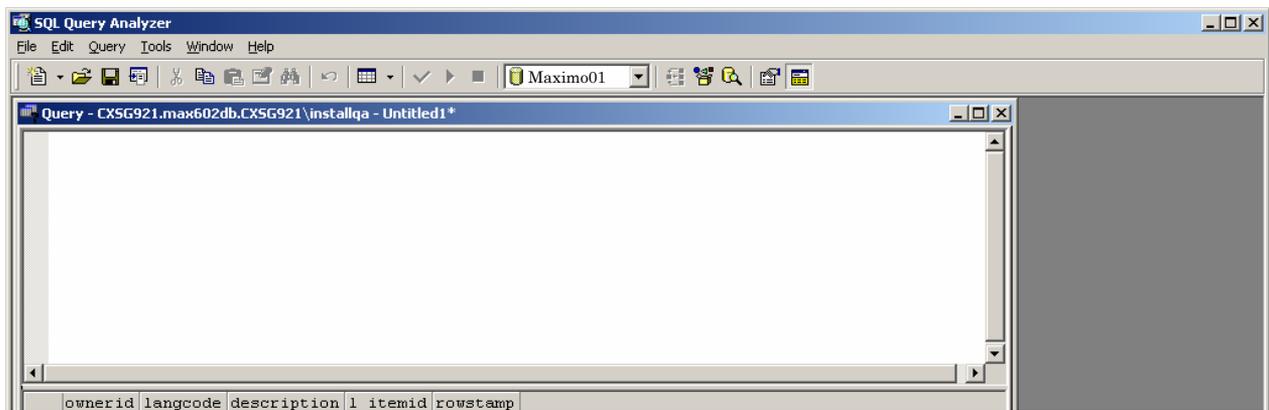


- 6 Click **OK**.

7 From the Tools menu, select SQL Server Analyzer



8 Select the correct database name from the drop-down menu. This is the value you entered in Step 3 on page 7-3.



9 Run the following scripts:

a To create the *Maximo* user, run the following script:

```
sp_addlogin maximo,maximo
go
```

If the maximo account is already present in the SQL Server installation, then you will get an error message “login maximo already exists.” You can ignore this error message.

b Change **maximo** to be the database owner by running the following script:

```
sp_changedbowner maximo
go
```

c If you intend to use the Users app to add native database logins and users, then run the following script:

```
sp_addsrvrolemember maximo, securityadmin
go
```

10 You can now run the maxinst script from the <Maximo_home>\tools\Maximo folder from the machine where you installed Maximo.

See “Create the Maximo Database Objects”, on page 7-10.

Preparing Oracle Instance

In this section, you perform the following tasks:

- ▼ Verify the Oracle instance requirements.
- ▼ Create Maximo Tablespace(s).
- ▼ Create the Maximo user.
- ▼ Create the Maximo database objects.

Database Character Set

Maximo supports multiple languages within a single schema. The Oracle instance must be created with the character set that will support all the languages which you will be using. For example, English, French, German, Spanish, Dutch, Portuguese, and Italian all use the Oracle character set WE8ISO8859P1.

If you plan to use a mix of languages that cannot all use a single character set, such as English, Chinese, and Polish, then you must create the database with the Unicode character set AL32UTF8. The AL32UTF8 character set is the only Unicode character set that can be used with MAXIMO.

If you create the database with AL32UTF8 or any multi-byte character set you must also set the initialization parameter `nls_length_semantics=CHAR`.

Verifying the Oracle Instance Requirements

The Oracle instance for Maximo must have Oracle Text installed. Maximo uses Oracle Text for indexes on description fields. You can verify that Oracle Text is installed by checking for the CTXSYS userid.

From SQL Plus, run the following command:

```
select username from dba_users where username = 'CTXSYS';
```

If Oracle Text is installed, this command will return the name CTXSYS.

NOTE The instance for Maximo will need at least 100MB of temporary tablespace and 100MB of undo tablespace.

If Oracle Text is not installed, refer to Oracle installation documentation for more detail.

Oracle Initialization Parameters

MRO does not provide detailed performance settings for MAXIMO because there are an infinite number of combinations of data sizes, user counts, module usages, add-on module usages, system configurations, and customizations possible in an MXES system. MRO Software recommends that you take advantage of all the features of Oracle 9.2 and 10g tuning, such as:

- ▼ Use locally managed tablespaces for MAXIMO tables and indexes.
- ▼ Use the new method of PGA management by setting `WORKAREA_SIZE_POLICY=AUTO` and `PGA_AGGREGATE_TARGET=memory value`.
- ▼ Use the new method of SGA management by setting `SGA_TARGET = memory value`.
- ▼ Control I/O cache via `DB_CACHE_SIZE` instead of `DB_BLOCK_BUFFERS`.
- ▼ Reduce library latch contention by setting `CURSOR_SHARING=SIMILAR` or `FORCE`.
- ▼ Make sure `OPTIMIZER_FEATURES_ENABLE` is set to your current Oracle version and not an older one.
- ▼ `OPEN_CURSORS = 1000` estimated; you may need more.
- ▼ `DBMS_JOBS_PROCESSES = 2` required for job that updates Oracle Text indexes.

Beyond the above, sizing for SGA, PGA, and so forth, is best determined by using Oracle Enterprise Manager or a Third-party database monitoring and administration tool to analyze the database under load and make tuning recommendations.

CAUTION If you have created the database with AL32UTF8 or any multi-byte character set, you must also set the initialization parameter `nls_length_semantics=CHAR`.

Creating Maximo Tablespace(s)

Complete the following steps to create the Maximo tablespaces. Maximo Enterprise Suite offers a multi-schema option. This feature enables the application tables to be owned by a user other than Maximo, permitting multiple Maximo schemas to reside in a single Oracle instance.

Maximo tablespaces should be locally managed and not dictionary managed. These instructions will create a locally managed tablespace by default.

If you do not include a schema owner, the default is Maximo. The expected size of your database determines the size of a Maximo tablespace.

- ▼ If you plan to install the MAXDEMO schema, create a Maximo tablespace of size 600MB.

- ▼ If you plan to create an empty Maximo schema, use the estimated size of the database. Refer to Table 7-1: Database Size Guidelines.

To permit growth, you can add another datafile later or use the AUTOEXTEND option of the CREATE TABLESPACE command.

Use related names for Maximo schemas and tablespaces. For example, to set up a MAXDEMO database, a production database, and a test copy of the production database, you might choose MAXDEMO, MAXPROD, and MAXTEST as schema owners and MAXDEMO_DATA, MAXPROD_DATA, MAXPROD_INDEX, MAXTEST_DATA, and MAXTEST_INDEX as tablespace names (MAXDEMO has only one tablespace name as splitting a small demo database has no real advantage). Use the following guidelines to estimate initial tablespace size:

Size of Database	Tablespace Estimate (MB)	
	Initial	Maximum
Small (1–2 users)	500	2000
Medium (20–100 users)	1000	5000
Large (100+ users)	5000+	20000+

To create a tablespace, use the following command:

```
CREATE TABLESPACE <tablespace_name> DATAFILE '<file_name>' SIZE
<file_size> AUTOEXTEND ON MAXSIZE <maximum>;
```

where:

- ▼ <tablespace_name> is the Maximo tablespace's name.
- ▼ <file_name> is the data file's name.
- ▼ <file_size> is the datafile's initial size from table.
- ▼ MAXSIZE <maximum> is the maximum size allotted to the data file from the above table.

You can express both filesize and maximum as a number of megabytes when you follow it with the letter *M* (for example, 1000M). You can customize the storage parameters for the particular database.

The file name is the full path of the server. It includes the local drive of the server and path location to the data file, and should be placed inside single quotes. For example: 'C:\oracle\oradata\MXES\MAXIMO01.DBF'

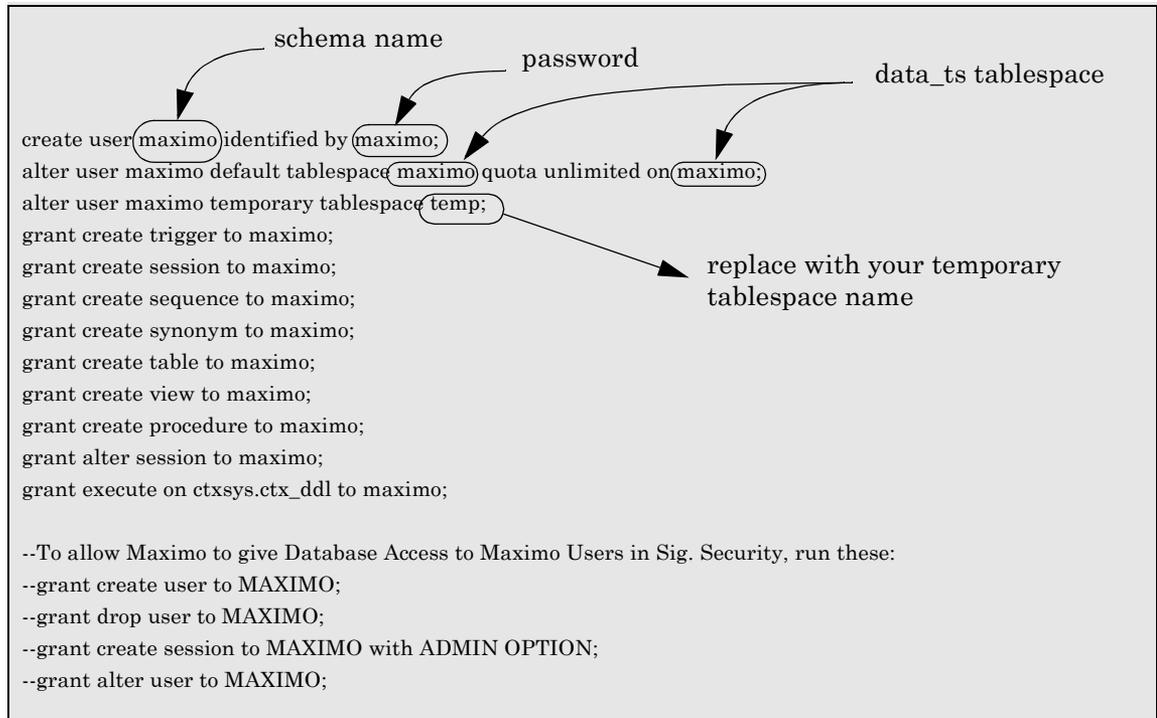
Creating the Maximo User

This section describes how to modify **createMaximoES.sql** file. The multi-schema feature enables the application tables to be owned by a user other than MAXIMO, thus permitting multiple schemas to reside in a single Oracle instance.

To use different schema or tablespace names, you must edit the following parameters in `createMaximoES.sql`.

- ▼ **schema** — the schema (userid) to own the tables (same value that you specified in Step 10 on page 4-5)
- ▼ **data_ts** — the name of the table space to hold the Maximo tables (and indexes if the optional index table space is not used)
- ▼ **index_ts** — the name of the table space to hold the Maximo tables

An example of `createMaximoES.sql` is shown below:



NOTE Ensure that the `alter user schema temporary tablespace temp` line reflects your temporary tablespace name.

Add the following line if you use a separate index tablespace:

```
alter user <schema> quota unlimited on <index_ts>;
```

To create the Maximo user, complete the following steps:

- 1 Open SQL Plus.
- 2 Login as system administrator.
- 3 At the prompt, type:

```
@"<drive_letter>:\<Maximo_installation_location>\tools\Maximo\en\createMaximoES.sql";
```

- 4 Press **Enter**.

5 Exit SQL Plus.

Create the Maximo Database Objects

You create the Maximo database after creating the Maximo user. Complete the following steps:

- 1 Open a command prompt.
- 2 Change directory path to: `\maximo\tools\maximo`
- 3 At the prompt, type **maxinst**

By default, Maxinst will look in the maximo.properties file (In this example, `c:\Maximo\applications\maximo\properties`) for connectivity information to the database. It will connect using JDBC connection and start the process of creating a Maxdemo database. If you would like to create an empty database, use the **-imaximo** flag.

For example, at the command prompt, instead of just maxinst, type: **maxinst -imaximo**

The following depicts the various flags that you can use with maxinst.

Flag		Description
-a	database alias	Database alias. If not specified, uses mxe.db.url property.
-c	language code	Directory name of input file (for example en for English).
-d	log file directory	If using the -l parameter, it will output logfile to the Maximo directory. Typically: <code>tools > maximo > log</code> .
-e	none	Causes Sql to be executed. Required. Already present in maxinst.bat.
-f	file name	Filename for properties file. If not specified, uses maximo.properties.
-i	file name	Filename of input file (without path or extension). The default filename is Unlvt if the -i param is not provided.
-k	prop. file directory	Directory for properties file.
-l	none	Outputs a detailed log file. Strongly recommended. Already in maxinst.bat.
-o	file name	If using the -l parameter, the filename for the logfile. If not specified, logfile is "Maxinst" + timestamp + ".log".
-p	password	Password for database connection. If not specified, uses mxe.db.password property, or "maximo".
-s	index storage area	Oracle: tablespace for index storage (defaults to default tablespace for schema owner) SQL Server: filegroup for index storage (defaults to PRIMARY).

Flag		Description
-t	table storage area	Oracle: tablespace for table storage (defaults to default tablespace for schema owner) SQL Server: filegroup for table storage (defaults to PRIMARY).
-u	user name	Username for database connection. If not specified, uses mxo.db.user property, or "maximo".

CAUTION -S and -T PARAMETERS: Maxinst does not provide a default value for tablespace.

The -S and the -T PARAMETERS are required. You must *always* specify the data and index tablespace names. There is no default value.

The -X flag is required for UNIX environments.

CAUTION If MAXINST fails for any reason, you must drop and re-create the Maximo schema before re-running MAXINST.

NOTE Each flag *must* be followed by the parameters without a space, for example: -uMAXIMO.

Deploying the EAR Files

You are now ready to deploy the EAR files via the BEA WebLogic Console. Deploying the EAR files starts the Maximo Application Server. If MAXIMOSERVER is not running, start it from a command prompt.

You also need to install a Java Virtual Machine (JVM) in order to view the BEA WebLogic Console. Newer versions of Windows may not ship with JVM.

- 1 From a command prompt, change directory path to:

```
<drive_letter>:\<BEA_installation_location>\user_projects\domains\mydomain
```

- 2 Type **startWebLogic.cmd** and press Enter.
- 3 When prompted, type the username and password that you specified in Step 9 on page 2-11.

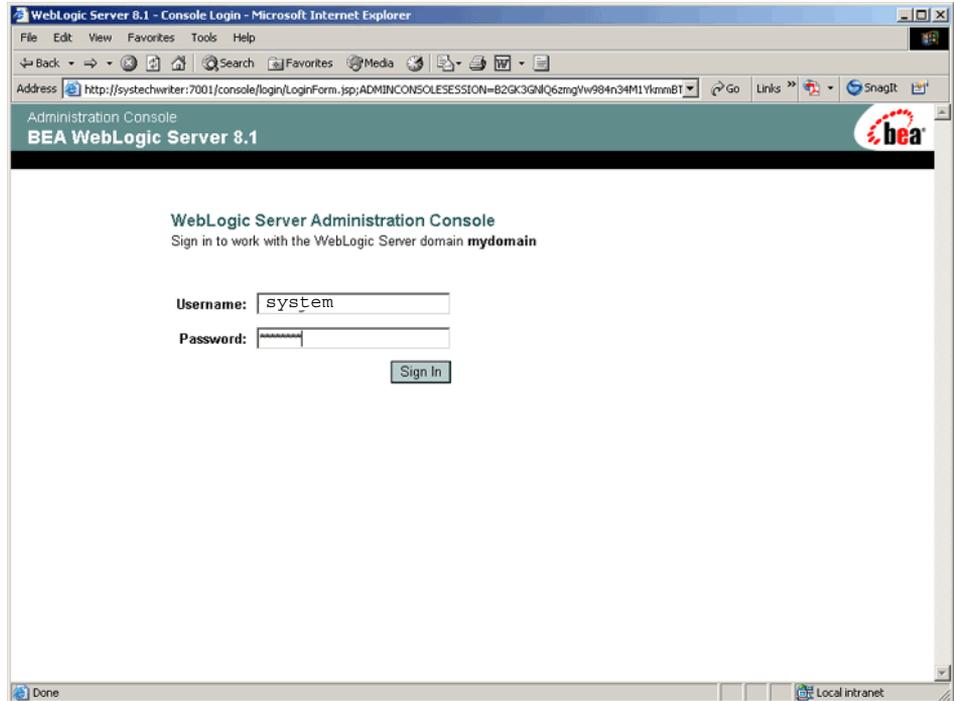
Once the phrase:

```
"<server started in RUNNING Mode>"
```

displays, the WebLogic Server is running.

- 4 Start the MAXIMOSERVER Admin Console by typing the following URL in your browser's address bar: **http://<host name>:7001/console**

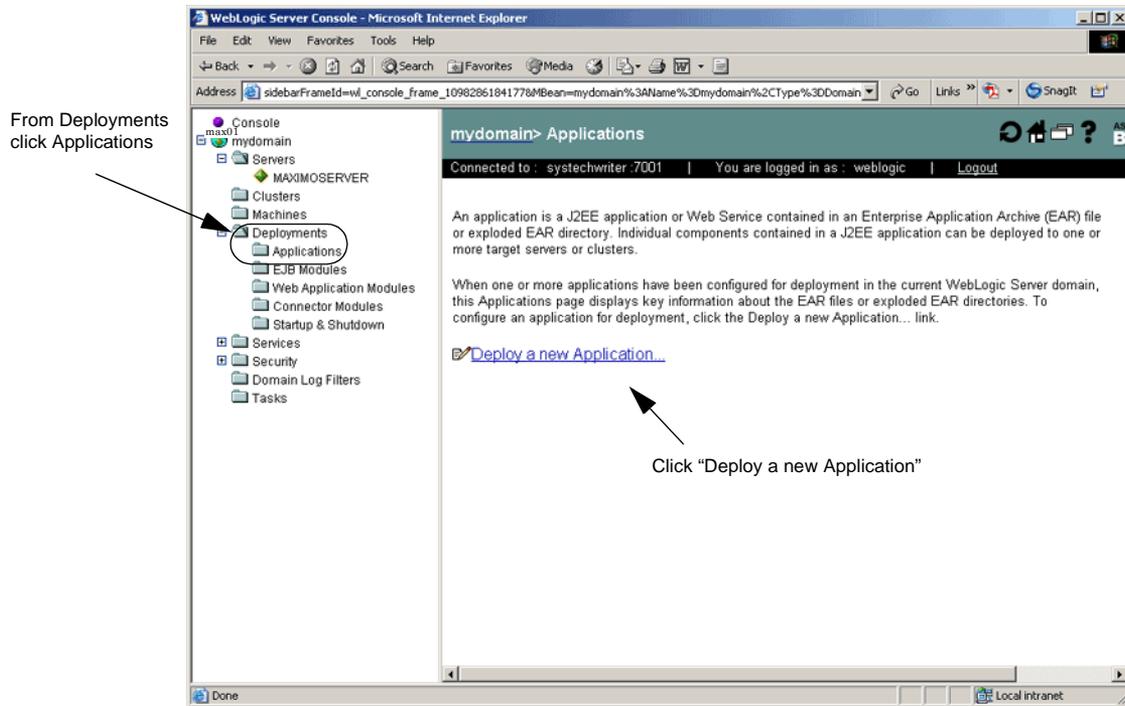
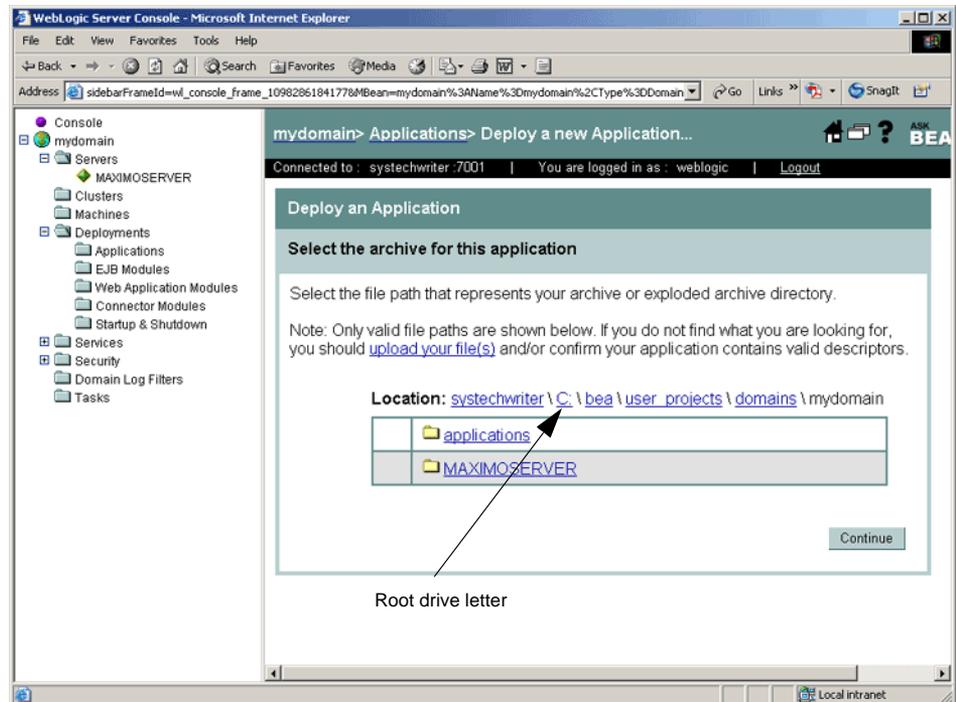
- 5 Replace the default **Username** and **Password** with the values you specified in Step 9 on page 2-11. Click **Sign In**.



