JD Edwards EnterpriseOne Tools

Server Manager Guide

9.2

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Server Manager Guide

9.2

Part Number: E61438-45

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Preface

Welcome to the JD Edwards EnterpriseOne documentation.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at *http:// www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc* .

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit *http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info* or visit *http://www.oracle.com/pls/topic/ lookup?ctx=acc&id=trs* if you are hearing impaired.

Related Information

For additional information about JD Edwards EnterpriseOne applications, features, content, and training, visit the JD Edwards EnterpriseOne pages on the JD Edwards Resource Library located at:

http://learnjde.com

Conventions

The following text conventions are used in this document:

Convention	Meaning
Bold	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
Italics	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`Monospace`	Monospace type indicates commands within a paragraph, URLs, code examples, text that appears on a screen, or text that you enter.
> Oracle by Example	Indicates a link to an Oracle by Example (OBE). OBEs provide hands-on, step- by-step instructions, including screen captures that guide you through a process using your own environment. Access to OBEs requires a valid Oracle account.

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1 Getting Started

Installing the Server Manager Management Console and Agent

The Server Manager Guide discusses the administration of Server Manager.

As of March 2016, the following chapters have been removed from this guide and added to the JD Edwards EnterpriseOne Installation and Upgrade Guides:

- Installing the Server Manager Console
- Running the Installation Wizard
- Installing the Server Manager Agent

There are twelve (12) install and upgrade guides for JD Edwards EnterpriseOne applications for various combinations of platform and database. For the chapters that describe the installation of the Server Manager Console and Server Manager Agent, the content is identical across all guides. Access the Installation or Upgrade guide for your particular platform and database to find the aforementioned chapters.

The installation and upgrade guides are located in the JD Edwards EnterpriseOne Installation and Upgrade Documentation Library at:

http://docs.oracle.com/cd/E61420_01/index.htm

Accessing the Certifications (Minimum Technical Requirements)

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne Certifications (MTRs). In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the following link for cross-reference material in the Program Documentation for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

Upgrading from 9.1 to 9.2 Server Manager Consoles can be done using the Server Manager Console Update (self-update) functionality for WAS and WLS based Server Manager Consoles. For an OC4J based Server Manager Console, please follow the documentation below.

http://www.oracle.com/corporate/contracts/index.html

You can locate the JD Edwards EnterpriseOne Tools Release 9.2 Certifications from My Oracle Support.

To access JD Edwards EnterpriseOne Tools Release 9.2 Certifications:

1. Navigate to My Oracle Support (*https://support.oracle.com*).
2. Click the Certifications tab.
3. Search for JD Edwards EnterpriseOne Server Manager 9.2.

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Configuring Server Manager Console to Work with Java 8 Update 201 (and later) (Release 9.2.3.4)

This section contains the following topics:

- *Configuring Server Manager Console Overview*
- *Secure JMX and Using SSL Settings for the Server Manager Console*
- *Additional JVM Arguments*
- *Steps with Examples*
- *JVM Arguments Configuration*
- *Server Manager Agent Configuration*
- *Java.security File*
- *startWeblogic.sh/cmd*

Configuring Server Manager Console Overview

Starting with Tools Release 9.2.3.4, you can make the following configuration changes if you are using Server Manager with Java 8 Update 201 and later (and equivalent Java 7 releases). Review the tasks in this section if you made the configuration changes described in the following My Oracle Support document:

E1: SVM: Console Not Communicating With Agent And/Or Runtime Metrics Not Displaying After AS400 / iSeries / IBM Java Update Disables 3DES_EDE_CBC Algorithm (Doc ID 2256869.1).

If you performed the configuration changes specified in the above support document, begin by reverting those modifications.

1. Stop the Server Manager Console and the Admin server in the domain on which the Server Manager Console is installed.
2. Stop the Server Manager Agents.
3. Stop the Managed Instance.
4. Undo the changes to the $jdk/jre/lib/security/java.security file or restore the file from a backup. This process of managing the $jdk/jre/lib/security/java.security file applies to the Java Installation used by the Server Manager Console, Server Manager Agents, and other Managed Instances on the respective machines.

Secure JMX and Using SSL Settings for the Server Manager Console

The subsequent sections are applicable if you have the following settings in the SCFMC/config/agent.properties and $SCHFA/config/agent.properties files.

```
management.server.usesecurejmx=true
```

```
management.server.usingssl=true|false
```

These settings are required only if Secure JMX is enabled. By default, the Secure JMX setting is enabled.

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Additional JVM Arguments

Additional JVM Arguments that are required to support Java 8 Update 201 and later (and equivalent Java 7 releases) are as follows (where this command is a single contiguous command line with no line breaks or carriage returns):

```
-Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=C:\certs\keystore.jks -
Djavax.net.ssl.keyStorePassword=<key_store_password> -Djavax.net.ssl.keyStoreType=JKS -
Djavax.net.ssl.keyPassword=<key_password> -Djavax.net.ssl.trustStore=C:\Java64\jdk1.8.0_201\jre\lib\security
\cacerts -Djavax.net.ssl.trustStorePassword=<trust_store_password>-Djavax.net.ssl.trustStoreType=JKS -
Dweblogic.http.headers.enableHSTS=true
```

In the argument, replace the values that look like `<password>` with the actual password.

The functions of the additional JVM Arguments are:

Additional JVM Argument	Value	Function
`-Djdk.tls.client.protocols`	`TLSv1.2`	This sets the TLS version for JMX Communication to 1.2.
	`TLSv1.3`	This sets the TLS version for JMX Communication to 1.3.
`-Djavax.net.ssl.keyStore`	`C:\certs\keystore.jks`	This is the location of the Identity store or Keystore file that contains the private key.
`-Djavax.net.ssl.keyStorePassword`	`<key_store_password>`	This is the passphrase for the Identity store or Keystore file.
`-Djavax.net.ssl.keyStoreType`	`JKS`	This is the format of the Identity store or Keystore file; formats include JKS, PKCS12, and PEM.
`-Djavax.net.ssl.keyPassword`	`<key_password>`	This is the passphrase for the private key stored in the Identity store or Keystore file.
`-Djavax.net.ssl.trustStore`	`C:\Java64\jdk1.8.0_201\jre\lib\security\cacerts`	This is the location of the Truststore of jre (Java Runtime Environment) that contains all the public keys. Typically, the Truststore is at located

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Additional JVM Argument	Value	Function
		at $jdk/jre/lib/security/cacerts.
`-Djavax.net.ssl.trustStorePassword`	`<trust_store_ password>`	This is the passphrase for the Truststore file.
`-Djavax.net.ssl.trustStoreType`	`JKS`	This is the format of the Truststore file; formats include JKS, PKCS12, and PEM.
`-Dweblogic.http.headers.enableHSTS`	`true`	This setting enables the WebLogic Server to send the HSTS header.

Note: Starting with Tools Release 9.2.5, TLSv1.3 support is available on WebLogic Server (WLS) if you are using Server Manager with Java 1.8 Update 261 and later. But, if you are using any Non-Oracle Java (i.e IBM, HP) in your setup for any web component, Enterprise Server or Server Manager Console or if you are using the Server Manager Console installed on WebSphere Server (WAS), you must continue to use the default version or use TLSv1.2. Also, starting with Tools Release 9.2.5, Java 1.7 is no longer supported with JDEdwards for any web and non-web components.

Note: If you plan to implement HTTP Strict Transport Security, refer to this Oracle document: *Command Reference for Oracle WebLogic Server 14c* in the section entitled: *HTTP Strict Transport Security*.

Additional JVM Arguments that are required to support Java 8 Update 201 and later and TLS 1.2 and later are as follows (where this command is a single contiguous command line with no line breaks or carriage returns:

```
<server Instance name>.javax.net.ssl.trustStoreType=JKS
 <server Instance name>.javax.net.ssl.keyStore=/u01/Middleware12214/oracacert/ keystore.jks
 <server Instance name>.jdk.tls.client.protocols=TLSv1.2
 <server Instance name>.javax.net.ssl.keyPassword=<key_password>
 <server Instance name>.javax.net.ssl.trustStore=/u01/jde_agent /SCFHA/jdk/jre/lib/security/cacerts
 <server Instance name>.javax.net.ssl.trustStorePassword=<trust_store_password>
 <server Instance name>.javax.net.ssl.keyStorePassword=<key_store_password>
 <server Instance name>.javax.net.ssl.keyStoreType=JKS
 <server Instance name>.javax.net.ssl.enableHSTS=true
```

In the argument, replace the values that look like <password> with the actual password and <server Instance name > with the BSSV or RTE instance name. These JVM Arguments update the agent.properties file of the embedded agent ($SCFHA/config/agent.properties) and these are required for Healthcheck to work.

The functions of the additional JVM Arguments are as explained in the table at the beginning of this section.

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Steps with Examples

1. **Create the Identity Store:** Create the Identity store (Keystore) that stores the private key. Typically, the Identity store is created on the Server Manager Console machine only.

   ```
   C:\Java64\jdk1.8.0_211\bin\keytool -genkey -alias <your_machine_name> -keyalg RSA -keypass
   <private_key_password> -storepass <identity_store_password> -keystore C:\certs\keystore.jks
   ```

2. **Export the Certificate:** Export the Certificate from the Keystore created in previous step. Typically, the Certificate is exported to the Server Manager Console machine only.

   ```
   C:\Java64\jdk1.8.0_211\bin\keytool -export -alias <your_machine_name> -storepass
   <identity_store_password> -file C:\certs\<your_machine_name>.cer -keystore C:\certs\keystore.jks
   ```

   The Certificate is stored in the file: `C:\certs\<your_machine_name>.cer`.

3. **Import the Certificate:** Import the Certificate from the Certificate file created in previous step. Typically, the Certificate is imported to Server Manager Console, Server Manager Agents, and on all machines that have Managed Instances. If you are using a custom Truststore, you will must import the Certificate into the custom Truststore. The command to import the Certificate to the Standard Truststore (cacerts file) is as follows:

   o **Windows Platform**

   ```
   C:\Java64\jdk1.8.0_211\bin\keytool -import -v -trustcacerts -alias <your_machine_name> -file C:
   \certs\<your_machine_name>.cer -keystore C:\Java64\jdk1.8.0_211\jre\lib\security\cacerts -keypass
   <private_key_password> -storepass <trust_store_password>Certificate was added to keystore [Storing
   C:\Java64\jdk1.8.0_211\jre\lib\security\cacerts]
   ```

   Run the following command to confirm that the import process was successful:

   ```
   C:\Java64\jdk1.8.0_211\bin\keytool -list -v -keystore C:\Java64\jdk1.8.0_211\jre\lib\security
   \cacerts -alias <your_machine_name> -storepass <trust_store_password>
   ```

   o **UNIX Platform**

   ```
   /u01/java8/bin/keytool -import -v -trustcacerts -alias <your_machine_name> -file /u01/
   certs/<your_machine_name>.cer -keystore /u01/java8/jre/lib/security/cacerts -keypass
   <private_key_password> -storepass <trust_store_password>Certificate was added to keystore
   [Storing /u01/java8/jre/lib/security/cacerts]
   ```

   Run the following command to confirm that the import process was successful:

   ```
   /u01/java8/bin/keytool -list -v -keystore /u01/java8/jre/lib/security/cacerts -alias
   <your_machine_name> -storepass <trust_store_password>
   ```

   o **AS/400 Platform**

   ```
   /QOpenSys/QIBM/ProdData/JavaVM/jdk80/32bit/bin/keytool -import -v -trustcacerts -alias
   <your_machine_name> -file /certs/<your_machine_name>.cer -keystore /QOpenSys/QIBM/ProdData/
   JavaVM/jdk80/32bit/jre/lib/security/cacerts -keypass <private_key_password> -storepass
   ```

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```
<trust_store_password>Certificate was added to keystore [Storing /QOpenSys/QIBM/ProdData/JavaVM/
jdk80/32bit/jre/lib/security/cacerts]
```

Run the following command to confirm that the import process was successful:

```
/QOpenSys/QIBM/ProdData/JavaVM/jdk80/32bit/bin/keytool -list -v -keystore /QOpenSys/QIBM/
ProdData/JavaVM/jdk80/32bit/jre/lib/security/cacerts -alias <your_machine_name> -storepass
<trust_store_password>
```

> **Note:** If there are multiple Certificates in the Certificate Chain of the Server Manager Console, all the Certificates in the Certificate Chain must be imported into the Truststore. Import of multiple files is commonly required for a CA Signed Certificate where a Root Certificate and an Intermediate Certificate exist in addition to the actual Certificate used by the Server Manager Console.

JVM Arguments Configuration

WebLogic and WebSphere Servers

The following screenshots show how the JVM Arguments are configured for the Server Manager Console on the WebLogic and WebSphere servers.

Server Manager Console on the WebLogic Server

Navigate to Home -> Summary of Servers -> <SM_J2EE_Server>, append the arguments as shown.

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Server Manager Console on the WebSphere Server

Navigate to Application servers -> <SM_J2EE_Server> -> Process definition - Java Virtual Machine, append the arguments as shown.
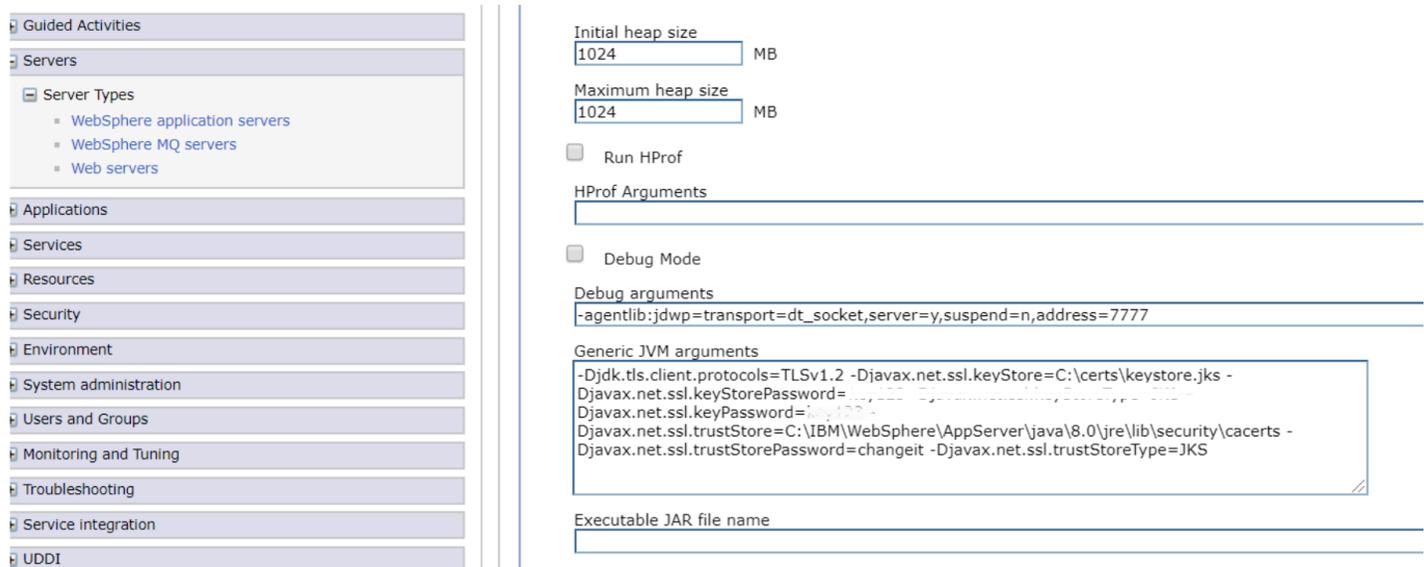
Setting the HttpOnly and Secure Attributes for the SMCONSOLE_SSID Cookie (Release 9.2.4.3)

After you update the Server Manager Console to 9.2.4.3, perform the steps in the following sections to set the **HttpOnly** and **secure** attributes for the **SMCONSOLE_SSID** cookie.

Server Manager Console on Weblogic Server

> **Note:** These steps are applicable only if you are using the Server Manager Console installed on WebLogic and is accessed over HTTPS or /SSL.

1. Stop the Server Manager Console.
2. Update the weblogic.xml file and uncomment the following lines:

   `<wls:cookie-secure>true</wls:cookie-secure><wls:cookie-http-only>true</wls:cookie-http-only>`
3. Start the Server Manager Console.

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4. After the Server Manager Console starts up, log in to the Server Manager Console over HTTPS or SSL to complete the configuration.

5. To confirm that the **HttpOnly** and **secure** attributes are set for the **SMCONSOLE_SSID** cookie, use the Browser Debugging tool and ensure that the attributes of this cookie are the same as the attributes shown in the following screenshot:

```
Set-Cookie: SMCONSOLE_SSID=NNuszq44C4_S9rZW1bJ0_qoymZnMGtbi7RJydkMs9dPIDSx--f-E!-2084762482; path=/manage; secure; HttpOnly
```

This completes the configuration.

Server Manager Console on the WebSphere Server

Note: These steps are applicable only if you are using the Server Manager Console installed on WebSphere and is accessed over HTTPS or /SSL.

1. Log in to the WebSphere Admin Console profile in which the Server Manager Console is installed.

2. Navigate to the J2EE container in which the Server Manager Console is running.

3. In the Container Settings section, click the **Session Management** link.

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4. In the General Properties section, select the **Enable Cookies** option.

5. Verify that the settings are configured as illustrated in the following screenshot:

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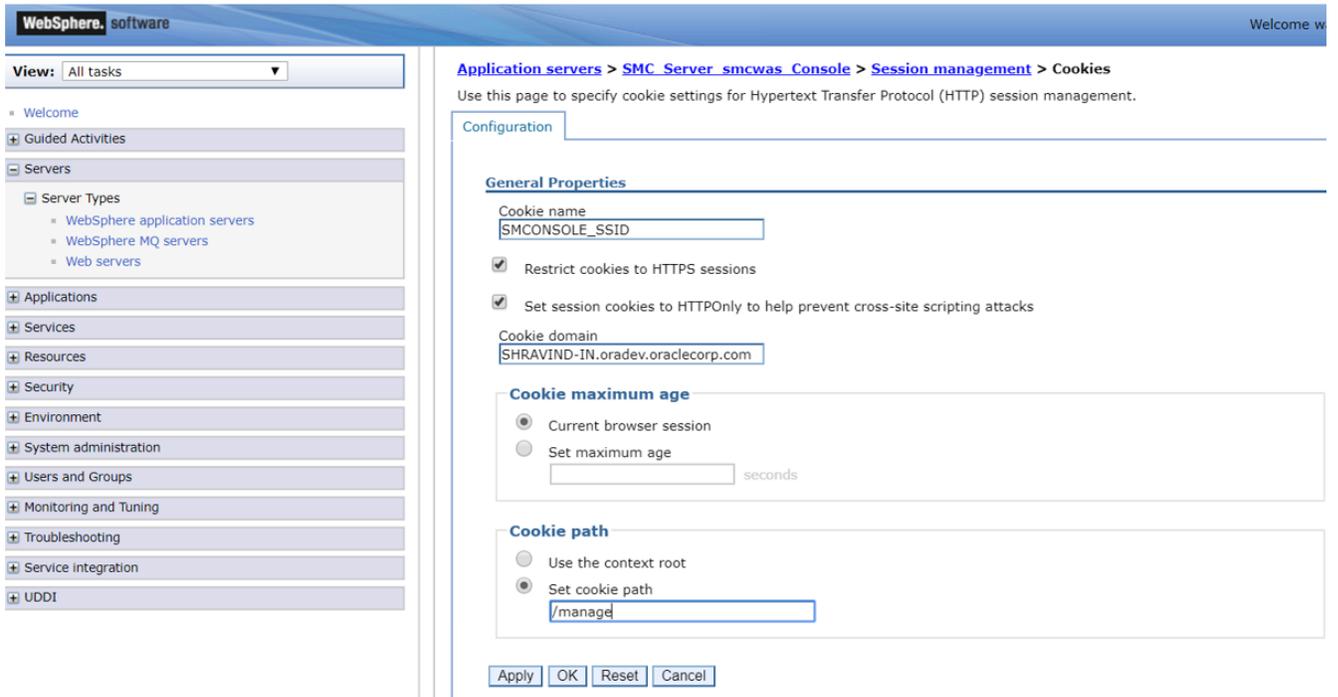
6. Navigate back to the J2EE container in which the Server Manager Console is running and expand the Ports option and note down the port number for the WC_defaulthost_secure name.

This completes the configuration.

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7. Navigate to Virtual Hosts, select **default_host**, add the port number that you noted in Step 6 for WC_defaulthost_secure, and click **Save**.
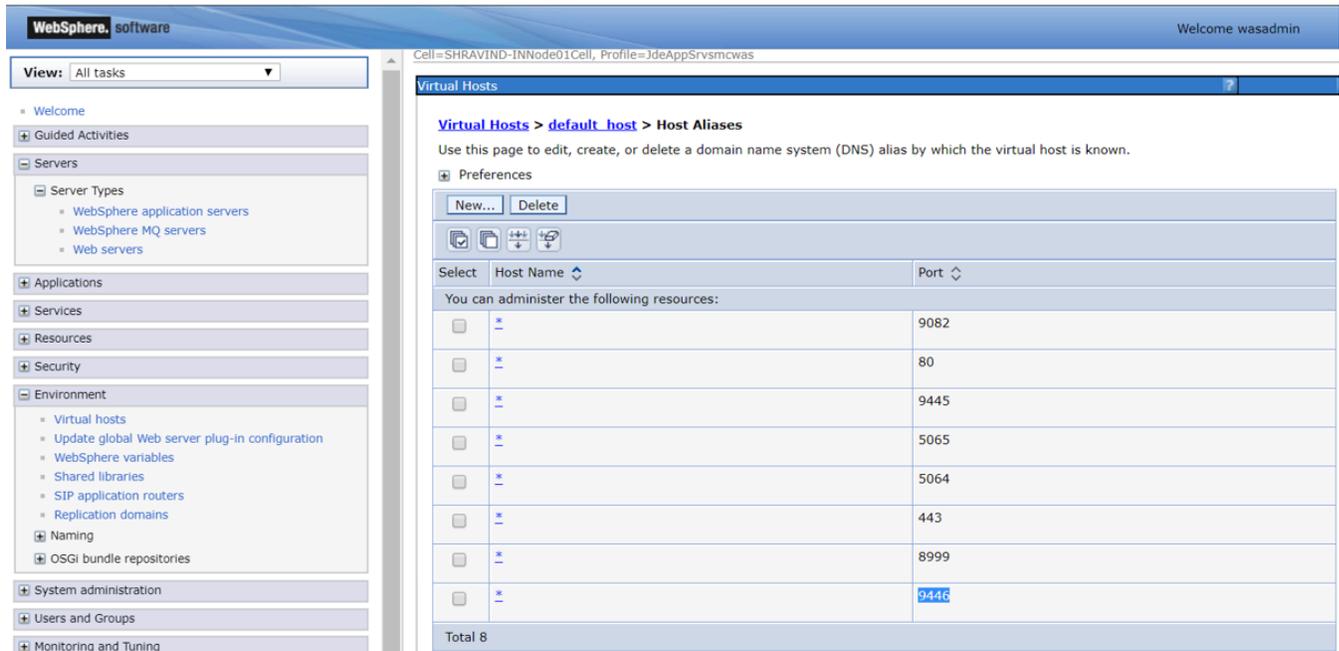
8. Restart the Server Manager Console and access the console over the WC_defaulthost_secure port.
9. To confirm that the **HttpOnly** and **secure** attributes are set for the **SMCONSOLE_SSID** cookie, use the Browser Debugging tool and ensure that the attributes of this cookie are as same as the attributes shown in the following screenshot:

Setting the Secure Attributes for the SameSite Cookies (Release 9.2.26.0)

Perform the steps in the following sections to enable the SameSite cookies for the WebLogic and WebSphere application servers.

Enabling SameSite for WebLogic application server

1. Stop the Server Manager Console.
2. Update the `weblogic.xml` file and uncomment the following lines:

   `<wls:cookie-name>SMCONSOLE_SSID</wls:cookie-name>`

   `<wls:cookie-path>/manage<!--;SameSite=Lax--></wls:cookie-path>`
3. Start the Server Manager Console.

Enabling SameSite for WebSphere application server

1. Log in to the WebSphere Integrated Solutions Console (usually accessed via a web browser at a URL like `http://<your_server>:<port>/ibm/console`).

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2. Navigate to Servers > Server Types > WebSphere application servers, then select the specific application server where your application is deployed.

3. Under Server Infrastructure, click Java and Process Management > Process Definition > Java Virtual Machine. Then, under Additional Properties, click Custom Properties.

4. Click **New** to add a new custom property. Set the following:

   o Name: `com.ibm.websphere.servlet.cookie.SameSite`

   o Value: `strict` or `Lax` (depending on your desired level of restriction)

   o Description (optional): A brief description, for example: SameSite cookie attribute for session management.

5. Click **Apply**, and then click **Save**.

6. If you are in a network deployment environment, synchronize the node where your application server is running. Navigate to System administration > Nodes. Select your Node and click **Synchronize**.

7. After synchronizing, restart the application server for the changes to take effect.

AIS and HTML Servers

The following screenshots show how the JVM Arguments are configured for the Web Component Managed Instance on the WebLogic and WebSphere server for the AIS and HTML servers:

Web Component on the WebLogic Server

For the AIS server, navigate to Home -> Summary of Servers -> <AIS_J2EE_Server>, append the arguments as shown in the screenshot.

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How do I...

- Configure startup arguments for Managed Servers
- Start Managed Servers from the Administration Console
- Shut down a server instance

System Status

Health of Running Servers as of 5:29 AM

- Failed (0)
- Critical (0)
- Overloaded (0)
- Warning (0)
- OK (6)

BEA Home:

Root Directory:

Class Path:

```
C:\Middleware\wlserver\server\lib\weblogic.jar;C:\jde_agent_w
eb\SCFHA\targets\tqa_923_win_wls_E1Domain_____7001\confi
g\jdbc\E1Domain\ais_9082\sqljdbc42.jar
```

Arguments:

```
-Ddefault_path=C:\jde_agent_web\SCFHA\targets\tqa_923_win_ais_____9082\config
-DUseSunHttpHandler=true -Xms32m -Xmx256m  -Djdk.tls.client.protocols=TLSv1.2 -
Djavax.net.ssl.keyStore=C:\Middleware\oracacert_____.jks -
Djavax.net.ssl.keyStorePassword=_____ -Djavax.net.ssl.keyStoreType=JKS -
Djavax.net.ssl.keyPassword=_____ -
Djavax.net.ssl.trustStore=C:\jdk\jre\lib\security\cacerts -
Djavax.net.ssl.trustStorePassword=_____ -Djavax.net.ssl.trustStoreType=JKS
```

For the HTML server, navigate to Home -> Summary of Servers -> <JAS_J2EE_Server>, append the arguments as shown.

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How do I...

- Configure startup arguments for Managed Servers
- Start Managed Servers from the Administration Console
- Shut down a server instance

System Status

Health of Running Servers as of 5:32 AM

	Failed (0)
	Critical (0)
	Overloaded (0)
	Warning (0)
	OK (6)

BEA Home:

Root Directory:

Class Path:

```
C:\Middleware\wlserver\server\lib\weblogic.jar;C:\jde_agent_w
eb\SCFHA\targets\tqa_923_win_wls_E1Domain_____7001\confi
g\jdbc\E1Domain\jas_8082\sqljdbc42.jar
```

Arguments:

```
-XX:MaxPermSize=256m -Dweblogic.wsee.wstx.wsat.deployed=false -Xms32m -
Xmx1024m  -Djdk.tls.client.protocols=TLSv1.2 -
Djavax.net.ssl.keyStore=C:\Middleware\oracacert_____jks -
Djavax.net.ssl.keyStorePassword=_____ -Djavax.net.ssl.keyStoreType=JKS
-Djavax.net.ssl.keyPassword=_____
Djavax.net.ssl.trustStore=C:\jdk\jre\lib\security\cacerts -
Djavax.net.ssl.trustStorePassword=_____ -
Djavax.net.ssl.trustStoreType=JKS
```

Web Component on the WebSphere Server

For the AIS server, navigate to Application servers - AIS_92 - Process definition - Java Virtual Machine, append the arguments as shown.

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For the HTML server, navigate to Application servers - AS_JS_82 - Process definition - Java Virtual Machine, append the arguments as shown.

Enterprise Server

The following screenshot shows how the JVM Arguments are configured for the Enterprise server.

Configure the JVM Arguments in the DefaultOptions entry in the [JDE JVM] section of the Enterprise server JDE.INI file.

