

Quick Install Guide (Single-Box): [Company] [ProductName] 5.1 for Windows 2000 Server

Using BEA WebLogic and Microsoft SQL Server

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Minimum Requirements

Before you begin using this guide, verify that your environment meets the minimum requirements for installing [ProductName] 5.1.

Portal Server Requirements

Note:

These requirements assume that you are using this guide to install [ProductName] on a single computer (excluding Search). For information about sizing your portal installation across multiple computers, refer to the [Company] [ProductName] 5.1 Deployment Guide. For instructions on installing the portal on multiple computers, refer to Appendix A of this guide.

- CPU: Single- or dual-processor, Intel Pentium III (or compatible) 700-900 MHz
- Memory: 1GB
- Available disk space: 4GB
- Network interfaces: 100 mbps/100 baseT

Search Server Requirements

- CPU: Dual-processor, Intel Pentium III (or compatible) 700-900 MHz
- Memory: 1GB (500MB per processor)
- Available disk space: 9-18GB depending on your search requirements
- Network interfaces: 100 mbps/100 baseT

Installation Worksheet: Windows 2000 Using MS-SQL

Before you begin the installation procedures in this guide, fill out as much information as you know about your environment in the following tables. As you follow the steps, use this worksheet to make note of values as you enter them, as many values are required for use in later steps.

The Instructions in this document assume that all services (except Search) will be installed on a single computer. For variations on the installation process that involve more computers, refer to "Appendix A: Installing the Portal on Multiple Computers."

Note: Default or recommended values are shown in brackets ([. . .]).

YOUR NAME	_____
YOUR ORGANIZATION	_____
Windows 2000 & Network Information	
1.1 Windows Administrator user account and password	
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2.2 SQL system administrator Login	
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4.3 SiteMinder Super User's Password	
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5.2 Server Identifier	
5.3 Server port number	
5.4 Suffix	
5.5 Configuration Directory Service Admin ID	
5.6 Configuration Directory Service Admin password	
5.7 Directory Manager distinguished name (DN) [cn=Directory Manager]	
5.8 Directory Manager DN password	
5.9 Administration port number	
5.10 Portal User Store Name [[Company]InteractionServer]	

Portal Configuration Service Information	
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6.2 Configuration Service password	
SiteMinder Web Agent Information	
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7.2 Default Cookie Domain	
7.3 IIS Proxy Username	
7.4 Proxy Password	
7.5 Policy Server Shared Secret	

PART 1: Windows 2000 Server Install & Configuration

Install Windows 2000 Server

Steps:

1. Refer to Windows 2000 Server installation documentation.

Install Windows 2000 Server Service Pack 2

Steps:

1. Refer to Windows 2000 Server installation documentation.

Windows 2000 Post-Install Configuration

Add a dedicated network login to the Administrators group on the [ProductName] computer:

Note:

This procedure will add a dedicated [ProductName] network login to the Administrators group and manage its privileges accordingly. The password for this login must not be blank.

1. On the desktop of the computer where you will install [ProductName], open **Start > Programs > Administrative Tools > Computer Management**.
2. In the left-hand pane, expand Local Users and Groups and click the Groups folder.
3. In the right-hand pane, right-click Administrators and click **Properties**.
4. In the Administrators Properties dialog box, click **Add**.
5. In the Look In list, click the network name containing your network login.
6. Scroll to and click your network login. Click **Add**.

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9. Click **OK** (twice).
10. Exit the Computer Management tool.

11. Log off Windows (**Start > Shut Down > Log off Administrator**) and log in again using the dedicated network login.

Verify your server has a fully qualified domain name:

1. On the desktop of the computer where you will install [ProductName], right-click **My Computer** and click **Properties**.
2. Click the **Network Identification** tab.

Your server name should appear in exactly the following format:

[server name].[domain name].[com | org | etc.]

For example, **niserver** is not a fully qualified domain name.
niserver.[Company].com is a fully qualified domain name.

3. Click **OK**.

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If your server does not have a fully qualified domain name, you must change it using these steps:

1. Right-click **My Computer** and select **Properties**.
2. Click the **Network Identification** tab.
3. Click **Properties**, then click **More**.
4. In the Primary DNS Suffix box, type the suffix for your domain (for example, **[Company].com**).

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5. Restart your computer and log on as an administrator of the local computer.

Create and share the content repository:

1. Create a folder named Pub containing a subfolder named Repository in the following location on your install server:

`c:\Pub\Repository`

Note:

You can use any mapped drive in place of `c:` as long as you point to the share correctly during [ProductName] setup (Part 5 of this document, step 13).

2. Right-click the `Pub` folder and select Sharing.
3. Click the **Share this folder** option.

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4. Click **OK**.

Test access to the shared content repository:

1. Go to **Start > Run** and enter the following path:

`\\[computer name]\Pub\Repository`

Verify that you are connected to and can view the Repository folder.

Install the IBM JVM:

1. Run the file **Install.exe**.
2. Follow the installer and click **OK** to accept the default options on every screen, except:
 - When typing the path to the destination folder, **DO NOT** include any spaces in the file path. Also, for best results, do not use any subfolder longer than eight characters. For example, `c:\Program Files\java13` is not a valid path to the install folder. `c:\java13` is a valid path to the install folder.

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- On the **Select Components** screen, verify that the first two components are selected. If you plan to use the WebLogic SDK, select all components on this screen.

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- At the Install This Runtime Environment as System JVM prompt, click **Yes**.

3. When prompted, click **Finish** to complete the installation.

Verify access to a directory service for use with the portal:

The instructions in this document require that you already have an Lightweight Directory Access Protocol (LDAP) directory service installed on your network. You must verify the network location of the directory service and record information about it in the Installation Worksheet for use in later sections. If there is no directory service on your network, you must install one now.