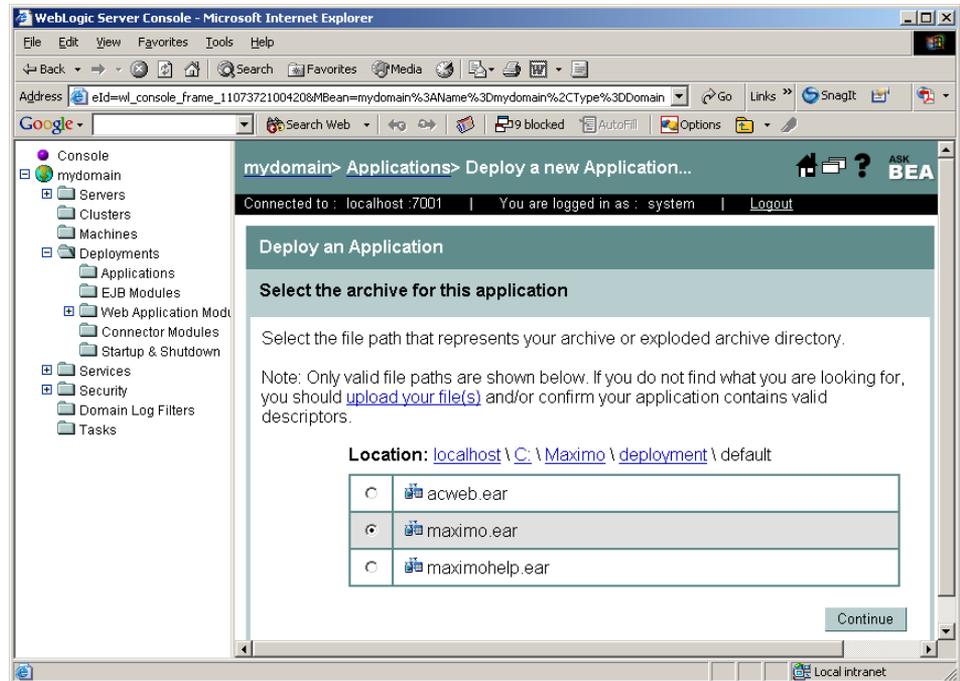
MEA Only

If you are a Maximo Enterprise Adapter customer, and you have set up the JMS queues during the WebLogic configuration (Appendix B), you must now enable the JMS connection factory before deploying the EAR files. Please refer to “Enabling JMS Connection Factory for Maximo Enterprise Adapter”, on page C-1 at this time and return to Step 1 on page 8-1 after completing the steps outlined in Appendix C.

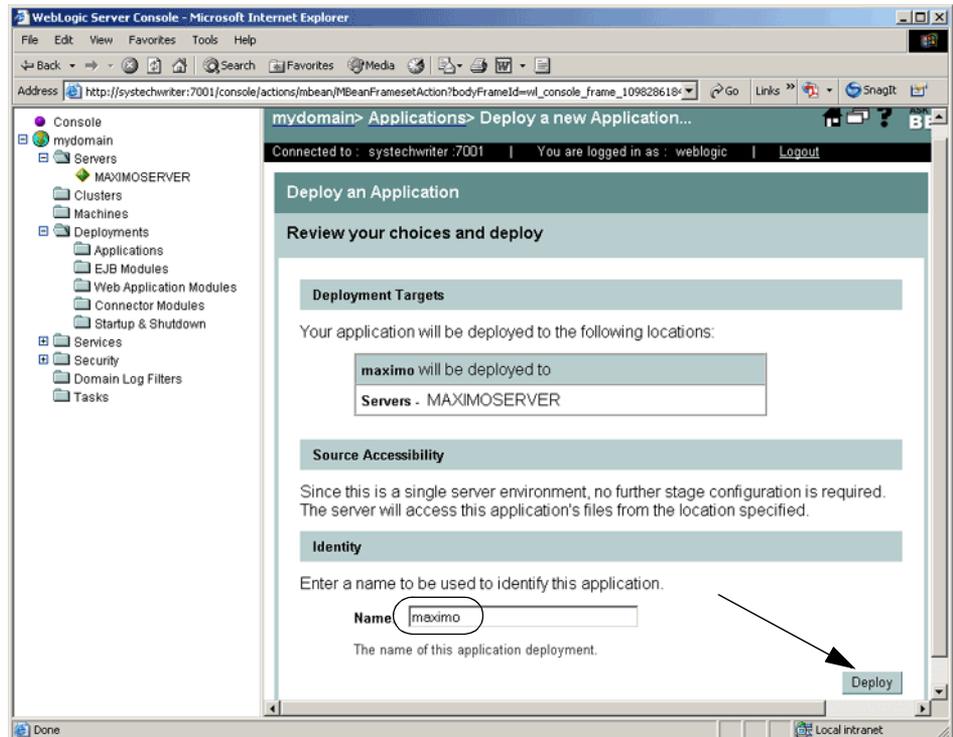
- 6 Click **Deployments** from the tree view in the left pane, and then click **Applications**.

7 From the main window, click **Deploy a new Application**.8 Click the root drive where you have installed Maximo (in this example, c:\) and navigate to c:\Maximo\deployment\default and click **Continue**.

- 9 Click the radio button next to the application **maximo.ear** and click **Continue**.

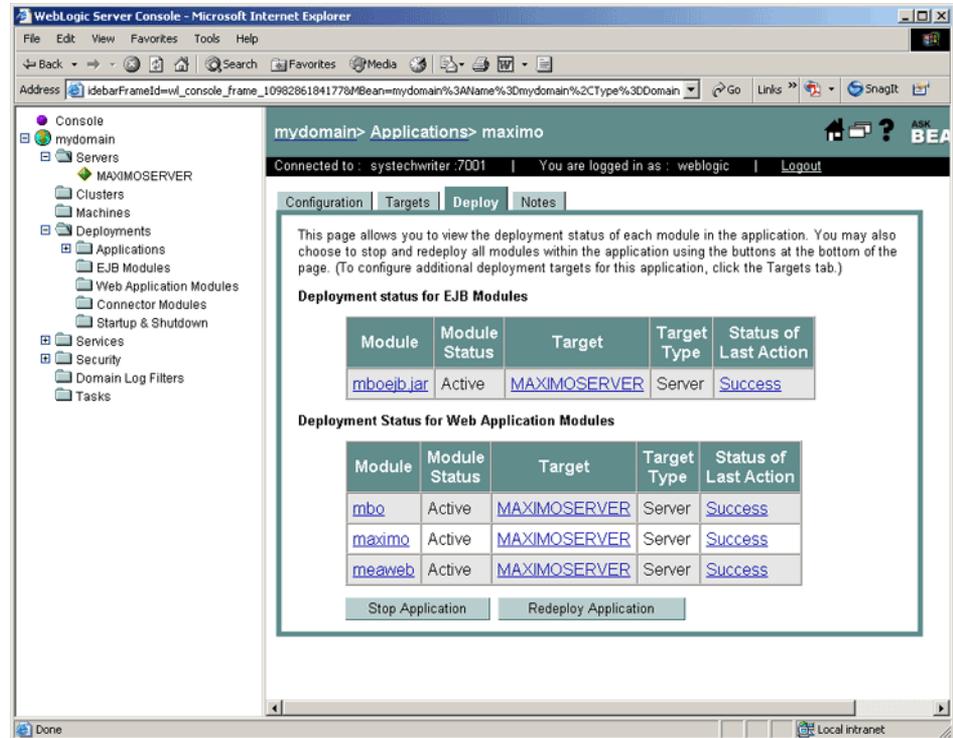


- 10 In the Review your choices and deploy window, type **maximo** in the Name field (unless it appears by default) and click **Deploy**.



This may take several minutes. Do not click **Deploy** again.

- 11 Allow enough time to pass for the EJB modules and the Web Application modules to indicate **Success** as Status of Last Action.



- 12 Repeat Steps 6 through 11 to deploy **maximohelp.ear**. If you are using Actuate, repeat Steps 6 through 11 to deploy the **acweb.ear** file.

As you choose the **maximohelp.ear** and **acweb.ear** files to deploy, accept the default value (**maximohelp** and **acweb** respectively) that appear as application names in Step 10 on page 8-4.

Installing The Actuate Encyclopedia for Maximo

9

If you installed Actuate in Chapter 3, then complete the steps outlined in this chapter to install the Actuate Encyclopedia for Maximo. The reason that you are installing an Actuate-related component at this time, is that, only now you can access the Actuate Administrative Console, after having deployed the acweb.ear file in the previous chapter.

The Encyclopedia is a collection of Maximo-specific reports, user roles, and user permissions that are copied during installation and placed in the Actuate8/iServer/encyc folder.

You must install the Actuate Encyclopedia for Maximo on the same machine where you installed the Actuate iServer. Before you install the Actuate Encyclopedia for Maximo, ensure that the:

- ▼ MAXIMOSERVER application server is running.
- ▼ Actuate iServer application is running.

Starting the Actuate iServer for Maximo

By default the Actuate iServer starts automatically when your system reboots. If you did not choose to start the Actuate iServer automatically, use the Services panel to start the service. Complete the following steps:

- 1 From the Control Panel >> Administrative Tools, click **Services**.
- 2 Right-click the **Actuate Process Management Daemon 8** service name.
- 3 Click **Start**.

The Process Management Daemon (PMD) starts automatically after the Actuate iServer installation. The PMD starts the Report Server services. You can also start the PMD from the command line.

- 1 From a command prompt change directory to the C:\ drive (or your root Actuate installation folder).
- 2 To start the PMD, type:

```
net start "Actuate Process Management Daemon 8"
```

Installing the Actuate Integration for Maximo

You are now ready to install the Actuate Integration for Maximo. Complete the following steps:

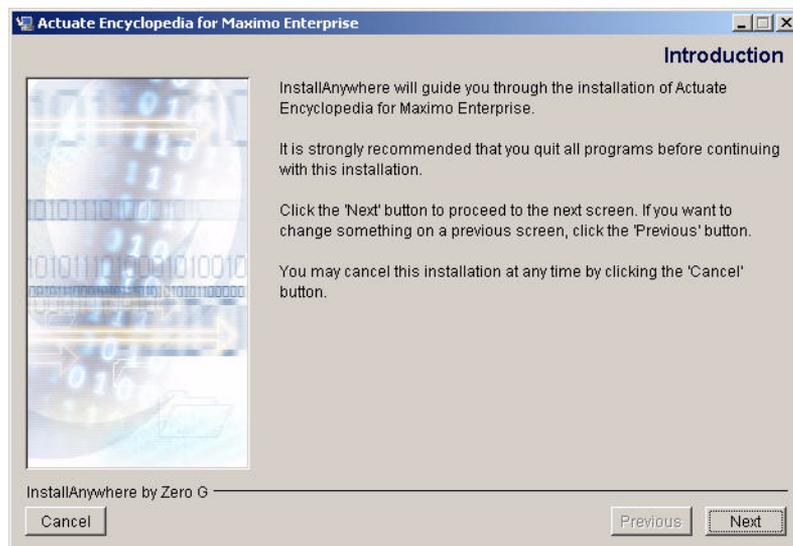
- 1 Insert the Actuate Reporting Release 8 English Encyclopedia for Windows CD-ROM into the CD drive.
- 2 From the root CD drive, double-click **actuate.exe**.
- 3 Select the appropriate language from the drop-down list. If your language is not available from the list, select English; if it is Japanese or Chinese, see Note 2 below. Click **OK**.

NOTE 1 Selecting a language only changes the installation screens into that language but does not affect the underlying files that gets installed.

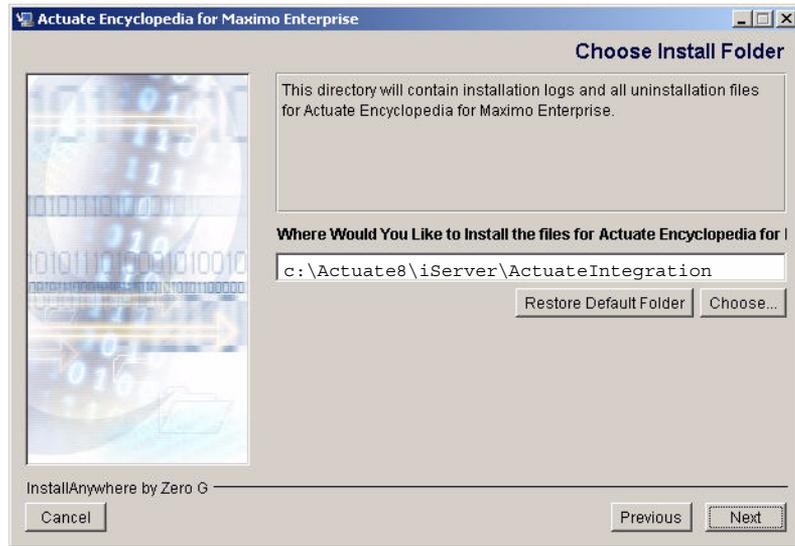
NOTE 2 The installation screens are translated into: Spanish, Portuguese, Japanese, and Simplified Chinese. In order to see Japanese or Chinese you must have those fonts installed on your system.



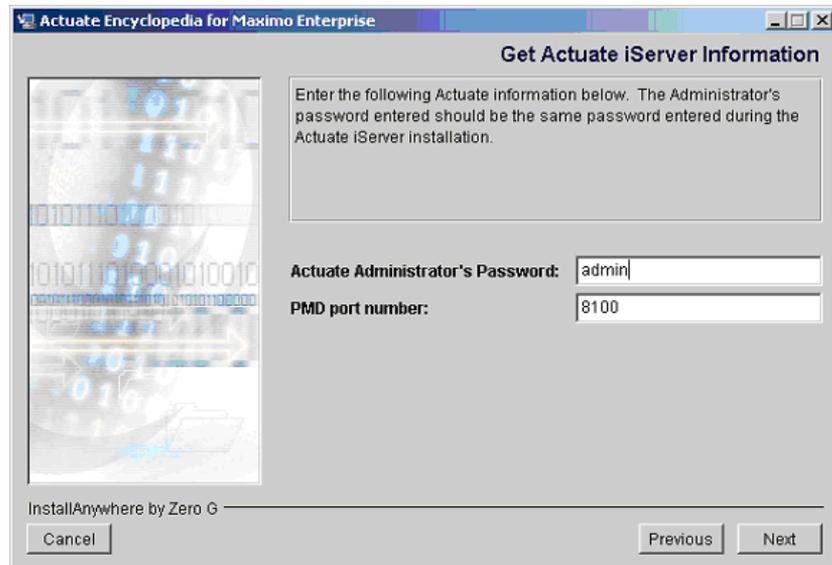
- 4 Click **Next** in the Introduction dialog box.



- 5 Accept the default installation location (c:\Actuate8\iServer\ActuateIntegration) or select another location. Click **Next**.



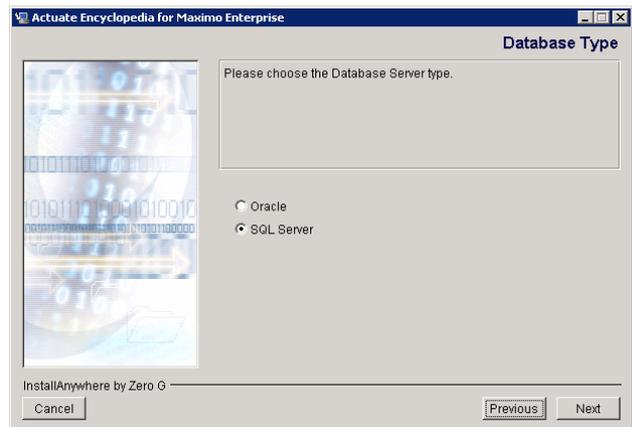
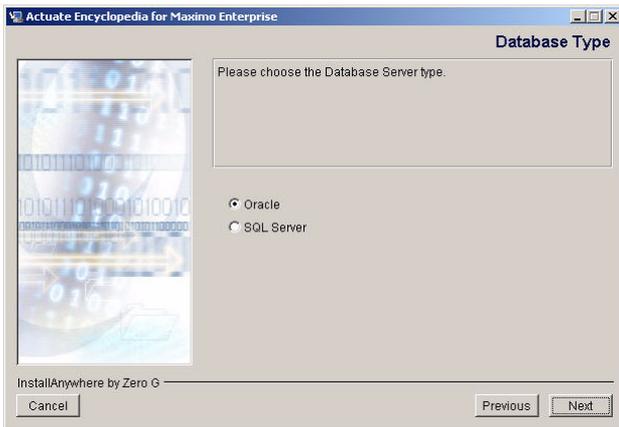
- 6 Enter the required information. Ensure that the Administrator's password is the same password you specified on Step 12 on page 3-6. Click **Next**.



7 Select the appropriate database and click **Next**.

If you are connecting to an Oracle database...

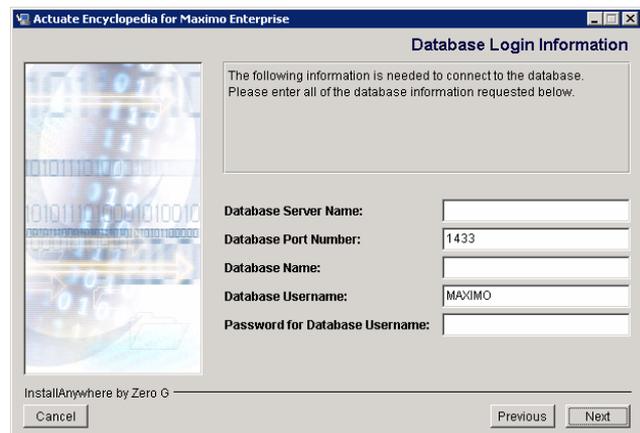
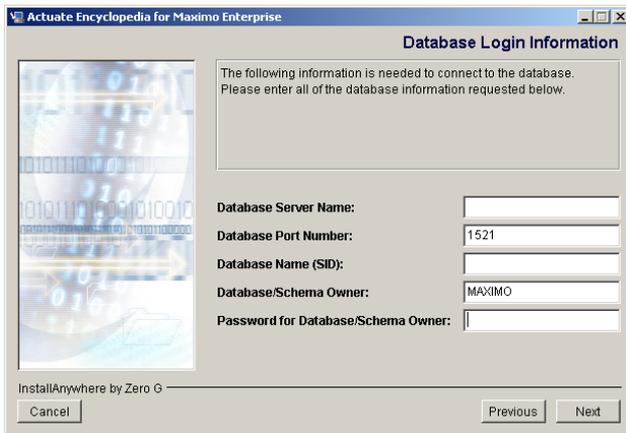
If you are connecting to a SQL Server Database...



8 Depending on your database type, enter the following database-related information, and click **Next**.

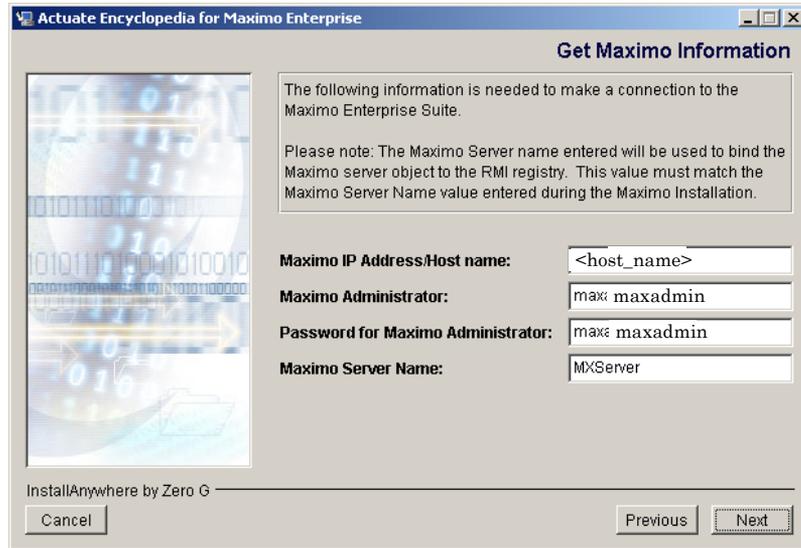
If you are connecting to an Oracle database...

If you are connecting to a SQL Server Database...



	Oracle	SQL Server
Database server name	Enter the Oracle host name	Enter the SQL Server host name
Port number	1521 (Default)	1433 (default)
Database name	Enter the Oracle system identifier	Enter the SQL Server database name
Database owner	Maximo (default)	Maximo (default)
Database owner's password	Maximo (default)	Maximo (default)

- 9 Enter the necessary information to connect to Maximo. Ensure that the Maximo Server Name is the same value as that in Step 13 on page 4-6 and click **Next**.