```
[JDE JVM]
# Settings governing the usage of the in-process JVM inside of E1 Kernels.
# The JVM is used primarily to support XML specs but would be used for any
# Java code run inside of an E1 process.
#
# Full path to jvm.dll (include 'jvm.dll' in path) that will be loaded for java
# processing within Enterprise One C/C++ processes. MUST be version J2SE 1.4 or later!
# Default is to use the JRE located in the JRE directory inside of the E1 'system'
# directory.
# InProcessJVMHome=<JVM Location>
# Class path for the JVM will be constructed using all the .jar files contained
# in the <install location>/system/classes directory.  It is possible to prepend
# items from other locations to the class path by setting the 'CLASSPATH' attribute
# in the [JDE CG] section.
DefaultOptions= -Xms256m -Xmx256m -Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=D:\Temp\        .jks
-Djavax.net.ssl.keyStorePassword=          -Djavax.net.ssl.keyStoreType=JKS -Djavax.net.ssl.keyPassword=
-Djavax.net.ssl.trustStore=D:\Java64\jdk1.8.0_201\jre\lib\security\cacerts -Djavax.net.ssl.trustStorePassword=
-Djavax.net.ssl.trustStoreType=JKS
```

Applying TLS Configuration Setting for Server Manager Console and Agent (Tools Release 9.2.5 and later)

You can access **Server Manager TLS Configuration Settings** by clicking the **TLS Configuration Settings** link in the **What do you want to do?** pane. After you have uploaded and distributed the Server Manager keystore file and certificate file, you can validate the configuration changes and apply these changes to the Server Manager Console and the Server Manager Agents by selecting the appropriate TLS version and entering the trust store, keystore, and private key passwords.

> **Note:** *Click here to view a recording of this feature.*

> **Note:** Before starting with the TLS configuration, ensure that all the agents associated with the Server Manager Console are in a running state. If any Server Manager Agent is stopped or not required, remove the corresponding entry from the management dashboard. Additionally, update the Server Manager Agents to the same release as the Server Manager Console.

Perform the following steps to apply the TLS configuration settings to the Server Manager Console and the Server Manager Agents:

1. Click the **Choose File** field to select the certificate file or the keystore file you want to upload and distribute. You can select only one file at a time to be uploaded and distributed.
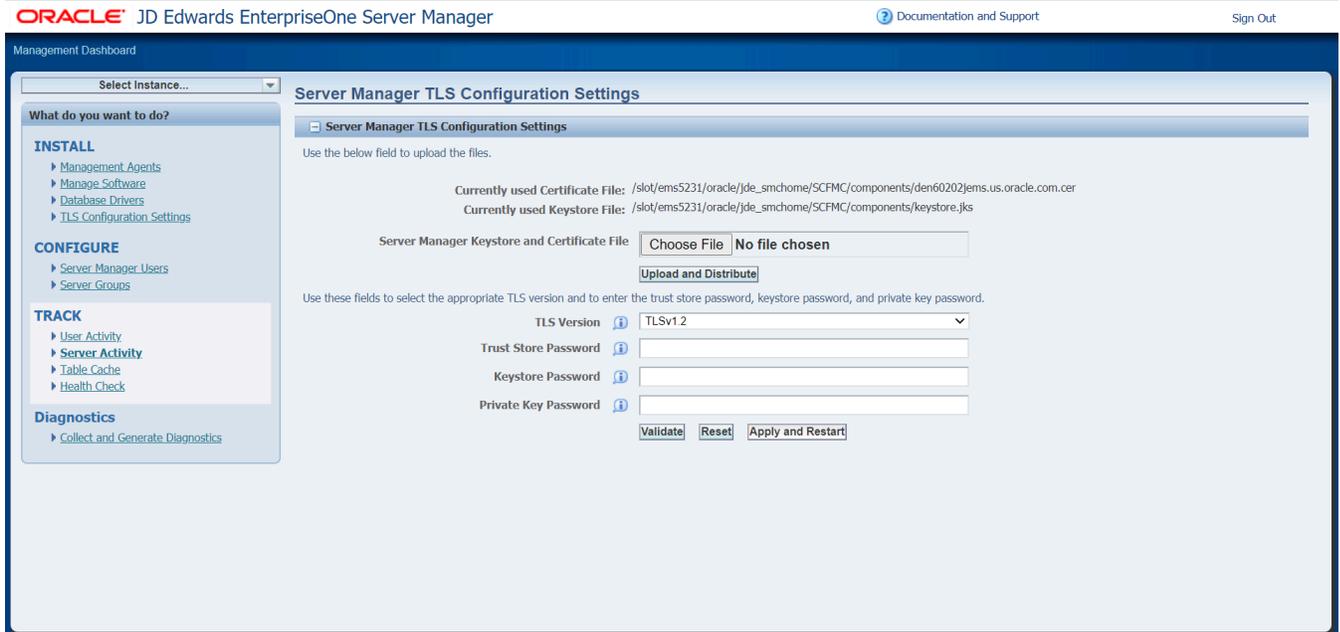
2. Click the **Upload and Distribute** button. To upload multiple files, repeat the above processes again.

   If all the agents associated with the Server Manager Console are not in a running state during the configuration, the following error message is displayed:

   Before performing validation, ensure that all the agents connected to the Server Manager Console are running.

   If any of the agents associated with the Server Manager Console are not updated during the configuration, the following error message is displayed.

   Ensure all the Agents connected to Server Manager Console are updated to the same release as Server Manager Console, prior to performing validation and applying the TLS automation.

3. Select a TLS version from the **TLS Version** drop-down list.

   > **Note:** Starting with Tools Release 9.2.9.3, you have the option to select the TLS version as AUTO. This ensures that the TLS protocol is automatically negotiated between the JD Edwards components and enables uninterrupted communication.

   > **Note:** For the WebLogic Server, you can select either TLSv1.2 or TLSv1.3.

   > **Note:** (Tools Release 9.2.9.3 and later) AUTO selection of TLS version is not supported for WebSphere Application Server.

4. Complete these fields:
   - **Trust Store Password**

     Enter the password of the trust store file. The password for all the trust store files in the setup on the Server Manager Console machine and the Server Manager Agent machines is the same.
   - **Keystore Password**

     Enter the password of the keystore file.
   - **Private Key Password**

     Enter the password of the private key file.

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5. Click the **Validate** button to validate the uploaded files and input passwords.

   After validation is successful, the following message is displayed and the **Apply and Restart** button is enabled.
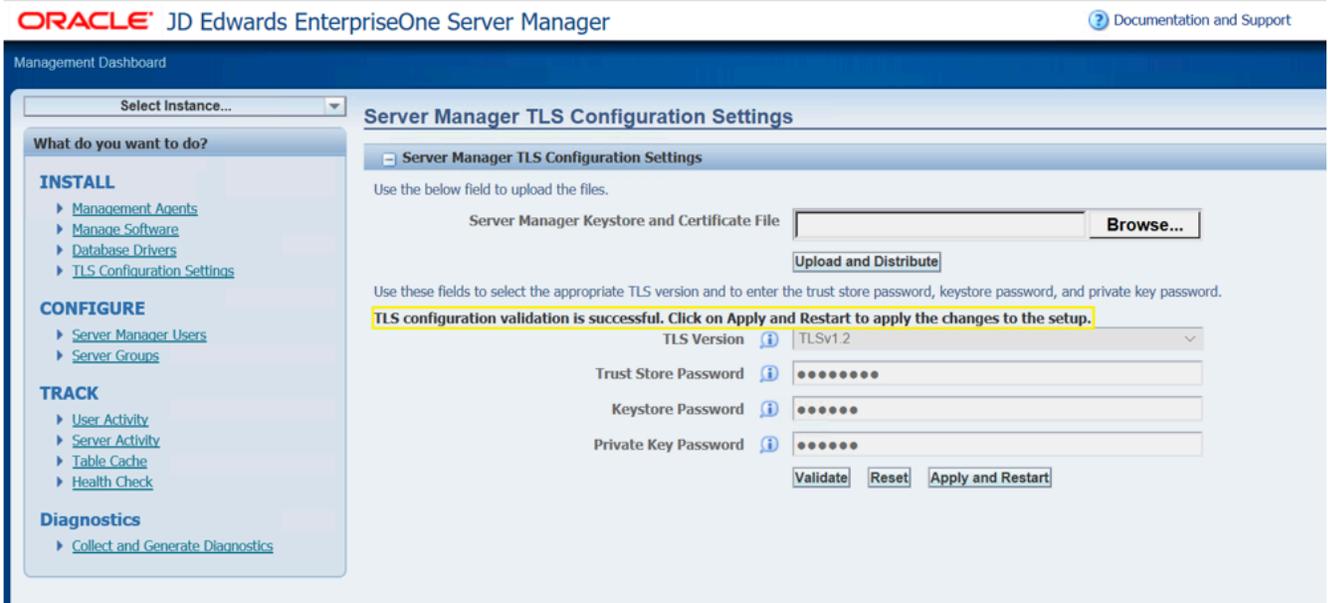
   If the validation fails, the following error message is displayed:

   Validation of the Certificate, Keystore, and Truststore failed with the inputs provided. Check the Server Manager Console logs for more information. Correct the errors and try again.

6. To select a different TLS version, click the **Reset** button. The system will reset the TLS version and passwords entered.

7. After successful validation, click the **Apply and Restart** button.

8. On the confirmation dialog box, click **OK** to apply the TLS configuration settings to the setup.

   The restarting of the Server Manager Console brings up a short-lived terminal window on the Windows machine on which the Server Manager Console is installed. You will see this window only if you are connected to that machine. No operation is to be performed on this window and it will automatically close after the restart of Server Manager Console is complete.

9. Click **Management Dashboard** and restart all the managed instances for which the message **Instance Restart Required** is displayed. After you restart the managed instances, you can see the associated runtime metrics.

The selected TLS version is displayed against the TLS Protocol field (Tools Release 9.2.9.3 and later).

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Server Manager TLS Configuration Settings

☐ Server Manager TLS Configuration Settings

Use the below field to upload the files.

Currently used Certificate File: /slot/ems2549/oracle/jde_smchome/SCFMC/components/
Currently used Keystore File: /slot/ems2549/oracle/jde_smchome/SCFMC/components/
TLS Protocol AUTO

Server Manager Keystore and Certificate File   [Choose File] No file chosen

[Upload and Distribute]

Use these fields to select the appropriate TLS version and to enter the trust store password, keystore password, and private

TLS Version ⓘ	AUTO	
Trust Store Password ⓘ		
Keystore Password ⓘ		
Private Key Password ⓘ		

[Validate]   [Reset]   [Apply and Restart]

Note:

- When the certificate used for TLS configuration is due to expire in 7 days or when it has already expired, a warning is displayed in the Managed Homes and Managed Instances page. You will need to take corrective action for the certificate before it expires (upon seeing the warning message). If the certificate expires, the secure communication over TLS will stop and you will need to manually reconfigure the TLS setting.

- If the Server Manager Console is on the WebLogic Server, after applying the TLS configuration, you will need to restart the admin server of the domain in which the Server Manager Console is installed.

- For any web component in a horizontal cluster setup, you must copy the `$SCFHA/config/agent.properties` file from the primary member to the horizontal cluster member after the automation has been applied. Additionally, you must copy the keystore file, certificate file, and trust store file and place them in the same location as the primary member.

- All the TLSv1.2/1.3 configuration information is saved in the `$SCFMC/config/agent.properties` file and `$SCFHA/config/agent.properties` file.

- (Tools Release 9.2.9.3 and later) For the selected TLS version, a new setting `TLSConnectiontype` is included in the `$SCFMC/config/agent.properties` file and `$SCFHA/ config/agent.properties` file. If the TLS Version is selected as AUTO, the setting is `TLSConnectiontype=AUTO`. When the TLS version is selected as TLSV1.2 or TLSv1.3 then the setting is `TLSConnectiontype=NONE`.

- The trust store file is automatically configured in the `$SCFHA/jdk/jre/lib/security/cacerts` file on the agent machines and to the `$jdk/jre/lib/security/cacerts` file of the Java installation used by the WebLogic Server and the WebSphere Application Server on the Server Manager Console machine.

- When you create a new instance in a setup where TLSv1.2/1.3 automation has been applied, for the new instance, TLSv1.2/1.3 is automatically configured.

- If the system property setting is `management.server.usesecurejmx=false` in the `$SCFMC/config/agent.properties` file and the `$SCFHA/config/agent.properties` file, the system property setting will be automatically be changed to `management.server.usesecurejmx=true` after applying the TLS configuration setting.

- You must import all the certificates from the `$WAS_profile_dir\etc` file for all the profiles into the agent's keystore and trust store files for the agent to connect to the WebSphere profiles.

Configuring TLS Setting for a Newly Installed Agent

To configure the TLS setting for a new agent installation:

1. Install the agent using the Agent Installer.
2. After installation, copy the certificate file, keystore file, and trust store file[SC1] from an existing agent and place these components on the new machine in a location similar to where they were stored in the existing agent.
3. Copy the `$SCFHA/config/agent.properties` file and make changes to the paths of the certificate file, keystore file, and trust store file if required.
4. Restart the agent.

Server Manager Agent Configuration

This section describes the configuration changes that are necessary for the Server Manager Agent to work with Java 8 Update 201 and later (and equivalent version of Java 7) without having to make changes to the java.security file.

Server Manager Agent on Windows

> **Note:** After you update the Server Manager Agent to Tools Release 9.2.3.4 or later, create a copy of the $SCHFA \bin\installAgentServiceV2.bat file and save the file as $SCHFA\bin\installAgentService.bat. This step is necessary to persist the changes related to TLSv1.2 to the agent. If you do not perform this step, your changes will be overwritten when the agent is updated. If the file $SCHFA\bin\installAgentService.bat is already present, use it to make the changes related to TLSv1.2. Do not use the $SCHFA\bin\installAgentServiceV2.bat file if the $SCHFA\bin \installAgentService.bat file is already is present.

Then perform the following tasks:

1. Stop the Server Manager Agent by using the $SCFHA\bin\stopAgent.bat file.
2. Uninstall the existing Server Manager Windows Service by using the $SCFHA\bin\uninstallAgentService.bat file.
3. Changes the $SCHFA\bin\installAgentService.bat file as follows:

   A sample start params entry is provided below. The changes are shown in bold in this entry sample, make the same set of changes in the do32 and do64 sections.

   ```
   "--StartParams =-Djdk.tls.client.protocols=TLSv1.2;-Djavax.net.ssl.keyStore= C:\certs
   \keystore.jks;-Djavax.net.ssl.keyStorePassword=<password>;-Djavax.net.ssl.keyStoreType=JKS;-
   Djavax.net.ssl.keyPassword=<password>;-Djavax.net.ssl.trustStore= C:\Java64\jdk1.8.0_211\jre\lib
   \security\cacerts;-Djavax.net.ssl.trustStorePassword=<password>;-Djavax.net.ssl.trustStoreType=JKS ;-
   Xrs;-classpath;%JDE_HOME%\lib\scfagent.jar;com.jdedwards.mgmt.agent.Launcher"
   ```
4. Install the Server Manager Agent Windows Service by using the modified $SCFHA\bin\ installAgentService.bat file.
5. Start the Server Manager Agent by using the $SCFHA\bin\startAgent.bat file.

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```
 1  @echo off
 2  SET CUR_DIR=%cd%
 3  cd /d "%~dp0.."
 4  SET JDE_HOME=%cd%
 5  cd /d "%CUR_DIR%"
 6
 7  SET JAVA_HOME=%JDE_HOME%\jdk\jre
 8
 9  CALL %JDE_HOME%\bin\bitness-checker.bat > %JDE_HOME%\bin\bits
10  set /p BITS=<%JDE_HOME%\bin\bits
11
12  if %BITS%==64 GOTO do64
13
14  :do32
15  if exist %SystemRoot%\SysWow64\vcruntime140.dll (
16  %JDE_HOME%\bin\scfagent.exe "//IS//SCFAGENT1" "--Description=SM Management Agent" "--DisplayName=SM Management Agent [%JDE_HOME%]" --Startup=auto
    --StartMode=exe "--StartImage=%JAVA_HOME%\bin\java.exe" "--StartParams=-Xrs;-classpath;%JDE_HOME%\lib\scfagent.jar;com.jdedwards.mgmt.agent.Launcher"
    "--LogPath=%JDE_HOME%\logs" --LogPrefix=installAgentService.log --LogLevel=DEBUG "--StdOutput=%JDE_HOME%\logs\stdout.log" "--StdError=%JDE_HOME%
    \logs\stderr.log"
17  ) else (
18      @echo on
19      echo Please install Microsoft VC++ 2017 x86 Re-distributable before installing the Server Manager Agent Service.
20      @echo off
21  )
22
23  GOTO EOF
24
25  :do64
26  if exist %SystemRoot%\System32\vcruntime140.dll (
27  %JDE_HOME%\bin\scfagent_64.exe "//IS//SCFAGENT1" "--Description=SM Management Agent" "--DisplayName=SM Management Agent [%JDE_HOME%]" --Startup=auto
    --StartMode=exe "--StartImage=%JAVA_HOME%\bin\java.exe" "--StartParams=-Djdk.tls.client.protocols=TLSv1.2;-Djavax.net.ssl.keyStore=
    C:\Middleware\oracacert\den01zqq.jks;-Djavax.net.ssl.keyStorePassword=           ;-Djavax.net.ssl.keyStoreType=JKS;-Djavax.net.ssl.keyPassword=
              ;-Djavax.net.ssl.trustStore=C:\jdk\jre\lib\security\cacerts;-Djavax.net.ssl.trustStorePassword=        ;-Djavax.net.ssl.trustStoreType=
    JKS;-Xrs;-classpath;%JDE_HOME%\lib\scfagent.jar;com.jdedwards.mgmt.agent.Launcher" "--LogPath=%JDE_HOME%\logs" --LogPrefix=installAgentService.log
    --LogLevel=DEBUG "--StdOutput=%JDE_HOME%\logs\stdout.log" "--StdError=%JDE_HOME%\logs\stderr.log"
28  ) else (
29      @echo on
```

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Server Manager Agent on UNIX and AS/400 Platforms

After you update the Server Manager Agent to Tools 9.2.3.4 or later, for Server Manager Agent installations on UNIX and AS/400 platforms, perform the following tasks:

1. Create a copy of the `$SCHFA/bin/runAgentV2` file and save it as $SCHFA/bin/runAgent.
2. Stop the Server Manager Agent by using `$SCFHA/bin/stopAgent`.
3. Change the `$SCHFA/bin/runAgent` file as follows:

   A sample start parameters entry is provided below. The changes are shown in bold in the sample entry.
4. For AS/400, the Administrator must update the `$SCFHA/config/agent.properties` file to include these values:
   ```
   os.os400.as400.user=JDE
   os.os400.as400.password=<plain text as400 user JDE password>
   ```

   After these values are set, the Administrator should restart the AS/400 Server Manager agent.

UNIX

```
echo Starting the management agent on `date` in home $JDEHOME >>$JDEHOME/logs/e1agent_0.log

$JAVA $BITFLAG   -Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=/slot/ems9991/appmgr/
certs/keystore.jks -Djavax.net.ssl.keyStorePassword=<password> -Djavax.net.ssl.keyStoreType=JKS -
Djavax.net.ssl.keyPassword=<password> -Djavax.net.ssl.trustStore=/slot/ems9991/appmgr/jde_agent_ent/SCFHA/jdk/
jre/lib/security/cacerts -Djavax.net.ssl.trustStorePassword=<password> -Djavax.net.ssl.trustStoreType=JKS  -
classpath $JDEHOME/lib/scfagent.jar com.jdedwards.mgmt.agent.Launcher >>$JDEHOME/logs/e1agent_0.log 2>&1 &

echo $!>$JDEHOME/agent.pid

exit 0
```

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```
JAVA=$JAVA_HOME/bin/java

BITFLAG=
PLATFORM=`uname`
MACHINE=`uname -m`
if [[ "$PLATFORM" = "SunOS" ]]; then
  if [[ -d $JAVA_HOME/bin/sparcv9 ]]; then
    BITFLAG=-d64
  fi
fi
if [[ "$PLATFORM" = "HP-UX" ]]; then
  if [[ -d $JAVA_HOME/bin/IA64W || -d $JAVA_HOME/bin/PA_RISC2.0W ]]; then
    BITFLAG=-d64
  fi
fi

if [ -f $JDEHOME/agent.pid ]; then
  PIDFILEINFO=`cat $JDEHOME/agent.pid`
  if [ `ps -p $PIDFILEINFO | wc -l` = "1" ]; then
    echo Process id file for process $PIDFILEINFO found, but process is not running >>$JDEHOME/logs/e1agent_0.log
    rm $JDEHOME/agent.pid
  else
    echo The management agent is already running under process id $PIDFILEINFO >>$JDEHOME/logs/e1agent_0.log
    exit 1
  fi
fi

##This is code to cleanup the old commons-httpclient-3.0.jar and commons-codec-1.3.jar jars
if [ -f $JDEHOME/lib/commons-httpclient-3.0.jar ]; then
        rm -f $JDEHOME/lib/commons-httpclient-3.0.jar
        echo Found and successfully deleted $JDEHOME/lib/commons-httpclient-3.0.jar
    fi
if [ -f $JDEHOME/lib/commons-codec-1.3.jar ]; then
        rm -f $JDEHOME/lib/commons-codec-1.3.jar
        echo Found and successfully deleted $JDEHOME/lib/commons-codec-1.3.jar
    fi

mkdir -p $JDEHOME/logs
echo Starting the management agent on `date` in home $JDEHOME >>$JDEHOME/logs/e1agent_0.log
$JAVA $BITFLAG -Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=/slot/ems9991/appmgr/certs/_____.jks -Djavax.net.ssl.keyStorePassword=_____
-Djavax.net.ssl.keyStoreType=JKS -Djavax.net.ssl.keyPassword=_____ -Djavax.net.ssl.trustStore=/slot/ems9991/appmgr/jde_agent_ent/SCFHA/jdk/jre/lib/securit
y/cacerts -Djavax.net.ssl.trustStorePassword=_____ -Djavax.net.ssl.trustStoreType=JKS -classpath $JDEHOME/lib/scfagent.jar com.jdedwards.mgmt.agent.Launch
er >>$JDEHOME/logs/e1agent_0.log 2>&1 &
```

AS/400 Platform

If you are managing the WebSphere Managed Instance on the AS/400 platform, configure the `$SCFHA/bin/runAgent` script to use the 64-bit Java installation. Typically, the Java Installation used by the WebSphere Installation is:

```
/QOpenSys/QIBM/ProdData/JavaVM/jdk80/64bit/jre
```

If you are managing the Enterprise Server Managed Instance on the AS/400 platform, configure the `$SCFHA/bin/runAgent` script to use the 32-bit or 64-bit Java installation depending on whether it is a 32-bit or 64-bit Enterprise Server Managed Instance installation.

The install location of the Java 8, 32-bit and 64-bit, respectively, on the AS/400 machine is:

```
/QOpenSys/QIBM/ProdData/JavaVM/jdk80/32bit/jre
```

```
/QOpenSys/QIBM/ProdData/JavaVM/jdk80/64bit/jre
```

```
echo starting the management agent
```

```
$JAVA_HOME$JDKBIN$JAVAEXE   -Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=/jde_agent_1/
SCFHA/keystore.jks -Djavax.net.ssl.keyStorePassword=<password> -Djavax.net.ssl.keyStoreType=JKS
-Djavax.net.ssl.keyPassword=<password> -Djavax.net.ssl.trustStore=/QOpenSys/QIBM/ProdData/
JavaVM/jdk80/32bit/jre/lib/security/cacerts -Djavax.net.ssl.trustStorePassword=<password> -
Djavax.net.ssl.trustStoreType=JKS   -classpath "$JDEHOME/lib/scfagent.jar:/QIBM/ProdData/HTTP/Public/jt400/lib/
jt400.jar" com.jdedwards.mgmt.agent.Launcher 2>/dev/null 1>/dev/null &
```

In order to enable the Server Manager agent to read the PTF.LOG file, you must use the DDM/DRDA AS/400 user and password using this procedure:

1. The Administrator must update the `$SCFHA/config/agent.properties` file to include these values:
   ```
   os.os400.as400.user=JDE
   os.os400.as400.password=<plain text as400 user JDE password>
   ```

2. After these values are set, the Administrator should restart the AS/400 Server Manager agent.