Back-up IIS 5.0:

1. Log in to Windows as an administrator of your local computer.
2. Go to **Start > Programs > Administrative Tools > Internet Services Manager**.
3. In the left-hand tree view, right-click your computer name and click **Backup/Restore Configuration**.
4. In the Configuration Backup/Restore dialog box, click **Create backup**.
5. Name your backup **DEFAULT_IIS** . Click **OK**.

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6. In the Configuration Backup/Restore dialog box, click **Close**.
7. Close the Internet Information Services control panel.

Install Acrobat Reader (optional):

Note:

You must install Acrobat Reader 5 if you plan to view the SiteMinder documentation.

1. Refer to the installer and instructions available at <http://www.adobe.com>.

PART 2: SQL 2000 Install & Configuration

Install MS-SQL 2000

Caution:

If you use a file share to install SQL 2000, you must map a drive letter to the share on your computer, by right-clicking **My Computer** and selecting **Map Network Drive**. Simply connecting to the share to run the install files (for example, using **Start > Run**) will not successfully install SQL 2000.

Steps:

1. Run the installer program from your SQL 2000 compact disc or mapped network drive.
2. Follow the installer steps and click **OK** to accept the default options on every screen, with the following exception: On the Authentication Mode screen, click the **Mixed Mode (Windows Authentication and SQL Server Authentication)** option and enter the following information:
 - System Administrator account name = sa
 - System Administrator password = sa

SQL 2000 Post-Install Configuration

Verify that the SQL services are started:

1. Go to **Start > Programs > Administrative Tools > Services**.
2. Verify that the MSSQLSERVER and SQLSERVERAGENT services are started (**Started** is visible in the Status column), and that both services are set to start automatically upon restart (**Automatic** is visible in the Startup Type column).
3. Close the Services tool.

Create new database and user account:

1. Open **Start > Programs > Microsoft SQL Server > Enterprise Manager**.
2. In the left-hand pane, expand the tree.
3. Right-click the SQL Server instance name in the left-hand column, and click **Properties**.
4. Click the **Security** tab.
5. In the **Security** area, verify that the **SQL Server and Windows** option is selected, and click **OK**.

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6. Under the SQL Server instance name in the left-hand column, expand **Security**.
7. Under Security, right-click **Logins** and click **New Login**.
8. Enter a database user name for the new user (for example, **ni~~server~~**).
9. Click **SQL Server Authentication**.
10. In the Password text box, enter a password for accessing the new database and click **OK**.

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11. Confirm the password for the new login as you created it in step 10 and click **OK**.
12. In the left-hand pane, right-click the Databases folder under the SQL Server instance and click **New Database**.
13. In the Name box, type a name for the new database (for example, **ni~~server~~**). Click **OK**.

Note:

Your database name must not start with a numeric character.

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14. In the Tools menu, select **SQL Query Analyzer**.
15. In the drop-down list, select the database name you created in step 13 (for example, **NISServer**).
16. In the Query Analyzer command window, type the following command:

```
sp_changeDBowner 'usr'
```

where **usr** is the database user name you created in step 8 (for example, **niserver**).

Note:

Executing this command in Query Analyzer is NOT the same as changing the database owner within SQL Enterprise Manager. Additional properties to the new user role are applied.

Also, when executing this command, make sure to include single quotation marks (') around the database user name, as shown in the text above.

17. In the toolbar, click the Execute Query (green forward arrow) button.
18. Close the SQL Query Analyzer tool and return to Enterprise Manager. You do not need to save changes to the query.
19. Under the SQL Server instance in the Enterprise Manager left-hand tree, expand **Security**.
20. Under Security, click **Logins**.
21. In the right-hand pane, right-click the database user name you created in step 8 (for example, **niserver**) and click **Properties**.
22. In the Database list, change the default database to the database you created in step 13 (for example, **NISServer**). Click **OK**.

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23. Close the SQL Server Enterprise Manager tool.

PART 3: BEA WebLogic Install & Configuration

Install BEA WebLogic 6.1 SP2

Steps:

1. Run the file **Weblogic610sp2_win.exe**.
2. On the Welcome screen, click **Next**.

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3. Accept the BEA license agreement.
4. On the Choose Install Set screen, click the **Server Only** button and then click **Next**.

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5. On the Choose BEA Home Directory screen, select the **Create a New BEA Home** option. In the **Specify a New BEA Home** box, type the path to the folder you want to use as the BEA Home directory. Click **Next**.

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6. On the Choose Product Directory screen, type a location for the WebLogic product directory (for example, `C:\bea\wlserver`). Click **Next**.

Note:

This directory must be a subfolder of the BEA Home directory you set in step 6.

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7. On the Default Server Configuration screen, enter the following values:

- In the WebLogic Admin Domain Name box, type [Company].

Caution:

You must type this value exactly as shown, or installation will fail.

- In the Server Name box, type the name you want to use for your BEA Server.

Note:

This name must exactly match the BEA Server name you enter later in step 7 of "Install [ProductName]" in Part 5 of this document.

- In the Listen Port box, type 7001.
- In the Secure (SSL) Listen Port box, type 7002.

Note:

The WebLogic ports you configure (7001 and 7002) must not conflict with any other assigned ports on this computer.

Click **Next**.

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8. On the Install WebLogic Server Service, select the **No** option and click **Next**.

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9. In the **Password** text box on the Create System Password screen, type the password you want to use to access BEA WebLogic. This password must be at least eight characters. In the **Verify password** text box, re-type the password and then click **Install**.

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10. Momentarily, the Install Complete screen will appear. Click **Done**.