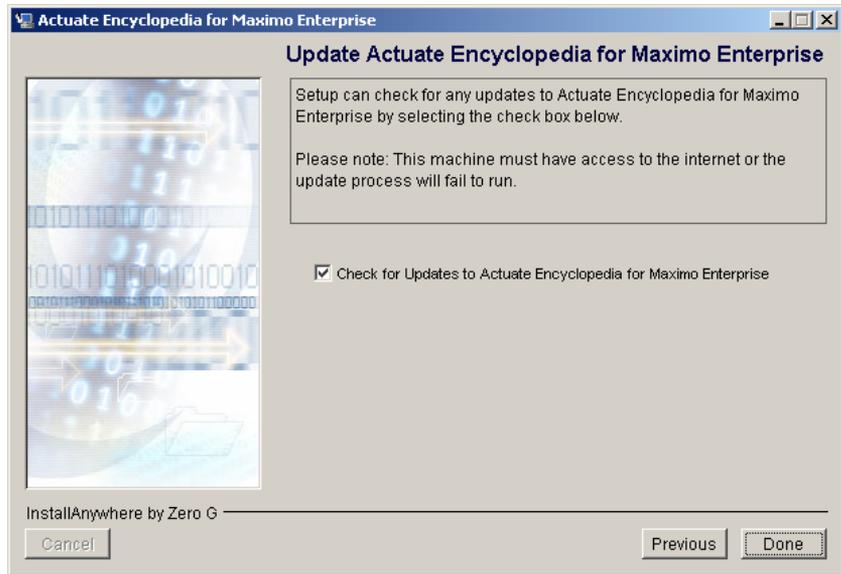


- 10 Click **Install**.

- 11 Click **Next** to check for Actuate Updates.



12 Check the check box in the Update dialog box and click **Done**.

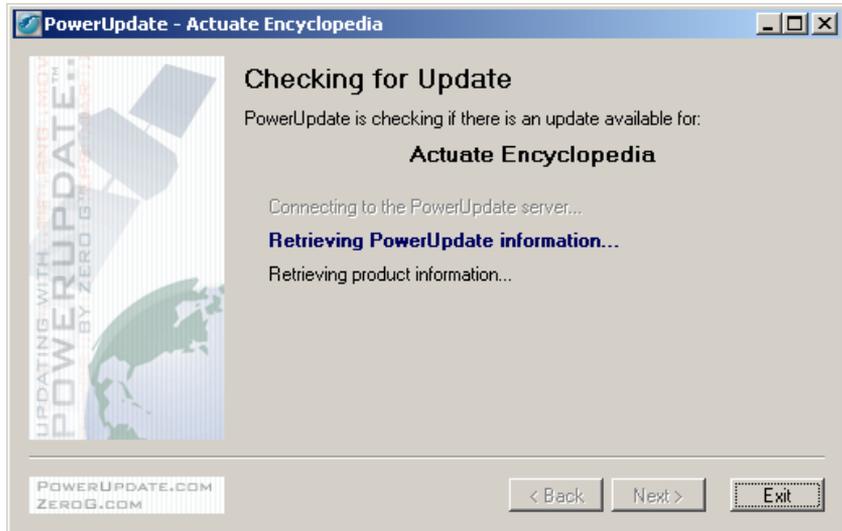


The PowerUpdate wizard opens. The computer where you are performing this installation from *must* be connected to the Internet.

13 Click **Next** in the Welcome to PowerUpdate dialog box.



The PowerUpdate program checks for available updates at this time.

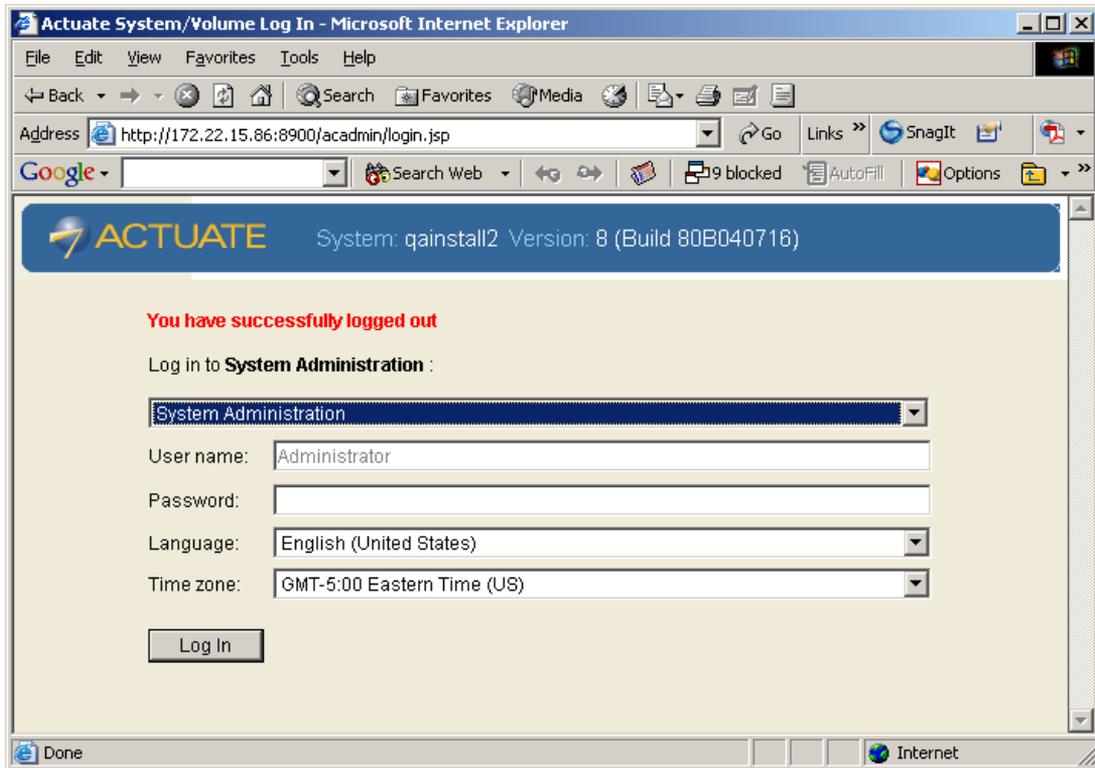


- 14 There are no updates available for this release of the Actuate Encyclopedia. Click **Done**.

Importing the Encyclopedia

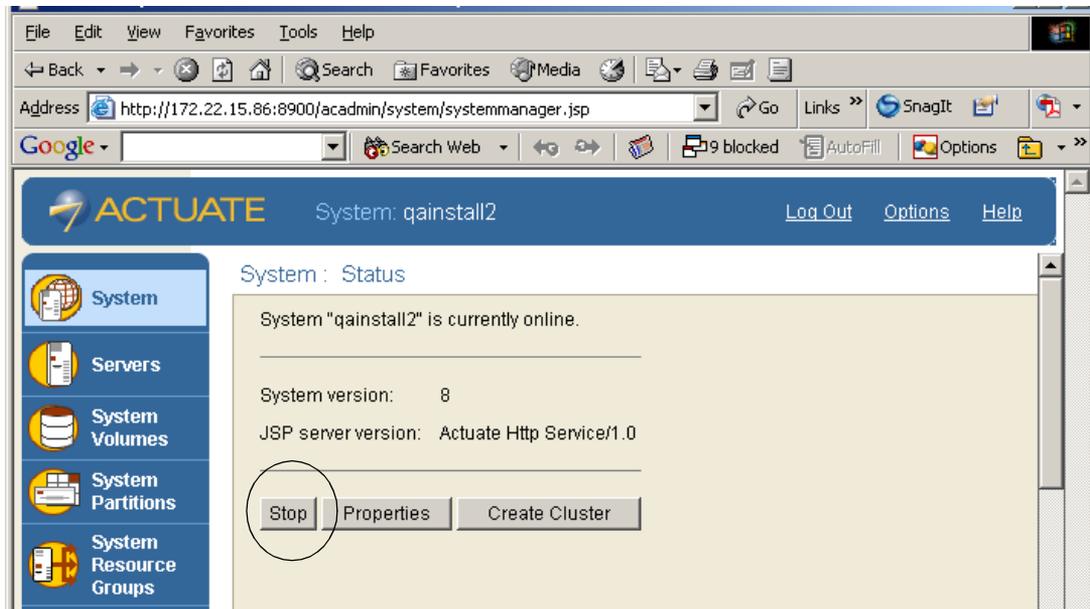
Ensure that the Maximo Application Server is running while you are importing the encyclopedia. If at any point, the Maximo Application Server is re-started, the Actuate service *must* be restarted too.

- 1 Login to the Actuate Admin Console (http://<host_name>:8900/acadmin) from the machine where you have installed the Actuate iServer.
- 2 Change the Volume Name drop down to **System Administration**.



- 3 Login as Administrator.
- 4 Select the **System** tab (if not selected by default already).

- 5 Click the **Stop** button on the System tab.



- 6 Click **OK** in the ensuing message box. Wait 1 to 2 minutes for the Stop to take effect.
- 7 Using Windows Explorer, navigate to your Actuate installation location:
<drive_letter>:\Actuate8\iServer.
- 8 Delete the **encyc** folder found under the \Actuate8\iServer folder.
- 9 Open a command prompt and change path to Actuate's bin directory. For example: C:\actuate8\iServer\bin
- 10 Execute the **acimport.bat** script, and pass in the path to the full Encyclopedia files.
For example: **acimport.bat c:\actuate8\iServer\oracle_export**
- 11 After importing the Encyclopedia, go back to the Actuate Admin Console and **Start** the Volume.
- 12 To launch the Encyclopedia:
- a Ensure that the Maximo Application Server is running.
 - b Open a browser and enter the following URL in the address box:

http://<actuate_server_name>:8900/acadmin
 - c Log in to Actuate Console as a Maximo user (not the user *administrator*).

Logging Into Maximo Start Center

10

The final step in installing the Maximo system, is opening the Maximo Start Center window.

Ensure that the Maximo Application Server is running.

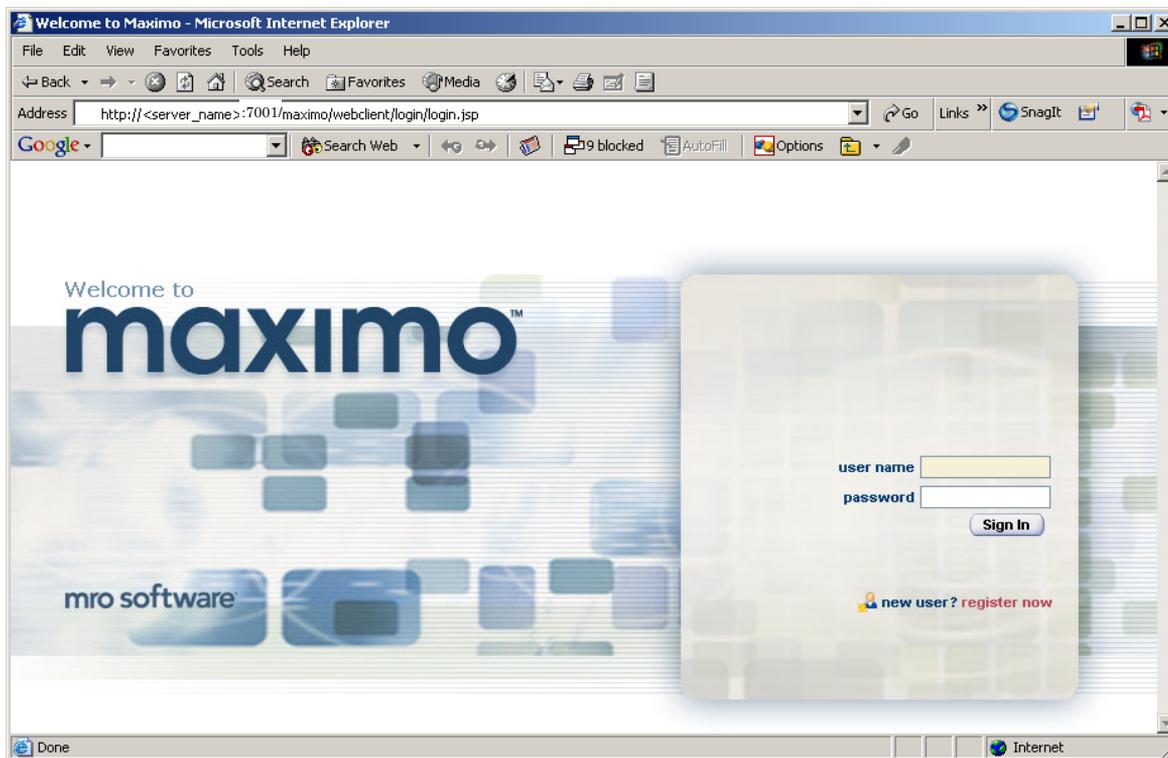
- 1 To open Maximo login page, launch Internet Explorer and in the URL address bar type: `http://<host_name>:<port_number>/maximo`

where

- ▼ `<host_name>` is the machine name or IP address of the application server
- ▼ `<port_number>` is the value that you specified on Step 5 on page 2-8.

NOTE The context path (maximo) is case-sensitive.

The Maximo login page opens.

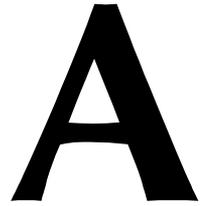


- 2 Login as **maxadmin** for both username and password. Newly installed Maximo databases contain maxadmin as a user ID with unlimited system access. You cannot use Maximo or SYSADM.

Maximo Enterprise Adapter Users

If you have obtained the Maximo Enterprise Adapter Key, you must complete additional integration steps that are detailed in Chapter 6 of the *Maximo Enterprise Adapter System Administration Guide*.

System Server Administration



This appendix describes how to start and stop the MAXIMOSERVER, whether you are running it as a Windows service, or from a command prompt.

Creating a Windows Service for the MAXIMOSERVER Server

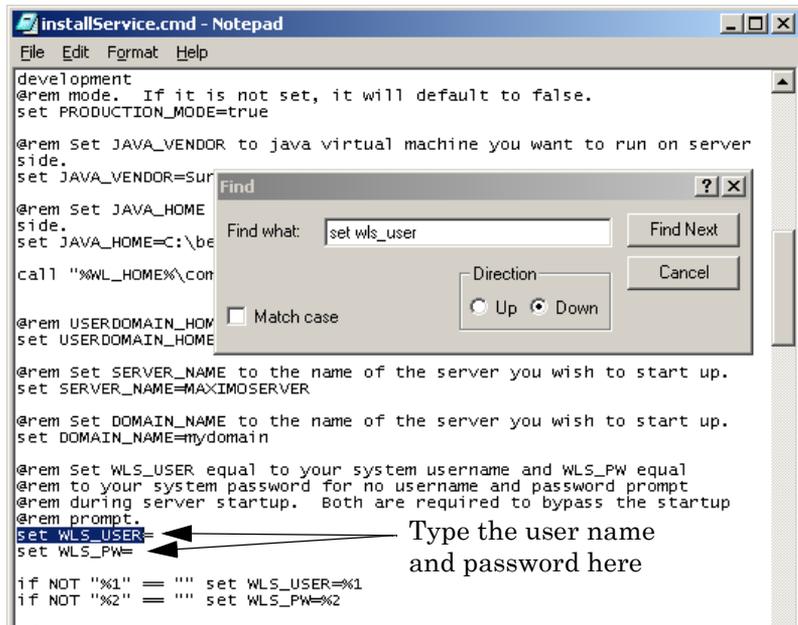
Before you create a Windows Service for the MAXIMOSERVER, you must edit the `installService` file to include user name, password, and modify the memory heap size. Complete the following steps:

NOTE If you have already installed the server as a Windows Service, you must remove the service by running **`uninstallservice.cmd`** from the `\mydomain` folder.

To edit the `installService.cmd` file, complete following steps:

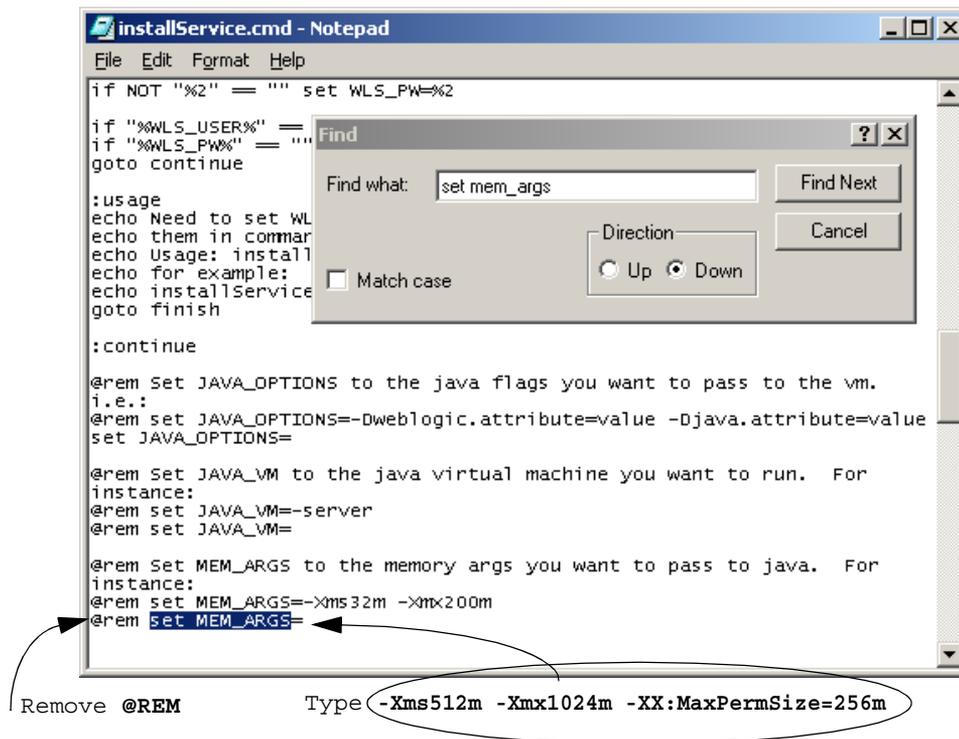
- 1** Using Windows Explorer navigate to:
`<bea_installation_drive>\bea_installation_location>\user_projects\domains\mydomain.`
- 2** Right-click and edit (do not open by double-clicking) the `installService.cmd` file.
 - a** Using your text editor Find tool, search for **`set wls_user`** *twice*.

- b Type the user name and password after the equal (=) sign after WLS_USER= and WLS_PW= respectively. This is the same username and password you specified in Step 9 on page 2-11.



- c Search for *set mem_args* three times.
- d Remove the **REM** (remark) from the front of the command **set MEM_ARGS**.
- e Type the following parameters (appears in bold) after the equal sign:
 set MEM_ARGS=-Xms512m -Xmx1024m -XX:MaxPermSize=256m

These parameters are case sensitive. Ensure to include the minus (-) sign before each parameter and to include the *m* after each value.



f Save and close the file.

3 From a command prompt, change directory path to:

<BEA_installation_drive>\bea\user_projects\domains\mydomain

4 At the prompt, type: **installService** and press **Enter**.

Starting and Stopping the MAXIMOSERVER Server

This section describes the following topics:

- ▼ Starting the MAXIMOSERVER as a Windows Service
- ▼ Stopping the MAXIMOSERVER as a Windows Service
- ▼ Removing the MAXIMOSERVER as a Windows Service
- ▼ Starting the MAXIMOSERVER from a command prompt
- ▼ Stopping the MAXIMOSERVER Server from a command prompt

Starting and Stopping the MAXIMOSERVER Service

You start the MAXIMOSERVER running as a Windows Service, by completing the following steps:

- 1 From your Start menu, select Settings >> Control Panel >> Administrative Tools >> **Services**.
- 2 Right-click **beasvc mydomain_MAXIMOSERVER**
- 3 To start, select **Start** from the ensuing menu.
- 4 To stop, select **Stop** from the ensuing menu.

Removing the Application Server as a Service

To remove the MAXIMOSERVER server as a Windows Service, perform the following steps:

- 1 From a command prompt, change path to:

`<BEA_installation_drive>\bea\user_projects\mydomain\`
- 2 Run the uninstall script by typing the following command and then press Enter.

```
uninstallService.cmd
```

Starting the Application Server From a Command Prompt

You start the MAXIMOSERVER Application Server from a command prompt.

- 1 Open a Command Prompt.
- 2 In the Command prompt, change directory path to:

`<BEA_installation_drive>\bea\user_projects\mydomain\`
- 3 At the prompt type **startweblogic** and press Enter.
- 4 When prompted, type the username and password that you specified in Chapter 2.

Once the phrase:

```
<server started in RUNNING Mode>"
```

displays, the WebLogic Server is running.