```
cd `dirname $0`/..
JDEHOME=$PWD
cd $CWD
JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk70/32bit
JDKBIN=/bin
JAVAEXE=/java

##This is code to cleanup the old commons-httpclient-3.0.jar and commons-codec-1.3.jar jars
if [ -f $JDEHOME/lib/commons-httpclient-3.0.jar ]; then
        rm -f $JDEHOME/lib/commons-httpclient-3.0.jar
        echo Found and successfully deleted $JDEHOME/lib/commons-httpclient-3.0.jar
    fi
if [ -f $JDEHOME/lib/commons-codec-1.3.jar ]; then
        rm -f $JDEHOME/lib/commons-codec-1.3.jar
        echo Found and successfully deleted $JDEHOME/lib/commons-codec-1.3.jar
    fi

if (find -f $JAVA_HOME$JDKBIN$JAVAEXE)
then
  if [ -f $JDEHOME/agent.pid ]; then
   PIDFILEINFO=`cat $JDEHOME/agent.pid`
   if [ `ps -p $PIDFILEINFO | wc -l` = "1" ]; then
    echo An invalid agent.pid file exists, removing.
    rm $JDEHOME/agent.pid
   else
    echo The management agent is already running under process id $PIDFILEINFO
    exit 1
   fi
  fi
  typeset -i RET
  RET=10
  while [[ $RET = 10 ]]
  do
   echo starting the management agent
   $JAVA_HOME$JDKBIN$JAVAEXE -Djdk.tls.client.protocols=TLSv1.2 -Djavax.net.ssl.keyStore=/jde_agent_openssl_64/jde_openssl_64_Agent/SCFHA/DemoIdentity.jks -
   Djavax.net.ssl.keyStorePassword=                      -Djavax.net.ssl.keyStoreType=JKS -Djavax.net.ssl.keyPassword=                     -Djavax.net.ssl.trustStore=/
   QOpenSys/QIBM/ProdData/JavaVM/jdk70/32bit/jre/lib/security/cacerts -Djavax.net.ssl.trustStorePassword=         -Djavax.net.ssl.trustStoreType=JKS -classpath
   "$JDEHOME/lib/scfagent.jar:/QIBM/ProdData/HTTP/Public/jt400/lib/jt400.jar" com.jdedwards.mgmt.agent.Launcher 2>/dev/null 1>/dev/null &
   echo $!>$JDEHOME/agent.pid
   wait $!
   RET=$?
  done
else
  echo You must have J9 jdk 1.6 to run the agent!  Please download the jdk to the $JAVA_HOME location and retry.
fi
```

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Server Manager Agent on AS/400 if DDM/DRDA is Enabled

If DDM/DRDA is enabled on your AS/400, you must update the `agent.properties` file of the Server Manager agent for that server. You must include these settings:

```
os.os400.as400.user=JDE
os.os400.as400.password=<plain text as400 user JDE password>
```

Java.security File

If you have modified the $jdk/jre/lib/security/java.security file, and removed the anon and NULL entries from this file, add the entries again or restore the file to its original condition. The following screenshot highlights these entries:

```
"
# For PKI-based peer authentication and key exchange mechanisms, this list
# of disabled algorithms will also be checked during certification path
# building and validation, including algorithms used in certificates, as
# well as revocation information such as CRLs and signed OCSP Responses.
# This is in addition to the jdk.certpath.disabledAlgorithms property above.
#
# See the specification of "jdk.certpath.disabledAlgorithms" for the
# syntax of the disabled algorithm string.
#
# Note: The algorithm restrictions do not apply to trust anchors or
# self-signed certificates.
#
# Note: This property is currently used by the JDK Reference implementation.
# It is not guaranteed to be examined and used by other implementations.
#
# Example:
#   jdk.tls.disabledAlgorithms=MD5, SSLv3, DSA, RSA keySize < 2048
jdk.tls.disabledAlgorithms=SSLv3, RC4, DES, MD5withRSA, DH keySize < 1024, \
    EC keySize < 224, 3DES_EDE_CBC, anon, NULL
```

startWeblogic.sh/cmd

You must edit the startWeblogic.sh/cmd file in $<Server_Manager_Console_Weblogic_Domain>\bin\startWeblogic.sh/cmd. In startWeblogic.sh/cmd, edit the command and add the content as shown in bold in the sample below. Also,

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you must edit the same command to restart the Admin Server of the WebLogic Domain on which the Server Manager Console is installed.

```
SAVE_JAVA_OPTIONS="${JAVA_OPTIONS}  -Djdk.tls.client.protocols=TLSv1.2 " -Dweblogic.http.headers.enableHSTS=true
```

> **Note:** If you plan to implement HTTP Strict Transport Security, refer to this Oracle document: *Command Reference for Oracle WebLogic Server 14c* in the section entitled: *HTTP Strict Transport Security*.

> **Note:** Restart the Server Manager Console after making the changes to the command.

Updating the ManagementLoginModule_JAR.jar in the $SMC_WLS_Domain_Dir/lib Location (Release 9.2.4)

For the Server Manager Console on the WebLogic server when using Java 8 update 201 and later:

1. Stop the Server Manager Console J2EE container.
2. Stop the Admin server.
3. Stop all the other J2EE containers that are running in the domain in which the Server Manager Console is installed.
4. Delete the $SMC_WLS_Domain_Dir/lib/ManagementLoginModule_JAR.jar.

   For this specific set-up, the file can be found in the following directory:

   o /u01/OracleSMC/user_projects/domains/smc_domain/lib/ManagementLoginModule_JAR.jar
5. Copy the latest ManagementLoginModule_JAR.jar file from $SCFMC/stage/ManagementConsole_WAR.ear/ManagementConsole_WAR.war/WEB-INF/lib/ManagementLoginModule_JAR.jar to the $SMC_WLS_Domain_Dir/lib directory.

   For this set-up, the file can be found in the following directory:

   o /u01/SMConsole/SCFMC/stage/ManagementConsole_WAR.ear/ManagementConsole_WAR.war/WEB-INF/lib/ManagementLoginModule_JAR.jar to above location. The timestamp of the file should show the new date and time.
6. Start the Server Manager Console.
7. Perform the Change Component operation to confirm that the operation is successful.

Configuring Server Manager Console to Work with Java 8 Update 201 (and later) (Tools Release 9.2.4.3 and later)

If you are using Server Manager version 9.2.4.3 or later, you can remove the TLS arguments that were added in *JVM Arguments Configuration* and *Server Manager Agent Configuration* since these arguments are for the Server Manager versions earlier than the release 9.2.4.3.

If you are using Server Manager version 9.2.4.3 or later, these arguments will be taken from the agent.properties file that is present in the $SCFMC\config and $SCHA\config folders.

2 Concepts and Terminology

Introduction

Server Manager for JD Edwards EnterpriseOne is a web based application used to manage the complete life cycle of the *JD Edwards EnterpriseOne* server products. It is delivered with the *JD Edwards EnterpriseOne* Tools Release 8.97 and later releases and supports the same *JD Edwards EnterpriseOne* associated application releases that are supported by the tools releases.

Features at a Glance

Server Manager provides:

- Web Based System Management

  You can securely access and manage your *JD Edwards EnterpriseOne* installation from anywhere using a standard web browser.

- Remote Deployment and Upgrades

  You can install, uninstall, and update your *JD Edwards EnterpriseOne* servers regardless of their physical location or platform.

- Remote Operational Control

  You can start and stop any of your *JD Edwards EnterpriseOne* servers, Oracle J2EE application servers, or supported third party J2EE application servers directly from the *Management Console* .

- Secure Administrative Tasks

  Server Manager permits you to specify which existing *JD Edwards EnterpriseOne* users have access to the *Management Console* control, which *JD Edwards EnterpriseOne* servers the user may view, and specify which administrative tasks the user may perform on those servers.

- Configuration Management

  Server Manager provides a web-based interface for managing the configuration of all managed servers. The application presents each configuration item along with integrated help describing the configuration setting.

  > **Note:** Beginning with the availability of *Server Manager* , it is strongly advised that all changes to configuration files (such as jde.ini, jas.ini, jdbj.ini, jdelog.properties, etc.) for any *JD Edwards EnterpriseOne* server managed by *Server Manager* be accomplished using only the *Management Console* interface of *Server Manager* . In addition to providing usability improvements, using Server Manager reduces the risk of introducing configuration errors by providing dropdowns that contain only valid values where applicable. Further, the tool provides a useful Audit History for any modifications made to configurations using *Server Manager* .

- Configuration Comparison

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Use *Server Manager* to compare the configuration of two or more servers to identify configuration differences. You can compare configurations through the *Management Console* application regardless of the platform or location of the actual *JD Edwards EnterpriseOne* server. You can also compare individual servers with the default configuration of the corresponding server groups to which the servers belong.

- Audit History
  Server Manager maintains a history of changes made to the managed servers. This includes a history of each configuration change, each server start and stop, and each tools release update, including the user that performed the change or operation. The *Management Console* application provides mechanisms to query and view the audit history that is maintained.

- Integrated EnterpriseOne Software Management
  Use *Server Manager* to centrally maintain all your *JD Edwards EnterpriseOne* server tools releases, including the ability to copy the software to the remote server machines.

- Logical Server Grouping
  Server Manager allows you to group servers with a similar purpose. These groups can include any of the server types such as Enterprise Server, *HTML Web Server*, and so on. A default, or template, configuration is maintained for each server group.

- Application Release Independence
  Server Manager is delivered with *JD Edwards EnterpriseOne* Tools Release 8.97 (and later) and is compatible with any supported *JD Edwards EnterpriseOne* application release beginning with Application Release 8.9 through the currently supported release. No electronic software updates (ESUs) are required to support *Server Manager* .

- Self-Contained Installation
  The installation of *Server Manager* delivers all components that are required by the *Management Console* application. There are no third party requirements regardless of your existing or intended middleware topology (for example, Oracle WebLogic Server, WebSphere Application Server, or no application server).

- Tools Release Independence
  Newer versions of the *Server Manager* application will continue to support the management of earlier tools releases back to *JD Edwards EnterpriseOne* its initial release in Tools Release 8.97.

- Offline Monitoring and Scheduling of System Administrative Orchestrations (Release 9.2.6)
  Use Server Manager to monitor and schedule system administrative orchestrations in the offline mode. The Server Manager system administrator can run administrative orchestrations even when the HTML, Database, and Enterprise servers are down. Administrative orchestrations are orchestrations that contain *only* these types of components: Open API-type connectors connecting to a Server Manager Console Open API endpoint, rules, or child orchestrations with a similar structure as the parent orchestration.

Architecture

The key benefits of the *Server Manager* architecture include:

- An integrated, web-based *Management Console* application.
- *Management Agents* that are installed on the *JD Edwards EnterpriseOne* servers.

- Use of Java Management Extensions (JMX) technology by the *Management Agents* running on the servers to run as background processes that interact with the *Management Console* web application.

- Secure and encrypted network communication between the *Management Console* and *Management Agents* .

The design goal of *Server Manager* is to reduce the total cost of ownership of *JD Edwards EnterpriseOne* server products from installation and configuration, to ongoing maintenance and troubleshooting. *Server Manager* manages these *JD Edwards EnterpriseOne* servers:

- Enterprise Servers

- HTML Web Servers

- Transaction Servers

- Collaborative Portal Servers

- Business Services Servers

A high level view of the architecture is illustrated by this diagram:

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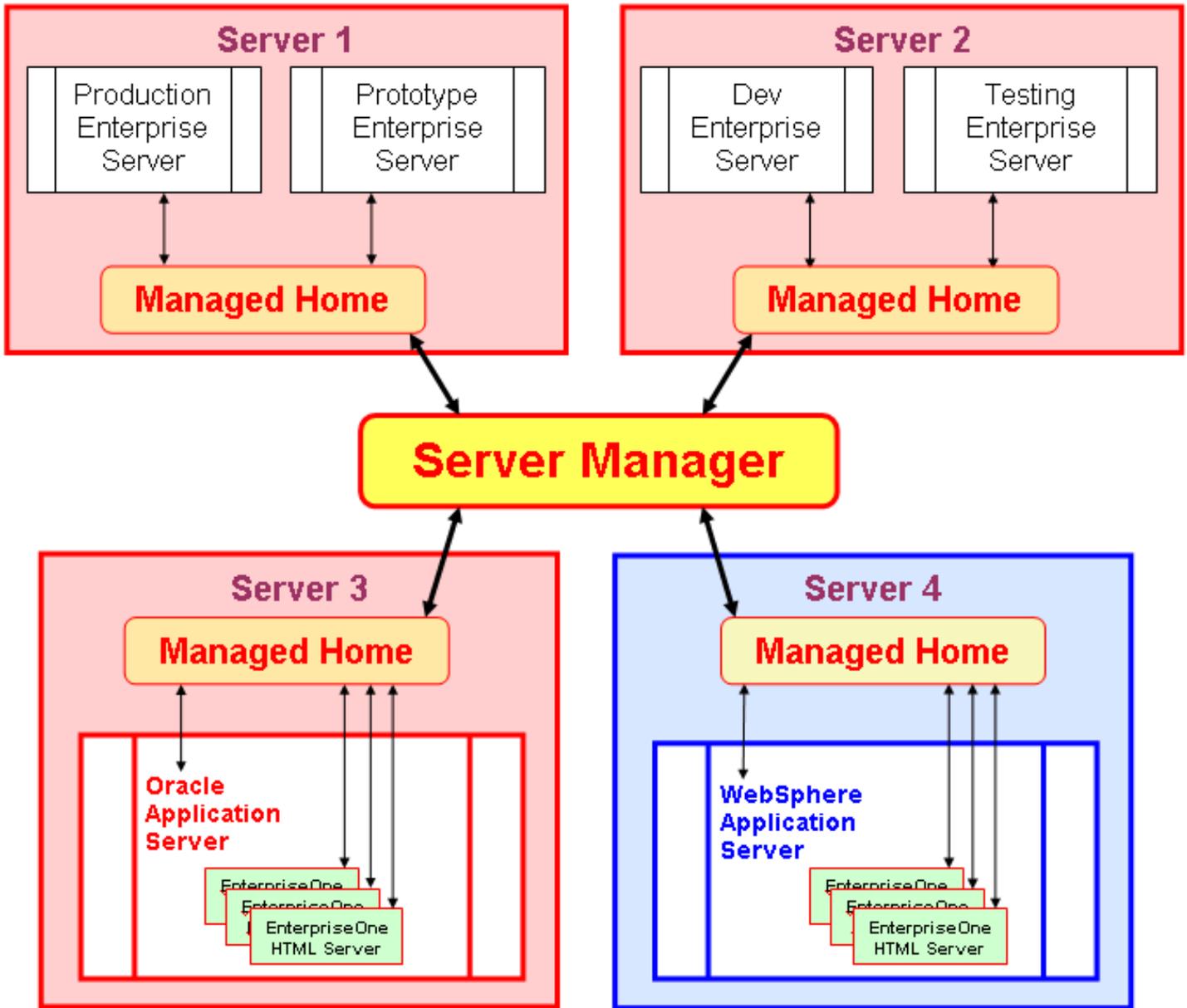
Components

This section discusses:

- *Management Console*
- *Management Agent*
- *Managed Home*
- *Managed Instance*
- *Instance Properties*
- *Software Component*
- *Server Configuration and Runtime Metrics*

Management Console

The central element of the *Server Manager* architecture is the *Management Console* , a web-based application. The *Management Console* is responsible for:

- Hosting the HTML-based interface accessed using a standard web browser.
- Communicating with *Management Agents* installed on remote machines.
- Monitoring the runtime operation of the *JD Edwards EnterpriseOne* servers.

Server Manager is required for all *JD Edwards EnterpriseOne* installations that use Tools Release 8.97 (and later) tools releases. The *Management Console* is a J2EE application with a web-based user interface that is accessed by the end user through a browser. For the management user, this interface is the only means of directly accessing any servers managed by *Server Manager* .

The Management Console can be installed on either a Windows-based or Linux-based machine.

Typically the most suitable machine within the *JD Edwards EnterpriseOne* architecture is the Deployment Server, although the *Management Console* can be installed on any server that meets the JD Edwards EnterpriseOne Certifications (MTRs) of the Deployment Server (for details refer to *Accessing the Certifications (Minimum Technical Requirements)* in this guide). The *Management Console* uses a J2EE application container to host the application.

Optionally, the *Management Console* can be configured to use the secure protocols of HTTPS/SSL.

See Also

- For an illustration of the role of the *Management Console* within *Server Manager* , refer to *Architecture*.

Management Agent

Server Manager uses *Management Agents* that are installed on the physical machines that run *JD Edwards EnterpriseOne* server products. These *Management Agents* communicate directly with the *Management Console* and are instructed to perform operations as a result of user actions in the *Management Console* web application.

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The *Management Agent* is based on the JMX Java management specifications. *Management Agents* interact only with the *Management Console* web application; however, much of the work, such as starting and stopping servers, is actually performed by the *Management Agent* .

The *JD Edwards EnterpriseOne* server products contain an embedded variant of the *Management Agent* . This *Management Agent* is responsible for providing the runtime information about an active server instance to the *Management Console* web application.

The Managed Home Agent is a standalone *Management Agent* which functions as an installed daemon process.

The responsibilities of the *Management Agent* within *Server Manager* include:

- Creating, registering, uninstalling, and updating the EnterpriseOne servers.
- Starting and stopping any managed EnterpriseOne server.
- Managing the configuration files used by the EnterpriseOne server.
- Providing access to the log files generated by the EnterpriseOne server.
- Providing basic management of the third-party application servers on which the web-based EnterpriseOne server products run.
- Transferring and managing a local copy of EnterpriseOne server software components (that is, the Tools Releases).

The *Server Manager* *Management Console* web application determines whether the *Management Agent* should be updated. If so, the *Management Agents* are updated using the *Management Console* .

Managed Home

The location in which the managed home agent is installed is a *Managed Home* . Similar to the concept of an ORACLE_HOME, the *Managed Home* is the deployment location of the standalone *Management Agent* and a structured file system containing the constituent parts of managed *JD Edwards EnterpriseOne* servers.

The *Managed Home* is created by the installation of the standalone *Management Agent* . The structured nature of the *Managed Home* simplifies the installation and maintenance of *JD Edwards EnterpriseOne* software.

You must install at least one *Managed Home* on each physical machine before installing or managing any *JD Edwards EnterpriseOne* servers. It is possible for a machine to host more than one *Managed Home* that might not use the same *Management Console* . Each unique *Managed Home* is associated with exactly one *Management Console* .

See Also

- For an illustration of the role of the *Managed Home* within *Server Manager* , refer to *Architecture*.

Managed Instance

Each EnterpriseOne server, Oracle Application Server, or WebSphere Application Server is referred to as a *Managed Instance* . A *Managed Instance* is a particular instantiation of a software component on a physical machine. Each *Managed Instance* is identified by an instance name that name is unique to the machine on which the *Managed Instance* resides. The instance name is supplied by the user who either created or registered the server with the *Management Console* .

Each *Managed Instance* is associated with a *Managed Home* on the same physical machine.

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Instance Properties

Instance Properties are the unique characteristics needed to identify an individual managed instance. For example, only a single instance property might have been defined for an Enterprise Server:

- Installation path

As another example, an *HTML Web Server* software component might define two instance properties:

1. Instance name of the application server under which it runs.
2. J2EE container within the application server target instance.

Software Component

The *JD Edwards EnterpriseOne* Tools Releases are downloaded as a portable archive (.PAR) and are referred to as *Software Component* s in *Server Manager* . The JDBC driver implementations (JAR files) are also *Software Component* s in *Server Manager* .

This section describes:

- *Server Components*
- *JDBC Driver Components*

See Also

- For an illustration of the role of the *Software Component* within *Server Manager* , refer to *Architecture*.

Server Components

These Server Components are a subset of the *Software Component* s that can be deployed and managed by *Server Manager* :

- *JD Edwards EnterpriseOne* Enterprise Server
- *JD Edwards EnterpriseOne* HTML Web Server
- *JD Edwards EnterpriseOne* Transaction Server
- *JD Edwards EnterpriseOne* Collaborative Portal Server
- *JD Edwards EnterpriseOne* Business Services Server
- *JD Edwards EnterpriseOne* Data Access Server
- *JD Edwards EnterpriseOne* Deployment Server

JDBC Driver Components

Server Manager can also distribute and deploy JDBC Drivers to:

- J2EE containers that run the *JD Edwards EnterpriseOne* web-based server products.

  These drivers are required components on the *JD Edwards EnterpriseOne* HTML Web Server and any other *JD Edwards EnterpriseOne* server component that requires JDBC database connectivity that is not natively provided by the underlying application server.

- RMI java application that runs on the *JD Edwards EnterpriseOne* Data Access Server.

  The JDBC driver for this server is required to provide native database connectivity for the application (such as Oracle BI Publisher) or program that is accessing the Data Access Server.

Note: Do not use Server Manager to install or uninstall an Oracle jdbc driver for any JD Edwards EnterpriseOne Web Server that it WebLogic Server-based. If you need to update a JDBC driver for WebLogic Server for any reason, you should use the native WebLogic Server tools, which are available at the below links:

Using JDBC Drivers with WebLogic Server WebLogic 12c

https://docs.oracle.com/middleware/1212/wls/JDBCA/third_party_drivers.htm#JDBCA234

Using JDBC Drivers with WebLogic Server WebLogic 14c

https://docs.oracle.com/cd/E24329_01/web.1211/e24367/third_party_drivers.htm#JDBCA232

Server Configuration and Runtime Metrics

Server Configuration and Runtime Metrics are a grouping of related managed resources. A *Software Component* defines the configuration and metrics that an instance contains. For example, a section from the `jas.ini` file can be defined as a configuration metric for the *Software Component* for the *JD Edwards EnterpriseOne* HTML Web Server.

Runtime metrics provide insight into the current state of a running *Managed Instance*. For example, the active user sessions are a runtime metric provided by the *JD Edwards EnterpriseOne* HTML Web Server.

For details, refer to these chapters and sections within this guide:

- Configuration

  For details refer to the chapter in this guide entitled: *Configure EnterpriseOne Server Instances*.

- Runtime Metrics

  For details refer to the chapter in this guide entitled: *View Runtime Metrics for a Managed Instance*.

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3 Functional Overview

Standardized Remote Deployment

Server Manager provides a depiction of the EnterpriseOne topology through the managed deployment of all server software.

Using *Server Manager* through the web-based *Management Console*, the *JD Edwards EnterpriseOne* administrator can create a new *JD Edwards EnterpriseOne* server on a remote machine. The *JD Edwards EnterpriseOne* software used for installation is stored on the *Management Console* machine after being downloaded from the Customer Connection website or using Change Assistant.

The software may be distributed, or copied, to the remote machine from the *Management Console*. This server software (*JD Edwards EnterpriseOne* Tools Release) can now be used to create the new *JD Edwards EnterpriseOne* server. The Management Home Agent performs the installation of the specific server type and automatically performs the requisite default configuration. After it is successfully installed, the server can be maintained entirely through the *Management Console*. This deployment process is similar for all *JD Edwards EnterpriseOne* server types.

Configuration Management

Server Manager provides a complete configuration management system for all server types. Each configuration entry from the `.INI` and `.properties` files has been defined in metadata contained within the *Management Console*. It is no longer necessary to directly edit any of these configuration files, or even to know where they exist.

The configuration items are grouped into logical configuration topics. These topics are presented on the management page for each *JD Edwards EnterpriseOne* *Managed Instance*. Selecting a configuration topic displays all the individual configuration items contained within. These items are further grouped and displayed for viewing or editing. Each configuration item is displayed with a plain text description. Configuration items with a list of allowed values are displayed using drop down boxes.

A link to display context sensitive help is displayed next to each configuration item. Clicking this link displays the name of the `.INI` file that is being viewed, the section and entry name in the file to which the `.INI` pertains, the default value of the setting, and a full description of the configuration item. For items with an associated list of allowed values, each value is displayed in the help text.

The contents of the contextual help for each setting are also available in reference form in the *Management Console* documentation.

Through the *Server Manager* *Management Console*, a *JD Edwards EnterpriseOne* administrator can compare configurations for each remote *Managed Instance*, even if they reside on separate physical machines. This capability significantly reduces the effort required to ensure consistency among configurations, especially for those installations containing numerous *JD Edwards EnterpriseOne* servers.

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Audit History

Before the introduction of *Server Manager* , many of steps in the software life cycle were not logged by any *JD Edwards EnterpriseOne* mechanism. With *Server Manager* , the *Management Console* records and makes available an audit trail of actions, such as:

- Installing or changing tools releases on a *JD Edwards EnterpriseOne* Enterprise Server.
- Installing or changing runtime code on a *JD Edwards EnterpriseOne* *HTML Web Server* .
- Changing to configuration items of Server Metrics.
- Recording implemented notifications (for example, for a critical failure).

Remote Troubleshooting

An administrator can use the *Management Console* to troubleshoot any of the *Managed Instances* within the management domain. Troubleshooting includes:

- Retrieving and modifying configuration entries of managed servers.
- Retrieving log files.
- Comparing configurations of a particular instance with any other.

Before *Server Manager* , some of this functionality was available through the Server Administration Workbench (SAW) web interface. However, *Server Manager* greatly enhances the capability of the administrator by extending this ability to managing all *JD Edwards EnterpriseOne* server-based products (for a list of supported servers, refer to *Server Components*). Additionally, unlike the previous SAW implementation, which was directly embedded in the product, the *Server Manager* configuration management and troubleshooting tools are available even if the target instance is not running or fails to start.

Operational Control for Managed Servers

Using *Server Manager* , the *JD Edwards EnterpriseOne* administrator can remotely start any *Managed Instance* through the browser-based *Management Console* . This functionality reduces the effort required to perform configuration or performance tuning changes by removing the necessity to have physical access to the machine.

Flexible Monitoring

Due to its inherent knowledge of the registered topology, *Server Manager* can accurately determine and subsequently monitor all entities constituting an EnterpriseOne installation. As such, *Server Manager* provides enterprise-wide views rather than machine specific views, which eliminates the potential for inaccurate monitoring of general information. For example, *Server Manager* contains real-time data for user sessions, Java memory usage, JDBj connection cache, and prepared statement configurations. Without *Server Manager* , such information is not available.

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See Also

- *View Runtime Metrics for a Managed Instance*

Simplification and Automation of System Administration Tasks by Using Orchestrations (Release 9.2.6)

The Server Manager system administrator can perform system administration tasks by running administrative orchestrations even when the HTML, Database, and Enterprise servers are down, with only the AIS server and the Server Manager Console running. In addition, the orchestrations can be scheduled to run at defined time intervals.

The Server Manager system administrator can use the Management Console to upload system administrative orchestrations, which are designed to perform system administration tasks, and then use the Orchestrator Studio to run the administrative orchestrations. This capability of Server Manager enables system administration tasks to be completed even when the EnterpriseOne servers are down, ensuring business continuity.

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4 Configuring Server Manager Console to Start Automatically

Server Manager Console Automatic Startup

In Tools Release 9.2, WebLogic or WebSphere Server Manager Console installations will need to be configured to start automatically, since they do not include automatic startup by default.

The information to setup automatic startup is available at:

E1: SVM: How to Configure Server Manager Console to Start Automatically With the Operating System When Installed on WLS or WAS (Doc ID 2066799.1):

https://support.oracle.com/epmos/faces/DocumentDisplay?id=2066799.1

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5 Start, Stop, and Restart a Management Agent

Start a Management Agent

You can start the *Management Agent* by using a script that is delivered when the *Management Agent* is installed. The script resides on the machine on which you installed the *Management Agent* and is typically located in these platform-dependent directories:

- *Microsoft Windows*
- *UNIX*
- *OS400 ()*

Microsoft Windows

You can use these methods to start the *Management Agent* :

- *Start a Management Agent as a Service*
- *Start a Management Agent from a Script*

Start a Management Agent as a Service

The *Management Agent* installer creates a windows service that can be used to start, stop, or restart the *Management Agent* . This is the format of the service name:

SM Management Agent [install_location\JDE_HOME]

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

For example:

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Name △	Description	Status	Startup Type	Log On As
Shell Hardware Detection	Provides n...	Started	Automatic	Local Syste
Simple Mail Transport Protocol (SMTP)	Transports...	Started	Automatic	Local Syste
SM Management Agent [C:\JDE_HOME_Agent]	SM Manag...	Started	Automatic	Local Syste
SM Management Console [C:\JDE_HOME] - SCFMngmtConsole2	SM Manag...	Started	Automatic	Local Syste
Smart Card	Manages a...		Manual	Local Servi
Smart Card Helper	Provides s...		Manual	Local Syste
SMS Agent Host	Provides c...	Started	Automatic	Local Syste
Special Administration Console Helper	Allows adm...		Manual	Local Syste
SQL Server (JDESSELOCAL)	Provides st...	Started	Automatic	Local Servi
SQL Server Active Directory Helper	Enables int...		Manual	Network S
SQL Server Analysis Services (INST1)	Supplies on...		Automatic	Local Syste
SQL Server Browser	Provides S...	Started	Automatic	Local Servi
SQL Server FullText Search (INST1)	Quickly cre...		Automatic	Local Syste
SQL Server FullText Search (SQL2005)	Quickly cre...		Automatic	Local Syste
SQL Server Reporting Services (INST1)	Manages, ...		Automatic	Local Syste
SQL Server VSS Writer	Provides th...		Manual	Local Syste
SQLAgent$JDELOCAL			Manual	Local Syste
Symantec AntiVirus	Provides re...	Started	Automatic	Local Syste

Start a Management Agent from a Script

You can use this `.bat` file to start the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\startAgent.bat`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

UNIX

You can use this script to start the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\startAgent.bat`

> **Note:** The path `installation_directory/JDE_HOME` refers to the install location of the *Management Agent* .

OS400 ()

In order for the *Management Agent* to function, it is required that JDK 1.5 be installed on the *IBM i* machine.

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Start the *Management Agent* **as a Background Job**

As shown below, you must use the "&" switch as a suffix for the command script in order to start the *Management Agent* as a background job. Launching the job in this manner means that when you leave the qshell the job will not die.

User Installing, Starting, or Restarting the Management Agent

The user who installs, starts or restarts the agent must have the minimum permissions of *ALLOBJ, *SAVSYS and *JOBCTL and *SECADM. After the *Management Agent* installation is complete, it will start. It is important to note that when starting the *Management Agent* the user that is signed onto the *IBM i* machine is the user that executes the functionality when the *Management Agent* is performing *Server Manager* work. That user must not be a user that has a *JD Edwards EnterpriseOne* Enterprise Server library in its library list (for example: E900SYS).

Agent Commands

For the *Management Agent* running on the *IBM i* platform, you can run these commands from the default `/JDEdwards/ JDE_HOME/SCFHA/bin` folder:

`restartAgent`

`runAgent`

`startAgent`

`stopAgent`

To submit each command to batch:

1. To stop, start, or restart the *Management Agent* , log in to OS400 with a user profile which has sufficient privileges to operate these services.

    You should ensure that the job queue that the user belongs to is one that is not interrupted during processing. Because it is interruptible, a job queue such as QINTER might not be the best choice for the job queue in which to run the *Management Agent* . You should consider this warning when selecting the user with the correct permissions and configuration to run the *Management Agent* processing tasks.

2. To submit the *Management Agent* action (stop, start, or restart) to batch so it runs in a subsystem other than QINTER:

```
cmd: SBMJOB CMD (STRQSH CMD('cd
       /JDEdwards/JDE_HOME/bin;./startAgent &')) JOB(STARTAGENT)
I      JOBQ(QTXSRCH)
```

where in this example, the job queue is `QTXTSRCH`, which is a job queue that is delivered by IBM. This job queue has no thread limitation and runs in the `QBATCH` subsystem.

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3. You can use the work with active jobs command to view the processes running under the QBATCH subsystem. For example:

```
cmd:  SBMJOB CMD(STRQSH
        CMD('cd /JDEdwards/JDE_HOME/bin;./stopAgent &'))
        JOB(STOPAGENT) JOBQ(QTXTSRCH)
```

```
                    Work with Active Jobs                      ENTSRV1
                                              08/14/08   12:23:27

CPU %:      .9      Elapsed time:  00:10:33     Active Jobs:    722
                        Current
Opt  Subsystem/Job   User       Type   CPU %  Function       Status
__    QBATCH          QSYS       SBS     .0                    DEQW
__      QPOZSPWP        QSECOFR    BCI     .0    PGM-QZSHSH     EVTW
__      QPOZSPWP        QSECOFR    BCI     .0    JVM-com.jdedwa JVAW
__      STARTAGENT      QSECOFR    BCH     .0    CMD-STRQSH     TIMW
```

4. If you want to kill the initial startAgent job, you can issue this command:

   cmd: SBMJOB CMD(STRQSH CMD('cd /JDEdwards/JDE_HOME/SCFHA;./stopAgent &')) JOB(STOPAGENT) JOBQ(QTXTSRCH)

   where QTXTSRCH is the name of the job queue previously started.

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5. To verify the job is killed, you can use this work with active jobs command to view the processes running under the QBATCH subsystem:

```
cmd: WRKACTJOB SBS(QBATCH)
```

```
                        Work with Active Jobs                      ENTSRV1
                                              08/14/08   12:29:22