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Verify BEA WebLogic Installation

Steps:

1. Click the following:
Start > Programs > BEA Weblogic > Weblogic Server 6.1 > Start Default Server.
2. When prompted, enter the BEA password you created in step 9 of "Install BEA WebLogic 6.1 SP2".
3. Press ENTER and wait while BEA WebLogic initializes.

Once you see the following message, BEA is running:

```
< WeblogicServer><ListenThread listening on Port 7001>
```



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4. On any computer attached to your network, start a Web browser application.
5. Point your browser to the following URL:
`http://[hostname]:7001/index.html`
where [hostname] is the machine name of your server.
6. Verify that the following screen appears:



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7. Close the BEA initialization window.

PART 4: [Company] SiteMinder Install & Configuration

Install SiteMinder Policy Server 4.61 Gold

Steps:

1. Run the file `Policy-Server-4.61-NT.exe`.
2. Click **Next** (twice).
3. Click **Yes** to accept license, and then click **Next**.
4. Enter user information, and then click **Next**.
5. On the System Reboot Message screen, click the **Continue with Install** option, and then click **Next**.

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6. If you are asked for the location of the Java VM, click **Browse** and navigate to the parent folder of the `bin` folder of your Java VM installation (for example, `c:\java13`). Click **OK** and then click **Next**.

Note:

This path must exactly match the path you entered in step 2 of "Install the IBM JVM" during "Windows Post-Install configuration" in Part 1 of this document.

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Caution: The folder `bin` must not be included in the file path you indicate here. You must include only the path to the parent folder of `bin` or else installation will fail.

7. On the Configure Web Server screen, select the **Microsoft IIS** check box and click **Next**.

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8. Choose the folder where you want to install SiteMinder and then click **Next**.
9. In the Encryption Key text box, type a random, case-sensitive string between 6 and 24 characters. In the next text box, confirm the encryption key you entered and click **Next**.

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10. Enter the SiteMinder superuser's password, which is case-sensitive and 6 to 24 characters in length. Then, confirm the password that you entered and click **Next**.

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11. When installation is complete, click **Finish**. Your computer will restart automatically.
12. After your computer restarts, log on to Windows using the dedicated login you created in Part 1 of this document.

Install SiteMinder Policy Server SP2

Steps:

1. Run the file `Policy-Server-4.61-SP2-NT.exe`.
2. On the first screen of the installer, click **Next**.
3. Select the **Upgrade to 4.61 Service Pack 2** option, and then click **Next** (twice).
4. Click **Yes** to accept the license agreement, click **Next**, and then click **Finish**.
5. Read the readme file on your [ProductName] compact disc for any additional hot fixes.

Configure the Portal User Store

[ProductName] uses a Lightweight Directory Import File(LDIF) to register its user and group data in an Lightweight Directory Access Protocol (LDAP) directory server. A preconfigured file, `nissys.ldif`, is included on the [ProductName] installation media.

Note:

The procedures in this section require that you already have an LDAP directory service installed on your network. The following instructions describe how to configure [ProductName] to use a Netscape 4.1 LDAP directory for its user store. Instructions for other LDAP directory services might differ from those shown here, but can be configured in a similar way.

For instructions for configuring Microsoft Active Directory Service for use with the portal, see the file on your [ProductName] installation media.

Configure the [ProductName] User Store:

1. Open **Start > Programs > Netscape Server Products > Netscape Console 4.2**.
2. Log in to the Netscape Console using `cn=Directory Manager` and indicate the Admin URL containing the port number reserved for Netscape administration. Click **OK**.
3. On the console, expand the tree in the left-hand pane and double-click **Directory Server**.
4. Click the **Configuration** tab.
5. In the left-hand pane, click the **Database** icon.
6. In the right-hand pane, click the **Settings** tab.
7. Click **Add**.
8. In the empty text box, type `o=[Company]InteractionServer`.
9. Click **Save**.
10. Click the **Directory** tab.
11. Right-click the LDAP server name and click **New > Other**.
12. In the **Choose a new object** list, click **Organization** and then click **OK**.
13. In the **Organization Name** text box, type over the existing text (`new`) with the name `[Company]InteractionServer`. Click **OK**.
14. Right-click the LDAP directory server name and click **Refresh**.
15. Close the Netscape Console.

Import the Portal LDIF file to your directory service

1. At an MS-DOS command prompt, change to the directory **shared\bin** of the Netscape LDAP installation directory.
2. Import the LDIF file using the following command:

```
ldapmodify -h [host] -p [port] -D [binddn] -w [pw] -f [file] -a
```

where...

[host] is the hostname of LDAP server.

[port] is the general usage port of the LDAP server (for example, 389).

[binddn] is the distinguished login (for example, "cn=Directory Manager").

[pw] is the password for distinguished (binddn) login.

[file] is the path to the file **nissys.ldif** on the [ProductName] compact disc.

For example:

```
ldapmodify -h myserver -p 389 -D "cn=Directory Manager"  
-w password -f d:\nissys.ldif -a
```

3. Close the MS-DOS command prompt.

SiteMinder Policy Server Post-Install Configuration

Start SiteMinder Services:

1. Open **Start > Programs > SiteMinder > SiteMinder Policy Server Management Console**.
2. On the **Status** tab, click **Start** next to each of the following services: Authentication, Authorization, and Administration.
3. Click **OK**.

Configure SiteMinder for use with the portal:

1. Run the file **psconfig.exe** from the [ProductName] installation media or file share.
2. On the Install Folder screen, type the path to the folder where you installed SiteMinder Policy Server in step 8 of the earlier procedure, "Install SiteMinder Policy Server 4.61 Gold." Click **Next**.

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3. In the **Enter the password** text box on the Password Info screen, type the superuser password you created for SiteMinder in step 10 of the earlier procedure, "Install SiteMinder Policy Server 4.61 Gold."

In the **Re-enter the password** text box, re-type the same password, and then click **Next**.