Stopping the MAXIMOSERVER Server

You stop the MAXIMOSERVER from running as follows:

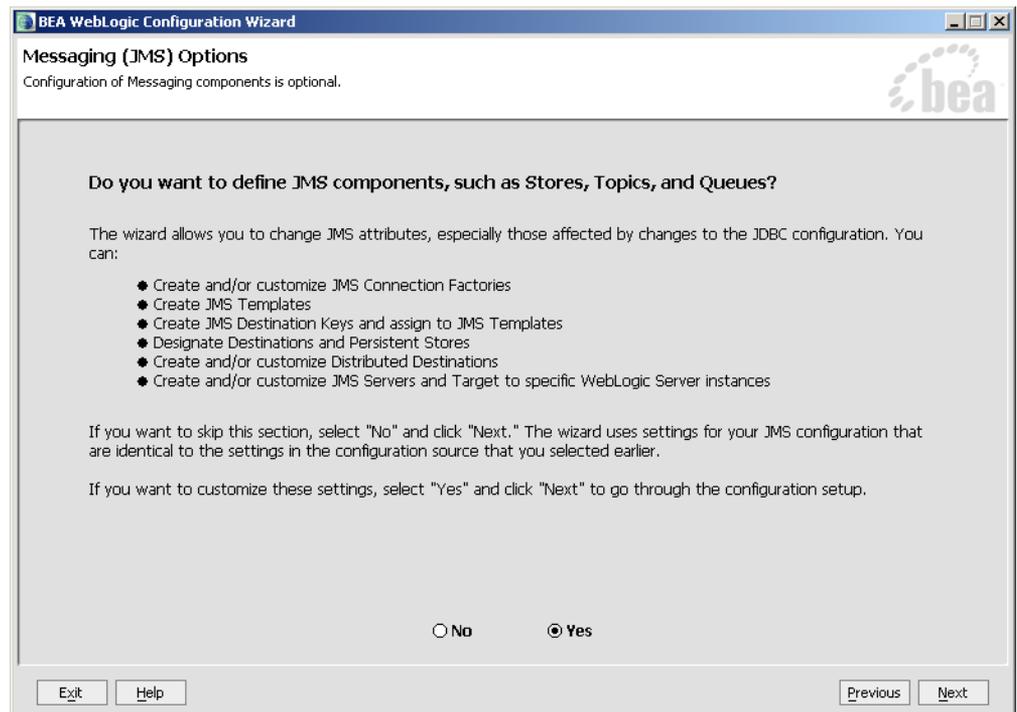
- 1 In the same Command Prompt Window that MAXIMOSERVER server is running, press **<Ctrl> + C**.
- 2 Type **Y**, and press Enter.
- 3 Close the Window.

Configuring JMS Options for Maximo Enterprise Adapter

B

In the event that you selected *Yes* in Step 8 on page 2-10, complete the steps outlined in this Appendix and return to Chapter 2, Step 9 on page 2-11 to complete your BEA WebLogic installation and configuration.

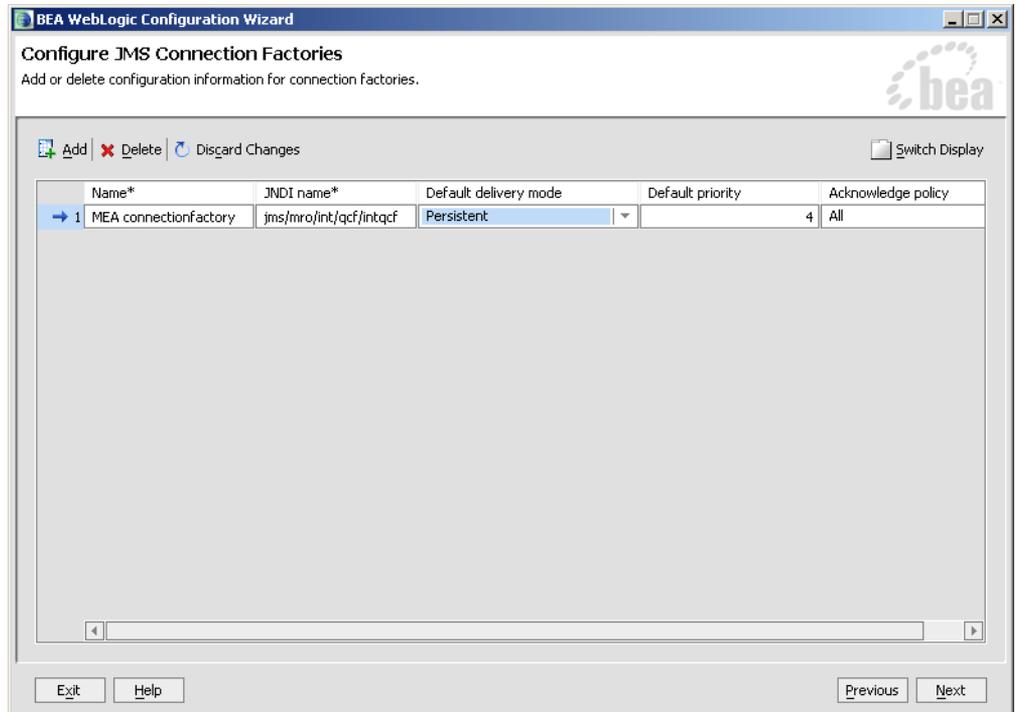
1 Select **Yes** to define JMS components and click **Next**.



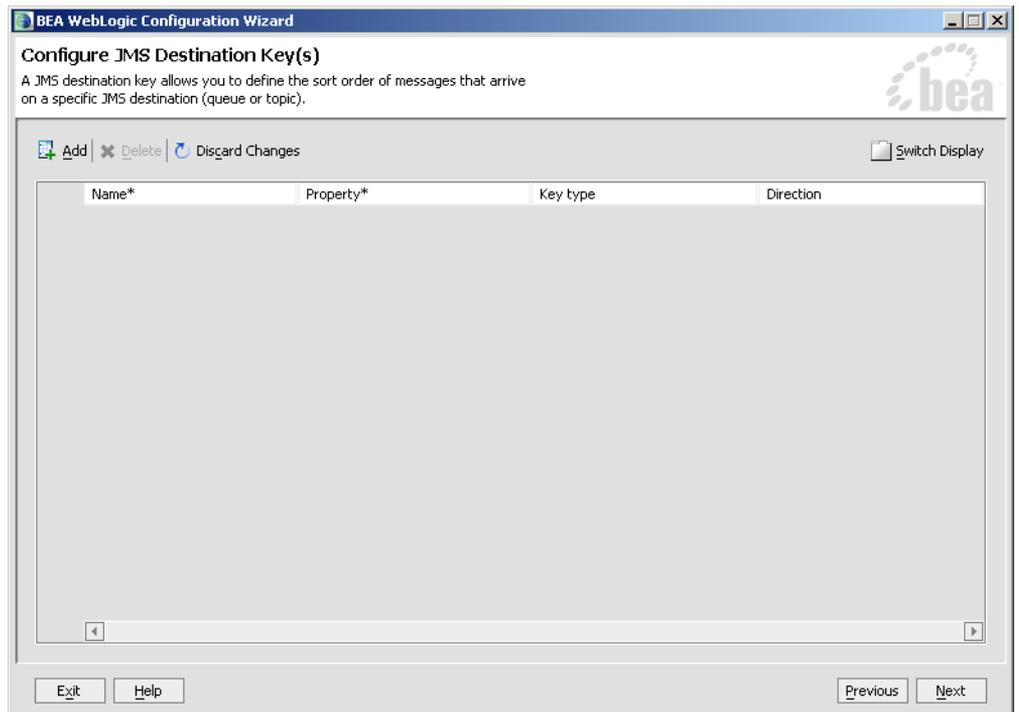
2 In the Configure JMS Connections Factories window:

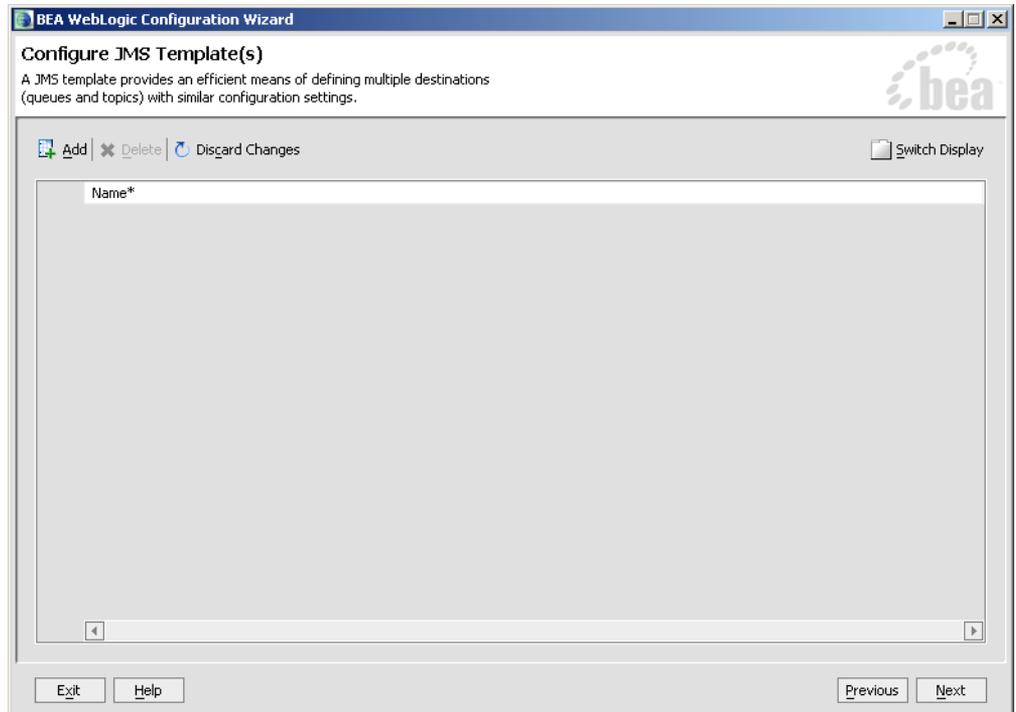
- a Click **Add**
- b In the Name field type: **MEA connectionfactory**
- c In the JNDI name field type: **jms/mro/int/qcf/intqcf**
- d In the Default delivery mode: select **Persistent**
- e Accept the default values that appear in the Default priority field (4) and the Acknowledge policy field (All)

f Click Next.



3 In the Configure JMS Destination Key(s) window, click Next.



4 In the Configure JMS Template(s) click **Next**.

5 In the Configure JMS Files Stores window, you must add three JMS file stores:

The directory names mentioned in this step (jmsstore) are arbitrary and can be any directory located on your file system. MRO Software recommends that you create a folder named **jmsstore** in the root of the BEA installation location before continuing with this step.

a Click **Add** to type or select the following values:

- ▼ Name: **mxintsqinfile**
- ▼ Directory:
<drive_letter>:\<bea_installation_location>\jmsstore
- ▼ Synchronous write policy: **Disabled**

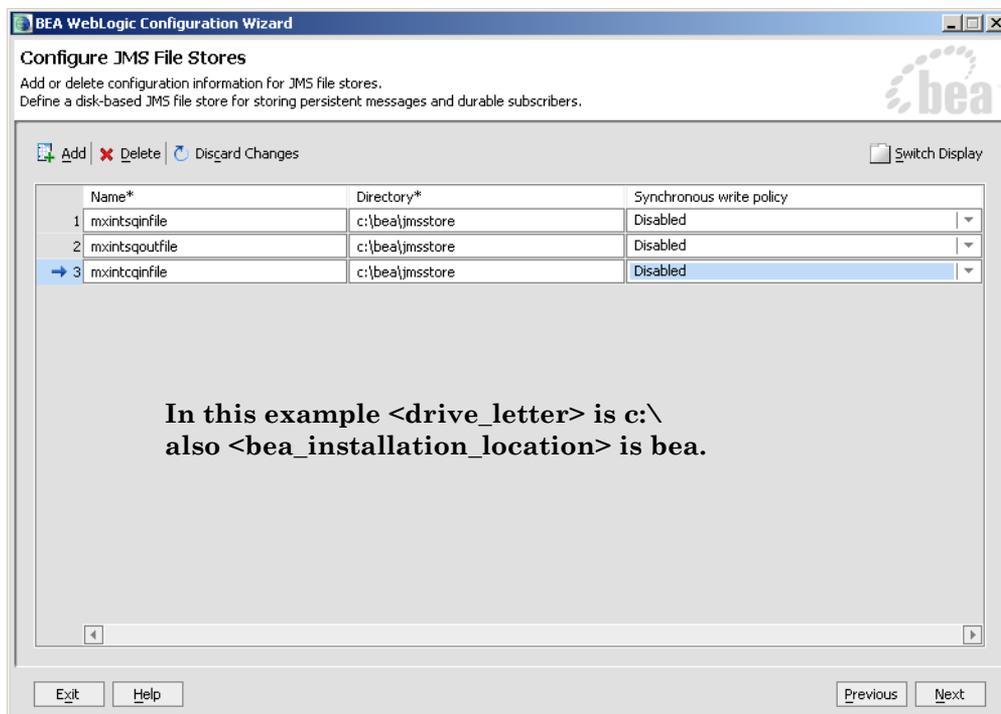
b Click **Add** to type or select the following values:

- ▼ Name: **mxintsqoutfile**
- ▼ Directory:
<drive_letter>:\<bea_installation_location>\jmsstore
- ▼ Synchronous write policy: **Disabled**

c Click **Add** to type or select the following values:

- ▼ Name: **mxintcqinfile**
- ▼ Directory:
<drive_letter>:\<bea_installation_location>\jmsstore

▼ Synchronous write policy: **Disabled**.



d Click **Next**.

Refer to Chapter 2 Step 4 on page 2-2 for the exact BEA installation location.

6 In the Configure JMS Servers window, you must add three JMS Servers:

a Click **Add** to type or select the following values:

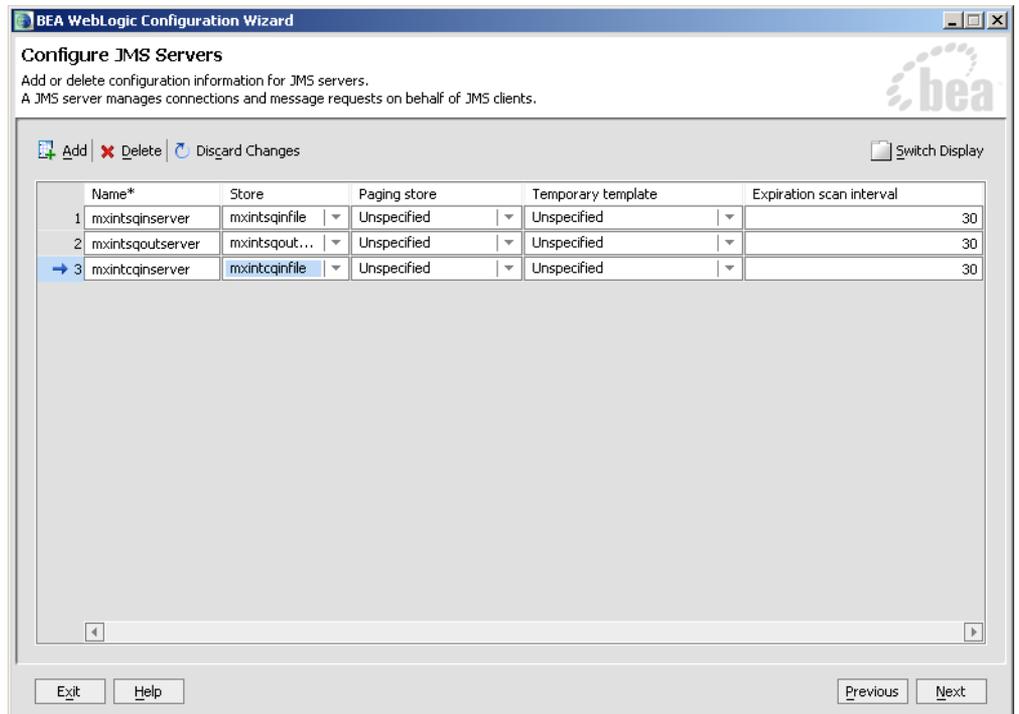
- ▼ Name: **mxintsqinserver**
- ▼ Store: **mxintsqinfile**
- ▼ Paging store: Unspecified (default)
- ▼ Temporary template: Unspecified (default)
- ▼ Expiration scan interval 30 (default)

b Click **Add** to type or select the following values:

- ▼ Name: **mxintsqoutserver**
- ▼ Store: **mxintsqoutfile**
- ▼ Paging store: Unspecified (default)
- ▼ Temporary template: Unspecified (default)
- ▼ Expiration scan interval 30 (default)

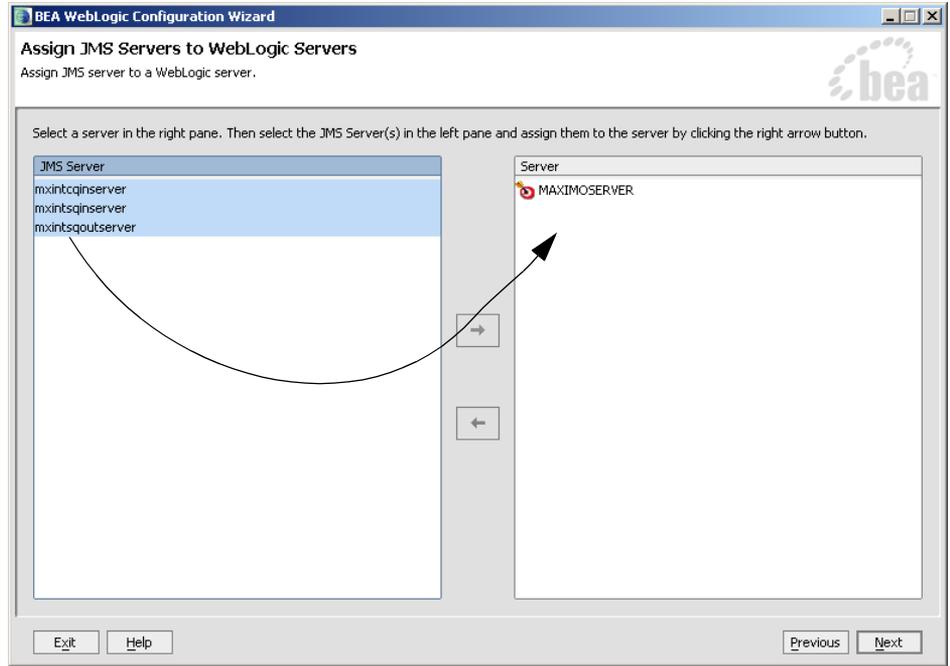
c Click **Add** to type or select the following values:

- ▼ Name: **mxintcqinserver**
- ▼ Store: **mxintcqinfile**
- ▼ Paging store: Unspecified (default)
- ▼ Temporary template: Unspecified (default)
- ▼ Expiration scan interval 30 (default)

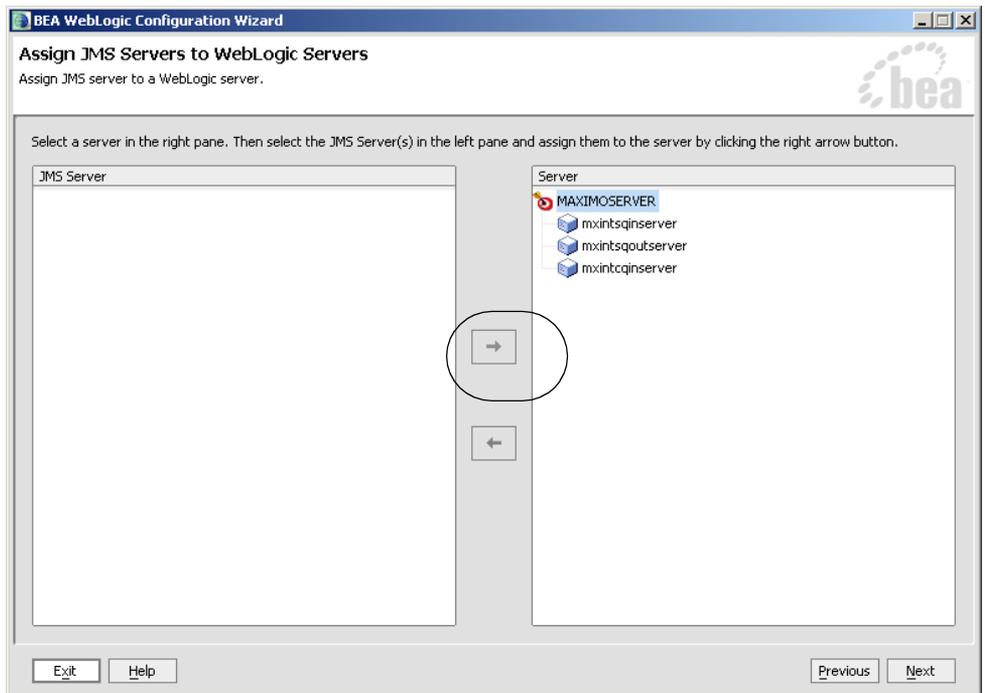


d Click **Next**

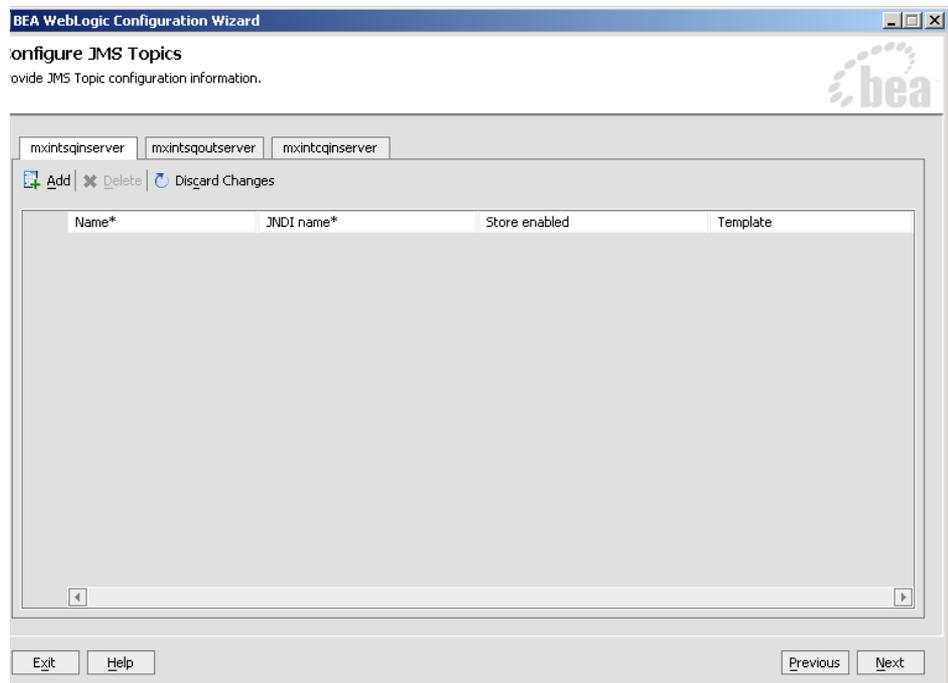
7 Select all JMS Servers.



