# Oracle WebLogic Server Post-Installation Steps

A Java 2 Platform, Enterprise Edition (J2EE) application server is prerequisite software for deploying SAS Web applications. If you specified Oracle WebLogic Server as your J2EE application server in your SAS installation plan, SAS Deployment Wizard requires that you have successfully installed WebLogic Server before installing SAS software. SAS Deployment Wizard prompts you for the location of your installed Java Development Kit (JDK) and the location of your WebLogic Server software before installing any SAS software.

You can opt to let SAS Deployment Wizard configure a WebLogic Server domain for you. As an alternative to permitting the automated configuration, SAS Deployment Wizard can provide custom instructions that you can follow to configure your own domain to use with SAS Web applications. If you choose automated configuration, you can also choose to have SAS Deployment Wizard deploy the generated SAS Web applications into that domain. Otherwise, SAS Deployment Wizard will provide instructions so that you can deploy them yourself.

On some platforms you must complete post-installation steps manually after you have installed WebLogic Server but before you configure a domain for SAS Web applications. If you choose automated configuration with SAS Deployment Wizard, any steps that you must complete before you start SAS Deployment Wizard are provided in the following sections. If you choose manual configuration, you must follow these same steps and any additional steps that are generated in the custom instructions file, Instructions.html. An example of an Instructions.html file that is generated with manual configuration is available in the WebLogic documents location.

**Note:** In some situations the configuration instructions from Oracle recommend modifying such files as commEnv.cmd (Windows) or commEnv.sh (UNIX) in the WebLogic Server installation. SAS Deployment Wizard generates a wrapper script for commEnv.sh and custom scripts to launch servers and tools. SAS Deployment Wizard never modifies your WebLogic Server installation. You can find a description of SAS customized scripts in the generated Instructions.html.

Source information for the post-installation steps is available at the Oracle WebLogic Server Supported Configurations Web page. SAS has provided additional information for WebLogic Server.

### **General Configuration Recommendations**

See the following URL for information about setting ulimit on all UNIX platforms:

http://support.sas.com/resources/thirdpartysupport/v92m3/appservers/preinstall.html

If you have a machine with multiple network connections, also see "Configuring JGroups on Multihomed Machines" at the following URL:

http://support.sas.com/resources/thirdpartysupport/v92m3/appservers/postinstall.html

#### WebLogic Server Patches

The patches that are required to run the SAS Web applications are identified on the Oracle WebLogic Server Support for SAS 9.2 Web page.

#### **Platform-Specific Configuration Recommendations**

#### AIX 5.3 and 6.1 (64-bit)

If you are installing WebLogic Server on an AIX 6.1 host, WebLogic Server 9.2 MP3 or higher is required. Review the patch information on the Oracle WebLogic Server Support for SAS 9.2 Web page.

#### Windows (32-bit and 64-bit)

No platform-specific post-installation steps are required.

#### HP-UX 11i v2 and v3 on Itanium

You must update the execution mode as described below.

1. If you have installed WebLogic 9.2 MP3, set the WL\_HOME variable to the directory in which you installed WebLogic Server and export WL\_HOME; for example:

```
export WL_HOME=<your_installation_directory>/weblogic92
cd $WL HOME/server/native/hpux11/IPF32/
```

2. Set these execution modes on the contents of the \$WL HOME/server/native directory:

```
chmod -R +x $WL HOME/server/native/hpux11/*
```

#### Linux

Red Hat Enterprise Linux 4 and 5 and SuSE Linux Enterprise Server 9 and 10 are supported. No platform-specific post-installation steps are required.

#### Solaris 10 (x86-64)

No platform-specific post-installation steps are required.

#### Solaris 9, 10 (64-bit SPARC)

No platform-specific post-installation steps are required.

# Notes Regarding the Generated Manual Configuration Instructions

## Configuring the Listen Address for Administration Server and Managed Servers

By default, when a new WebLogic Server is created, the Default Listen Address is set as an empty string. As a result, WebLogic Server listens on all host names that are associated with the hosting machine—namely, both the machine host name and localhost. With this configuration you might see warnings in the server log that are similar to this example:

```
<Nov 24, 2008 10:49:02 AM EST> <Warning> <Server> <BEA-002611> <Hostname "mymachine.mycompany.com", maps to multiple IP addresses: 192.168.1.39, 127.0.0.1>
```

If WebLogic Server is running on a *multihomed* machine (one with multiple network interfaces), you probably do not want it to listen on all available addresses.