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4. Next, in the **Enter the password** text box, type a shared secret to use with the portal. In the **Re-enter the password** text box, re-type the shared secret, and then click **Next**.

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5. On the Webserver hostname screen, enter the fully qualified DNS name of your computer (for example, RH_NIS.[Company].com). Click **Next**.

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6. On the LDAP Information screen, enter the following values:
 - In the **Host name** text box, type the fully qualified DNS name of the LDAP server..
 - In the **Port** text box, type general usage port number for your LDAP server (for example, **389**).
 - In the **Login** text box, type **cn=Directory Manager**.
 - In the **Root DN** text box, type **o=[Company]InteractionServer**.Click **Next**.

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7. On the Password Info screen, type the password you created for the Directory Manager account on the LDAP server. Click **Install**.

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8. In the LDAP Information 2 screen, edit the LDAP Start and End values as needed. (The default listings apply to Netscape iPlanet version 4.1.3.) Click **Next**.

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9. Momentarily, you will see the Installation Complete screen. Click **Done**.

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PART 5: [Company] [ProductName] Installation

Install [ProductName]

Steps:

1. Run the file **setup_nis.exe** from the [ProductName] installation media or file share.
2. On the Introduction screen, click **Next**.

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3. On the License Agreement screen, select the "I accept the terms of the license agreement" option and click **Next**.

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4. Momentarily, the Choose Product Features screen will appear in a separate installer window. Click **Full Install** and then click **Next**.

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5. On the [Company] [ProductName] 5.1 Installation Folder screen, type the path to the folder where you want to install the portal. Click **Next**.

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6. On the BEA Home Directory screen, type the path to the BEA Home Directory you set in step 5 of "Install BEA WebLogic 6.1 SP2" in Part 3 of this document. Click **Next**.

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7. On the WebLogic Information screen, enter the following values:
- In the **Product Directory** text box, type the name of the BEA Product Directory you set in step 6 of "Install BEA WebLogic 6.1 SP2" in Part 3 of this document.
- Note:**
You must type the folder name ONLY (not the path to the folder).
- In the **Server Name** text box, type the name of the BEA default server you configured in step 7 of "Install BEA WebLogic 6.1 SP2" in Part 3 of this document.
 - In the **DNS host name** text box, type the fully qualified domain name of the machine where you are installing [ProductName].
 - In the **Listen Port** text box, type 7001 .
 - In the **SSL Listen Port** text box, type 7002 .
- Click **Next**.

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8. On the Password Info screen, type the password you created for BEA WebLogic in step 9 of "Install BEA WebLogic 6.1 SP2" in Part 3 of this document. Click **Next**.

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9. On the DBMS Selection screen, select the **MS-SQL** option. Click **Next**.

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10. On the Microsoft SQL Server screen, type the **Server Name**, **Database Name**, and **User Name** that [ProductName] will use to access its data.

Note:

The database name and user name must match the database name and database user you created in "SQL 2000 Post-Install Configuration" in Part 2 of this document (for example, **NIserver** and **niserver**).

Click **Next**.

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11. In the **Enter the password** text box on the Password Info screen, type the password you created in step 10 of "SQL 2000 Post-Install Configuration" in Part 2 of this document.
In the **Re-enter the password** text box, re-type the same password, and then click **Next**.

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12. On the SiteID screen, type a unique Site ID (1 through 15) for this portal and click **Next**.

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13. On the [Company] [ProductName] 5.1 Configuration screen, enter the following values:
 - In the **Repository path** text box, type the UNC location for the content repository you created and shared in Part 1 (for example, `\\portal\pub\repository`).
 - In the **Server Name** text box, type the fully-qualified domain name of the JMS server.
 - In the **Port number** text box, type the BEA Listen Port value you entered in step 7.Click **Next**.

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14. On the E-mail Configuration screen, enter the **SMTP Host** and **SMTP Port** information for the mail server running on your network. In the **Portal From Name** box, type the name you want to appear in the "From" line of e-mails sent by the portal, and in the **Portal E-mail Address** box, type the address of the e-mail account you want to use for this purpose. Click **Next**.

Note:

This step is optional. You can configure e-mail later using an Administrative Portlet.

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15. On the Java Virtual Machine screen, select the JVM you installed in Part 1 of this document. Click **Next**.

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16. On the Policy Server Host screen, type the name of the computer running SiteMinder Policy Server and click **Next**.

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17. On the Password Info screen, enter and confirm the Policy Server superuser password.

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18. On the next screen, type the shared secret of the SiteMinder web agent and click **Next**.

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19. On the [Company] [ProductName] 5.1 Registry screen, type the port number you want to use for the Portal Configuration Service (for example, 1095). Click **Next**.

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20. On the next screen, type the password you want to use for the Portal Configuration Service. This password will protect the secure information that is encrypted in the [ProductName] configuration service. In the next box, re-type the password, and then click **Next**.

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21. Review the information on the Installation Summary screen. If needed, click **Previous** to go back and change any information. When you are ready to proceed, click **Install**.

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22. Momentarily, the Create Database screen will appear. Select **Yes** and then click **Next**.

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23. On the Microsoft SQL Server DB Scripts screen, make note of the data and click **Next**.

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24. Momentarily, you will see the Installation Complete screen. You have now installed [ProductName] and will automatically enter Policy Server configuration. Click **Done**.

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PART 6: [Company] SiteMinder Web Agent Installation

Install the SiteMinder Web Agent

Steps:

1. Run the file **Web-Agent-4QMR3-NT.exe**.
2. On the first screen of the installer, click **Next**.
3. Click **Yes** to accept license, and then click **Next** (twice).
4. Choose install directory and click **Next**.
5. Click **Next** to begin install.
6. When you are prompted, click the **Launch the Web Agent Configuration Wizard now** option, and then click **Finish**.
7. Select the **Microsoft IIS** check box, and then click **Next**.