8 Click the right arrow button to assign the JMS Servers to MAXIMOSERVER. Click Next.



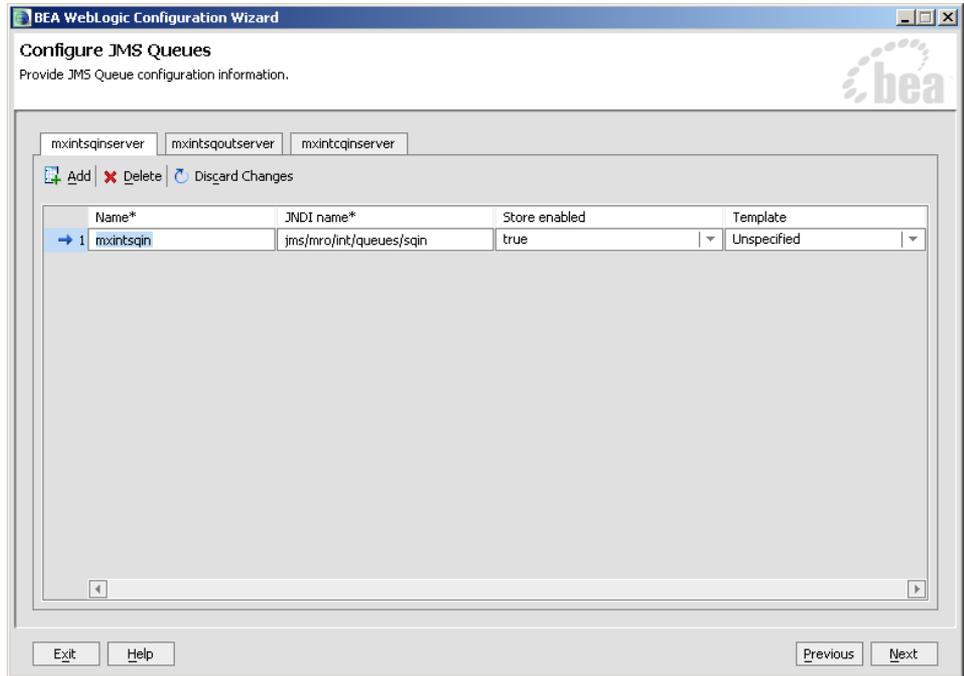
9 In the Configure JMS Topics window, click **Next**.



10 In the Configure JMS Queues window, you must configure all three JMS Servers.

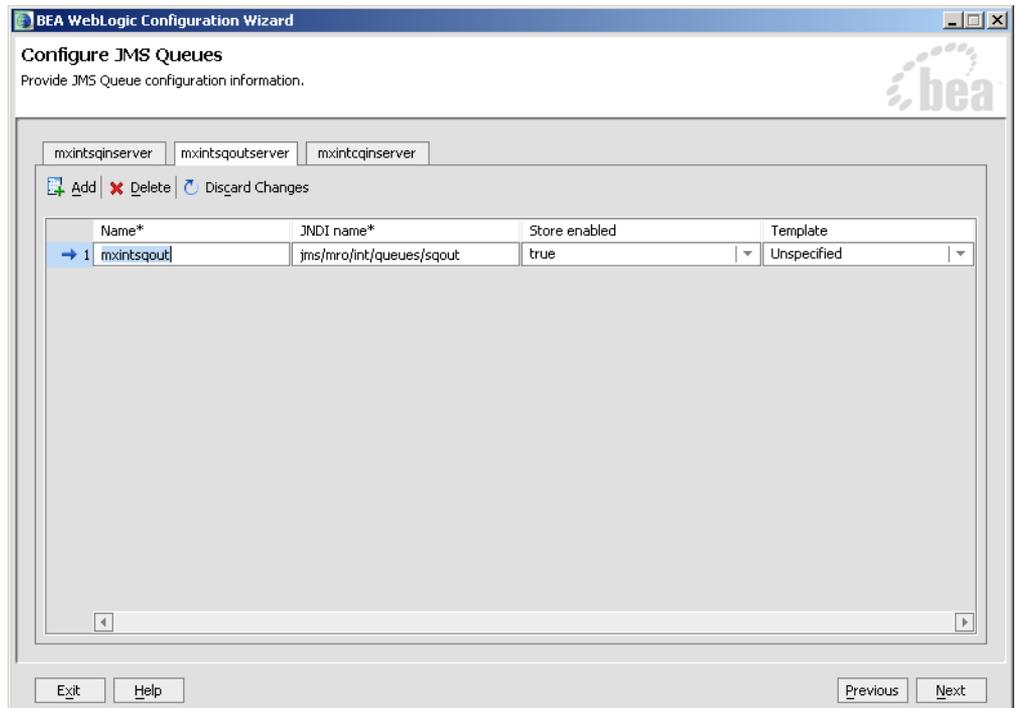
- a Select the **mxintsqinserver** tab (open by default) click **Add** and enter the following values:
 - ▼ Name: **mxintsqin**
 - ▼ JNDI name: **jms/mro/int/queues/sqin**
 - ▼ Store enabled: **true**

▼ Template: Unspecified (default).

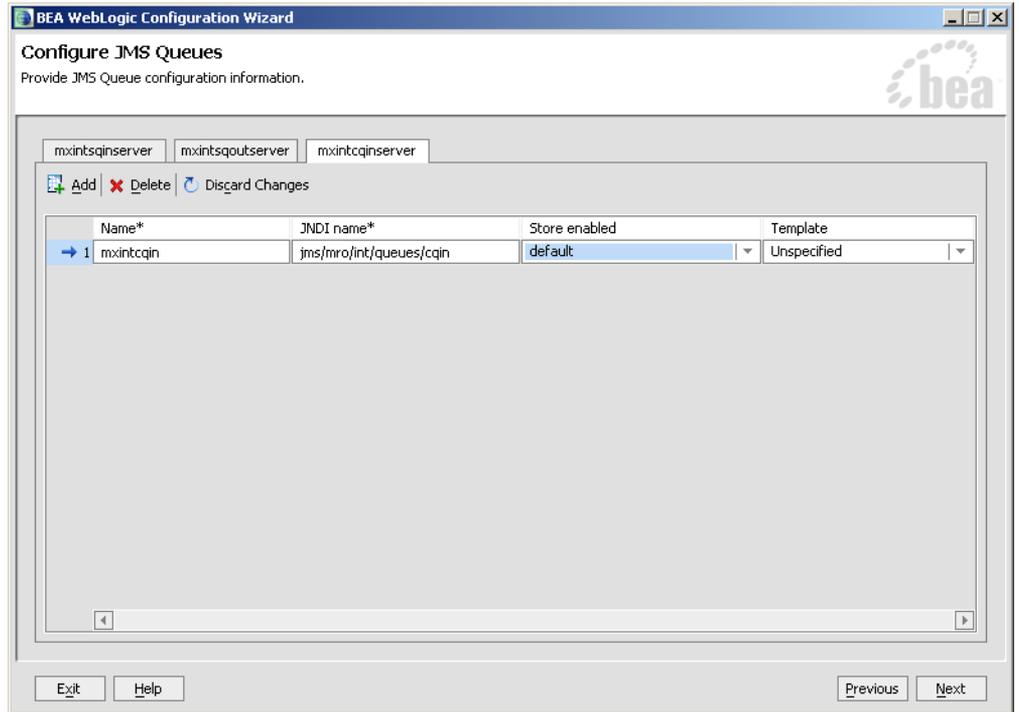


b Select the **mxintsqoutserver** tab click **Add** and enter the following values:

- ▼ Name: **mxintsqout**
- ▼ JNDI name: **jms/mro/int/queues/sqout**
- ▼ Store enabled: **true**
- ▼ Template: Unspecified (default)



- c Select the **mxintcqinserver** tab click **Add** and enter the following values:
 - ▼ Name: **mxintcqin**
 - ▼ JNDI name: **jms/mro/int/queues/cqin**
 - ▼ Store enabled: **default**
 - ▼ Template: Unspecified (default)

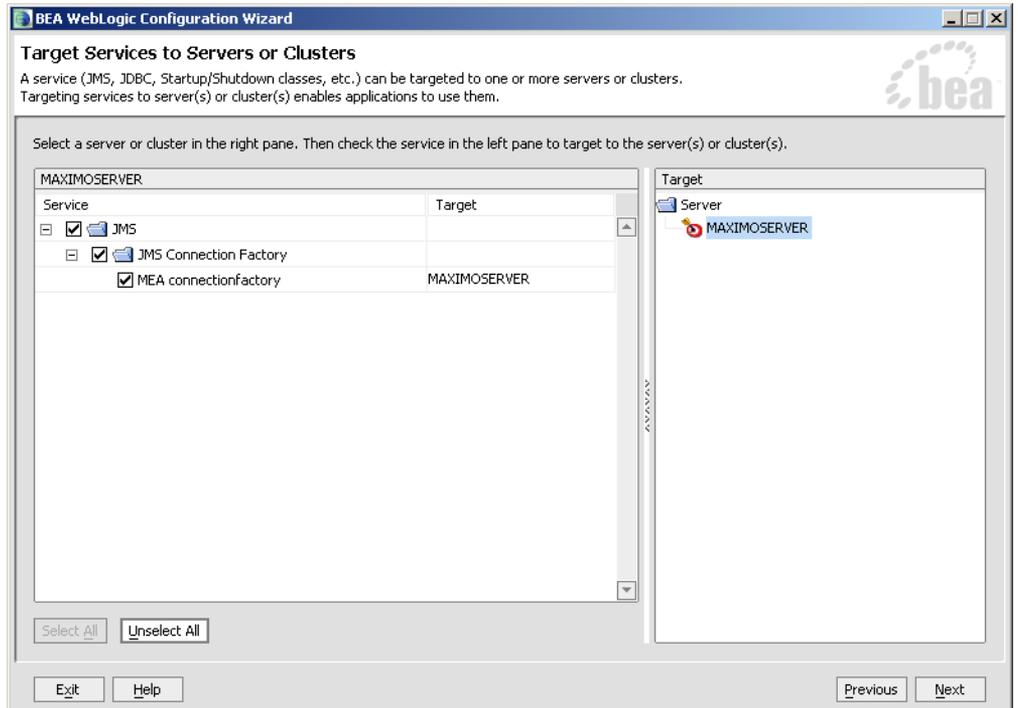


- d Click **Next**.

11 In the Applications and Services Targeting Options, select **Yes** and click **Next**.

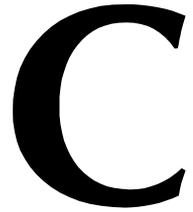


12 In the Target Services to Servers or Clusters check *all* services and select (highlight) the MAXIMOSERVER from the left pane. Click **Next**.



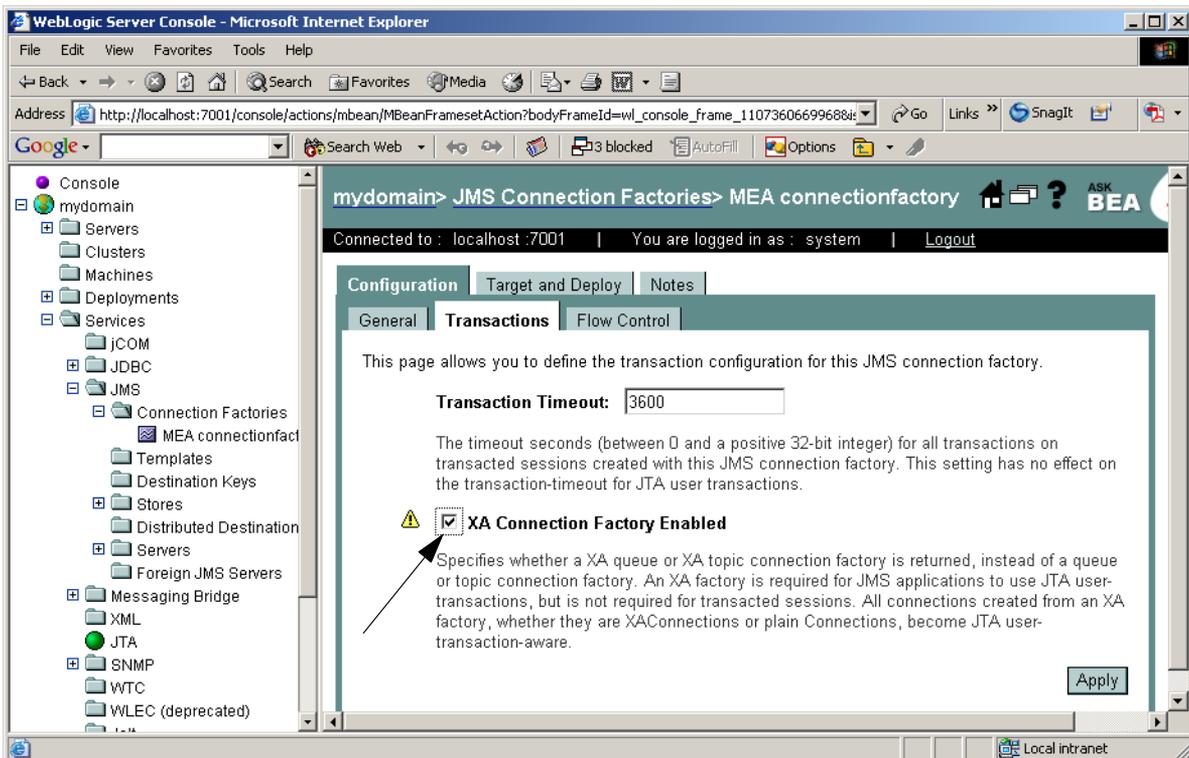
13 Refer back to Chapter 2 and continue with Step 9 on page 2-11.

Enabling JMS Connection Factory for Maximo Enterprise Adapter



Complete the steps outlined in this Appendix and return to Step 1 on page 8-1 to complete your BEA WebLogic installation and configuration.

- 1 After logging into the BEA WebLogic Console, expand the **Services** link in the left pane.
- 2 Click and expand the **JMS** link.
- 3 Click **Connection Factories**.
- 4 Click **MEA connectionfactory**.
- 5 Select the **Transactions** tab from the right pane.
- 6 *Check the **XA Connection Factory Enabled** check-box and click **Apply**.*



- 7 Close the browser.
- 8 Stop the MAXIMOSERVER application server from the command prompt by pressing **Ctrl + C**.

-
- 9 Refer back to “Deploying the EAR Files” on page 8-1, to restart the MAXIMOSERVER Application Server.

Adding Additional Maximo Keys

D

Ensure that Maximo is not running. At this time you must install the additional Maximo Keys program you received. The EAR files are built at this time. Complete the following steps.

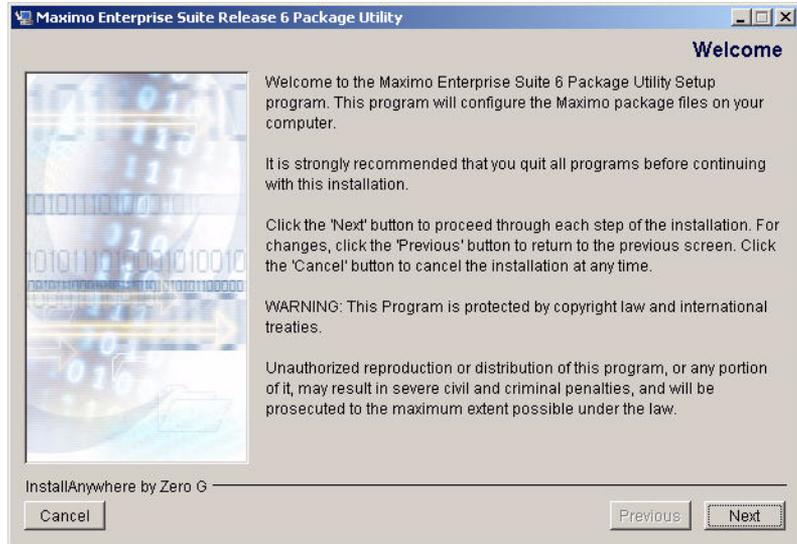
- 1 Insert the Maximo Keys CD-ROM into the CD drive.
- 2 From the root CD drive, double-click **setup.exe**.
- 3 Select the appropriate language from the drop-down list. If your language is not available from the list, select English; if it is Japanese or Chinese, see Note 2 below. Click **OK**.

NOTE 1 Selecting a language only changes the installation screens into that language but does not affect the underlying files that gets installed.

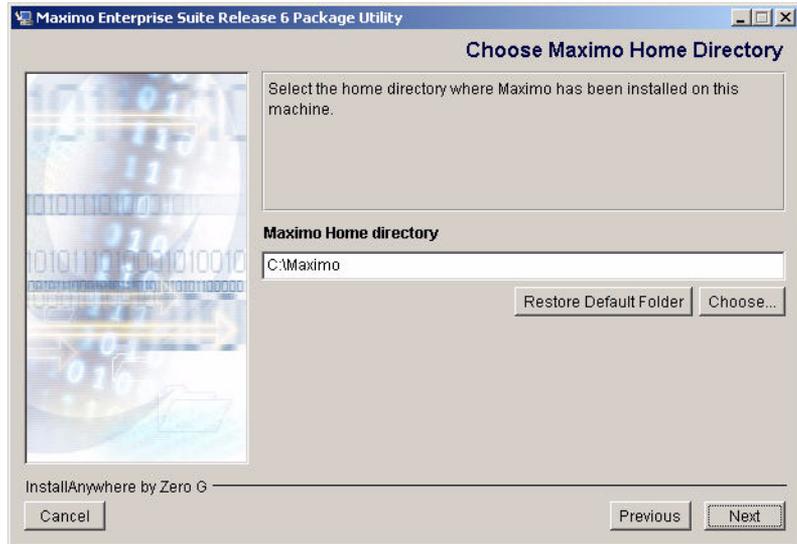
NOTE 2 The installation screens are translated into: Spanish, Portuguese, Japanese, and Simplified Chinese. In order to see Japanese or Chinese you must have those fonts installed on your system.



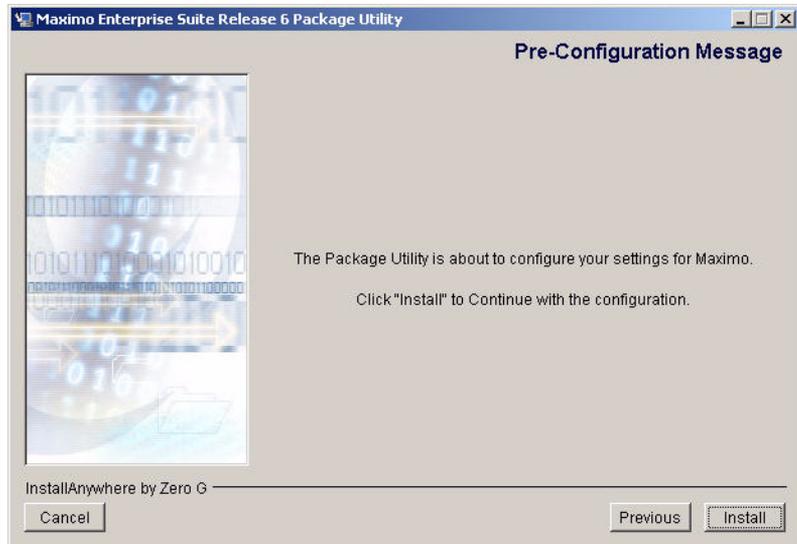
4 Click **Next** in the Welcome dialog box.