When SAS Deployment Wizard configures a WebLogic Server domain for SAS Web applications, it always sets the Listen Address to the host name that is specified in the demonstration certificate. If you choose manual deployment, you can configure this address in config.xml before you start any servers, or you can configure this in the Administration Console after the Administration Server is started. If the Administration Server is running, you must restart it before your changes take effect.

To set the Listen Address before launching any servers, edit config.xml for your domain. For each server definition that is enclosed in <server></server> tags, add these tags:

```
<listen-address>MyHostName</listen-address>
```

MyHostName should match the host name that is in the demonstration certificate or your production certificate, if you have configured one. Here is where you can find your demonstration certificate in your WebLogic installation:

```
WebLogic Server 9.2: $WL_HOME/weblogic92/server/lib/DemoIdentity.jks
WebLogic Server 10.0: $WL_HOME/wlserver_10.0/server/lib/DemoIdentity.jks
WebLogic Server 10.3: $WL_HOME/wlserver_10.3/server/lib/DemoIdentity.jks
```

To read the certificate, use this command (all one line):

```
\label{lem:keytool} \begin{tabular}{ll} keytool -list -v -alias demoidentity -keystore $keystore\_location -storepass DemoIdentityKeyStorePassPhrase \end{tabular}
```

You can set the host name in the Administration Console from the Server **General Configuration** panel.

(In a future revisions, this information will be added to the generated instructions.)

#### Command Line for startNodeManager.sh

Instructions for starting the Node Manager on UNIX platforms do not mention any command-line options. By default, the startNodeManager.sh command starts the Node Manager on localhost and sets it to listen on port 5556. SAS Deployment Wizard provides prompts for the Node Manager address and listen port. Pass these values as command-line options to startNodeManager.sh.

For example, if the fully qualified domain name is mymachine.example.com and you want Node Manager to listen on port 5558, specify this command line:

startNodeManager.sh mymachine.example.com 5558

#### Location of Sample startNodeManager Start Script

In the Instructions.html file that SAS Deployment Wizard generates is the section, "Start Node Manager." It identifies the location of the Node Manager start script that is in the installed WebLogic Server image. However, if you plan to use customized scripts for starting the Administration Server and Managed Server that are provided in the sample domain, you should also use the customized version of the Node Manager start script that is in the bin directory for the sample domain. See these examples for UNIX deployment:

 ${\it SAS-config-dir/Levn/Web/SASDomain/bin/startNodeManager.sh}$ 

### **Recommended Reading**

These URLs are current as of March 2010.

Oracle Corporation, 2008: Download and Apply BEA Patches. Available at http://download.oracle.com/docs/cd/E13196\_01/platform/suppconfigs/configs/ibm\_aix/ibm\_aix53\_92. html#97345.

Oracle Corporation, 2008: Download and Install IBM SDK Java 5 with Service Refresh 6B + IZ08455. Available at

 $http://download.oracle.com/docs/cd/E13196\_01/platform/suppconfigs/configs/ibm\_aix/ibm\_aix53\_92. \\ html \#100117.$ 

Oracle Corporation, 2008: Downloading and Installing IBM SDK Java 5 with Service Refresh. Available at

http://download.oracle.com/docs/cd/E13196\_01/platform/suppconfigs/configs/ibm\_aix/ibm\_aix53\_92. html#98216.

Oracle Corporation, 2008: Downloading and Installing IBM SDK Java 6 with Service Release 2. Available at

http://download.oracle.com/docs/cd/E13196\_01/platform/suppconfigs/configs/ibm\_aix/ibm\_aix53\_10 3.html#100701.

Oracle Corporation, 2008: Oracle Weblogic Server Supported Configurations. Available at http://download.oracle.com/docs/cd/E13196\_01/platform/suppconfigs/config\_wls.html.