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8. Click **Configure**.

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9. Verify the IP address of the Policy Server and then click **Next**.

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10. For the Default Agent Name, enter `nis_agent` and then click **Next**.

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Caution:

You must enter this agent name exactly as shown, or installation will fail.

11. In the Default Cookie Domain field, type or confirm the domain name containing the computer where you are installing the Web Agent (for example, `.[Company].com`).

Note:

The domain name notation in this text box must begin with a dot (.).

Click **Next**.

ART

(screen shot removed)

12. Set the IIS Proxy Username to the login [ProductName] will use for administrative access to this computer (for example, **NIS**). Set the Proxy Password to the password of the local Administrator account, and then click **Next**.

Note:

This login must be the dedicated login you configured in Part 1 of this document. A blank password will not be accepted.

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13. Enter the Shared Secret for the Policy Server, and then click **Next**.

ART

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14. Click the "This Web Agent will not be providing registration" option, and then click **Next**.

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15. View the new settings and then click **Next**.

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16. Click **Next** again and then click **Finish**.

ART

(screen shot removed)

SiteMinder Web Agent Post-Install Configuration

Configure the IIS Web Agent Management Console:

1. Open **Start > Programs > SiteMinder > IIS Web Agent Management Console**.
2. On the **Settings** tab, select the Enable Web Agent check box.
3. On the **Advanced** tab, type `/server/nis/?method=logout` in the **Log off URI** text box.
4. Click **Apply** and then click **OK**.
5. Open **Start > Programs > Administrative Tools > Services** and restart the IIS Admin service.

PART 7: Starting [ProductName]

Install the XML Parser (optional)

Note:

The XML parser is required software for any client computer where you want to operate advanced features of Integration Server, such as the Workspace Publisher.

Steps:

1. Run the file **MSXML3.exe**.
2. Follow the installer steps and click **OK** to accept the default options on every screen.
3. At the end of the installer, click **Install**. When installation is complete, click **Finish**.

Start BEA WebLogic

1. Go to **Start > Programs > [Company] [ProductName] > Start WebLogic**
2. Wait while BEA WebLogic initializes.

Once you see the following message, BEA is running:

```
< WeblogicServer><ListenThread listening on Port 7001>
```

A large, light gray watermark consisting of the letters 'ART' in a bold, sans-serif font is centered on the page.

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Start [ProductName]

Steps:

1. Point any network-connected Web browser to the following URL:
`http://[fully-qualified DNS name]/server/nis`
where [fully-qualified DNS name] is the DNS name of the portal server.
2. Login to the portal as Administrator.

PART 8: Search Installation (Optional)

If you plan to use Search with your portal, you must follow the instructions in this section. You can install Search at any time after installing the DataChannel Server Configuration Server.

Install Search

Important: Before you begin the installation, make sure that IIS 5.0 is enabled.

1. If you previously started WebLogic Server on any server in the deployment, make sure it is stopped.
2. Open **Start > Programs > Administrative Tools > Services**.
3. Double-click **Netscape [ProductName] Registry**.
4. Click **Start**.
5. On the server where you want to install Search, log in as the Installation User.
6. Close all running applications, and then insert the [ProductName] compact disc into the CD-ROM drive.
7. Double-click **setup_search.exe** on the installation CD.
8. Momentarily, the Installation Folder screen will appear. Type the path of the search installation folder from the Installation Worksheet, and then click **Next**.

Important: Do not install Search to the shared deployment folder.

9. On the Web Server Document Root Directory screen, type the path of the Web server document root directory recorded in the "Installation Worksheet," and then click **Next**.

Note:

On IIS 5.0, this path is **c:\Inetpub\wwwroot** by default.

10. On the Web Server CGI Directory screen, type the path of the Web server CGI or scripts directory recorded in the "Installation Worksheet," and then click **Next**.

Note:

On IIS 5.0, this path is **c:\Inetpub\scripts** by default.

11. On the Search Configuration Screen, type the information recorded in the "Installation Worksheet," and then click **Next**.
12. On the [Company] [ProductName] 5.1 Registry screen, type the server name of the server running the Portal Configuration Service and the port number you want to use for the Portal Configuration Service (for example, 1095). Click **Next**.
13. On the next screen, type the password you want to use for the Portal Configuration Service. This password will protect the secure information that is encrypted in the [ProductName] configuration service. In the next box, re-type the password, and then click **Next**.
14. Review the information on the Installation Summary screen. If needed, click **Previous** to go back and change any information. When you are ready to proceed, click **Install**.
15. After several minutes you will see the Installation Complete Screen along with a pop-up reminding you to reboot the server after completing the installation process. Click **OK** on the pop-up, and then click **Done** on the install screen.

Note:

Immediately after installing Search, you must configure it using the steps in the next section.

Search Post-Install Configuration

After installing Search, you must restart the server and then take additional steps to configure it.

Start the Search Service:

1. Open **Start > Programs > [Company] [ProductName] > Search > Search Agent**.
2. Open **Start > Programs > [Company] [ProductName] > Search > Search Manager**.
3. Choose **6** ("Indexing and index utilities").
4. Choose **10** ("Delete and create empty indexes for a library").
5. Enter the library name (for example, **NIS_lib**).
6. Choose **1** ("Are you sure? (1 = YES, 2 = NO)") and then press any key to continue.
7. Repeat steps 5 and 6 to configure the spidering indexes. Use a unique library name (for example, **NIS_spider_lib**).
8. Choose **1** ("Return to previous menu").
9. Choose **4** ("Search and Indexing Servers - Start/Stop/Restart/Status").
10. Choose **2** ("Start servers in background"), then press any key to continue.
11. Choose **1** ("Return to previous menu").
12. Choose **14** ("Convera Internet Spider utilities").
13. Choose **2** ("Start O2 server") and then press any key to continue.
14. Choose **3** ("Start URL server") and then press any key to continue.
15. Choose **1** ("Return to previous menu").