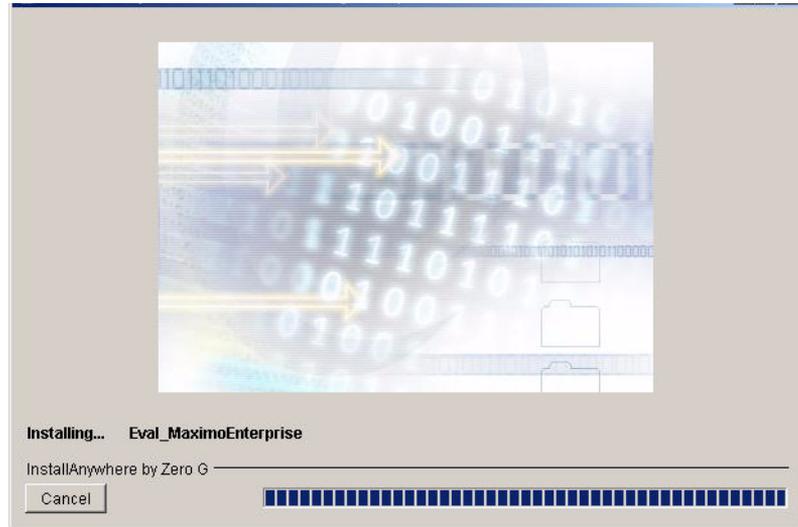
5 Verify that the default value (c:\Maximo) is the **Maximo** Home Directory and click **Next**.



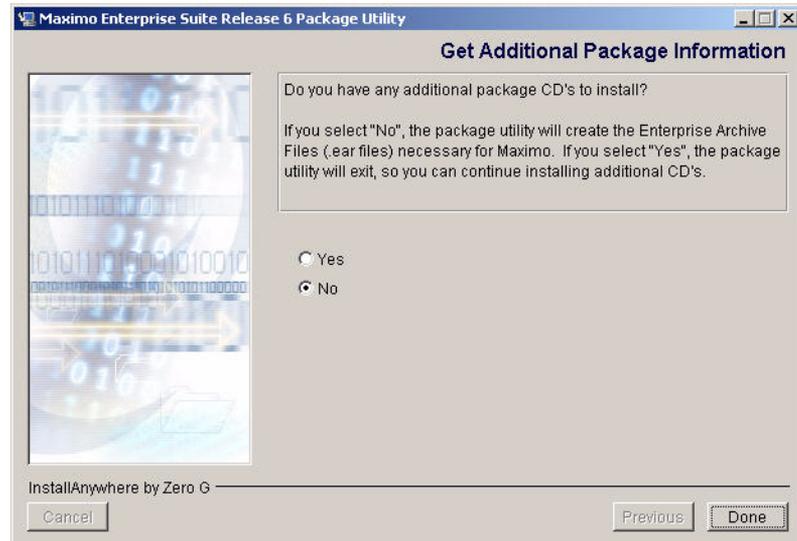
6 Click **Install** in the Pre-Configuration Message box.



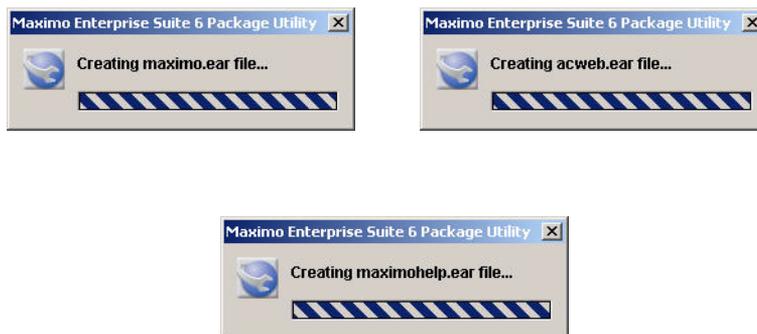
Allow the installation progress bar to complete.



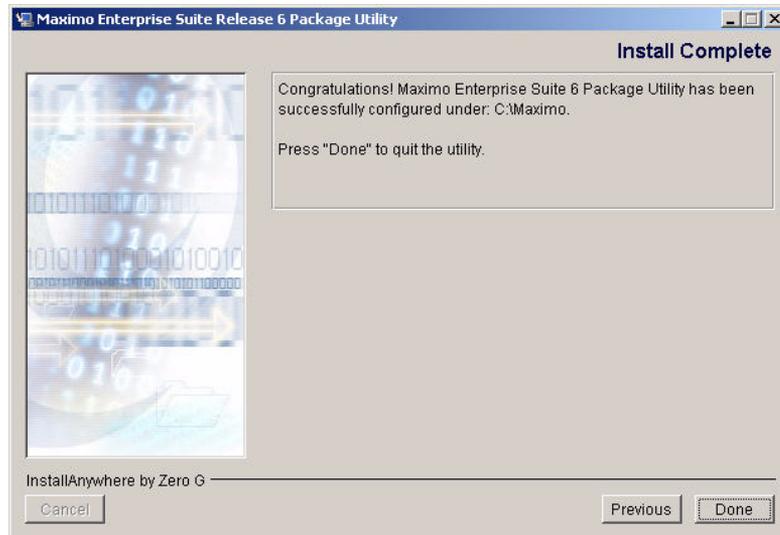
- 7 If you are installing additional Keys (Packages), select *Yes* and the program exits. You must now insert other Key CD-ROM(s) that you may have obtained, otherwise select *No* and click **Done**.



Three message boxes appear indicating that the EAR files are being built:



-
- 8 Click **Done** in the Install Complete dialog box.



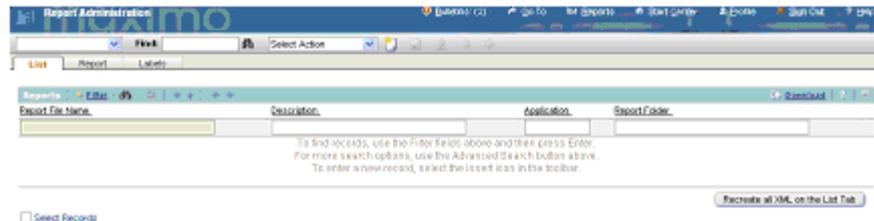
Each time that EAR files are re-built, MRO Software recommends, that you delete the temporary BEA files. Complete the following steps:

- 9 Navigate to
c:\bea\user_projects\domains\mydomain\MAXIMOSERVER directory.
- 10 Delete all files and folders under this directory except for the Upload folder. *Do not* delete the upload folder.

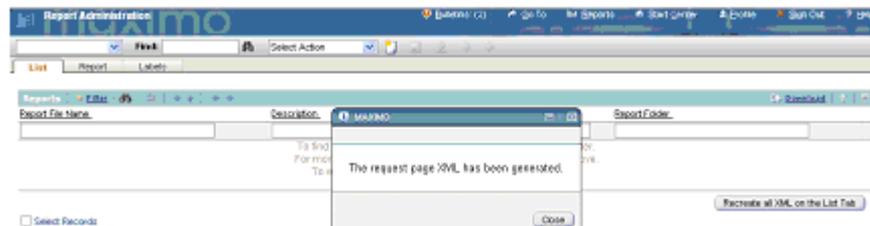
Enabling Reports to Run

As the Actuate Reports administrator, you must set up additional Actuate functionality to run Reports properly. Complete the following steps:

- 1 To enable reports to execute, sign into maximo as a user with Admin Privileges.
- 2 Select the **Report Administration Application**.
- 3 Click **Recreate all XML** on the List tab.



- 4 Wait until the message **The request page XML has been generated** displays.



You can now run Reports properly.

maximo enterprise suite

Release 6.0
March 2006

Maximo Project Manager Installation Guide

mro software™

make it *all* count

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Contents

About This Guide	v
Audience	v
Related Documentation	v
Support	v
Installing Maximo Project Manager	1
Overview	1
Hardware Configurations	1
Disk Space	1
Software Configurations	1
Platforms	1
Other Requirements	2
Installation of Maximo Project Manager Release 6.0	2
Program Folder	2
Before You Begin	2
Installing Maximo Project Manager	3
Application Server Setup (WebLogic Users Only)	3
Maximo Project Manager Server Installation	6
Maximo Project Manager Client Installation	11
Appendix A: Multi-Language Setup	A-1
About the importlang.bat Utility	A-1
Running the importlang.bat Utility	A-1

About This Guide

This guide lists the hardware and software requirements to install Maximo Project Manager and describes how to install the software.

This guide does not contain information on how to install other applications necessary to run Maximo Project Manager, such as Maximo Release 6.0, or Microsoft® Project 2003. For details on installation procedures for other applications, refer to the documentation that accompanies those products.

Audience

The *Maximo Project Manager Installation Guide* is intended for planners, forecasters, and other managers who want to use Microsoft Project to work with business data from the MAXIMO database.

Related Documentation

Your documentation set includes this guide and the *Maximo Project Manager User's Guide* which provides information on how to use the application.

Maximo Project Manager also contains help that provides detailed instructions on how to use the application. Use the *Maximo Project Manager User's Guide* and the online help to assist you in mastering the use of this application. For information on Maximo's Work Order Tracking and Preventive Maintenance applications, see the *Maximo Enterprise Suite User's Guide*.

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Installing Maximo Project Manager

Overview

Maximo Project Manager integrates Maximo with Microsoft Project 2003, enabling you to use Microsoft Project scheduling data with your Maximo work order and preventive maintenance data.

The following information describes the software and hardware requirements to successfully install Maximo Project Manager.

Hardware Configurations

Recommended hardware configurations for Maximo Project Manager are the same as those for the Maximo Release 6.0 client work station. Refer to the *Maximo Enterprise Suite Installation Guide, Release 6.0* for details.

Disk Space

Maximo Project Manager Release 6.0 requires approximately 120 MB of disk space.

Software Configurations

Platforms

Maximo Project Manager Release 6.0 is designed to run on the following platforms:

Application Server Platforms	Client Desktop Platforms
▼ Microsoft Windows 2000 Professional	▼ Microsoft Windows 2000
▼ Microsoft Server 2003	▼ *Microsoft Windows XP

NOTE * If you are running Microsoft Windows XP on your client desktop with a BEA Weblogic application server, you will need to apply a BEA Weblogic patch on your Maximo application server in order to run Maximo. For instructions, see the `max_project_readme.txt` file, located at the root level of your CD-ROM directory.

Other Requirements

Before installing Maximo Project Manager Release 6.0, you must have already installed the following applications:

- ▼ Maximo Release 6.0
- ▼ MXES Patch 03 or higher
- ▼ The Maximo Application Server (a component of Maximo Release 6.0)
- ▼ Microsoft Project 2003 (client desktop only)

NOTE For recommendations for optimizing Maximo Project Manager's performance and details about customizing the MaximoProject.ini file, see the *Maximo Project Manager User's Guide*.

For configuration and other information about Microsoft Project, refer to the Microsoft Project documentation.

For specific software requirements for running Maximo Release 6.0 and the Maximo Application Server, refer to your *Maximo Enterprise Suite Installation Guide, Release 6.0*.

Installation of Maximo Project Manager Release 6.0

Program Folder

The installation program creates one new folder for the client desktop.

Default Client Folder	Default Server Folder
C:\MaxProjectClient	C:\<maximo home directory>
	Example: C:\maximo

Before You Begin

- ▼ Verify that the Maximo application-specific business components, which are included with Maximo Release 6.0, are installed. If they are not, you must install them before installing Maximo Project Manager. The installation program is on the Maximo Release 6.0 Application CD. Follow the instructions in the *Maximo Enterprise Suite Installation Guide, Release 6.0* or the *Installation/Upgrade Guide*, which are on the Release 6.0 On-line Documentation CD.
- ▼ Before installing Maximo Project Manager, you must have access to, and know the name and/or IP address of, the machine where the Maximo Application Server resides.
- ▼ You must know the name of your Maximo application server.
- ▼ You must know if your Maximo application server uses a non-standard mx.e.registry.port entry (not 1099) in the maximo.properties file.

Installing Maximo Project Manager

Exit all other Windows programs before installing Maximo Project Manager. You may leave Windows Explorer open.

There are three parts to the installation of Maximo Project Manager:

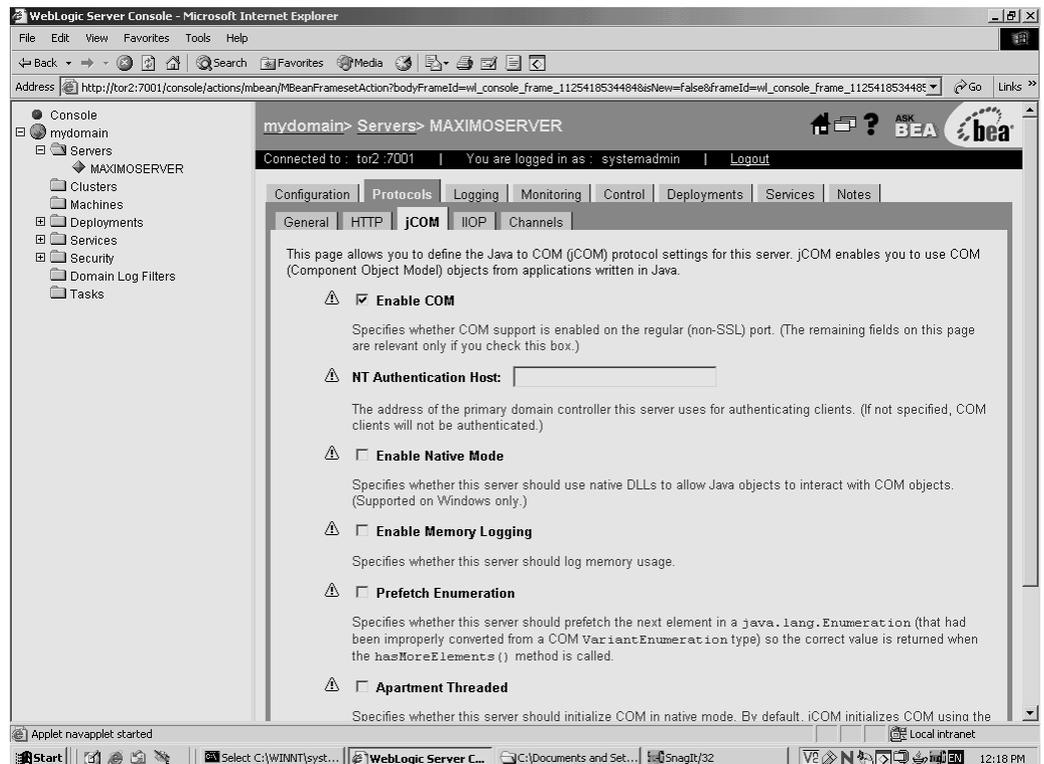
- ▼ Application Server setup (WebLogic only)
- ▼ Maximo Project Manager server installation
- ▼ Maximo Project Manager client installation

If you are installing on WebSphere, skip to “Maximo Project Manager Server Installation” on page 6.

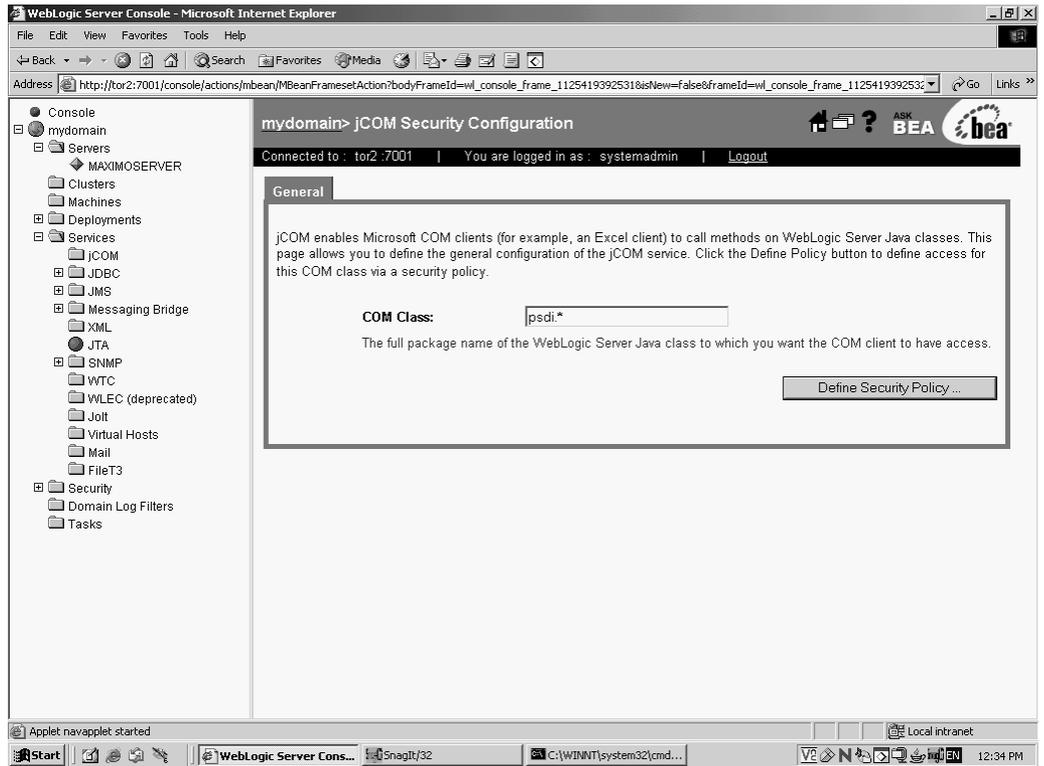
Application Server Setup (WebLogic Users Only)

This section applies to BEA WebLogic users only. If you are using WebSphere, skip to “Maximo Project Manager Server Installation” on page 6.

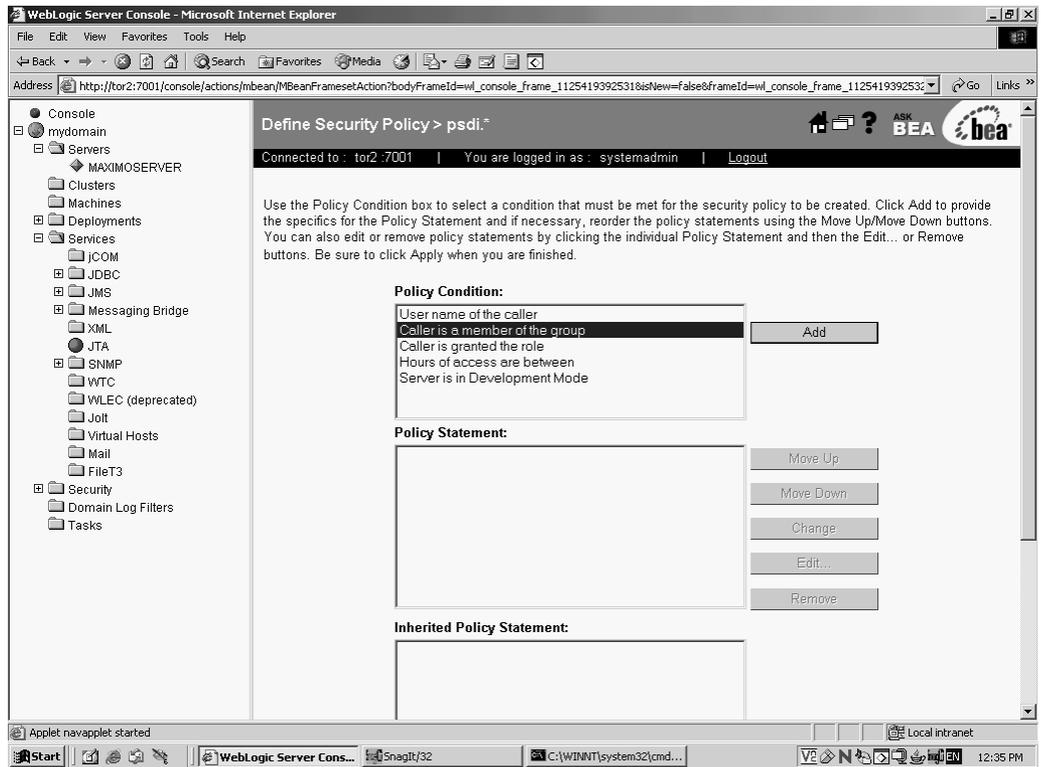
- 1 Start WebLogic if it isn’t already running.
- 2 Log in to the BEA WebLogic console.
- 3 In the console, click Servers, then select your Maximo server. Click the Protocols tab, and then the JCOM subtab. Check the **Enable COM** checkbox, and click **Apply**.



- 4 In the left pane of the window, Select **Services > JCOM**.
- 5 Type: **psdi.*** in the **COM Class** field, and click **Define Security Policy**.