CPU %:    2.2      Elapsed time:  01:55:35     Active Jobs:    725
                          Current
Opt   Subsystem/Job   User         Type   CPU %  Function        Status
__    QBATCH          QSYS         SBS      .0                    DEQW
```

Stop a Management Agent

You can use these methods to stop a *Management Agent* :

- *Stop a Management Agent from the Management Console*

- *Stop a Using a Script*

- *Stop a Management Agent as a Service (Microsoft Windows only)*

Stop a Management Agent from the Management Console

Using the *Management Console* , *Server Manager* users with appropriate permissions (refer to *Administer Management Console Users and User Groups*) can stop a specific *Management Agent* , each of which is uniquely associated with a specific *Managed Home* . You can specify which *Management Agent* to stop by checking the check box of the associated *Managed Home* and then clicking the *Stop Agent* button on the *Management Console* .

Note: If a user does not have sufficient privileges to stop a *Management Agent* , the *Stop Agent* button on the *Management Console* is disabled (grayed out).

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Stop a Using a Script

You can stop a *Management Agent* using a script that resides on the machine on which you installed the *Management Agent* . Typically the `stopAgent` script is located in a platform-dependent directory:

- *Microsoft Windows*
- *UNIX*
- *OS400 ()*

Microsoft Windows

You can use this `.bat` file to stop the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\stopAgent.bat`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

UNIX

You can use this script to stop the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\stopAgent`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

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OS400 ()

Use this command within qshell to stop the *Management Agent* :

`JDE_HOME/SCFHA/bin/stopAgent`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

Stop a Management Agent as a Service (Microsoft Windows only)

Refer to *Start a Management Agent from a Script* in this chapter.

Restart a Management Agent

You can restart (that is, "bounce") a *Management Agent* that is currently running using a script that resides on the machine on which you installed the *Management Agent* . Typically the `restartAgent` script is located in a platform-dependent directory:

- *Microsoft Windows*
- *UNIX*
- *OS400 ()*

Microsoft Windows

You can use this `.bat` file to restart the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\restartAgent.bat`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

UNIX

You can use this script to restart the *Management Agent* :

`installation_directory\JDE_HOME\SCFHA\bin\restartAgent`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

OS400 ()

User Installing, Starting, or Restarting the Management Agent. The user who installs, starts or restarts the agent must have the minimum permissions of *ALLOBJ, *SAVSYS, *JOBCTL, and *SECADM. After the *Management Agent* installation is complete, it will start. It is important to note that when starting the *Management Agent* the user that is signed onto the *IBM i* machine is the user that executes the functionality when the *Management Agent* is performing *Server Manager* work. That user must not be a user that has a *JD Edwards EnterpriseOne* Enterprise Server library in its library list (for example: E900SYS).

Use this command within qshell to stop the *Management Agent* :

`JDE_HOME/SCFHA/bin/restartAgent`

> **Note:** The path `installation_directory\JDE_HOME` refers to the install location of the *Management Agent* .

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6 User Interface for the Management Console

User Interface Layout

The user interface for the *Management Console* is comprised of these segments, starting from the top-left most portion of the page:

- *Select Instance Dropdown*
- *Quick Links - What do you want to do?*
- *Views of the Management Console*

Select Instance Dropdown
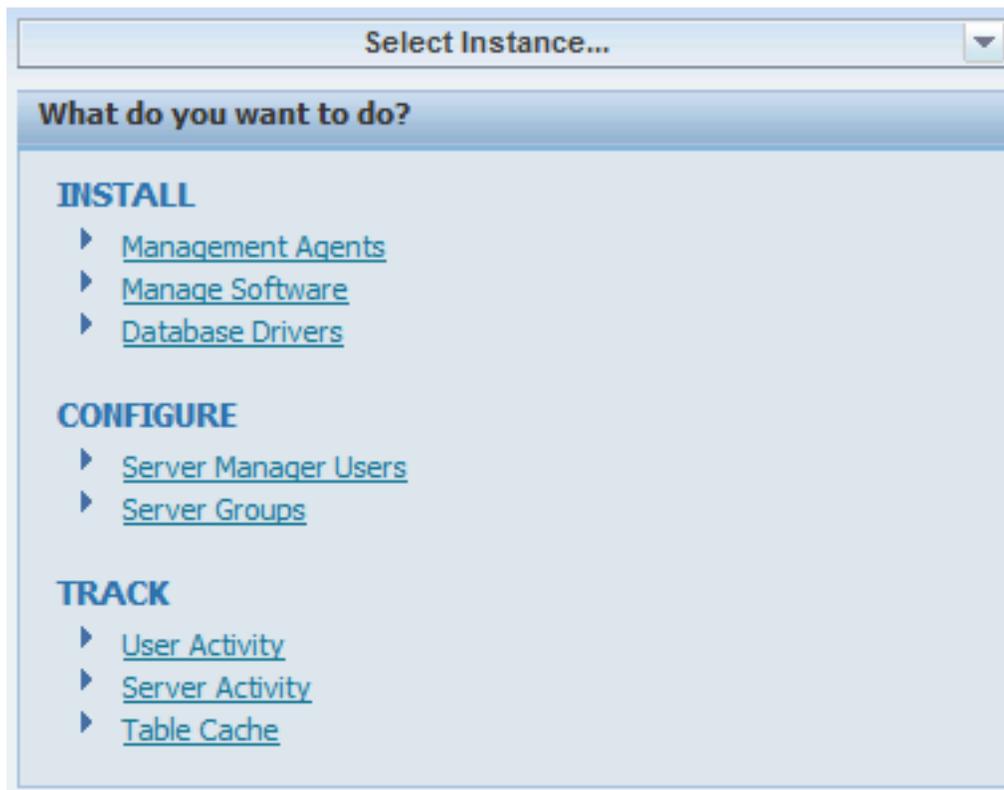
The *Select Instance dropdown* is available on every *Management Console* page. It is always located at the top-most portion of the left-hand pane, just above the *What do you want to do?* list.

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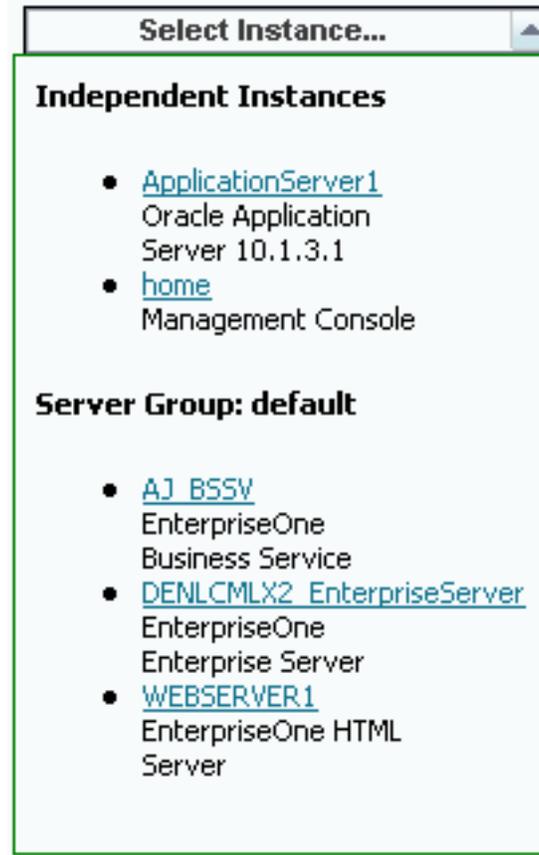
When you click the *Select Instance... dropdown*, the *Management Console* displays a list of currently available instances registered with this *Management Console* . The list is organized by these groups:

- *Independent Instances*

    These are instances not associated with a server group.

- *Server Group: name*

    Where *name* is the name of the server group. For example, *default*.

Each instance is listed by its name, which is a link to the instance, and a description of the instance. If you click the link for the instance, the *Management Console* displays the management page of the instance.

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Quick Links – What do you want to do?
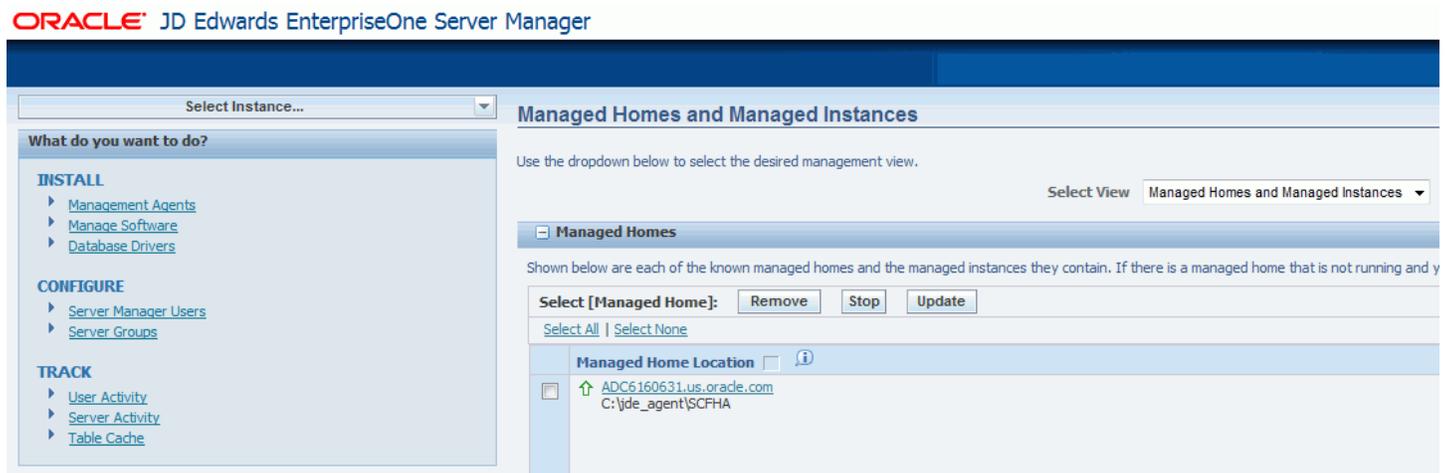
The *Management Console* displays a section in the left-hand pane of each web page called *What do you want to do?* that provides easy navigation to the *Management Console* functions for INSTALL, CONFIGURE, and TRACK:

INSTALL

- Management Agents

  Refer to *Installing the Server Manager Management Console and Agent* of this guide

- Managed Software

  Refer to *Managed Software Components* of this guide

- Database Drivers

  Refer to *Manage JDBC Drivers* of this guide

CONFIGURE

- Server Manager Users

    Refer to *Configure Management Console Users* of this guide

- Server Groups

    Refer to *Configure the Default Server Group Configuration Settings* and *Administer Server Groups* of this guide

TRACK

- User Activity

    Refer to "*Search for User Resources*" of this chapter

- Server Activity

    Refer to *Monitor JD Edwards EnterpriseOne Servers* of this guide

- Clear Table Cache

    Refer to *Clear Table Cache* of this guide

Views of the Management Console

The user interface for the *Management Console* supports these views:

- *Management Dashboard*
- *EnterpriseOne Servers By Type*
- *EnterpriseOne Servers By Group*
- *Search for User Resources*

Management Dashboard

The *Management Dashboard* is the entry point into the management application. The web page displays the status of all the *Management Agents* and *Managed Instances* . This view shows each of the known *Managed Homes* and the *Managed Instances* that they contain. *Managed Homes* and *Managed Instances* can be accessed by clicking their links.

ORACLE JD Edwards EnterpriseOne Server Manager

Select Instance...

What do you want to do?

INSTALL
▶ Management Agents
▶ Manage Software
▶ Database Drivers

CONFIGURE
▶ Server Manager Users
▶ Server Groups

TRACK
▶ User Activity
▶ Server Activity
▶ Table Cache
▶ Health Check

Diagnostics
▶ Collect and Generate Diagnostics

Managed Homes and Managed Instances

Use the dropdown below to select the desired management view.

Select View   Managed Homes and Managed Instances ∨

Make this the default view ☐

➖ **Managed Homes**

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you w

Select [Managed Home]: | Remove | | Stop | | Update | | Start All Instances | | Stop All Instances |

Select All | Select None

Managed Home Location △ ⓘ	Managed Insta
☐ ⬆ den00xiq.us.oracle.com C:\jde_home_2\SCFHA	**DADInstance1** EnterpriseOne D ⬇ Undetermine **JAS_2** EnterpriseOne H ⬆ Running **WLS** Oracle WebLogi Undetermined **JAS** EnterpriseOne H ⬇ Stopped **JAS_API** EnterpriseOne H ⬆ Running tqa_923_lnx

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To choose the Management Dashboard view of the *Management Console* , on the Home page, use the Select View dropdown to choose *Management Dashboard*.

> **Note:** This is the default view whenever you start the *Management Console* .

EnterpriseOne Servers By Type

The *EnterpriseOne Servers By Type* view of the *Management Console* lists each logical machine within the management domain of the *Server Manager for JD Edwards EnterpriseOne* . As such, this view also includes the *Management Console* itself. The complete list in this view includes:

- *JD Edwards EnterpriseOne* Management Console
- *JD Edwards EnterpriseOne* Enterprise Server
- *JD Edwards EnterpriseOne* HTML Server
- *JD Edwards EnterpriseOne* Transaction Server
- *JD Edwards EnterpriseOne* Collaborative Portal Server
- *JD Edwards EnterpriseOne* Business Services Server

To select the EnterpriseOne Servers view of the *Management Console* :

1. On the Home page, use the Select View dropdown to choose *EnterpriseOne Servers By Type*.
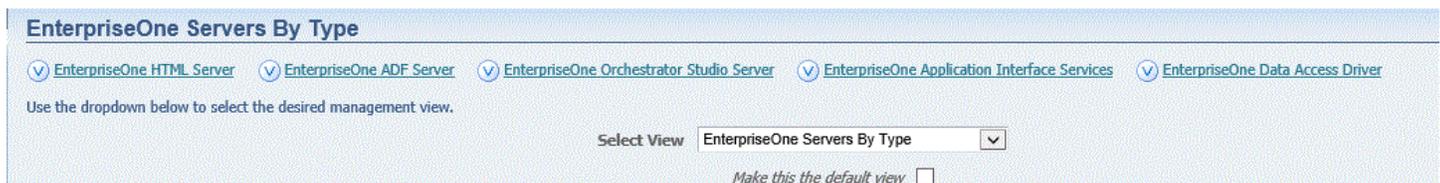
On the resulting page, the EnterpriseOne servers are organized by types.

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2. The grids in this view show the operational status of each installed server and their associated *Managed Instances* . For any installed servers, you can click on the associated link to Instance Name to work with the instance. The grids lists these items:

   ○ *Instance Name*

   Identifies the name assigned to the *Managed Instance* at the time it was created or registered.

   ○ *Managed Home Details*

   Displays the details of the Managed Home and the Managed Home host name of the target server.

   ○ *Server Group*

   Specifies the name of the server group of which the *Managed Instance* is a member.

   ○ *State*

   Lists the operational state of the managed instance, where valid values are:

   - Running
   - Stopped
   - Starting
   - Stopping
   - Failed
   - Undetermined

   ○ *User Activity*

   Provides a summary of the current user activity on the instance.

   For an Enterprise Server, the display includes the number of active CallObject (kernel business function) user and the number of active security server kernel users.

   For an *HTML Web Server* , the display includes the number of active user sessions.

   This screen shot displays an example of the grid for an installed Enterprise Server.

⊟ EnterpriseOne Enterprise Server					
Instance Name ⏶ ⓘ	Managed Home Details ⓘ	Server Group ⓘ	State ⓘ	User Activity ⓘ	
Ent_Copy_Instance	den00xiq.us.oracle.com,C:\jde_home_4\SCFHA	ENT_Group	⇧ Running	*None.*	
tga_923_lnx_ent_den60206jems_4000	den00xiq.us.oracle.com,C:\jde_home_4\SCFHA	ENT_Group	⇧ Running	*None.*	
tga_923_lnx_ent_den60206jems_4000	den60206jems.us.oracle.com,/slot/ems12400/appmgr/jde_agent_ent/SCFHA	ENT_Group	⇧ Running	10 Security Kernel User(s), 55 CallObject Kernel User(s)	

   This screen shot displays an example of the grid for an installed *HTML Web Server* :

Instance Name ▲ ⓘ	Managed Home Details ⓘ	Server Group ⓘ	State ⓘ	User Activity ⓘ
APIHTML1234	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	default	⬆ Running	None.
HTML_Instance	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	JAS_Group	⬆ Running	None.
JAS	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	default	⬇ Stopped	None.
JAS_2	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	JAS_Group	⬆ Running	None.
JAS_API	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	default	⬆ Running	None.
JAS_Latest	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	default	⬆ Running	None.
JASTdomain1	den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA	JAS_Group	⬆ Running	0
tqa_923_lnx_jas_den60206jems_21500	den00xiq.us.oracle.com,C:\jde_home_2\SCFHA	JAS_Group	⬆ Running	None.
tqa_923_lnx_jas_den60206jems_21500	den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA	JAS_Group	⬆ Running	0
tqa_923_lnx_jas_den60206jems_21502	den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA	JAS_Group	⬆ Running	0

3. The view also lists server types that are available, but not installed.

   This screen shot displays an example of the *Management Console* if the Enterprise Server is not installed:

EnterpriseOne Servers By Group

In Server Manager, you manage servers by grouping similarly purposed servers into logical groupings called server groups. You determine how you want to group servers depending on your particular JD Edwards EnterpriseOne implementation. For example, you may want to put all production servers in one server group and manage development servers in another. Or, you may decide to place servers in separate server groups based on geographical location. How you organize and manage servers in server groups is up to you.

At a minimum, the *EnterpriseOne Servers By Group* view of the *Management Console* includes a default server group that you can use to initially manage servers. You can move any server from the default server group to a newly created server group. A server cannot belong to more than one server group, including the default server group.

You can include the following types of servers in a server group:

- *JD Edwards EnterpriseOne* Management Console

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- *JD Edwards EnterpriseOne* Enterprise Server
- *JD Edwards EnterpriseOne* HTML Server
- *JD Edwards EnterpriseOne* Transaction Server
- *JD Edwards EnterpriseOne* Collaborative Portal Server
- *JD Edwards EnterpriseOne* Business Services Server

To select the *EnterpriseOne Servers By Group* view of the *Management Console* :

1. On the Home page, use the Select View dropdown to select *EnterpriseOne Servers by Group.*

2. The EnterpriseOne servers are organized by server groups, where every installation will have at least one server group called *default*. For example:

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3. The grids in this view show the operational status of each installed server and their associated *Managed Instances* . You can click on the link in the Instance Name column to access the instance. The grids lists these items:

- o *Instance Name*

    Identifies the name assigned to the *Managed Instance* at the time is was created or registered.
- o *Managed Home Details*

    Displays the details about the Managed Home and the Managed Home host name of the target server.
- o *Managed Instance Type*

    Lists the type of server the *Managed Instance* represents.
- o *State*

    Lists the operational state of the managed instance, where values are:

    - Running
    - Stopped
    - Starting
    - Stopping
    - Failed
    - Undetermined
- o *User Activity*

    Provides a summary of the current user activity on the instance.

    For an Enterprise Server, the display includes the number of active CallObject (kernel business function) user and the number of active security server kernel users.

    For an *HTML Web Server* , the display includes the number of active user sessions.

4. Start and Stop buttons are available to start and stop individual or multiple servers in a group.

Search for User Resources

You can use the Search for User Resources selection of the *Management Console* to view activity sorted by *JD Edwards EnterpriseOne* users or or by package name (starting with Tools Release 9.2.6.0).

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To select the Search for User Resources view of the *Management Console* :

1. On the Home page, use the Select View dropdown to select *Search for User Resources*.
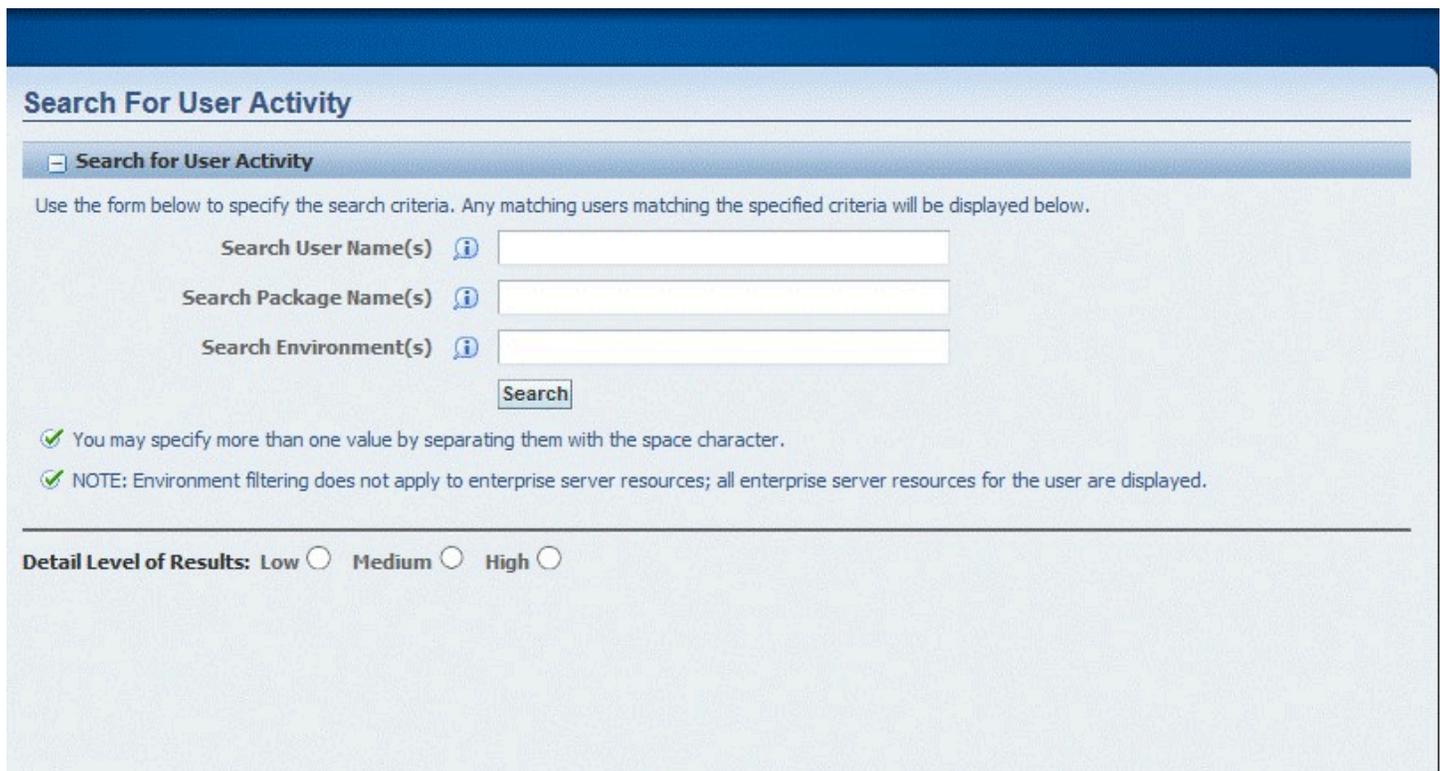
2. Complete these fields:

   ○ *Search User Name(s)*

   Enter one or more *JD Edwards EnterpriseOne* user names to filter the returned results. You should separate multiple names with spaces. Leave this field blank to search for all users.

   ○ *Search Package Name(s)*

   Enter one or more *JD Edwards EnterpriseOne* user names to filter the returned results. If you enter multiple names, separate each name with a space. Leave this field blank to search for all the packages.

   ○ *Search Environment(s)*

   Enter one or more environment names to filter the returned results. *Server Manager* will only display user resources that are associated with an environment for the environment that you specify. Leave this field blank to search for all environments.

   ○ *Detail Level of Results*

   Select a radio button for your desired level of results, where the choices are Low, Medium, or High.

3. Click the Search button.

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User Interface Productivity Hints

This section describes:

- *Grid Multiple Item Selection*
- *Grid Column Alphanumeric Sorting*
- *State Column Settings - Managed Homes*
- *State Column Settings - Managed Instances*

Grid Multiple Item Selection

For any grid displayed by the *Management Console* , the display includes these two links just above the heading of the grid:

- *Select All*
- *Select None*

Grid Column Alphanumeric Sorting

For any grid displayed by the *Management Console* , you can alphanumerically sort the content of a column by clicking on the heading title. The first time you click on a heading, an icon appears indicating the column is sorted in ascending order, as indicated by a downward pointing arrow to the right of the heading text.

If you click the heading title again, the sort toggles to descending, as indicated by an upward point arrow to the right of the heading text. For example:

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Note: The system keeps track of the sort using a browser cookie.

State Column Settings - Managed Homes

The state of a *Managed Home* is indicated by a graphical representation in the State column of the grid display. There are two possible states:

- Running

  A green up arrow indicates the *Managed Home* is running.

- Stopped

  A red down arrow indicates the *Managed Home* is stopped.
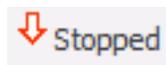
State Column Settings - Managed Instances

The state of a *Managed Instance* is indicated by description in State column of the grid display. There are three possible states:

- Running
- Stopped
- Undetermined

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7 Configure the Default Server Group Configuration Settings

Configuring Default Configuration Settings

All server groups, including the default server group, contain default configuration settings that you can configure for each type of server that you manage in the Management Console. The default configuration settings allow you to provide the initial configuration settings for a particular server type. This allows you to configure the settings once for multiple servers before you create server instances.

When you create a new server instance, the Management Console applies the default configuration settings for that type of server to the newly created server. For example, in a server group, you can define the default configuration settings for a JD Edwards EnterpriseOne HTML Web Server. Each HTML Web Server that you create in that server group uses the server groups default configuration settings for HTML Web Servers.

You can modify the configuration settings for an individual server as needed. The changes are reflected only in the configuration settings of that particular server and do not affect the default configuration settings for that type of server in the server group. Conversely, modifying the default configuration settings for a server group does not affect the configuration of any servers that have already been created.

> **Note:** When you create a server group, the Management Console copies default configuration settings from the default server group to the new server group. In the new server group, you can modify the default configuration settings as appropriate.

See Also

- *Administer Server Groups*

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To configure the default configuration settings for a server group:

1. In the *What do you want to do now?* section of the Management Console, click the *Server Groups* link.

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Select [Server Group]: Delete ⓘ

Select All | Select None

Server Group Name ⓘ	Group Description ⓘ	Server Group Members ⓘ
AIS_Group	All AIS Group	• ADF_8080 (den60206jems.us.oracle.com,/slot/ems14182/oracle/jde_agent_adf/SCFHA) • tqa_923_lnx_ais_den60206jems_26500 (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • tqa_923_lnx_ais_den60206jems_26500 (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA) • tqa_923_lnx_ais_den60206jems_26502 (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA)
ENT_Group	All Ent Server Group	• Ent_Copy_Instance (den00xiq.us.oracle.com,C:\jde_home_4\SCFHA) • tqa_923_lnx_ent_den60206jems_4000 (den00xiq.us.oracle.com,C:\jde_home_4\SCFHA) • tqa_923_lnx_ent_den60206jems_4000 (den60206jems.us.oracle.com,/slot/ems12400/appmgr/jde_agent_ent/SCFHA)
JAS_Group	All HTML Group	• HTML_Instance (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • JASTdomain1 (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA) • JAS_2 (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • tqa_923_lnx_jas_den60206jems_21500 (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • tqa_923_lnx_jas_den60206jems_21500 (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA) • tqa_923_lnx_jas_den60206jems_21502 (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA)
default	The default server group.	• APIHTML1234 (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • DADInstance11g (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • DADInstance11g (den60206jems.us.oracle.com,/slot/ems12400/oracle/jde_agent_jas/SCFHA) • JAS (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • JAS_API (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • JAS_Latest (den00xiq.us.oracle.com,C:\jde_home_2\SCFHA) • tqa_923_lnx_adf_den60206jems_21500 (den60206jems.us.oracle.com,/slot/ems14182/oracle/jde_agent_adf/SCFHA) • tqa_923_lnx_orch_den60206jems_27500 (den60206jems.us.oracle.com,/slot/ems14182/oracle/jde_agent_adf/SCFHA)

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2. In the *Select [Server Group]* pane of the Server Groups page, click the Server Group Name hyperlink in the Server Group Name row.

> **Note:** If prior to 9.1.4, click the *Configure* icon.
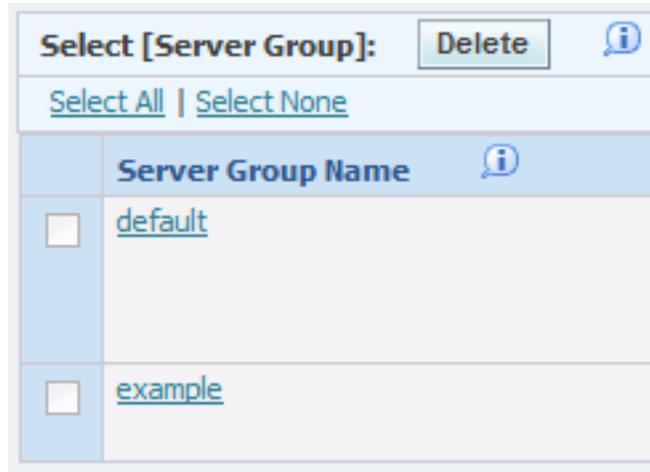
In the Server Group Default Configuration pane, the Management Console lists each type of JD Edwards EnterpriseOne server that could belong to the group and the configuration categories for each.

3. Under the appropriate server type, click a configuration category link.

Server Manager displays the parameters for that category.

4. Click the information icon next to each setting to view a definition of the parameter. The definition contains a description of the setting and if applicable, a set of valid values.

If a set of valid values exists, the Management Console displays these values in a dropdown menu.

> **Note:** There might be some configuration items that are installation-specific and therefore not displayed in the default configuration template. These settings are automatically configured for a new server when it is created.

For example:

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Configuring Default Configuration Settings Based on Existing Instance

You can set server group defaults based on an existing instance. You may set the server group defaults based on an instance in the group, or apply the current server group default values to an instance in the group.

To configure the default configuration settings based on an existing instance:

1. In the Server Group Default Configuration section of the Configure Server Group default page; select the existing instance from the dropdown menu.
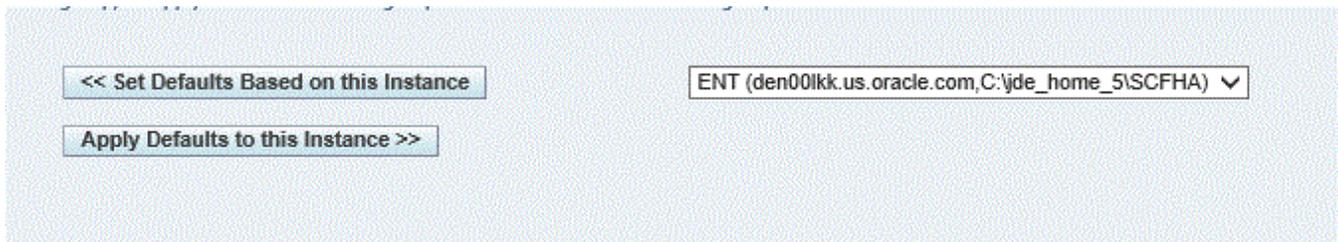
2. Select the *<< Set defaults Based on this Instance* button to set the server group defaults based on an existing instance.
3. Select the *Apply defaults to this Instance >>* button to apply the current server group default values to an instance group.

Using Centralized Configuration for EnterpriseOne HTML Servers (Release 9.2.7)

Starting with Tools Release 9.2.7, you can use Centralized Configuration in Management Console to configure default configuration settings across EnterpriseOne HTML servers. Centralized Configuration enables you to configure server settings from a single location that can be applied to all the HTML servers assigned to a server group.

You can use Centralized Configuration under Configure section in Management Console to create a centralized configuration file, e1central.properties, that will help Management Console and HTML server instance to connect with the database.

The configuration file will be distributed to all the applicable instances in the Server Manager Console, enabling Centralized Configuration. Management Console will use the values defined in the centralized configuration file to connect with the database. Each HTML server, that has Centralized Configuration enabled, will read the configuration files (such as jde.ini, jas.ini, jdbj.ini, jdelog.properties, etc.) from the database and create the .ini file before starting the instance.

After you enable the Centralized Configuration, the group level default configuration settings will be applicable to the server group as well as all the HTML server instances in that server group. Any changes made on the configuration of server groups will be applicable to HTML server instances as well. However, if you change the configuration settings at

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instance level, the system overrides the group level configuration settings and uses the instance level configuration. You have the option to restore the default group level configuration settings for such instances. See *Understanding How to Restore Group Default Settings for HTML Server Instances* for details.

When you add a new server to a server group, Management Console automatically applies the default configuration settings for that type of server to the newly added server. See *Configuring Default Configuration Settings* for details. Moving an existing server from a group to a different server group will use the settings of the server group it is moved to, if you have the Centralized Configuration enabled for a server instance. Server Manager automatically applies the default configuration settings of that server group to the newly added HTML server instance.

Below prerequisites should be fulfilled before you enable Centralized Configuration:

- The Sever Manager Console and the HTML servers should be on Tools Release 9.2.7.
- All the required drivers and certificates must be installed on both Server Manager Console and JAS for Server Manager Console to communicate with the database.
- Latest Tools Rollup ESU must be installed.

Any changes to configuration settings on group or instance level requires you to synchronize the settings and restart the HTML server instance for to use the new settings. For such instances, the system displays a Warning message along with a Synchronize Configuration button. Click the Synchronize Configuration button to sync the changes and restart the instance.

For all cluster setup, you must manually copy the e1central.properties file, that has the database details, along with the e1Central_config folder, if available, to the node's config folder.

> **Note:** If you have more than one Sever Manager Console, you need to have different data sources for respective consoles. For each Server Manager Console, you must create different F98CCONF (E1 Centralized Configuration Table) table in different data sources. The table F98CCONF (E1 Centralized Configuration Table) in system data source will be created as part of latest Tools Rollup ESU.

In case there is a change in the data source, you need to manually migrate all the records from F98CCONF (E1 Centralized Configuration Table) table to the new data source.