*Start the Spidering Service:***Caution:**

You must not perform any other instructions in this appendix while the spidering services are starting. Depending on your configuration, this can require up to one hour or more. For this reason, you can optionally perform this procedure last, or you can wait for the default interval (usually overnight) for spidering services to start automatically.

1. In the Search Manager main menu, choose **14** ("Convera Internet Spider utilities").
2. Choose **4** ("Launch the Internet Spider support processes (tagent, tproc)").
3. Enter the spidering library name you created in step 11 of the previous procedure (for example, **NIS_spider_lib**) and then press any key to continue.
4. Choose **5** ("Launch the Internet Spider process").

Start [ProductName]:

- For instructions on starting the portal, see Part 7.

Resynchronize the search indexes for initial use:

1. Log into the portal as administrator.
2. In the left-hand pane, click the **Administration** topic.

3. In the right-hand pane, click the **Administration** folder.
4. Click **dc_portalsearchadmin_v1** (Portal Search Administration).
5. In the **Search** box, verify the Search server name you configured during Search installation.
6. In the **Port** box, verify the Search server port number you configured during Search installation.
7. In the **RMI Registry** box, verify the following:


```
rmi://[server_name]:[port#]
```

 where **[server_name]** is the hostname of your Search server and **[port#]** is the Search Agent port number.
8. On the Search Administration portlet main screen, click **Resync Search Indexes**. Momentarily, the resynchronization will be complete.

Add the spidering library:

Note:

Before performing the steps in this procedure, you must start the spidering services. If you did not start the spidering services in the previous procedure, you can skip this procedure for now.

1. Click **Add new library**.
2. In the Library Name box, type **NIS_spider_lib**.
3. In each of the three Library Information lists (**Update**, **ACL Check**, and **Exclusive**) click **False**.
4. In the **name** box in the Field Configuration area, type **title**.
5. Clear all values in the remaining boxes of the Field Configuration area.
6. Click **Update Library**.

Verify Search Installation:

Note:

Do not use this procedure until you have resynchronized the search indexes using the previous procedure.

1. Log into the portal as either a user or administrator.

Note:

For instructions on starting the portal, see Part 7.

2. Click **Publish**.
3. In the Type box, select **File** and click **Next**.
4. In the left-hand pane, click **My Folders** and drag it to the Folder box.
5. Choose a topic in which you want your test published file to appear, and click **Next**.
6. In the Name box, type a name for the test file you want to publish.
7. Next to the File box, click **Browse**.
8. Select a file to publish, and then click **Open**.
9. Click **Finish**.

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10. In the Search list box in the upper right of the portal, verify that **Content** is selected.
11. In the Search text box in the upper right of the portal, type the name of the file you published, and then click **Search**.

Note:

The default interval for indexing is fifteen minutes.

Appendix A: Installing the Portal on Multiple Computers

The steps in Parts 1 through 8 of this document describe the simplest kind of [ProductName] installation, where all portal components and portal-dependent applications (except for the directory service and Search) are collocated on a single computer.

This appendix describes how to install the portal on multiple computers in two scenarios:

- **Separate Database Installation**
This scenario is identical to the single-box scenario described in Parts 1 through 8, but allows for the portal database to be installed on a separate computer from the other components and applications.
- **4-box BEA Cluster Installation**
An extension of the "separate database" configuration, this scenario installs the portal across four computers that are then joined into a cluster using BEA WebLogic.

The instructions provided in this appendix make reference to procedures in Parts 1 through 8. The main differences include the number of machines to which you apply the procedures, and the order in which you apply them. In addition, new instructions must be followed to build and configure the BEA cluster.

Use the Installation Worksheet for tracking required information about each portal component and portal-dependent application the same way you would use it for a single-box installation.

Separate Database Installation

You can install [ProductName] on two computers instead of one to isolate the database. To accomplish this, follow all instructions in Parts 1 through 8 making the following exceptions:

- When using the instructions in Part 2, install the database to a separate computer.
- In steps 10 and 11 of "Install [ProductName]" in Part 5, refer to the separate database server you configured in Part 2.

4-box BEA Cluster Installation

This section describes how to install [ProductName] on the following four computer:

- **Box 1: Database Server**
This computer contains the portal database and content repository.
- **Box 2: Master Server**
This computer contains the Master, Notification, Agent Router, Front-End and Second-Pass services. It also contains the SiteMinder Policy Server installation required for the portal.
- **Box 3: Secondary Front-End Server**
This computer also runs the Front-End and Second-Pass services.
- **Box 4: Search Server**
This computer contains Search.

These four computers, plus a remote directory service, make up a sample portal cluster, recommended by [Company], that is commonly used and easy to install.

Note:

You can achieve multiple variations on this cluster, including a different collocation of components and scaling the cluster across more than four computers. For information on these variations, refer to the [Company] [ProductName] 5.1 *Deployment Guide*.