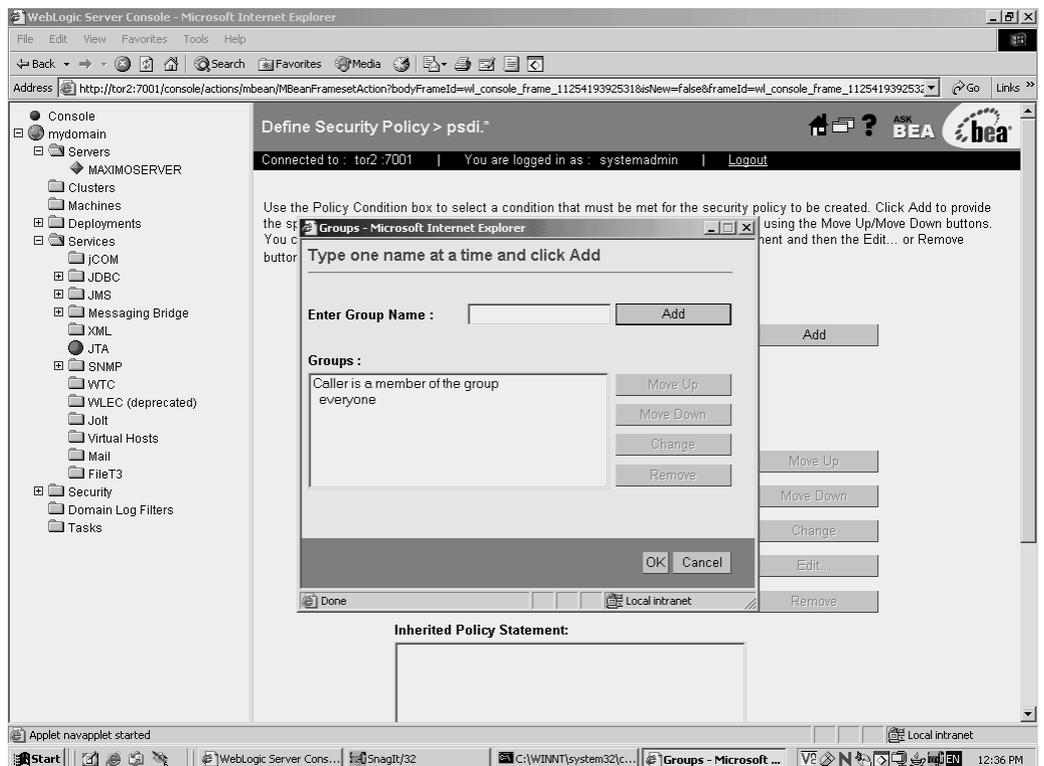


6 Select Caller is a member of the group from the Policy Condition list. Click Add.



The Groups dialog box opens.

7 In the Enter Group Name field, type: everyone (case-sensitive, all lowercase). Click Add.



- 8 Click **OK** to close the dialog box, then scroll down and click **Apply** in the lower-right corner of the screen.
- 9 Logout of the BEA console.
- 10 Shutdown and restart your Maximo application server. You must restart your server for the changes to take effect.

Maximo Project Manager Server Installation

You will now install the portion of Maximo Project Manager that resides on the machine where Maximo is installed.

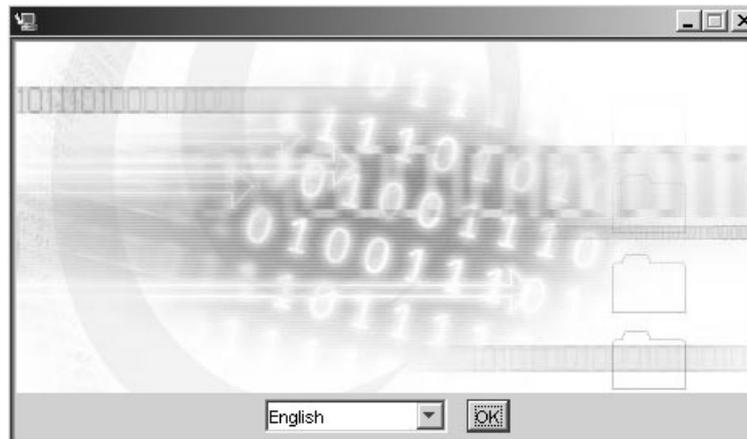
- 1 Insert the Maximo Project Manager CD into the CD-ROM drive.
- 2 Click **Start** and select **Run**.
- 3 Type: **d:\maxproject.exe** (where d is your CD-ROM drive) and select **OK** or press **Enter**.

or,

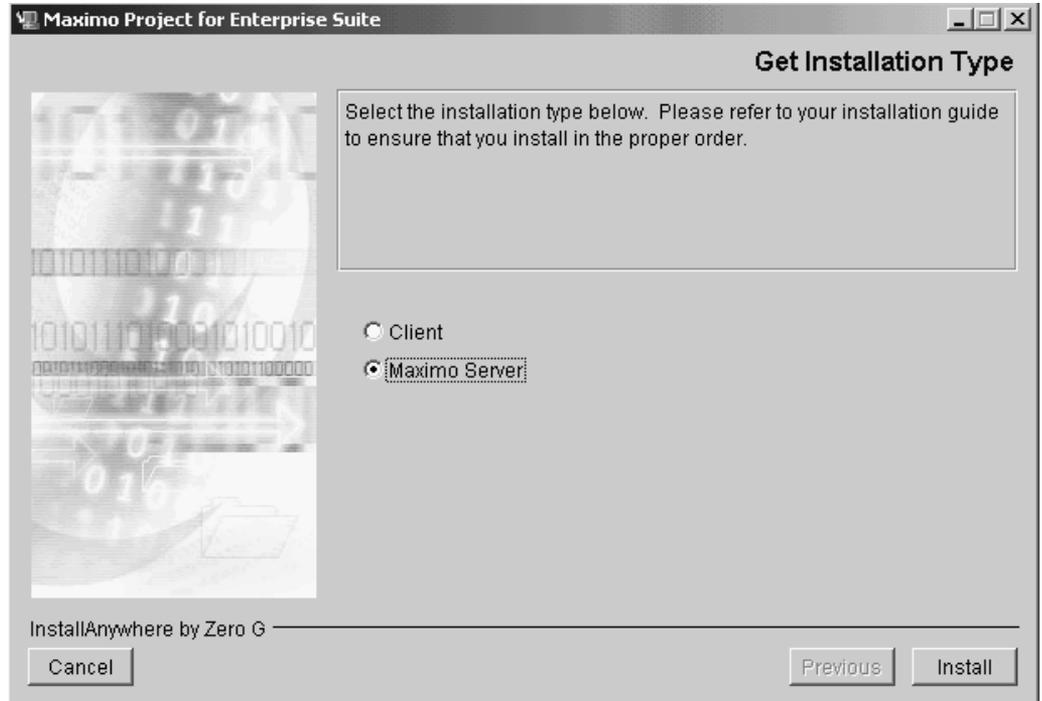
Using Windows Explorer, open your CD-ROM drive folder and double-click **maxproject.exe**.

The installation program displays a series of screens and dialog boxes. Follow the instructions on the screen.

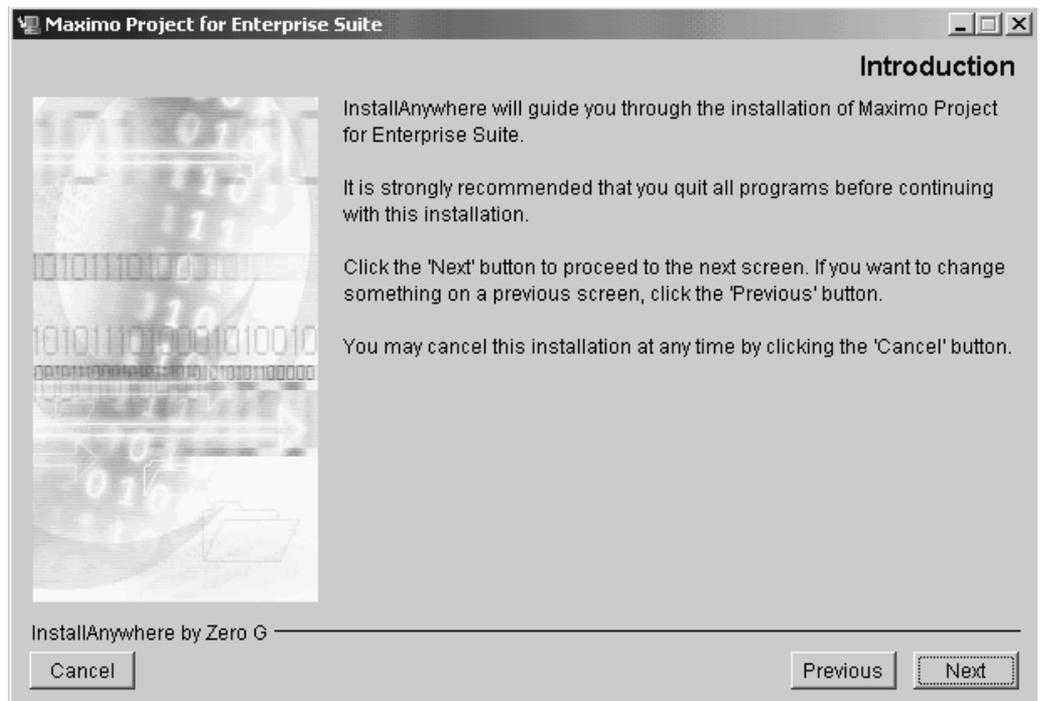
- 4 In the opening panel, select the language you wish to install from the drop-down menu. Click **OK**.



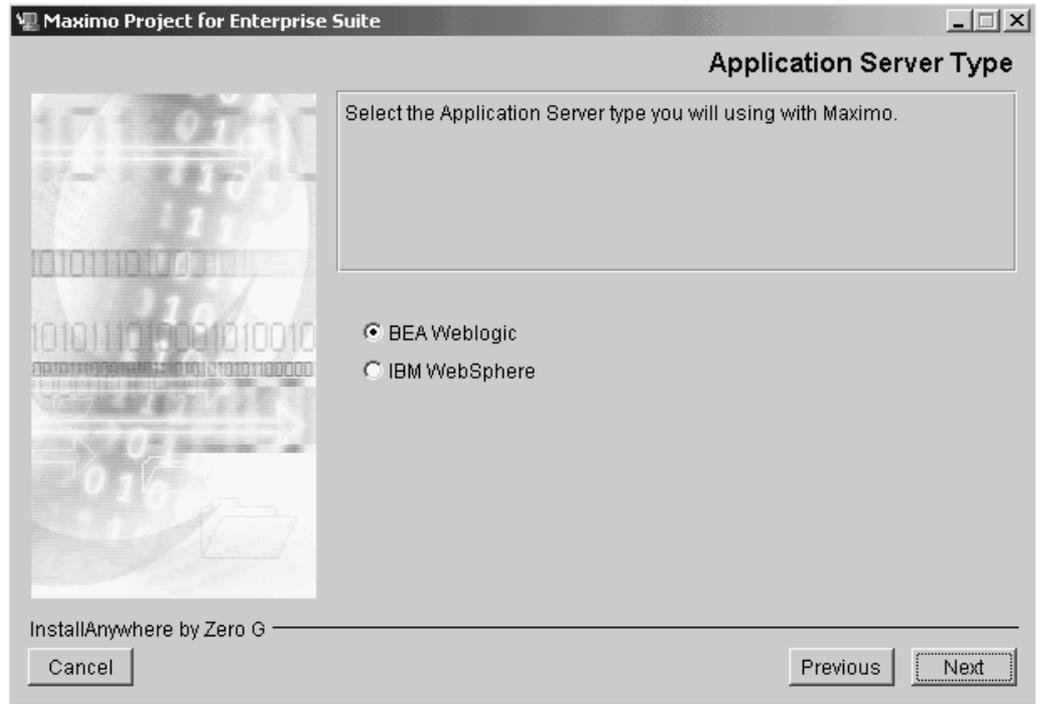
- 5 Select the **Maximo Server** radio button and click **Install**.



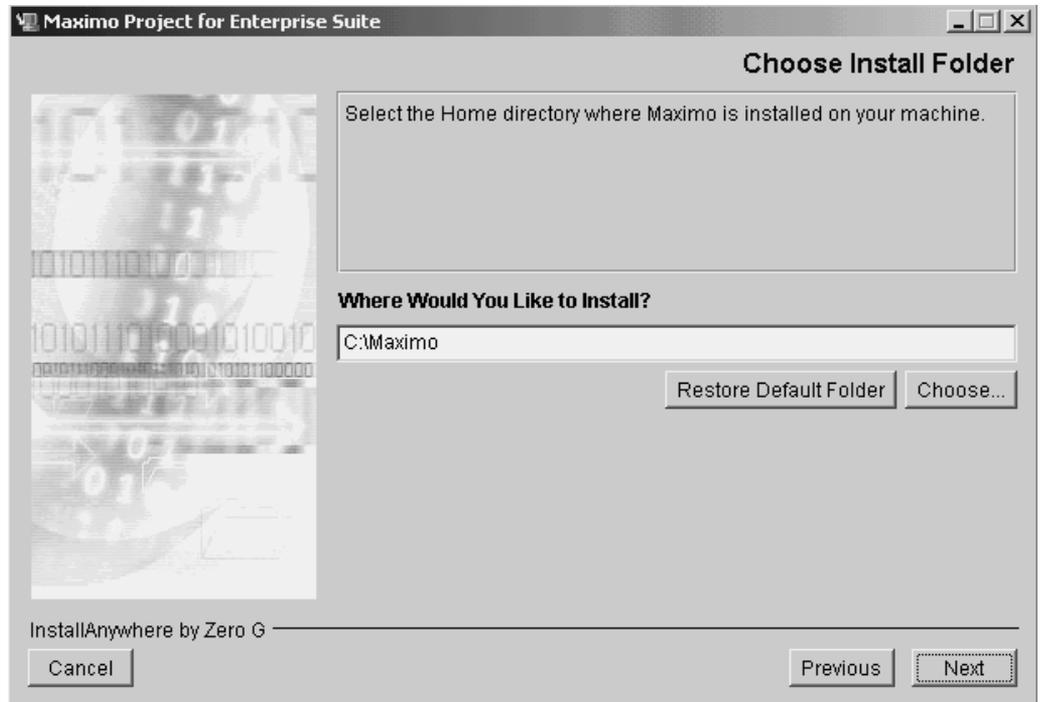
- 6 The Introduction screen displays. Click **Next**.



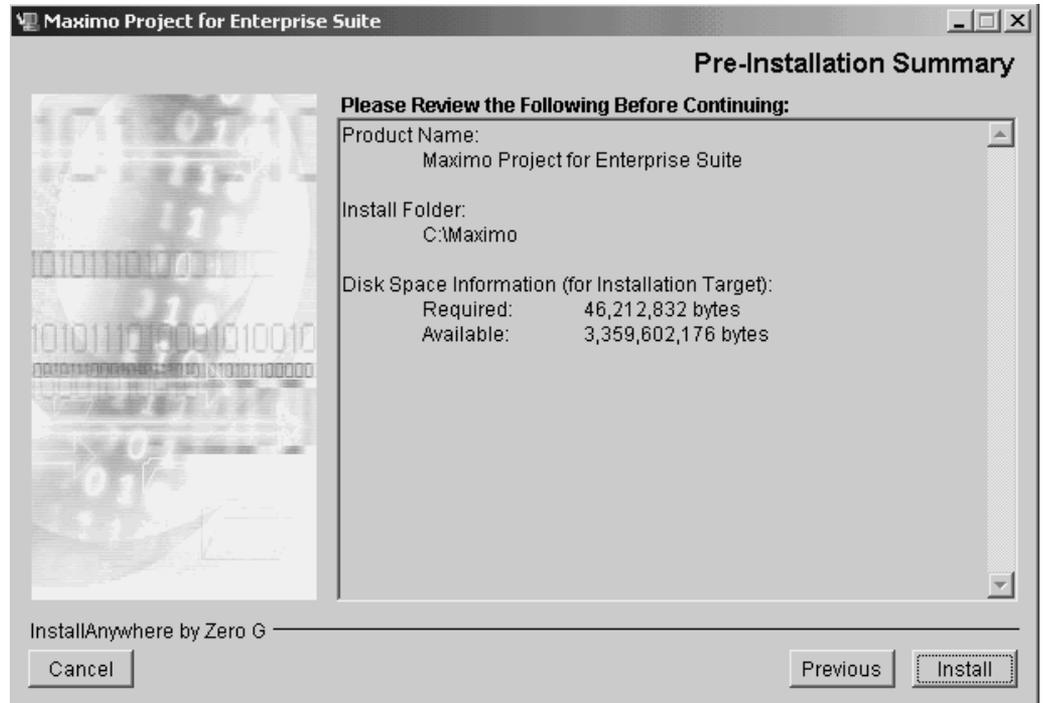
- 7 In the Application Server Type dialog box, select the radio button for the application server type you are using. Click **Next**.



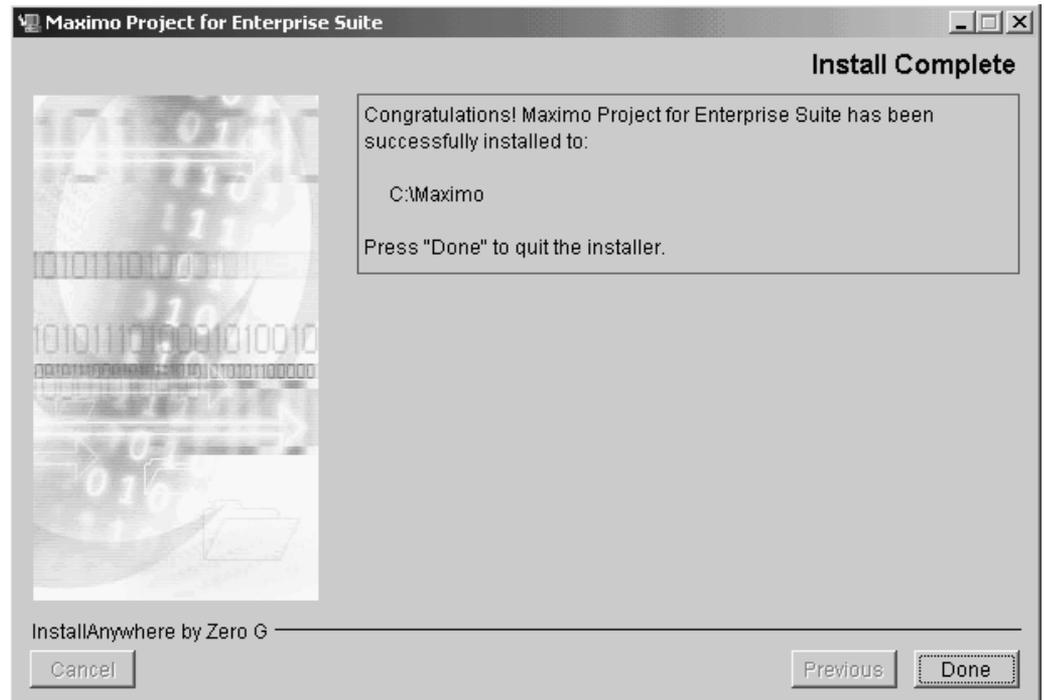
- 8 In the Choose Install Folder dialog box, specify the location where the Maximo Project Manager server files will be installed. Click **Next**.



- 9 In the Pre-Installation Summary dialog box, click **Install**.



- 10 Once the install is complete, click **Done**.



11 Update your database by running **updatedb.bat** from the <maximo>\tools\maximo directory.

NOTE If your base language is not English, use the **-n** option when you run updatedb.bat. For example, if your base language is Italian, use **updatedb -nit**.

12 **If English is your base language, skip this step and proceed to step 13.

Otherwise, run the importlang.bat file for your base language. For information on running importlang.bat, see “Running the importlang.bat Utility” in Appendix A.

13 **Linux users only: If you are not running Maximo on Linux, skip this step and proceed to step 14.

To run Maximo Project Manager while connecting to a Maximo instance installed on Linux, modify the hosts file on your Linux server.

To modify the hosts file:

- a** Open the hosts file from the following directory: */etc/hosts*
- b** Modify the hosts file so that the hostname and the IP address are no longer on the same line.

Example:

Original host entry:

```
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1 LINSRV1 localhost.localdomain localhost
```

New host entry:

```
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1 localhost.localdomain localhost
172.22.12.54 LINSRV1 (IP and Name of the Linux server)
```

14 Rebuild and deploy the Maximo .EAR files. For more information, see the *Maximo Enterprise Suite Installation Guide, Release 6.0*.

15 Shutdown and restart your Maximo application server. You must restart your server for the changes to take effect.

Maximo Project Manager Client Installation

You will now install the client portion of Maximo Project Manager. Verify that Microsoft Project 2003 is installed on the client desktop.