> **Note:** HTML servers that are on and above Tools Release 9.2.7, must be restarted after synchronization is complete with the new settings. When Centralized Configuration is enabled, any update that is made manually will not take effect after the server is restarted. The changes are lost as the changes will be downloaded from the database.

> **Note:** *Click here to view an OBE of this feature.*

Understanding How to Enable Centralized Configuration for EnterpriseOne HTML Servers

After you save the settings in the Centralized Configuration for the first time, it is applied to the server group's HTML server configuration and all the HTML server instances within that group. Upon a successful save, Centralized Configuration inserts a group level configuration to the database. An instance level override, for those instances where the level configuration settings are different from the server group it belongs to, is also inserted.

Centralized Configuration is also enabled for HTML servers that are on Tools Release 9.2.7 while you create a new instance. Alternatively, with Tools Release 9.2.7, you can perform a Change Component operation on the existing server

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instances which enables Centralized Configuration. Change component will make all the current configuration entries in database as instance level configuration.

To enable Centralized Configuration:

1. Log in to Server Manager Console.
2. Click Centralized Configuration to access the database details.

   > **Note:** Make sure you have required drivers and certificates installed to allow the JAS instances and the Server Manager Console to connect with the database.

3. Complete the below fields:
   - Username

     Enter the username to use for centralized configuration when connecting to the configured database.
   - Password

     Enter the password to use for centralized configuration when connecting to the configured database.
   - Database Type

     Use the dropdown to select a database where the centralized configuration table is stored. Tnsname.ora field is populated when you select Oracle Database and the Use TLS field is populated when you select either IBM UDB, AS/400 or SQL.
   - Owner

     Enter the database object owner where the centralized configuration table is stored.
   - Server

     Enter the server name where the centralized configuration table is stored.
   - Database Name

     Enter the database name where the centralized configuration table is stored.
   - Physical Database

     Enter the physical database name where the centralized configuration table is stored.
   - Server Port

     Enter the database server port where the centralized configuration table is stored.
   - Data Source Name

     Enter the database server port where the centralized configuration table is stored.
   - Use TLS

     The Use TLS option appears for selection after you select either IBM UDB, AS/400, or SQL. Select the checkbox if you want a secure TLS connection to either of the databases.
   - Tnsname.ora

     The Tnsname.ora field appears for modification after you select Oracle Database in Database Type. Enter the Tnsname.ora connection details.
4. Click Save.

The system will continue to apply the settings and it will take between 5 to 15 minutes to complete the action depending on the number of server instances in the group. Do not refresh your web browser until the system prompts that the operation is successful.

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If the database details are incorrect, the system displays an error message. You must rectify the incorrect details to enable Centralized Configuration.

> **Note:** The data migration is a one-time event. If the database already has the records, the migration will not initiate after you click Save. The system only performs the database connection validation.

Understanding How to Restore Default Group Settings for HTML Server Instances

Once enabled, the Central Configuration settings are applicable to all the instances in a group and does not have an override option. However, you can update the configuration settings for individual instances. For server instances where you have different configuration settings than the server group, the system provides you an option to restore the default configuration setting of the server groups.

To restore the instance configurations settings to group configuration settings:

1. Access the instance that has different configuration settings than the group it belongs to.
2. Navigate to Configuration > Advanced.
3. Open any configuration head. For example, the Cache configuration of the instance.
4. Under the configuration section, click Revert to Group Defaults button.

   > **Note:** The Revert to Group Defaults button is only activate if the instance level configuration settings are different from the group level configuration settings. If the Revert to Group Defaults button is not available under the configuration items of an instance, any configuration setting that you update at the server group level is applicable to the instance as well.

Understanding How to Disable Centralized Configuration for EnterpriseOne HTML Servers

To disable Centralized Configuration for HTML servers:

1. Access the install location of Server Manager Console.
2. Navigate to \targets\home\config.
3. Delete the e1central_Config folder.
4. For the cluster setup, from the target\<targetname>\config folder delete e1central.properties file and e1Central_config folder from all JAS instances and respective nodes.
5. Delete e1central.properties file from WAS/WLS deployment WEB-INF/classes folder.

   > **Note:** If you disable the Centralized Configuration, you can restore the previously saved configuration else the existing ini will continue to work.

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Using Centralized Configuration for EnterpriseOne AIS Servers (Release 9.2.7.3)

Starting with Tools Release 9.2.7.3, you can use Centralized Configuration in Management Console to configure default configuration settings across EnterpriseOne AIS servers. Centralized Configuration enables you to configure server settings from a single location that can be applied to all the AIS servers assigned to a server group.

> **Note:** If you have enabled Centralized Configuration for HTML servers in the previous Tools Release (9.2.7), the Centralized Configuration will be automatically enabled for AIS servers in Release 9.2.7.3. Alternatively, with Tools Release 9.2.7.3, you can perform a Change Component operation on the existing server instances which enables Centralized Configuration. Change component will make all the current configuration entries in database as instance level configuration. See *Using Centralized Configuration for EnterpriseOne HTML Servers (Release 9.2.7)* for details.

After you enable the Centralized Configuration, the group level default configuration settings will be applicable to the server group as well as all the AIS server instances in that server group. Any changes made on the configuration of server groups will be applicable to AIS server instances as well. However, if you change the configuration settings at instance level, the system overrides the group level configuration settings and uses the instance level configuration. You have the option to restore the default group level configuration settings for such instances. See Understanding How to Restore Group Default Settings for AIS Server Instances for details.

Understanding How to Enable Centralized Configuration for AIS Servers

When you perform a Change Component operation with Tools Release 9.2.7.3, Centralized Configuration for AIS servers will also be enabled if you enabled Centralized Configuration for HTML servers in the previous release (9.2.7). However, Centralized Configuration for AIS servers will not be enabled if you did not enable Centralized Configuration for HTML servers in the previous release.

The steps to enable Centralized Configuration for AIS servers are same as enabling Centralized Configuration for HTML servers. See *Understanding How to Enable Centralized Configuration for EnterpriseOne HTML Servers* for details.

Also see, *Understanding How to Validate Centralized Configuration with Data Browser*.

Understanding How to Restore Default Group Settings for AIS Server Instances

Once enabled, the Central Configuration settings are applicable to all the AIS server instances in a group and does not have an override option. However, you can update the configuration settings for individual instances. For AIS server instances where you have different configuration settings than the server group, the system provides you an option to restore the default configuration setting of the server groups.

1. Access the AIS instance that has different configuration settings than the group it belongs to.
2. Navigate to Configuration > Advanced.
3. Open any configuration head. For example, the Cache configuration of the instance.

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4. Under the configuration section, click Revert to Group Defaults button.

> **Note:** The Revert to Group Defaults button is only activate if the instance level configuration settings are different from the group level configuration settings. If the Revert to Group Defaults button is not available under the configuration items of an instance, any configuration setting that you update at the server group level is applicable to the instance as well.

Understanding How to Disable Centralized Configuration for EnterpriseOne AIS Servers

The steps to disable Centralized Configuration for AIS servers are same as disabling Centralized Configuration for HTML servers. See *Understanding How to Disable Centralized Configuration for EnterpriseOne HTML Servers* for details.

Using Centralized Configuration for Enterprise, BSSV, and Transaction (RTE)Servers (Release 9.2.8)

Starting with Tools Release 9.2.8, you can use Centralized Configuration in Management Console to configure default configuration settings across EnterpriseOne Enterprise, BSSV, and Transaction servers. Centralized Configuration enables you to configure server settings from a single location that can be applied to all the Enterprise, BSSV, and Transaction servers assigned to a server group.

> **Note:** Release 9.2.8 extends the capability of Centralized Configuration to all the EnterpriseOne servers. If you have enabled Centralized Configuration in the previous Releases 9.2.7 or 9.2.7.3, the Centralized Configuration will be automatically enabled for all the EnterpriseOne servers in Release 9.2.8. Alternatively, with Tools Release 9.2.8, you can perform a Change Component operation on the existing server instances which enables Centralized Configuration. Change component will make all the current configuration entries in database as instance level configuration. See Using Centralized Configuration for EnterpriseOne HTML Servers (Release 9.2.7) for details.

After you enable the Centralized Configuration, the group level default configuration settings will be applicable to the server group as well as all the server instances in that server group. Any changes made on the configuration of server groups will be applicable to server instances as well. However, if you change the configuration settings at instance level, the system overrides the group level configuration settings and uses the instance level configuration. You have the option to restore the default group level configuration settings for such instances. See Understanding How to Restore Group Default Settings for Enterprise, BSSV, and Transaction Server Instances for details.

Understanding How to Enable Centralized Configuration for Enterprise, BSSV, and Transaction Servers

When you perform a Change Component operation with Tools Release 9.2.8, Centralized Configuration for Enterprise, BSSV, and Transaction servers will also be enabled if you enabled Centralized Configuration in the previous releases, 9.2.7 or 9.2.7.3. However, Centralized Configuration for Enterprise, BSSV, and Transaction servers will not be enabled if you did not enable Centralized Configuration in the previous releases.

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The steps to enable Centralized Configuration for Enterprise, BSSV, and Transaction servers are same as enabling Centralized Configuration for HTML and AIS servers. See Understanding How to Enable Centralized Configuration for EnterpriseOne HTML Servers for details.

Also see, Understanding How to Validate Centralized Configuration with Data Browser.

> **Note:** For Transaction server horizontal cluster instance, adding `e1central.properties` file is not required. Whenever there is a change in configuration, you can either copy the INI files from vertical machine to horizontal machine (path: `..\targets\rte_instance_name\config`) or update the changes in the horizontal machine's INI files manually.

Understanding How to Restore Default Group Settings for Enterprise, BSSV, or Transaction Server Instances

Once enabled, the Central Configuration settings are applicable to all the EnterpriseOne server instances in a group and does not have an override option. However, you can update the configuration settings for individual instances. For server instances where you have different configuration settings than the server group, the system provides you an option to restore the default configuration setting of the server groups.

Access the Enterprise, BSSV, or Transaction server instance that has different configuration settings than the group it belongs to:

1. Navigate to Configuration > Advanced.
2. Open any configuration head. For example, the Cache configuration of the instance.
3. Under the configuration section, click **Revert to Group Defaults** button.

> **Note:** The Revert to Group Defaults button is active only if the instance level configuration settings are different from the group level configuration settings. If the Revert to Group Defaults button is not available under the configuration items of an instance, any configuration setting that you update at the server group level is applicable to the instance as well.

Understanding How to Disable Centralized Configuration for Enterprise, BSSV, and Transaction Servers

The steps to disable Centralized Configuration for Enterprise, BSSV, and Transaction servers are same as disabling Centralized Configuration for HTML servers. See Understanding How to Disable Centralized Configuration for EnterpriseOne HTML Servers for details.

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Understanding How to Validate Centralized Configuration with Data Browser

After you enable Centralized Configuration, the system creates a e1central.properties file in the database. You can validate it by accessing the table F98CCONF (E1 Centralized Configuration Table) through the Data Browser tool.

1. Log in to JD Edwards EnterpriseOne environment.
2. Type databrowser in the Fast Path.
3. In the Query Selector form select the By Table option.
4. In the Name field located under the By Table option, enter F98CCONF.
5. Press Tab.
6. The Data Source field automatically displays the name of the data source in which the table resides for the environment that you are logged into.
7. In the Data Source field, if the data source that is displayed is different than the one from which you want to search, type a new data source, or use the search button to locate a data source.
8. Click OK.
9. The Data Browser search form appears for F98CCONF (E1 Centralized Configuration Table).
10. Click Find. The system displays all the server groups and instances under the InstanceName column that have Centralized Configuration enabled.

All server groups listed under the InstanceName column will have a prefix of star symbol. For the sever instances, JdeHome and SmHostName columns will list the names of the managed home and host names they are part of.

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8 Configure Management Console Users

Configure Management Console Users

Management Console users are JD Edwards EnterpriseOne users that you import from *JD Edwards EnterpriseOne* . You determine which *JD Edwards EnterpriseOne* users should have access to the *Management Console* and assign each user to user groups, which are used to define the actions the users may perform.

An authorized user signs into the *Management Console* with *JD Edwards EnterpriseOne* credentials; a separate user ID and password are not required. The *Management Console* uses a *JD Edwards EnterpriseOne* security server for user authentication. The *Management Console* employs user groups as an efficient way to manage permissions and servers. Instead of administering these items at the user level, you can associate permissions with a user group.

For example, you might assign a set of users to a user group that allows the users to view the log files of a particular group of servers but not allow the users to start or stop the servers. You might also create a user group that enables its group members to completely administer the development servers but not to see the production servers within the *Management Console* application.

The *Management Console* user repository stores user group definitions, server group definitions, and authorization information.

Refer to these applicable tasks in Advanced Console Administration part of this guide:

- *Configure the Management Console for User Setup*
- *Manage Management Console Users*
- *Manage User Groups*
- *Assign Server Manager Permissions*
- *Run the User Access Report*

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9   Managed Software Components

Upload Software Components

You access *Managed Software Components* by clicking the *Manage Software* link within the *What do you want to do?* pane. Once you have uploaded the *Managed Software Components* , you can distribute them to Managed Home Locations where you plan to create new server instances. Or, if the software component is a new version of the *Management Console* you can use it to update the *Management Console* itself.

You use the Upload Software Components page to upload *JD Edwards EnterpriseOne* software components to the *Management Console* . Once you have uploaded and distributed the *Managed Software Components* to a *Management Agent* , you can use them to create new server instances.

☐ Upload Software Components

Use this form to upload EnterpriseOne software components to the management console. Once uploaded the software components may be be used to create new server instances.

File To Upload [   ] [Browse...]

[**Upload**]

✅ You may also add software components by manually copying the files to the following directory on the host machine running the management console: `D:\servermanager\demosystem\components`.

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To upload *Managed Software Components* :

1. On Upload Software Components, click the *Browse* button to locate the various .par files for each *Managed Software Component* . Typically you will obtain these files from Customer Connection using the Change Assistant, although they can also be on CD.

   For example:
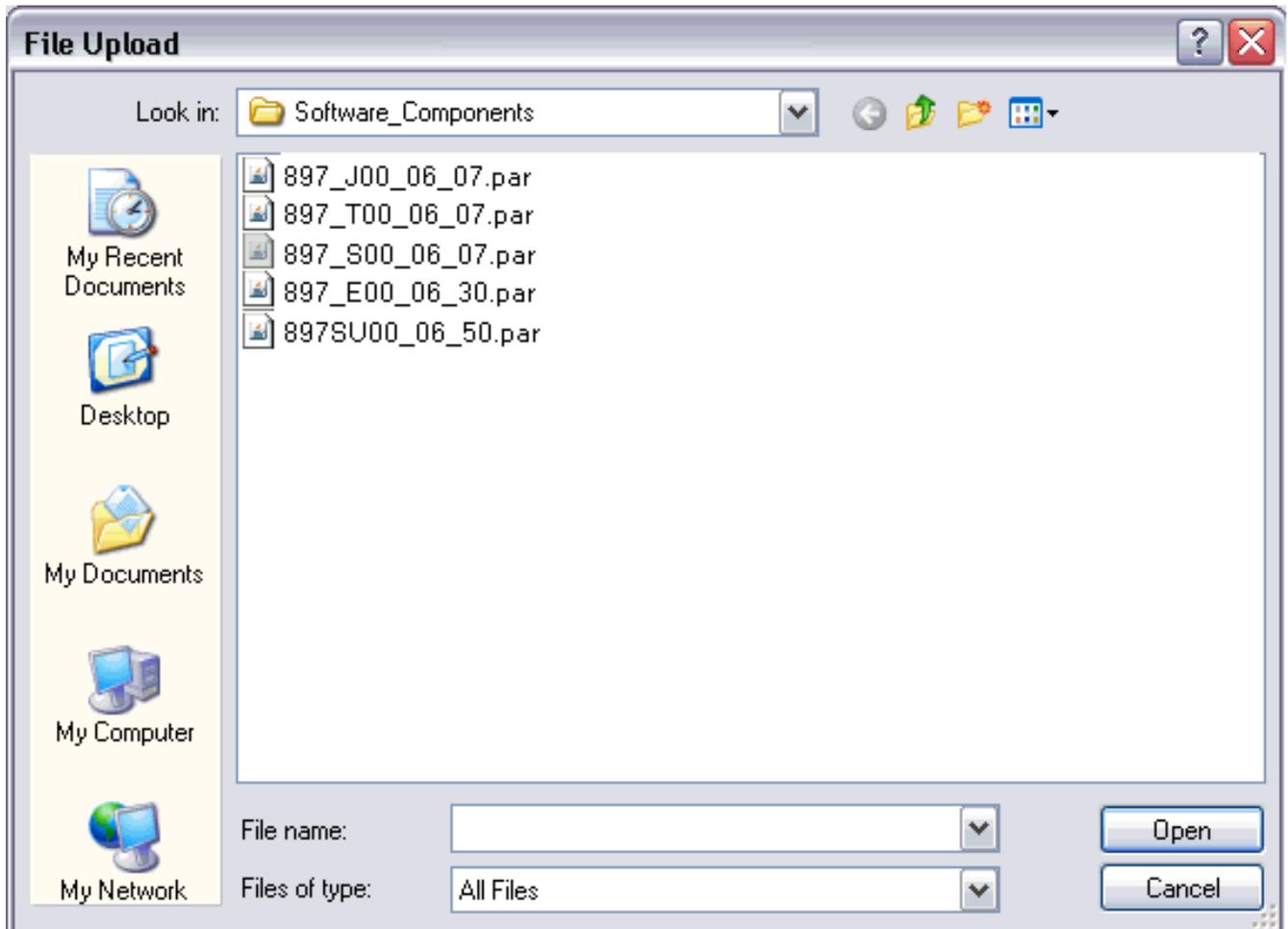
2. On File Upload, select the `.par` file(s) for the *Managed Software Component* that you wish to upload and click the *Open* button.
3. On Upload Software Components, click the *Upload* button to upload the selected file.

   As soon as the file is successfully uploaded, the *Management Console* updates the page to include the *Managed Software Component* .

If you attempt to upload a *Management Console* that already exists with the identical file name, the *Management Console* displays this warning, discards the request, and does not overwrite the existing file:

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⚠ **Warning**

The uploaded file already exists in the management console. The uploaded file has been discarded.

Tip: You can also add *Managed Software Components* by manually copying the files to the `components` directory on the machine running the *Management Console* . This directory is auto-detected by *Management Console* and is displayed in the tip section of the Upload Software Components section. For example, in the preceding section, the directory is: `D:\servermanager\demosystem\components`

Distribute or Delete Managed EnterpriseOne Software Components

This section discusses these *Managed EnterpriseOne Software Components* functions:

- *Distribute Software Components to Managed Homes*
- *Delete Managed Software Components from the Management Console*
- *Delete Managed Software Components known to the Management Console*

Distribute Software Components to Managed Homes

Once you have uploaded them, the *Managed EnterpriseOne Software Components* page displays all the *Managed Software Components* that have been uploaded to the *Management Console* .

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To distribute *Management Consoles* to *Managed Homes* :

1. On Managed EnterpriseOne Software Components, select one or more available *Software Components* that you want to distribute to a connect *Managed Home* .
2. Click the *Distribute* button.

The *Management Console* displays a page of connected *Managed Homes* to which you can distribute the selected *Software Component* .

3. On the list of available *Managed Homes* to which you can distribute the selected *Software Component* , select one or more *Managed Homes* .

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4. Click the *Distribute Software* button.
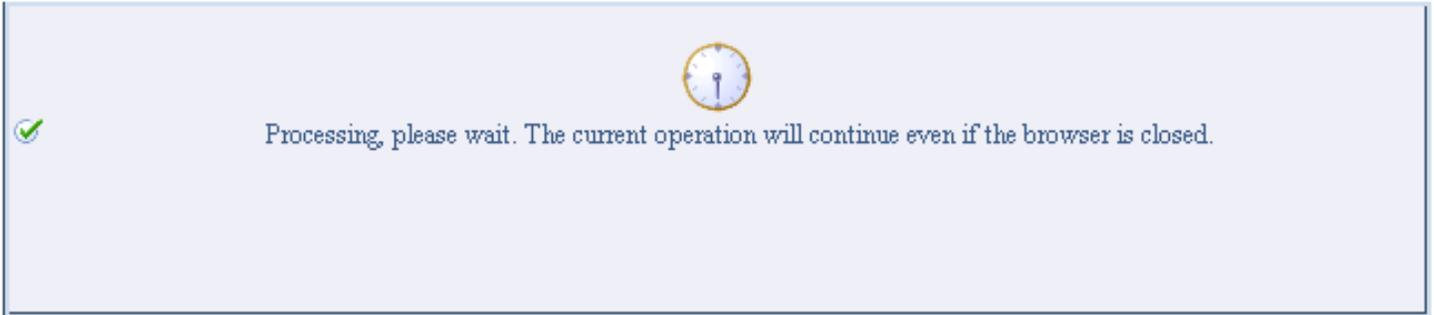
The *Management Console* displays a progress panel and performs the requested operation.

5. To verify that the selected *Software Component* is distributed, you can navigate to the *Managed Home* to which you distributed the *Software Component* and check the list of software components in Managed Software Components. *Management Consoles* .

Delete Managed Software Components from the Management Console

To delete Managed Software Components from the Management Console:

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1. In the *What do you want to do?* section, click on the link for *Manage Software*.
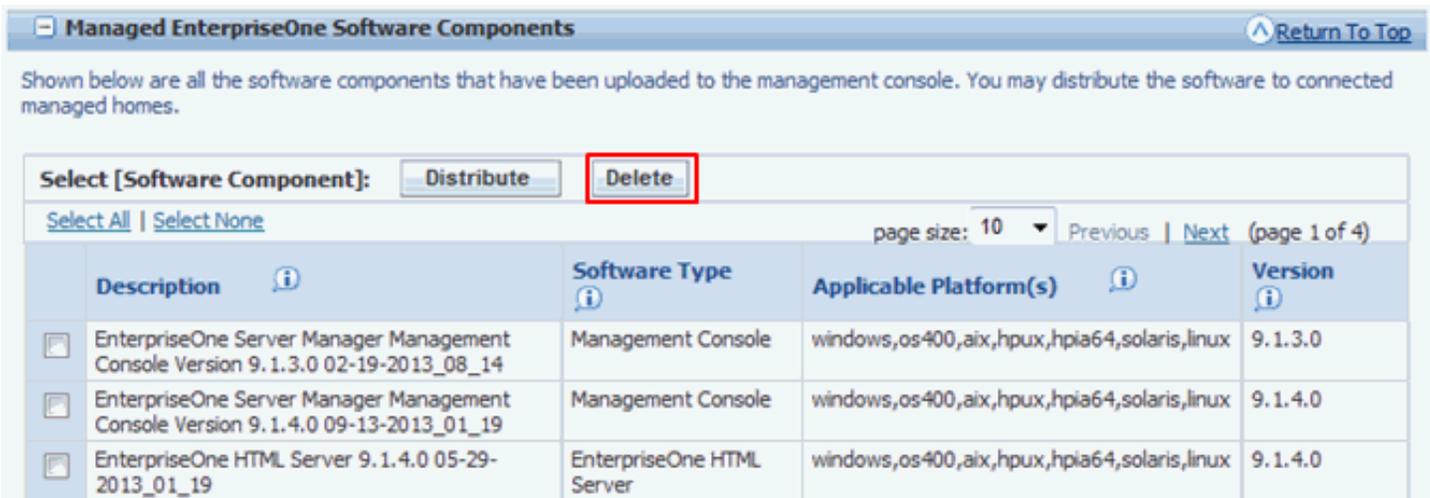
2. On the Managed Software Components section, use the check box to select one or more *Managed Software Components* to delete.

3. Click the *Delete* button.

4. On the confirmation dialog, click OK to perform the requested deletion.

You cannot delete a *Software Component* that has a Dependent Managed Instance. Such instances are displayed in the last column of the Managed Software Components grid.

Delete Managed Software Components known to the Management Console

To delete Managed Software Components known to the Management Agent:

Managed Homes and Managed Instances

Use the dropdown below to select the desired management view.

Select View   Managed Homes and Managed Instances ▼

Managed Homes

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you wish to not see it listed here you may remove it.

Select [Managed Home]:   Remove   Stop   Update

Select All | Select None

	Managed Home Location ⓘ	Managed Instances ⓘ
☐	⬆ ADC6160631.us.oracle.com C:\jde_agent\SCFHA	**wls_bip** Oracle WebLogic Server ⬇ Stopped **HTML_srv1** EnterpriseOne HTML Server ⬇ Undetermined

1. On the Managed Homes and Managed Instances page, click on the link to a Managed Home.

Managed Software Components ⟳   ⋀ Return To Top

The following software components have been downloaded to this host from the management server. You may create new managed instances using any of the following components.

Select [Software Component]:   Delete

Select All | Select None

	Software Description ⓘ	Software Type ⓘ	Applicable Platform(s) ⓘ	Version ⓘ	Dependent Managed Instances ⓘ
☑	EnterpriseOne HTML Server 8.98.4.8 01-06-2012_02_07	EnterpriseOne HTML Server	windows,os400,aix,hpux,hpia64,solaris,linux	8.98.4.8	None.
☐	EnterpriseOne HTML Server 9.1.4.0 05-07-2013_02_36	EnterpriseOne HTML Server	windows,os400,aix,hpux,hpia64,solaris,linux	9.1.4.0	None.

2. On the Managed Software Components section, use the check box to select one or more *Managed Software Components* to delete.

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3. Click the *Delete* button.

4. On the confirmation dialog, click OK to perform the requested deletion.

You cannot delete a *Software Component* that has a Dependent Managed Instance. Such instances are displayed in the last column of the Managed Software Components grid.

Start or Stop a Managed EnterpriseOne Software Component

When you click the link for a *Managed Instance* , the Instance Name page displays information in two categories:

- General
- Instance Properties

The General section of the page shows the status of the *Managed Instance* . If the status is either *Started* or *Stopped*, the page contains either the *Stop* or *Start* button, as appropriate. If the status of the *Managed Instance* is undetermined, the page does not contain either button.

For example, if the status is Running, you can stop the instance by pressing the Stop button as shown below:

Also for example, if the status is Stopped, you can start the instance by pressing the Start button as shown below:

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Change a Managed EnterpriseOne Software Component

When you click the link for a *Managed Instance* , the Instance Name page displays information in two categories:

- General
- Instance Properties

In the General section of the page contains a section for *Software Component Version*, under which is a *Change* button.

If there is only a single version of the *Software Component* associated with this *Managed Instance* , clicking the *Change* button displays this *Change Tools Release* dialog that indicates there is no component available to which to change:

If multiple versions of the *Software Component* are available to the *Management Console* , clicking the *Change* button displays the *Change Tools Release* dialog that lists each available *Software Component* . For example:

To change a *Software Component* :

1. Select the radio button associated with the *Management Console* to which you wish to change.
2. Click the *Change Component* button.

   There is no confirmation dialog for this action. As soon as you click the *Change Component* button, the *Management Console* begins the work. You can always revert to your previous version assuming you have a copy of the *Software Component* for the *Management Console* to which you want to change.

Note: If you are using WebSphere Application Server and running JD Edwards EnterpriseOne as part of a federated (or clustered) web server, you may need to regenerate the WebSphere global plugin configuration after deploying the newest tools release. This is required when new servlets have been added to the tools release you are deploying.

View the Software Release History for a Managed Instance

If more than more version of a *Software Component* has been installed to a *Managed Instance* the *Software Release History* icon is displayed in the *General* section of the page. For example:

To view the Software Release History for a *Managed Instance* :

1. Select a *Managed Instance* for which you wish to view the Software Release History.
2. In the *General* section of the page, click the *Software Release History* icon (refer to preceding graphic).

   The *Software Release History* popup displays these grid items:

   ○ *Date*
   ○ *User Name*
   ○ *Old Release*
   ○ *New Release*

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10 Manage JDBC Drivers

Obtain JDBC Drivers