Steps:

1. Install the Master Server with a separate database, and start [ProductName].
 - Using the instructions in Parts 1 through 8 of this document, fully install the portal onto the computer you want to use as the Master Server.
 - During Parts 2 and 5, install and configure the portal database on a separate computer ("Database Server") using the instructions in "Separate Database Installation" earlier in this appendix.
 - At the conclusion of Part 1 through 8, share the [Company] folder on the Master Server so that it can be accessed by the other servers in the cluster.
2. Configure the load balancer (optional).
 - If you are using a load balancer with the portal cluster, you must configure it now. Make sure to set "sticky load balancing" (cookie-based) to your IIS web servers. Specific instructions depend on the model and configuration of the load balancer.
3. Configure the portal zones.
 - After logging in to the portal as Administrator, click the **Administration** topic.
 - In the right-hand pane, click the **Administration** folder.
 - Click the **dc_zoneadmin_v1** portlet (Zone Administration).
 - Click on the Primary zone of the Zone Administration Portlet.
 - If you are using a load balancer with the portal cluster, update the Full URL and Second Pass URL to reference the web address of the load balancer. For example:
`http://corp_test_cluster.[Company].com:80/server/nis/`
 - If you are not using a load balancer with the portal cluster, do the following:
 - Update the Full URL to reference the web address of the computer you will use as the Secondary Front-End Server. For example:
`http://nis3.[Company].com:80/server/nis/`
 - Update the Second Pass URL to reference the web address of the computer you will use as the Master Server. For example:
`http://nis2.[Company].com:80/server/nis/`
 - Click **Update**.
 - Logout of the portal.
4. Install and configure BEA WebLogic on the Secondary Front-End Server.
 - Use the instructions in Part 3 to install and configure BEA WebLogic 6.1 SP1.
5. Configure IIS on the Secondary Front-End Server.
 - Verify that IIS is installed and backed up. (For instructions, see "Windows Post-Install Configuration" in Part 1.)
 - On the Master Server, go to the folder `c:\winnt\system32\inet\inetsrv\` and copy the following files to the identical folder on the Secondary Front-End Server.
 - `iisforward.dll`
 - `iisproxy.dll`
 - `iisproxy.ini`

- Edit the file `WINNT\system32\inet\iisproxy.ini` on the Secondary Front-End Server to add the following line, which must include the correct server names and port numbers to be used by the Secondary Front-End Server:

```
WebLogicCluster=[box3_hostname]:[port#],[box4_hostname]:[port#]
```

where...

[box3_hostname] is the computer name of the Secondary Front-End Server.

[port#] is the port number used by the WebLogic web server.

For example:

```
WebLogicCluster=nis3.[Company].com:7001,nis4.[Company].com:7001
```

- In the same file, comment out the line beginning with `WebLogicHost=`.
- Configure the default web site:
 - Open **Start > Programs > Administrative Tools > Internet Services Manager**.
 - Go to Properties of Default Web Site and click the **ISAPI Filters** tab.
 - Click **Add**.
 - In the Filter Name box, type `WebLogic forward`.
 - Click **Browse** and find the location of the file `iisforward.dll`.
For example:


```
\\WINNT\System32\Inetsrv\iisforward.dll
```
 - Click **OK**.
 - Click the **Home Directory** tab.
 - Click **Configuration**.
 - Click **Add**.
 - In the Executable field, click **Browse** and find the location of the file `iisproxy.dll`. For example:


```
\\WINNT\System32\Inetsrv\iisproxy.dll
```
 - Click **OK**.
 - In the Extension box, type `wlforward`.
- Create the IIS Virtual Directory:
 - In the left-hand pane of the Internet Services Manager, right-click the default web site directory and click **New Virtual Directory**.
 - In the Alias box, type `server`. Click **Next**.
 - In the Directory box, type the UNC path to the share you established on the Master Server in step 1, and then click **Next**.
For example:


```
\\nis2\nis5.1\Applications\server
```
 - On the User Name and Password, enter a user name and password for an account with access to both the Master Service and Secondary Front-End Server. Click **Next**.
 - Validate the password and click **OK**.

- f. On the Privileges screen, click **Execute** and then click **Next**.
- g. Click **Finish**.
- Configure the IIS Virtual Directory:
 - a. In the left-hand pane of the Internet Services Manager, right-click the **server** virtual directory and then click **Properties**.
 - b. On the Virtual Directory tab, click **Remove**.
 - c. Click the **Directory Security** tab.
 - d. In the **Anonymous access and authentication control** area, click **Edit**.
 - e. Clear the **Integrated Windows authentication** option and click **OK**.
 - f. Click **Apply** and then click **OK** (twice).
 - g. Close the Internet Service Manager.
- 6. Install and configure the SiteMinder Web Agent on the Secondary Front-End Server.
 - Use the instructions in Part 6 to install and configure the SiteMinder Web Agent.
- 7. Configure SiteMinder Policy Server on the Master Server.

Note:

If you are not using a load balancer, you do not need to perform this step.

- Start SiteMinder Policy Server UI console. For example:


```
http://nis2/siteminder
```
- Login to the SiteMinder console.
- In the left-hand pane, click **Authentication Schemes**.
- In the right-hand pane, double-click **NISFormsBasedAuth**.
- In the Server Name field, replace the contents with the URI of the load balancer.
For example:


```
corp_test_cluster.[Company].com
```
- Click **OK**.
- Close the SiteMinder Policy Server UI console.
- Restart Policy Server. For instructions, see " SiteMinder Policy Server Post-Install Configuration " in Part 4.
- 8. On the Master Server, start BEA WebLogic.
 - Use the instructions in "Start BEA WebLogic" in Part 7.
- 9. On the Master Server, configure the BEA WebLogic console.
 - Start the BEA WebLogic console. For example:


```
http://localhost:7001/console).
```
 - Login to BEA WebLogic.
 - In the left-hand pane, click the **Servers** node under the [Company] domain.
 - Click **Configure a new server** and then add the BEA Server name of the Secondary Front-End Server. (You will need to perform this step twice.) Click **Create**.
 - In the left-hand pane, click the **Clusters** node under the [Company] domain.