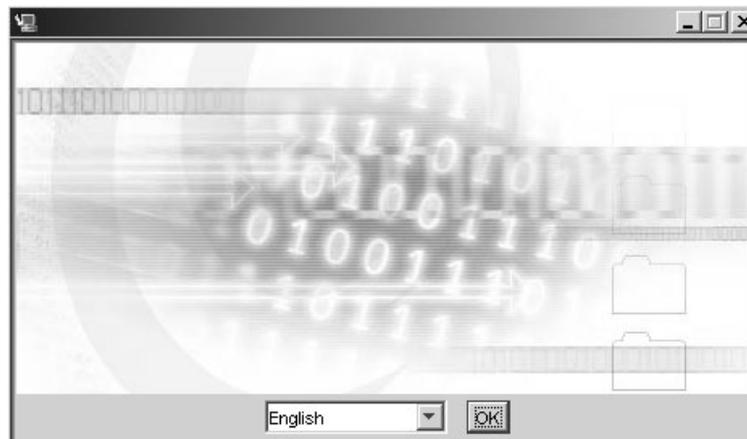
- 1 Start the Maximo server if it is not already running.
- 2 Insert the Maximo Project Manager CD into the CD-ROM drive.
- 3 Click **Start** and select **Run**.
- 4 Type: **d:\maxproject.exe** (where d is your CD-ROM drive) and select **OK** or press **Enter**.

or,

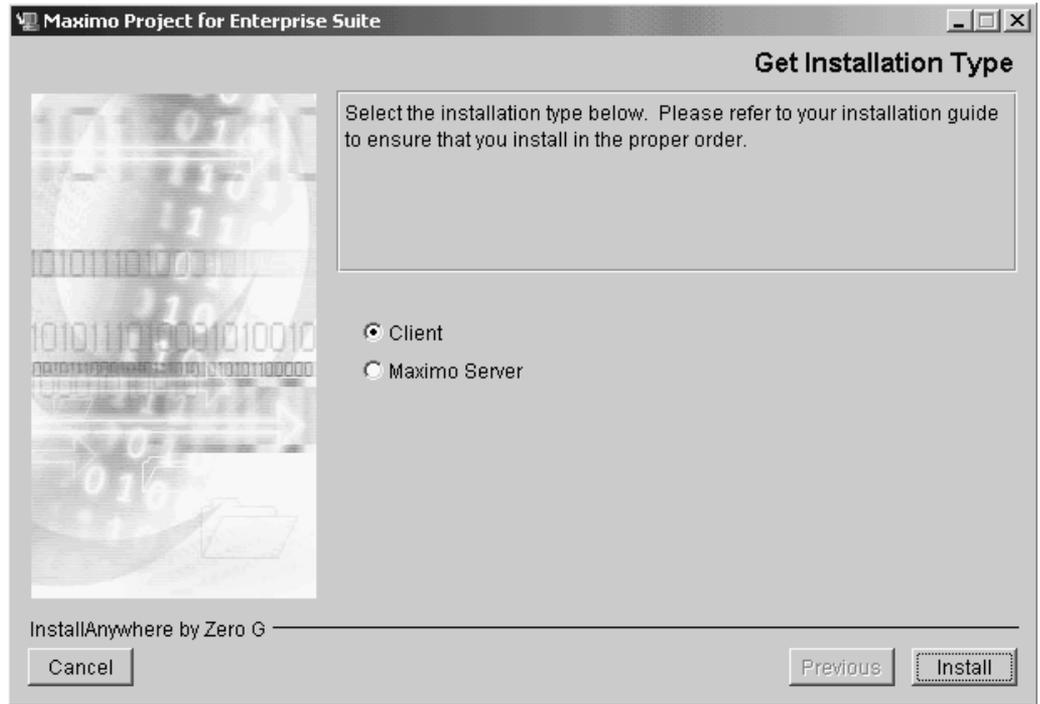
Using Windows Explorer, open your CD-ROM drive folder and double-click **maxproject.exe**.

The installation program displays a series of screens and dialog boxes. Follow the instructions on the screen.

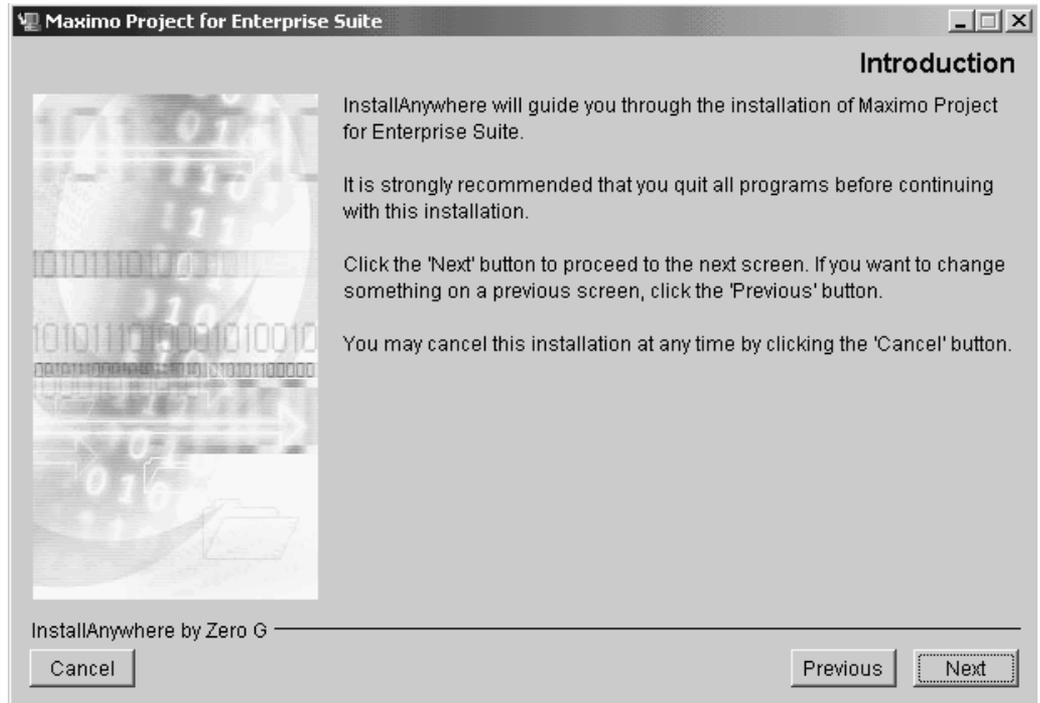
- 5 In the opening panel, select the language you wish to install from the drop-down menu. Click **OK**.



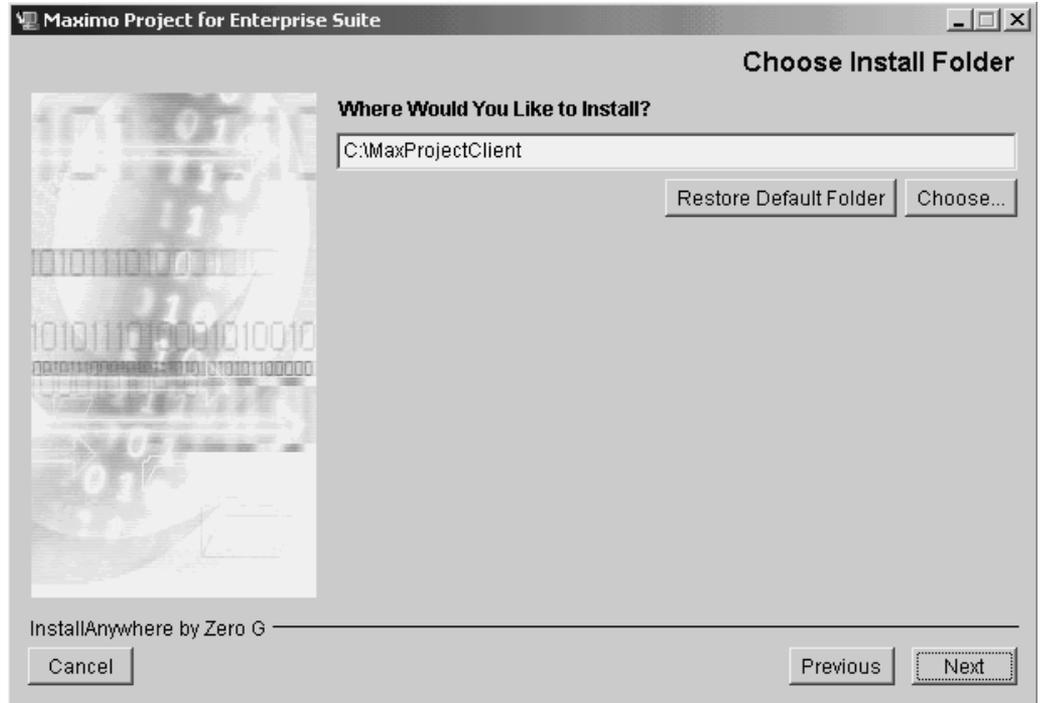
- In the Get Installation Type dialog box, select the **Client** radio button. Click **Install**.



- The Introduction screen displays. Click **Next**.



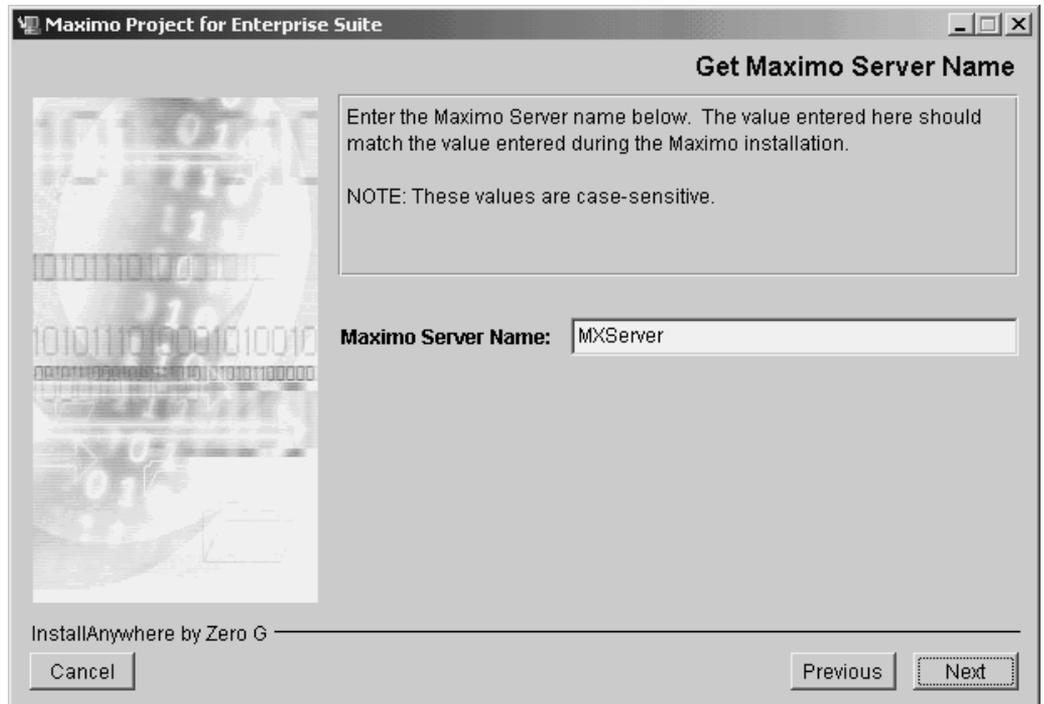
- 8 In the Choose Install Folder dialog box, specify a location and click **Next**.



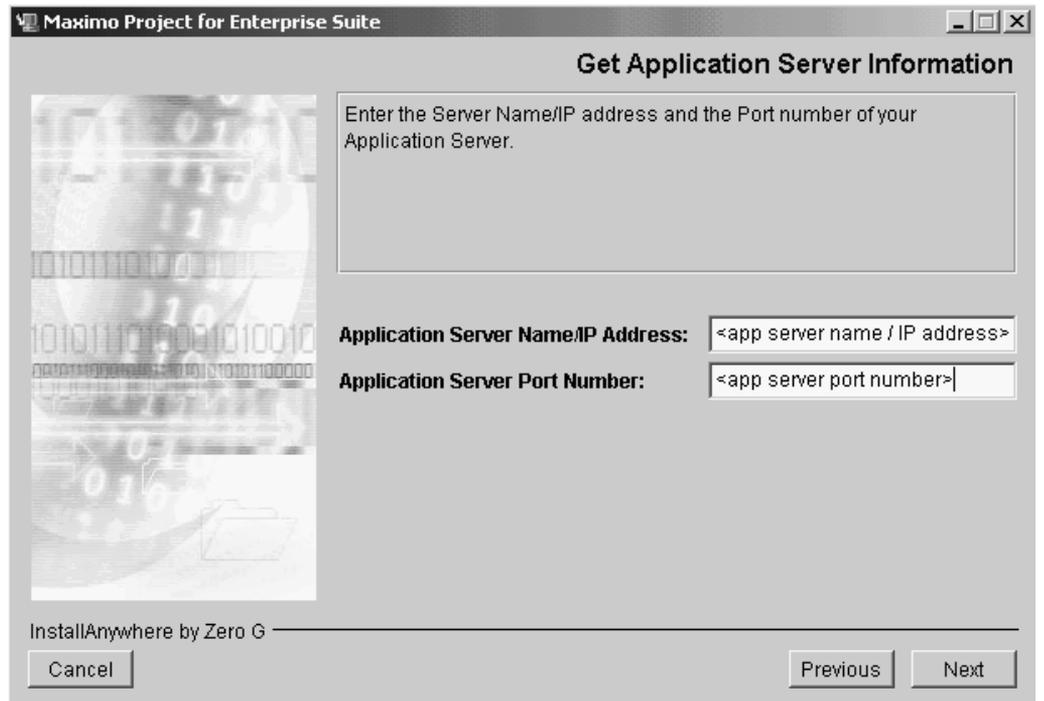
- 9 In the Get Maximo Project Information dialog box, enter the Maximo user name and password for the user who will be using Maximo Project Manager. Enter the **Server RMI Port Number** if your Maximo application server uses a non-standard mx.e.registry.port entry (not 1099) in the maximo.properties file. Click **Next**.



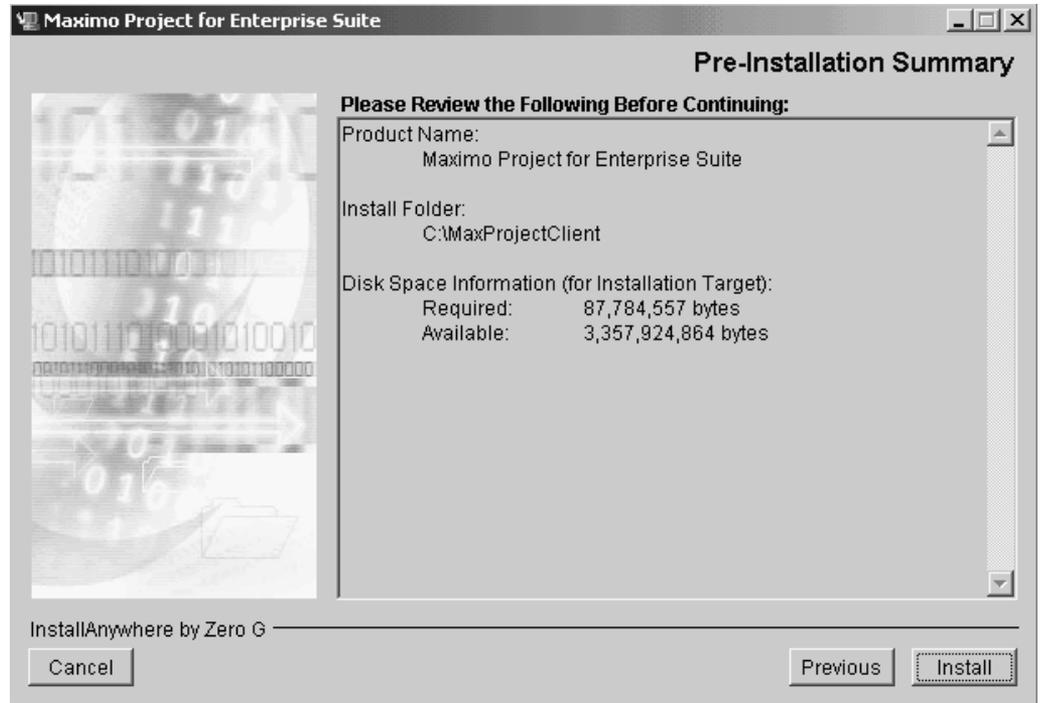
- 10 In the Get Maximo Server Name dialog box, enter your Maximo server name. Click **Next**.



- 11 In the Get Application Server Information dialog box, enter the Server Name/IP address and the port number of your application server. Click **Next**.

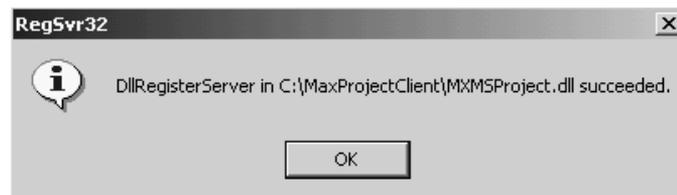


12 In the Pre-Installation Summary dialog box, click **Install**.



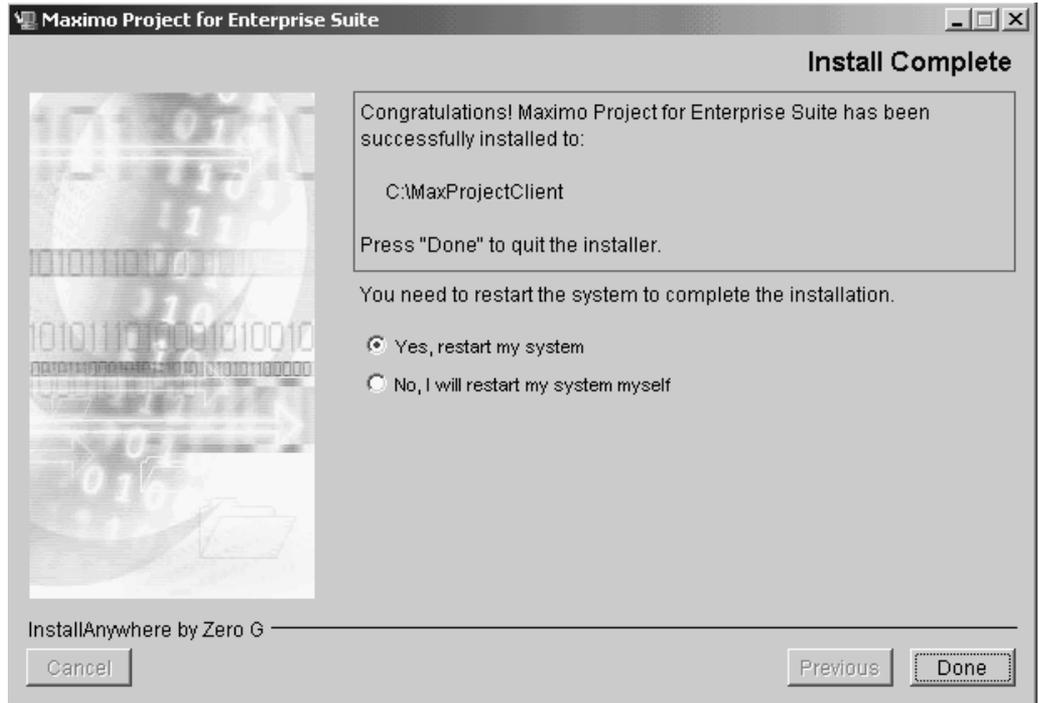
CAUTION If you get a message asking if you wish to overwrite an existing file with an older file, keep the newer file.

13 When you receive a message that indicates that the MXMSProject.dll has been successfully installed, click **OK**.



14 Once the install is complete, click **Done**.

Depending on your operating system, you may be prompted to restart.



15 Start the Maximo server if it is not already running.

16 In Maximo's Work Order application, create a query that will return a work order.

17 Open Microsoft Project.

The **Maximo Project** dialog box opens.

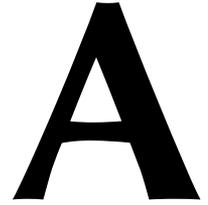
18 Click **Load Maximo Work Order**.

19 Enter the user name and password for your Maximo server.

20 Select the query you created in Maximo, then click **Launch**.

The work order is loaded into Microsoft Project.

Multi-Language Setup



If you are installing Maximo Project Manager in an environment where you have multiple languages enabled for Maximo, you will need to run the `importlang.bat` utility for Maximo Project Manager, the same way you did for Maximo. You will need to run the utility once for each additional language (besides your base language) that you have enabled.

About the `importlang.bat` Utility

`Importlang.bat` populates the corresponding multi language table of the MAXIMO database with data from the .XML file. The usage of the `importlang.bat` batch file is as follows:

```
-infile <path and filename of projectlang<langcode>.xml file>
-propfile <path to maximo.properties file>
-l <language code>
```

Example

The most common usage of the `importlang.bat` utility for Maximo Project Manager is as follows:

```
importlang.bat -infile
C:\maximo\tools\maximo\<langcode>\project\
projectlang<langcode>.xml -l FR
```

NOTE Your language code will differ, depending on what language you are importing. For example, FR means French.

Running the `importlang.bat` Utility

For each secondary language that you are enabling, you will need to do the following:

- 1 Install the Maximo Server portion of the installation program on your Maximo application server.
- 2 Run the `importlang.bat` file included in the installation program for that language.

Example

In your Maximo environment, you have English established as your base language, but also have users that access Maximo in French and Chinese.

You install Maximo Project Manager in English (both the server and client portions). You then insert the French Maximo Project Manager CD, install only the server portion, and run the importlang.bat file for French. Then, you insert the Chinese Maximo Project Manager Installation CD, install only the server portion, and run the importlang.bat file for Chinese.

CAUTION When you re-install the server portion of Maximo Project Manager, your projectlang<langcode>.xml file will be overwritten with the version on the CD. If you have made any customizations to the projectlang<langcode>.xml file that you do not want erased, select **No** when the installation program asks you if you want to overwrite the existing file.