> **Tip:** *Web-Based Servers.* Although not absolutely required, the sequence of installing JDBC drivers on your *Management Console* machines should precede the installation of any *JD Edwards EnterpriseOne* web-based server. This sequence is recommended because the process of installing *JD Edwards EnterpriseOne* web-based servers includes starting the server after the installation is complete. If the requisite JDBC driver is not installed, the *JD Edwards EnterpriseOne* web-based server cannot communicate with the *JD Edwards EnterpriseOne* Security Server thus the server cannot start.

Server Manager allows you to centrally manage JDBC drivers that are required to enable the various web-based servers to access their respective databases. Using *Server Manager* you can upload and install any of these JDBC drivers supported by the *JD Edwards EnterpriseOne* web-based servers:

- Oracle Database
- MicroSoft SQL Server
- IBM DB2 for Windows or Unix
- IBM DB2 for *IBM i*

You should obtain the required driver files from the database vendor. Once all the required files have been obtained they can be uploaded to the management console. This table lists the requisite JDBC drivers.

Database	JDBC Driver Files
Oracle 9i	classes12.jar
Oracle 10g (JDK 1.4)	ojdbc4.jar
Oracle 11g (JDK 1.5)	ojdbc5.jar
Oracle 11g (JDK 1.6)	ojdbc6.jar
Oracle 12c (JDK 1.7)	ojdbc7.jar
Oracle 12c/19c (JDK 1.8)	ojdbc8.jar
SQL Server (JDK 1.4/JDK 1.5)	sqljdbc.jar
SQL Server (JDK 1.6)	sqljdbc4.jar
SQL Server (JDK 1.7)	sqljdbc41.jar

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Database	JDBC Driver Files
SQL Server (JDK 1.8)	sqljdbc42.jar
SQL Server 2019 (JDK 1.8)	mssql-jdbc-7.4.1.jre8.jar
IBM DB2 UDB Type-2 (JDK 1.4/JDK 1.5)	db2java.zip
IBM DB2 UDB Type-4 (JDK 1.4/JDK 1.5)	db2jcc.jar db2jcc_license_cu.jar
IBM DB2 UDB (JDK 1.6)	db2jcc4.jar
IBM DB2 for IBMi (*IBM i*)	jt400.jar

For the Oracle database, you can locate the driver file in these locations:

- Beginning with WebLogic 12.1.3, WebLogic is pre-configured to use a bundled Oracle 12c database JDBC driver. This JDBC driver comes pre-installed with the WebLogic Server installation, and no additional steps are required to connect to an Oracle 12c database.

- Oracle Database

  Your installation of an Oracle database product includes the JDBC Thin driver for use with JDK 1.2 and JDK 1.3.

- Oracle Technology Network (OTN)

  https://www.oracle.com/database/technologies/appdev/jdbc-downloads.html

- JD Edwards Update Center

  Search for `classes12.jar` at this link:

  https://updatecenter.oracle.com/

Upload JDBC Drivers to the Management Console

To upload JDBC drivers to the *Management Console* :

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1. Navigate to the JDBC driver management page using this quick link in the *What do you want to do?* section:

   Database Drivers

2. Locate the section corresponding to the type of driver you wish to install.

   The *Management Console* displays this JDBC Driver Upload form only if you have not previously uploaded the JDBC driver.

   For example, if you have not previously uploaded the Oracle driver, the form looks like this:

3. For each of the required files use the `Browse` button to select the corresponding file previously obtained.

   For example, if you were uploading the driver for Oracle, you would browse to the location of the `classes12.jar file.`

4. Click the Upload button.

   The selected driver file(s) are uploaded to this directory, which contains the *Management Console* software repository.

   `x:\JDE_HOME\components`

where *x:* is the drive on which you installed the *Management Console* , and

where `JDE_HOME` is the name that you defined as the home for the *Management Console* .

Tip: External to the *Management Console* , the functional equivalent of using this form to upload the driver is to place it in the specified directory by other means. Once you have placed the driver files in the appropriate directory, refreshing the JDBC Drivers page displays the available application servers on which the drivers are not already installed, but on which they can be installed. Server Manager will not display bundled JDBC drivers that come already installed with Oracle WebLogic Server. The bundled JDBC driver does not need to be uploaded or installed through Server Manager.

Note: If you need to update the JDBC driver for the WebLogic Server that is bundled with Server Manager, refer to the following section entitled: **Update Bundled JDBC Drivers for WebLogic Server**

Update Bundled JDBC Drivers for WebLogic Server

Refer to this document on My Oracle Support for instructions on how to update JDBC and UCP drivers that JD Edwards EnterpriseOne bundles with WebLogic Server for Server Manager:

How To Update the JDBC and UCP Drivers Bundled with WebLogic Server (Doc ID *1970437.1*)

Also refer to these Oracle documents:

Adding Third-Party JDBC Drivers Not Installed with WebLogic Server

Upgrading and Using Latest Oracle 19c JDBC Drivers with WebLogic Server

Also refer to this blog:

Upgrading to use the Latest Oracle 19.x Drivers with WebLogic Server

Install JDBC Drivers to J2EE Servers

Once the JDBC driver file(s) are successfully uploaded for the chosen database type, they can be installed on the application servers within the management domain.

Management Console installs JDBC drivers in a web container within an Application Server installation. This installation corresponds to a Managed Server within an Oracle WebLogic Server and to a J2EE server in IBM WebSphere.

To install a driver on an Application Server:

1. Verify that the Status of the target application server for the installation is *Not Installed*.
2. Select the check box for the application server on which you want to install the driver.
3. Click the *Install Driver* button.
4. Refresh the JDBC Driver page and verify the status is changed to *Installed*.

Uninstall the JDBC Driver from J2EE Servers

To uninstall the JDBC Driver from J2EE Servers:

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1. Verify that the status of the J2EE server on which you wish to uninstall the JDBC Driver is *Installed*.
2. Enable the check box for the application server on which you want to uninstall the driver.
3. Click the *Uninstall Driver* button.
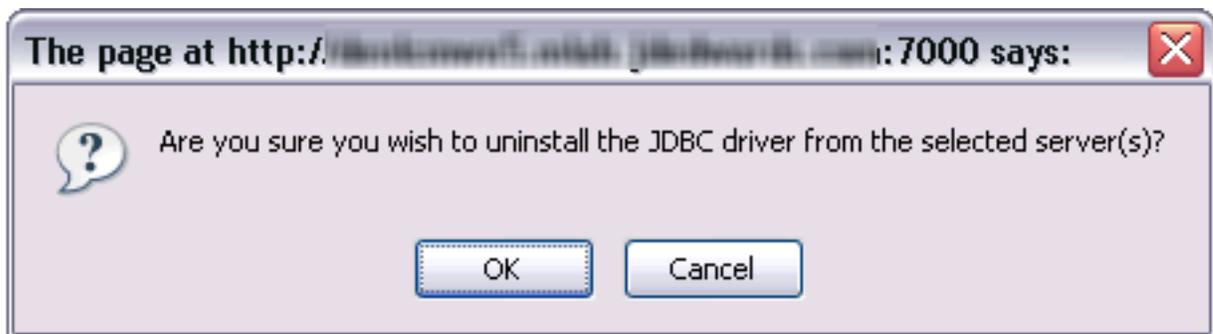
4. On the resulting confirmation dialog, click the *OK* button to confirm that you want to delete the JDBC driver from the selected server.
5. Refresh the JDBC Driver page and verify that the status is changed to *Not Installed*.

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Install JDBC Drivers to JD Edwards EnterpriseOne Data Access Servers

After you have uploaded the JDBC driver file(s) for the chosen database type, and after you have installed your Data Access Server, use the Server Manager to install the JDBC driver file(s) to the Data Access Servers within the management domain.

To install a driver on a Data Access Server:

1. Verify that the Status of the target Data Access Server for the installation is *Not Installed*.
2. Select the check box for the Data Access Server on which you want to install the driver.
3. Click the *Install Driver* button.
4. Refresh the JDBC Driver page and verify the status is changed to *Installed*.

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Uninstall JDBC Drivers from JD Edwards EnterpriseOne Data Access Servers

To uninstall the JDBC Driver from JD Edwards EnterpriseOne Data Access Servers:

1. Verify that the status of the Data Access Server on which you wish to uninstall the JDBC Driver is *Installed*.
2. Enable the check box for the Data Access Server on which you want to uninstall the driver.
3. Click the *Uninstall Driver* button.

4. On the resulting confirmation dialog, click the *OK* button to confirm that you want to delete the JDBC driver from the selected server.

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5. Refresh the JDBC Driver page and verify that the status is changed to *Not Installed*.

Install JDBC Drivers to JD Edwards Enterprise Servers (Release 9.2.7.0)

After you have uploaded the JDBC driver file(s) for the chosen database type, and after you have installed your Enterprise Server, use the Server Manager to install the JDBC driver file(s) to the Enterprise Servers within the management domain.

To install a driver on an Enterprise Server:

1. Verify that the Status of the target Enterprise Server for the installation is *Not Installed*.

2. Select the check box for the Enterprise Server on which you want to install the driver.

3. Click the *Install Driver* button.

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4. Refresh the JDBC Driver page and verify the status is changed to *Installed*.

Uninstall JDBC Drivers from JD Edwards Enterprise Servers (Release 9.2.7.0)

To uninstall the JDBC Driver from JD Edwards Enterprise Servers:

1. Verify that the status of the Enterprise Server on which you wish to uninstall the JDBC Driver is *Installed*.
2. Enable the check box for the Enterprise Server on which you want to uninstall the driver.
3. Click the *Uninstall Driver* button.

4. On the resulting confirmation dialog, click the *OK* button to confirm that you want to delete the JDBC driver from the selected server.

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5. Refresh the JDBC Driver page and verify that the status is changed to *Not Installed*.

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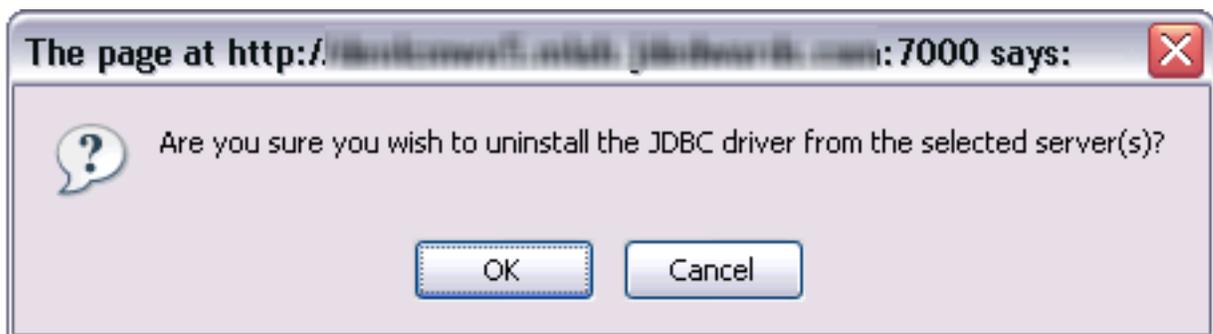
11 Manage System Administration Tasks by Using Administrative Orchestrations (Release 9.2.6)

Overview

The Server Manager system administrator can perform several system administration tasks by running system administrative orchestrations, with only the Server Manager Console and AIS servers running and without any dependency on other EnterpriseOne servers. For example, a system administrator can automatically bring up the EnterpriseOne servers and perform administration tasks such as updating the Tools Releases or updating the EnterpriseOne server configuration by running a system administrative orchestration even when the HTML, Database, and Enterprise servers are down.

A system administrative orchestration is an orchestration that contains only these types of components: Open API-type connectors connecting to a Server Manager Console Open API endpoint, rules, or child orchestrations with a similar structure as the parent orchestration.

Prerequisites

To upload a system administrative orchestration to the Server Manager Console and run the orchestration, you must ensure that:

- The AIS server is running.
- The Server Manager Console is running.
- The system administrative orchestration is published or shared, and then exported. When exporting the orchestration, you must ensure that the orchestration and all the associated components are exported.

  For information about how to create orchestrations, see *"Creating Orchestrations"* in the *JD Edwards EnterpriseOne Tools Orchestrator Guide* .

  Orchestrations and orchestration components are saved and managed as user defined objects (UDOs) in JD Edwards EnterpriseOne. For information about how to publish and share UDOs, see *"Publishing UDOs"* in the *JD Edwards EnterpriseOne Tools Using and Approving User Defined Objects Guide* .

  For information about how to export orchestrations, see *"Exporting Orchestration Components from the Orchestrator Studio"* in the *JD Edwards EnterpriseOne Tools Orchestrator Guide* .

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Upload Administrative Orchestrations

You can upload an administrative orchestration to the *Management Console* so that you can run it offline with only the AIS server and the Server Manager Console running, without any dependency on the EnterpriseOne servers, including the HTML server, Enterprise server, and Database servers.

> **Note:** You can upload *only* administrative orchestrations, which have been shared or published and then exported, to the *Management Console* . An administrative orchestration is an orchestration that contains these types of components: Open API-type connectors, rules, or child orchestrations.

To upload an administrative orchestration to the *Management Console* :

1. Log in to Server Manager Console as the jde_admin user.
2. Navigate to the Server Manager Offline Orchestration page using the quick link **Offline Orchestration** in the **What do you want to do?** section:

3. On the Server Manager Offline Orchestration page, click the **Browse** button to locate and select the file that contains the exported administrative orchestration components that you want to upload.

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4. Click the **Upload** button to upload the selected file that contains the orchestration components.

The system displays a message that the orchestration has been imported successfully.

If you attempt to upload an orchestration that is not an administrative orchestration, the system displays a warning message. The following image shows an example of a warning message that is displayed when you attempt to upload a non-administrative orchestration:

After you upload an administrative orchestration to the *Management Console* , you can run the orchestration offline. See *Run Administrative Orchestrations*.

Delete Administrative Orchestrations

To delete administrative orchestrations from the Management Console:

1. Log in to Server Manager Console as the jde_admin user.
2. Navigate to the Server Manager Offline Orchestration page using this quick link in the *What do you want to do?* section:

   Offline Orchestration
3. On the Server Manager Offline Orchestration page, in the Select [Orchestration] section, select the check box to select one or more orchestrations to delete. Use the Select All link to select all the orchestrations.
4. Click the **Delete** button.
5. In the Confirmation dialog box, click **OK**.

Run Administrative Orchestrations

To run an administrative orchestration:

1. Log in to the JD Edwards EnterpriseOne Orchestrator Studio as the jde_admin user.

   On the Orchestrator Studio Home page, only the Run Orchestrations and Scheduler icons are enabled and all the other orchestration component icons are disabled.
2. Click the **Run Orchestrations** icon.

   The Run Orchestrations page displays only the administrative orchestrations that have been uploaded to the Server Manager Console.
3. Select the administrative orchestration that you want to run.
4. In the **Value** column, enter a value for each input. Alternatively, click the **Raw** button to enter the input values directly in the JSON format or the XML format in the input grid.
5. Click **Run**.

   The Output section displays a green check mark if the orchestration completes successfully.

For more information about running orchestrations, see *"Testing Orchestrations"* in the *JD Edwards EnterpriseOne Tools Orchestrator Guide* .

Starting and Stopping Administrative Orchestrations Using the Scheduler

If a schedule is attached to an administrative orchestration, you can start and stop the administrative orchestration job by using the Scheduler user interface.

To start or stop an administrative orchestration job:

1. Log in to the JD Edwards EnterpriseOne Orchestrator Studio as the jde_admin user.

    On the Orchestrator Studio Home page, only the **Run Orchestrations** and **Scheduler** icons are enabled and all the other orchestration component icons are disabled.
2. Click the **Scheduler** icon.
3. On the Scheduler user interface, select the orchestration job you want to start or stop and then perform either of the following actions:

    ○ To start the orchestration job, slide the toggle in the **Started** column to the right.

    ○ To stop the orchestration job, slide the toggle in the **Started** column to the left.

    For more information about the Scheduler, see *"Working with Scheduler"* in the *JD Edwards EnterpriseOne Tools Orchestrator Guide* .

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12 Register an Application Server

Register an Oracle WebLogic Server 14c

Only Oracle WebLogic Servers that are registered with the Management Console can be managed by the Management Console. The Oracle WebLogic Server must be installed outside of Server Manager. You should always verify that your Oracle WebLogic Server versions are fix-current per Oracle directives. You should also verify that your version of Oracle WebLogic Server is compatible with JD Edwards EnterpriseOne servers (for details refer to *Installing the Server Manager Management Console and Agent* in this guide).

> **Note:** Registration of an Oracle WebLogic Server requires that a Management Agent first be installed on the Oracle WebLogic Server. This server must be installed with the correct user and also started with the correct user. Refer to *Installing the Server Manager Management Console and Agent*.

To register an existing Oracle WebLogic Server:

1. Select the Managed Home where you want to register an Oracle WebLogic Server.

2. On Managed Instances, click the *Create New Managed Instance* button.

3. On Create/Register a Managed Instance, Instance Type, select the *Oracle WebLogic Server 14c* radio button.

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4. Click the Continue button.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type   Instance Properties   Confirmation   Finish

Instance Name	WLS
Oracle WebLogic Home	C:\Oracle\Middleware
Oracle WebLogic Admin User	weblogic
Oracle WebLogic Admin Password	••••••••••

5. On the Create/Register a Managed Instance screen for Instance Properties, complete these fields:

- ○ Instance Name

  Enter a name for the instance.
- ○ Oracle WebLogic Server Install Location

  Enter the installation location for the existing Oracle WebLogic Server. This is the Oracle WebLogic Home, where the default value is:

  `C:\Oracle\Middleware`
- ○ Oracle WebLogic Admin User

  Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created. The default admin user is:

  Oracle WebLogic
- ○ Oracle WebLogic Admin Password

  Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created.

6. Click the Continue button.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

7. On the Create/Register a Managed Instance screen for Confirmation, there are no configuration items to confirm.

8. Click the Continue button.

9. On the Create/Register a Managed Instance screen for Finish, click the *Create Instance* button to complete the registration of the Oracle WebLogic Server.

After you have completed the installation, the browser is redirected to the Management Console page for the newly registered Oracle WebLogic Server. This server also appears as a Managed Instance within the corresponding Managed Home.

For each registered Oracle WebLogic Server Managed Instance, the Management Console displays appropriate information at the top of the web page:

General Properties

- Product Description

  Oracle WebLogic Server 14c

- Version

  14.1.1.0.0

Instance Properties

- Instance Name

  Displays a clickable link for the name assigned to the Oracle WebLogic Server Managed Instance at the time is was created or registered.

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- Oracle WebLogic Home

  Displays the complete path to the Oracle WebLogic Server Home where this Oracle WebLogic Server instance was installed.

- Oracle WebLogic Administrative User

  Displays the administrative user credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

- Oracle WebLogic Administrative Password

  Displays the administrative password credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

  You can click the Reset button and reset the administrative password.
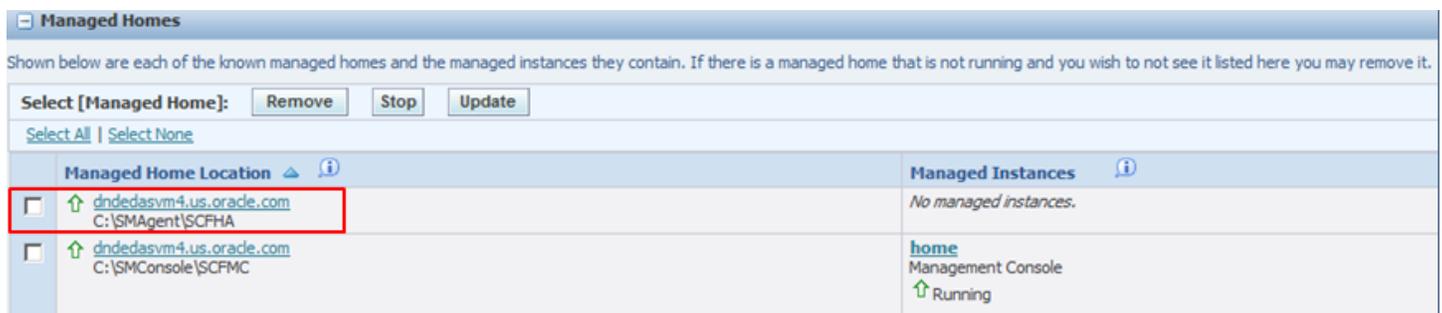
Register an Oracle WebLogic Server 12c

Only Oracle WebLogic Servers that are registered with the Management Console can be managed by the Management Console. The Oracle WebLogic Server must be installed outside of Server Manager. You should always verify that your Oracle WebLogic Server versions are fix-current per Oracle directives. You should also verify that your version of Oracle WebLogic Server is compatible with JD Edwards EnterpriseOne servers (for details refer to *Installing the Server Manager Management Console and Agent* in this guide).

> **Note:** Registration of an Oracle WebLogic Server requires that a Management Agent first be installed on the Oracle WebLogic Server. This server must be installed with the correct user and also started with the correct user. Refer to *Installing the Server Manager Management Console and Agent*.

To register an existing Oracle WebLogic Server:

ORACLE

1. Select the Managed Home where you want to register an Oracle WebLogic Server.

ORACLE

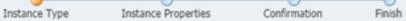2. On Managed Instances, click the *Create New Managed Instance* button.

3. On Create/Register a Managed Instance, Instance Type, select the *Oracle WebLogic Server 12c* radio button.

ORACLE

4. Click the Continue button.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type — Instance Properties — Confirmation — Finish

Instance Name	WLS
Oracle WebLogic Home	C:\Oracle\Middleware
Oracle WebLogic Admin User	weblogic
Oracle WebLogic Admin Password	••••••••••

5. On the Create/Register a Managed Instance screen for Instance Properties, complete these fields:

   o Instance Name

   Enter a name for the instance.
   o Oracle WebLogic Server Install Location

   Enter the installation location for the existing Oracle WebLogic Server. This is the Oracle WebLogic Home, where the default value is:

   C:\Oracle\Middleware
   o Oracle WebLogic Admin User

   Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created. The default admin user is:

   Oracle WebLogic
   o Oracle WebLogic Admin Password

   Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created.

6. Click the Continue button.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type — Instance Properties — Confirmation — Finish

7. On the Create/Register a Managed Instance screen for Confirmation, there are no configuration items to confirm.

ORACLE

8. Click the Continue button.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type — Instance Properties — Confirmation — Finish

Select 'Create Instance' to finalize the registration of the Oracle WebLogic Server instance.

Cancel   Create Instance

9. On the Create/Register a Managed Instance screen for Finish, click the *Create Instance* button to complete the registration of the Oracle WebLogic Server.

Oracle WebLogic Server

⌄ WebLogic domains

General Properties

Product Description
    Oracle WebLogic Server 12c
Version
    12.1.3.0.0

Instance Properties

Instance Name ⓘ
    wls_server
Oracle WebLogic Home ⓘ
    /u01/OracleJAS
Oracle WebLogic Administrative User ⓘ
    weblogic   Save
Oracle WebLogic Administrative Password ⓘ
                  Save   Reset

– WebLogic domains   ⌃ Return To Top

Select one of the domain links from the list below to create or remove servers.

Select [Managed Server]:   Start   Stop   Restart
Select All | Select None

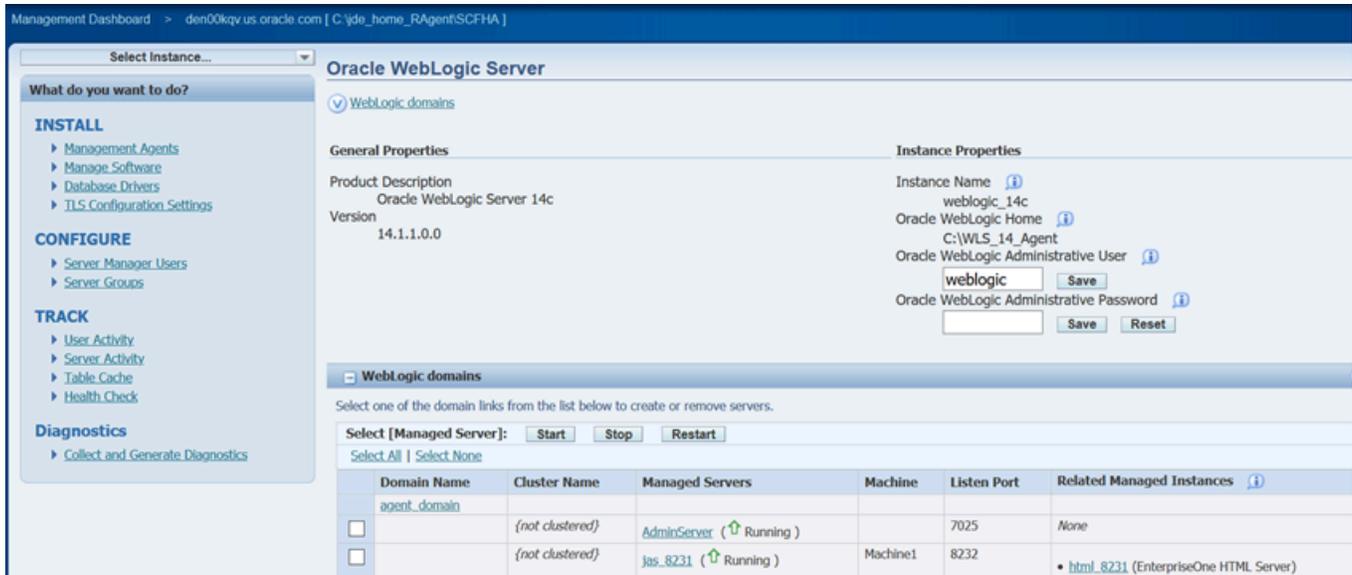|	Domain Name	Cluster Name	Managed Servers	Machine	Listen Port	Related Managed Instances ⓘ
	jde_domain					
☐		{not clustered}	html_server (⬇ Stopped)	Machine_1	8020	• html_inst (EnterpriseOne HTML Server)
☐		{not clustered}	AdminServer (⬆ Running)		7001	None

After you have completed the installation, the browser is redirected to the Management Console page for the newly registered Oracle WebLogic Server. This server also appears as a Managed Instance within the corresponding Managed Home.

For each registered Oracle WebLogic Server Managed Instance, the Management Console displays appropriate information at the top of the web page:

General Properties

- Product Description

    Oracle WebLogic Server 12c

ORACLE

- Version

    12.1.3.0.0

Instance Properties

- Instance Name

    Displays a clickable link for the name assigned to the Oracle WebLogic Server Managed Instance at the time is was created or registered.

- Oracle WebLogic Home

    Displays the complete path to the Oracle WebLogic Server Home where this Oracle WebLogic Server instance was installed.

- Oracle WebLogic Administrative User

    Displays the administrative user credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

- Oracle WebLogic Administrative Password

    Displays the administrative password credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

    (Release 9.2.1)You can click the Reset button and reset the administrative password.

Register an Oracle WebLogic Server 11g

Only Oracle WebLogic Servers that are registered with the Management Console can be managed by the Management Console. The Oracle WebLogic Server must be installed outside of Server Manager. You should always verify that your Oracle WebLogic Server versions are fix-current per Oracle directives. You should also verify that your version of Oracle WebLogic Server is compatible with JD Edwards EnterpriseOne servers (for details refer to *Accessing the Certifications (Minimum Technical Requirements)* in this guide).

> **Note:** Registration of an Oracle WebLogic Server requires that a Management Agent first be installed on the Oracle WebLogic Server. This server must be installed with the correct user and also started with the correct user. Refer to *Installing the Server Manager Management Console and Agent*.

To register an existing Oracle WebLogic Server:

1. Select the Managed Home with which you wish to register an Oracle WebLogic Server.

ORACLE

2. On Managed Instances, click the **Create New Managed Instance** button.

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

Oracle WebLogic Server 11g

ORACLE

4. Click the **Continue** button.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to
management domain and may only contain the characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type   Instance Properties   Confirmation   Finish

Instance Name	WLS11gAdmin
WebLogic Server Install Location	/u01/Oracle/Middleware
WebLogic Admin User	jde
WebLogic Admin Password	••••••••

5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- ○ *Instance Name*

  Enter a name for the instance.
- ○ *Oracle WebLogic Server Install Location*

  Enter the installation location for the existing Oracle WebLogic Server. This is the Oracle WebLogic Home, where the default value is:

  `/u01/Oracle/Middleware`
- ○ *Oracle WebLogic Admin User*

  Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created. The default admin user is:

  `Oracle WebLogic`
- ○ *Oracle WebLogic Admin Password*

  Enter the administrative user for the Oracle WebLogic Administrative Console on which this Managed Instance will be created. For the default password refer to the `/u01/Oracle/Middleware/utils/quickstart/` `quickstart.sh` program. Access the **Start Administration Console** option.

ORACLE

6. Click the **Continue** button.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' t

Instance Type   Instance Properties   Confirmation   Finish

7. On Create/Register a Managed Instance, Confirmation, there are no configuration items to confirm.
8. Click the **Continue** button.

Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

WebLogic Server instance.

Cancel   Create Instance

9. On Create/Register a Managed Instance, Finish, click the **Create Instance** button to complete the registration of the Oracle WebLogic Server.

ORACLE

Oracle WebLogic Server

(V) WebLogic domains

General Properties

Product Description
    Oracle WebLogic Server 12c
Version
    12.1.3.0.0

Instance Properties

Instance Name (i)
    wls_server
Oracle WebLogic Home (i)
    /u01/OracleJAS
Oracle WebLogic Administrative User (i)