- Click **Configure a new cluster**.
 - Type a name for the cluster (for example, `nis cluster`) and click **Create**.
 - Click the **Servers** tab.
 - Add the Master Server to the cluster by clicking it in the Available list and moving it to the Chosen list (right arrow button).
 - Repeat the previous step for Secondary Front-End Server.
 - Click **Apply**.
 - In the left-hand pane, expand the **Deployments** node under the [Company] domain, expand **Web Applications**, and then click **server**.
 - Click the **Targets** tab, and then click the **Clusters** sub-tab.
 - Set the cluster you created (for example `nis cluster`) as the target by clicking it in the Available list and moving it to the Chosen list (right arrow button).
 - Click **Apply**.
 - In the left-hand pane, expand the **Services** node under the [Company] domain, expand **JDBC**, expand **Connection Pools**, and then click **NIS**.
 - Click the **Targets** tab, and then click the **Clusters** sub-tab.
 - Set the cluster you created (for example `nis cluster`) as the target by clicking it in the Available list and moving it to the Chosen list (right arrow button).
 - Click **Apply**.
 - In the left-hand pane, expand the **Services** node under the [Company] domain, expand **JDBC**, expand **Data Sources**, and then click **NISDataSource**.
 - Click the **Targets** tab, and then click the **Clusters** sub-tab.
 - Set the cluster you created (for example `nis cluster`) as the target by clicking it in the Available list and moving it to the Chosen list (right arrow button).
 - Click **Apply**.
 - Under the **Deployments** node in the left-hand pane, expand **Startup & Shutdown** and then click **[Company] Portal Server Role**.
 - Remove the argument `engine`. For example, remove the following line:


```
arguments=engine
```
 - Click **Apply**.
 - Click the **Targets** tab, and then click the **Clusters** sub-tab.
 - Set the cluster you created (for example `nis cluster`) as the target by clicking it in the Available list and moving it to the Chosen list (right arrow button).
 - Click **Apply**.
 - Exit the BEA WebLogic console.
10. Configure the Master and Secondary Front-End Servers.
- Copy the folder `[install_directory]\NIS5.1\ibmvm` from the Master Server to the identical location on the Secondary Front-End Server.
 - Create a mapped drive to the [Company] folder you shared on the Master Server in step 1. Assign a drive letter to the new mapped drive (for example, `z`).

- In the `[bea_product_directory]\config\[Company]` folder on the Master Server, copy the file `startManagedWebLogic.cmd` to the identical folder on the Secondary Front-End Server and edit it to contain the BEA server name.

For example:

```
BEA_SERVER=nis3
```

- In the same file, edit the path to the IBM VM.

For example:

```
JAVA_HOME=c:[Company]\NIS5.1\ibmvm
```

- In the same file, edit the path to the portal home directory, using the mapped drive letter you created in the earlier step.

For example:

```
DATACHANNEL_HOME=z:\NIS5.1
```

11. Configure `startManagedWebLogic.cmd` to run as a Windows service.

- In the `\[Company]\NIS5.1` folder on the Secondary Front-End Server, create a new folder named `install_tmp`.
- In the `\[Company]\NIS5.1\install_tmp` folder on the Master Server, copy the file `nisservice.exe` to the folder on the Secondary Front-End Server that you created in the previous step.
- In the `[bea_product_directory]\config\[Company]` folder on the Master Server, copy the file `registerNISManagedService.cmd` to the identical folder on the Secondary Front-End Server and edit it to include the BEA server name.

For example:

```
BEA_SERVER=nis3
```

- In the same file, edit the path to the IBM VM.

For example:

```
JAVA_HOME=c:[Company]\NIS5.1\ibmvm
```

- In the same file, edit the path to the portal home directory, using the mapped drive letter you created in step 9.

For example:

```
DATACHANNEL_HOME=z:\NIS5.1
```

- At an MS-DOS prompt, change to the `[bea_product_directory]\config\[Company]` directory and run the file `registerNISManagedService.cmd`.

12. In the `[install_directory]\NIS5.1\config` folder on the Master Server, edit the file `role.properties`. Several parameters in this file are currently set the value `engine` and you must change the values to appear as follows:

```
master=[box2_BEA_servername]
frontEnd=[box2_BEA_servername],[box3_BEA_servername]
secondPass=[box2_BEA_servername],[box3_BEA_servername]
notification=[box2_BEA_servername]
eai=
agentRouting=[box2_BEA_servername]
```

where...

[box2_BEAServername] is the server name of the Master Server.

[box3_BEAServername] is the server name of the Secondary Front-End Server.

13. In the [install_directory]\NIS5.1\config folder on the Master Server, edit the file `appserverBEA.properties`. You must change all references in this file that point to the C:[Company] folder, and redirect them to the mapped drive letter you created in step 10. For example:

```
system.path.webroot=home:/.
system.path.logs=file:/Z:/NIS5.1/logs
system.path.classes=home:/WEB-INF/classes
system.path.tmpclasses=file:/Z:/NIS5.1/dc_tmp_classes
system.path.lib=home:/WEB-INF/lib
system.path.autodeploy=file:/Z:/NIS5.1/autodeploy
system.path.install=file:/Z:/NIS5.1/install
system.path.config=file:/Z:/NIS5.1/config
system.path.bin=file:/Z:/NIS5.1/native/lib
```

14. On the Master Server, stop the **WebLogic** service. For instructions, see " Start the Configuration Service" in Part 7.
15. On the Master Server, restart the Solaris service **NISRegistry**. For instructions, see " Start the Configuration Service" in Part 7.
16. On the Master Server, start the **WebLogic** service. For instructions, see " Start the Configuration Service" in Part 7.
17. After the service in step 16 has fully started, open an MS-DOS prompt and change to the following directory:

```
[bea_product_directory]\config\[Company] .
```

18. Run the command `startManagedWebLogic.cmd`.
19. Install Search on Box 4 in your cluster using the instructions in Part 8.