    weblogic   [Save]
Oracle WebLogic Administrative Password (i)
    [Save] [Reset]

[-] **WebLogic domains**   (∧) Return To Top

Select one of the domain links from the list below to create or remove servers.

Select [Managed Server]:   [Start]   [Stop]   [Restart]

Select All | Select None

	Domain Name	Cluster Name	Managed Servers	Machine	Listen Port	Related Managed Instances (i)
	jde_domain					
☐		{not clustered}	html_server (⬇ Stopped)	Machine_1	8020	• html_inst (EnterpriseOne HTML Server)
☐		{not clustered}	AdminServer (⬆ Running)		7001	None

ORACLE

After you have completed the installation, the browser is redirected to the Management Console page for the newly registered Oracle WebLogic Server. This server also appears as a Managed Instance within the corresponding Managed Home.

For each registered Oracle WebLogic Server Managed Instance, the Management Console displays appropriate information at the top of the web page:

- *General Properties*

    - *Product Description*

        Oracle WebLogic Server 11g
    - *Version*

        10.3.6.0

ORACLE

- *Instance Properties*

  - *Instance Name*

    Displays a clickable link for the name assigned to the Oracle WebLogic Server Managed Instance at the time is was created or registered.

  - *Oracle WebLogic Home*

    Displays the complete path to the Oracle WebLogic Server Home where this Oracle WebLogic Server instance was installed.

  - *Oracle WebLogic Administrative User*

    Displays the administrative user credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

  - *Oracle WebLogic Administrative Password*

    Displays the administrative password credential that is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance.

    You can reset the administrative password using the Reset button. The following window is displayed when you click the Reset button.

    Enter the passwords in the fields, and click Change to confirm the new password.

ORACLE
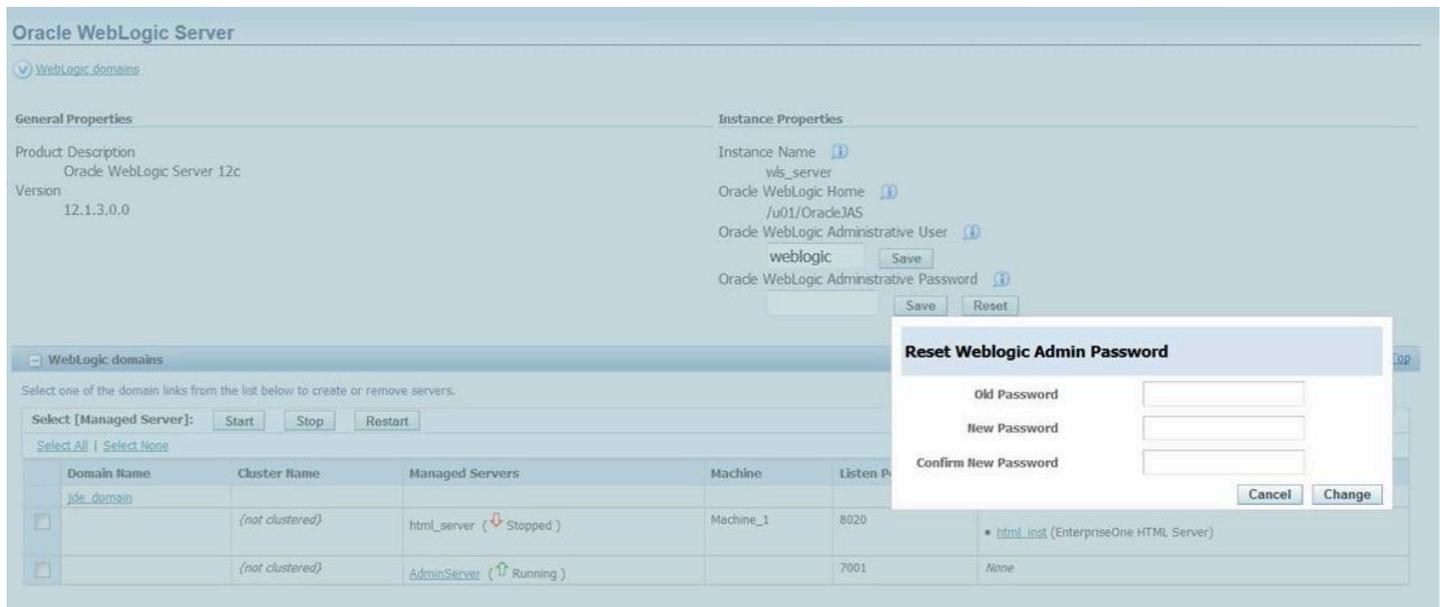
Register a WebSphere Application Server, Version 8.5.5.0/9.0

Only WebSphere Application Servers, version 8.5 that are registered with the *Management Console* can be managed by the *Management Console* . The WebSphere Application Server must be installed outside of *Server Manager* . You should always verify that your WAS versions are fix-current per IBM directives. You should also verify that your version of WAS is compatible with JD Edwards EnterpriseOne servers (for details refer to *Accessing the Certifications (Minimum Technical Requirements)* in this guide).

> **Note:** Registration of a WebSphere Application Server requires that a *Management Agent* first be installed on the WebSphere Application Server. This server must be installed with the correct user and also started with the correct user. Refer to *Installing the Server Manager Management Console and Agent*.

If you have enabled administrative security in a WebSphere Application Server profile, refer to *Configure WebSphere Application Server to Work With Server Manager When Administrative Security is Enabled* in this section.

ORACLE

To register an existing WebSphere Application Server:

1. Select the *Managed Home* with which you wish to register the WebSphere Application Server.

cordvsn1 [/u01/appmgr/jde_home/SCFHA]

(V) Managed Software Components   (V) Available Log Files

☐ Managed Instances ↻

Shown below are all the managed instances owned by the managed home. Use caution when removing instances. Depending on the instance type this may involve uninstalling and/or deleting the EnterpriseOne server installation.

Select [Managed Instance]:   [Remove Instance]

Select All | Select None

	Instance Name △ ⓘ	Managed Instance Type ⓘ	State ⓘ
☑	cordvsn1_ent_6116	EnterpriseOne Enterprise Server	⬆ Running
☑	cordvsn1_jas_server	EnterpriseOne HTML Server	⬆ Running
☐	ocm	Oracle Configuration Manager	⬇ Stopped
☑	rte_new	EnterpriseOne Transaction Server	⬇ Stopped
☑	wls_1036_cordvsn1	Oracle WebLogic Server	⬆ Running

[Create New Managed Instance]

ORACLE

2. Click the **Create a New Managed Instance** button to create the *Managed Instance* within the *Managed Home*
.

3. On Create/Register a Managed Instance, Instance Type, select the **WebSphere Application Server 8.5/9.x** radio button.

4. On Create/Register a Managed Instance, Instance Properties, complete these fields:

   ○ *Instance Name*

      Enter a name for the instance.

   ○ *Install Location*

      Enter the installation location for the existing WebSphere Application Server. This location should include the path up to the parent folder of the `profiles` folder.

      For example:

      OS400 (IBM i)

      `/QIBM/ProdData/WebSphere/AppServer/V85/ND`

      Unix

      `/u01/WebSphere85/AppServer`

5. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type — Instance Properties — Confirmation — Finish

There are no configuration items to confirm. Please continue to the next step.

Cancel   Continue

6. On Create/Register a Managed Instance, Confirmation, there are no configuration items to confirm.
7. Click Continue.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type — Instance Properties — Confirmation — Finish

Select 'Create Instance' to finalize the registration of the IBM WebSphere instance.

Cancel   Create Instance

ORACLE

8. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the registration of the WebSphere Application Server.

IBM WebSphere

General

Product Description
    IBM WebSphere Application Server Network Deployment
Version
    9.0.0.0

Instance Properties

Application Server Install Location
    C:\Program Files\IBM\WebSphere\AppServer
Instance Name ⓘ
    WAS9
TrustStore File ⓘ
    [   ] [Save]
TrustStore File Password ⓘ
    [   ] [Save]
KeyStore File ⓘ
    [   ] [Save]
KeyStore File Password ⓘ
    [   ] [Save]

After you have completed the installation the browser is redirected to the *Management Console* page for the newly registered WebSphere Application Server. This server also appears as a *Managed Instance* within the corresponding *Managed Home* .

For each registered WebSphere Application Server *Managed Instance* , the *Management Console* displays appropriate information at the top of the web page:

- o *Product Description*

  Displays the description for this WebSphere Application Server *Managed Instance* .
- o *General*

  - Version

    Displays the version of this WebSphere Application Server *Managed Instance* .
- o *Instance Properties*

  - Application Server Install Location

    Displays the full path for the install location of the selected WebSphere Application Server *Managed Instance* .
  - Instance Name

    Displays a clickable link for the name assigned to the WebSphere Application Server *Managed Instance* at the time is was created or registered.

ORACLE

Configure WebSphere Application Server to Work With Server Manager When Administrative Security is Enabled

To configure WebSphere Application Server to work with *Server Manager* when Administrative Security is enabled:

1. Locate the `soap.client.props` file associated with the security profile.

   Typically the file is found at this location:

   `WAS_Install_Location\profiles\Profile_Name\properties\soap.client.props`

2. Modify these settings in the `soap.client.props` file:

   `com.ibm.SOAP.securityEnabled=true`

   `com.ibm.SOAP.loginUserid=admin_user`

   `com.ibm.SOAP.loginPassword=admin_password`

   where *admin_user* and *admin_password* are values appropriate to your environment.

3. In order for the security changes to take effect, you must restart the *Management Agent* to which the WebSphere Application Server is registered. For instructions, refer to *Restart a Management Agent*.

Register a WebSphere Application Server, Version 7.0

Only WebSphere Application Servers, version 7.0 that are registered with the *Management Console* can be managed by the *Management Console*. The WebSphere Application Server must be installed outside of *Server Manager*. You should always verify that your WAS versions are fix-current per IBM directives. You should also verify that your version of WAS is compatible with JD Edwards EnterpriseOne servers (for details refer to *Accessing the Certifications (Minimum Technical Requirements)* in this guide).

Note: Registration of a WebSphere Application Server requires that a *Management Agent* first be installed on the WebSphere Application Server. This server must be installed with the correct user and also started with the correct user. Refer to *Installing the Server Manager Management Console and Agent*.

If you have enabled administrative security in a WebSphere Application Server profile, refer to *Configure WebSphere Application Server to Work With Server Manager When Administrative Security is Enabled* in this chapter.

ORACLE

To register an existing WebSphere Application Server:

1. Select the *Managed Home* with which you wish to register the WebSphere Application Server.

cordvsn1 [/u01/appmgr/jde_home/SCFHA]

Ⓥ Managed Software Components   Ⓥ Available Log Files

⊟ Managed Instances ◌

Shown below are all the managed instances owned by the managed home. Use caution when removing instances. Depending on the instance type this may involve uninstalling and/or deleting the EnterpriseOne server installation.
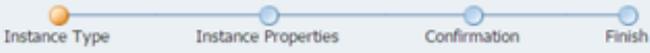
Select [Managed Instance]:   **Remove Instance**

Select All | Select None

	Instance Name △ ⓘ	Managed Instance Type ⓘ	State ⓘ
☑	cordvsn1_ent_6116	EnterpriseOne Enterprise Server	⬆ Running
☑	cordvsn1_jas_server	EnterpriseOne HTML Server	⬆ Running
☐	ocm	Oracle Configuration Manager	⬇ Stopped
☑	rte_new	EnterpriseOne Transaction Server	⬇ Stopped
☑	wls_1036_cordvsn1	Oracle WebLogic Server	⬆ Running

Create New Managed Instance

ORACLE

2. Click the **Create a New Managed Instance** button to create the *Managed Instance* within the *Managed Home*
.

ORACLE

3. On Create/Register a Managed Instance, Instance Type, select the **WebSphere Application Server 7.0** radio button.

4. On Create/Register a Managed Instance, Instance Properties, complete these fields:

   o *Instance Name*

     Enter a name for the instance.

   o *Install Location*

     Enter the installation location for the existing WebSphere Application Server. This location should include the path up to the parent folder of the `profiles` folder.

     For example:

     OS400 (IBMi / *IBM i* **)**

     `/QIBM/ProdData/WebSphere/AppServer/V7/ND`

     Unix

     `/u01/WebSphere7/AppServer`

5. Click Continue.

6. On Create/Register a Managed Instance, Confirmation, there are no configuration items to confirm.

ORACLE

7. Click Continue.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

Select 'Create Instance' to finalize the registration of the IBM WebSphere instance.

Cancel   Create Instance

ORACLE

8. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the registration of the WebSphere Application Server.

After you have completed the installation the browser is redirected to the *Management Console* page for the newly registered WebSphere Application Server. This server also appears as a *Managed Instance* within the corresponding *Managed Home* .

For each registered WebSphere Application Server *Managed Instance* , the *Management Console* displays appropriate information at the top of the web page:

- ○ *Product Description*

  Displays the description for this WebSphere Application Server *Managed Instance* .
- ○ *General*

  - Version

    Displays the version of this WebSphere Application Server *Managed Instance* .
- ○ *Instance Properties*

  - Application Server Install Location

ORACLE

Displays the full path for the install location of the selected WebSphere Application Server *Managed Instance* .

- Instance Name

Displays a clickable link for the name assigned to the WebSphere Application Server *Managed Instance* at the time is was created or registered.

Configure WebSphere Application Server to Work With Server Manager When Administrative Security is Enabled

To configure WebSphere Application Server to work with *Server Manager* when Administrative Security is enabled:

1. Locate the `soap.client.props` file associated with the security profile.

   Typically the file is found at this location:

   `WAS_Install_Location\profiles\Profile_Name\properties\soap.client.props`

2. Modify these settings in the `soap.client.props` file:

   `com.ibm.SOAP.securityEnabled=true`

   `com.ibm.SOAP.loginUserid=admin_user`

   `com.ibm.SOAP.loginPassword=admin_password`

   where *admin_user* and *admin_password* are values appropriate to your environment.

3. In order for the security changes to take effect, you must restart the *Management Agent* to which the WebSphere Application Server is registered. For instructions, refer to *Restart a Management Agent*.

ORACLE

13 Create a J2EE Server Container

Create a J2EE Server for an Oracle WebLogic Server Domain

> **Note:** There is a one-to-one relationship between a web-based server and a J2EE Server. You cannot install more than one web-based server in each J2EE Server.

To create a J2EE Server for an Oracle WebLogic Server domain:

ORACLE

1. Select the existing Managed Instance for a running Oracle WebLogic Server Managed Instance with which you wish to create a new Server.

ORACLE

Oracle WebLogic Server 11g

General Properties

Product Description
Oracle WebLogic Server 11g
Version
10.3.5.0

Instance Properties

Instance Name
den60202jems_3720_WLS1035
Oracle WebLogic Home
/slot/ems3720/appmgr/Oracle/Middleware
Oracle WebLogic Administrative User

| weblogic | Save |

Oracle WebLogic Administrative Password

| | Save |

WebLogic domains

Select a domain from the list below to create or remove servers.

Select [Managed Server]: Start Stop Restart

Select All | Select None

	Domain Name	Cluster Name	Managed Servers	Machine	Listen Port	Related Managed Instances
	E1_Apps					
☐		{not clustered}	AdminServer (⇧ Running)		7020	None
☐		{not clustered}	J2EE_WSRP_PD812 (⇧ Running)	den60202jems	8022	• HTML_812_WSRP_8022 (EnterpriseOne HTML Server)
☐		{not clustered}	J2EE_WSRP_PD900 (⇧ Running)	den60202jems	8020	• HTML_900_WSRP_8020 (EnterpriseOne HTML Server)

ORACLE

2. In the Oracle WebLogic domains section, click on the link for the domain into which you want to create a new Oracle WebLogic Server.

For example, in the above screen shot, the Oracle WebLogic Server Domain is *E1_Apps*.

ORACLE

Oracle WebLogic Domain E1_Apps

(V) Available Log Files

☐ J2EE Servers

Use the form below to create a new J2EE server. Once created, EnterpriseOne web products may be deployed to the server. New machines must be created from the WebLogic administration console.

Server Name [   ]

Listen Port [   ]

Machine [den60202jems ▼]

[**Create Server**]

Select [Managed Server]: [Start] [Stop] [Restart] [Delete]

Select All | Select None

	Cluster Name	Managed Server	Machine	Listen Port	Related Managed Instances ⓘ
☐	{not clustered}	AdminServer (⬆ Running)		7020	*None*
☐	{not clustered}	J2EE_WSRP_PD812 (⬆ Running)	den60202jems	8022	• HTML_812_WSRP_8022 (EnterpriseOne HTML Server)
☐	{not clustered}	J2EE_WSRP_PD900 (⬆ Running)	den60202jems	8020	• HTML_900_WSRP_8020 (EnterpriseOne HTML Server)
☐	{not clustered}	J2EE_WSRP_PD910 (⬇ Stopped)	den60202jems	8021	*None*
☐	{not clustered}	test (⬆ Running)	den60202jems	8023	• testport (EnterpriseOne HTML Server)

ORACLE

3. In the *J2EE Server* section of the page, use the form to create a new J2EE Server instance within the Oracle WebLogic Server domain by completing these fields:

    o *Server Name*

       Enter the name for the Oracle WebLogic Server instance.
    o *Listen Port*

       Enter a unique port number. This Oracle WebLogic Server must listen on a port that is different from all of the others servers in the domain.
    o *Machine*

       Use the pull-down to select an existing machine to which this Server is associated. The machine must have already been created in the Oracle WebLogic Server Admin Console.

       > **Note:** All Servers created within Server Manager must be associated with a machine so that they can be started and stopped through Server Manager.

4. After the above three (3) fields are complete, click the *Create Server* button.

Oracle WebLogic Server 11g

General Properties

Product Description
    Oracle WebLogic Server 11g
Version
    10.3.5.0

Instance Properties

Instance Name ⓘ
    den60202jems_3720_WLS1035
Oracle WebLogic Home ⓘ
    /slot/ems3720/appmgr/Oracle/Middleware
Oracle WebLogic Administrative User ⓘ

    | weblogic | [Save]

Oracle WebLogic Administrative Password ⓘ

    | | [Save]

Select a domain from the list below to create or remove servers.

Select [Managed Server]: [Start] [Stop] [Restart]

Select All | Select None

Domain Name	Cluster Name	Managed Servers	Machine	Listen Port
new_domain				

ORACLE

5. On the *J2EE Servers* section of the page, select the J2EE Server that you just created and click the *Start* button.

> **Note:** While technically you are not required to start the Oracle WebLogic domain, it is good practice to ensure that it is properly created and able to start. Otherwise, it might not start as expected during the installation process for a JD Edwards EnterpriseOne web-based server.

> **Tip:** Server Manager displays a progress monitor indicating that the Start operation is in progress and will continue even if you close the browser. After the progress monitor is no longer displayed, you can refresh the Management Console page to verify that the newly-created Oracle WebLogic Domain starts as expected.

> **Note:** If you do not install the JDBC drivers before installing the Web-Based Server Instance, the Web-Based Server Instance will not be able to start as expected at the end of the installation. Refer to *Install or Uninstall JDBC Drivers to the J2EE Server (WLS or WAS)*.

Create a J2EE Server Container for the WebSphere Application Server (WAS)

> **Note:** There is a one-to-one relationship between a web-based server and a J2EE Server Container. You cannot install more than one web-based server in each J2EE Server.

To create a J2EE Server Container:

ORACLE

1. Select the existing *Managed Instance* for a running WebSphere Application Server with which you wish to create a new J2EE Server Container.

ORACLE

IBM WebSphere

General

Product Description
  IBM WebSphere Application Server - ND
Version
  7.0.0.19

Instance Properties

Application Server Install Location
  Z:\IBM\WebSphere\AppServer
Instance Name ⓘ
  MyWAS7

Profiles and Servers

Select a profile from the list below to create or remove servers.

Select [Application Server]: [Start] [Stop] [Restart]

Select All | Select None

	Profile Name	Profile Path	Cell Name	Cluster Name	Node Name	Application Servers	Related Managed Instances ⓘ
	AppSrv01	Z:\IBM\WebSphere\AppServer\profiles\AppSrv01					
☐			DENPBDS11Node01Cell		DENPBDS11Node01	server1 (⬆ Running)	None
☐			DENPBDS11Node01Cell		DENPBDS11Node01	SMC_Server_EOne_ManagementConsole3_Console (Undetermined)	None
	AppSrv02	Z:\IBM\WebSphere\AppServer\profiles\AppSrv02					
☐			DENPBDS11Node03Cell		DENPBDS11Node02	SMC_Server_EOne_ManagementConsole4_Console (Undetermined)	None
☐			DENPBDS11Node03Cell		DENPBDS11Node02	server1 (Undetermined)	None
	wp_profile	Z:\IBM\WebSphere\wp_profile					
☐			DENPBDS11		DENPBDS11	WebSphere_Portal (⬆ Running)	• MyCP7 (EnterpriseOne Collaborative Portal Se
☐			DENPBDS11		DENPBDS11	server1 (⬆ Running)	None

2. In the *Profiles and Servers* section of the page, click the on an existing Profile Name.

> **Tip:** If you plan to use this J2EE Server Container to run a *JD Edwards EnterpriseOne   Business Services Server* , you should select a secure profile. This profile must be created and configured within the WebSphere Application Server itself.

J2EE Servers

Use the form below to create new J2EE servers. Once create EnterpriseOne web products may be deployed to the server. Select the node and enter the name of the server to be created.

Node Name [DENPBDS11Node01 ▾]

Server Name [AS_JS_5001]

[Create Server]

3. On the *J2EE Servers* section of the page, use the form to create a new J2EE Server Container, complete these fields:

   ○ *Node Name*

   Use the dropdown to select an existing node name.

   ○ *Server Name*

   Enter a name for this J2EE Server Container.

4. Click the *Create Server* button.
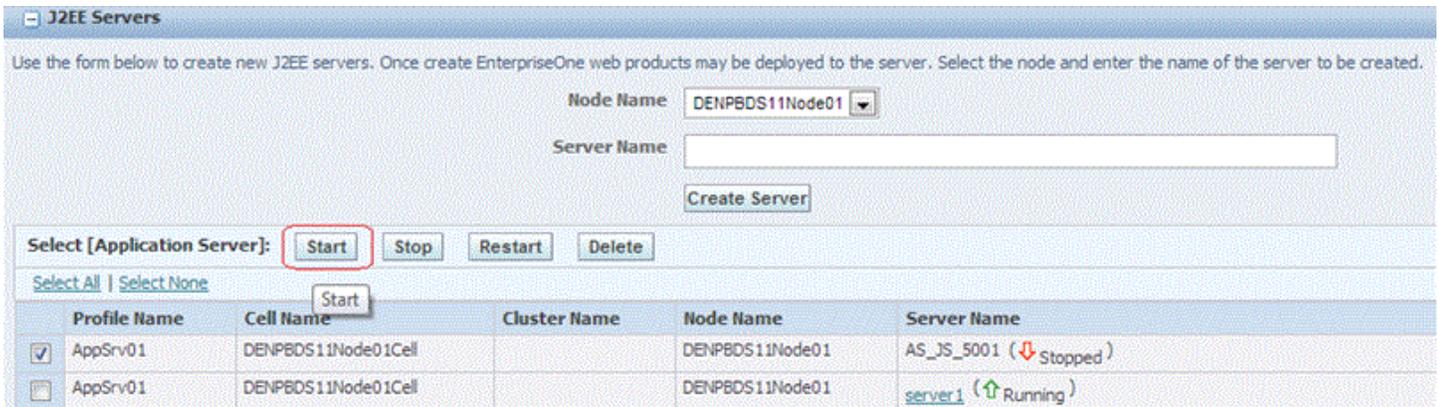
5. On the *J2EE Servers* section of the page, select the J2EE Server Container that you just created and click the *Start* button.

   > **Note:** While you are not required to start the J2EE Server, it is good practice to ensure that it is properly created and able to start. Otherwise, it might not start as expected during the installation process for a *JD Edwards EnterpriseOne* web-based server.

   > **Tip:** The *Server Manager* displays a progress monitor indicating that the Start operation is in progress and will continue even if you close the browser. After the progress monitor is no longer displayed, you can refresh the *Management Console* page to verify that the newly-created J2EE Server starts as expected.

> **Note:** If you do not install the JDBC drivers before installing the Web-Based Server Instance, the Web-Based Server Instance will not be able to start as expected at the end of the installation. Refer to *Install or Uninstall JDBC Drivers to the J2EE Server (WLS or WAS)*.

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Install or Uninstall JDBC Drivers to the J2EE Server (WLS or WAS)

After you have created a J2EE Server (WLS or WAS), you must ensure that requisite JDBC drivers are installed in the J2EE Server, as applicable. Select the database drivers that are required for the connection with your *JD Edwards EnterpriseOne* database server. If you have not already uploaded JDBC drivers to your *Management Console* , refer to *Manage JDBC Drivers*. Some versions of WebLogic Server automatically have a bundled Oracle Database JDBC driver already installed and configured. The JDBC driver install step is not needed if connecting to an Oracle database that is supported with the WebLogic bundled JDBC driver.

In addition to and in conjunction with the procedure previously described in *Manage JDBC Drivers* this section describes:

- *Install JDBC Drivers to the J2EE Server (WLS or WAS)*
- *Uninstall JDBC Drivers from the J2EE Server (WLS or WAS)*

Install JDBC Drivers to the J2EE Server (WLS or WAS)

To install JDBC drivers to the J2EE Server (WLS or WAS):

1. Click the link for a J2EE Server (WLS or WAS).

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2. Use the *JDBC Driver* dropdown to select the JDBC driver to install.

> **Note:** Only JDBC drivers that have been uploaded to the management console but are not currently installed are displayed.

3. Click the *Install Driver* button.

Server Manager installs the driver and adds it to the list of JDBC drivers that can be uninstalled.

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Uninstall JDBC Drivers from the J2EE Server (WLS or WAS)

To uninstall a JDBC driver from a J2EE Server (WLS or WAS):

1. From the JDBC Drivers section of the page, select the *JDBC Driver Filename* to be deleted.
2. Click the *Uninstall* button.

Note: If you Uninstall a JDBC driver, the J2EE Server (WLS or WAS) must be restarted in order to unload a memory resident JDBC driver.

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14   Manage an Application Server and Related Components

Manage a WebLogic Server Instance

This section describes:

- *Start, Stop, or Restart the WebLogic Server*
- *Instance Properties*

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Start, Stop, or Restart the WebLogic Server

To start, stop, and restart an Oracle WebLogic Server, first select the server using the check box and then click the appropriate button.

- *Started*

  If the status is *Started,* you can select one or more application servers using the check box and then click the *Stop* button to stop the WebSphere Application Server.

- *Stopped*

  If the status is *Stopped,* you can select one or more application servers using the check box and then click the *Start* or *Restart* button to start or restart the WebSphere Application Server.

Instance Properties

When you select an Oracle WebLogic Server Managed Instance, the top right portion of the page contains an *Instance Properties* area that includes these fields:

- *Instance Name*

  Identifies the name assigned to the managed instance at the time it was created or registered.

  In this example, the Instance Name is: *NEWAdmin.*

- *Oracle WebLogic Home*

  Displays the complete path to the Oracle Home where this Oracle WebLogic Server instance was installed. In this example, the Oracle Home is:

  In this example, the Oracle Home is `/u01/Middleware2.`

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> **Tip:** You can determine the complete path to your Oracle Home by issuing the pwd command from the root directory where your Oracle WebLogic Server is installed.

- *Oracle WebLogic Administrative User*

  Displays the administrator user credential that you specified when creating the domain and is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance. By definition, all servers in the same domain have the same administrative user and password.

  This section includes a Save button that enables you to change your administrative user name.

- *Oracle WebLogic Administrative Password*

  Displays the administrator password credential that you specified when creating the domain and is used by Server Manager to perform administrative tasks on the Oracle WebLogic Server instance. By definition, all servers in the same domain have the same administrative user and password.

  This section includes a Save button that enables you to change your administrative user password.

Manage a WebSphere Application Server (WAS) Instance

This section describes:

- *Start, Stop, or Restart the WebSphere Application Server*
- *Profiles and Servers*
- *Start, Stop, or Restart a J2EE Server*
- *Available Log Files*

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Start, Stop, or Restart the WebSphere Application Server

When you click on the *Managed Instance* for your installed WebSphere Application Server, you can view the status of the installed applications servers in the *Application Servers* column of the grid.

- *Started*

  If the status is *Started,* you can select one or more application servers using the check box and then click the *Stop* button to stop the WebSphere Application Server.

- *Stopped*

  If the status is *Stopped,* you can select one or more application servers using the check box and then click the *Start* or *Restart* button to start or restart the WebSphere Application Server.

Profiles and Servers

This section describes:

- *Start, Stop, or Restart a WebSphere Application Server*
- *Grid Items for Profiles and Servers*

Start, Stop, or Restart a WebSphere Application Server

When you select a WebSphere Application Server the *Profiles and Servers* section allows you to select a profile from a list that to start, stop, or restart a selected application server.

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Grid Items for Profiles and Servers

The *Profiles and Servers* section of the page includes these grid items:

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- *Profile Name*

  These are clickable links to existing profiles in the WebSphere environment. These profiles can only be created using the WebSphere administration tool.

- *Profile Path*

  Displays the path to the WebSphere profile.

- *Cell Name*

  Displays the name of the cell within the WebSphere profile.

- *Node Name*

  Displays the name of the node within the WebSphere cell.

- *Application Servers*

  Lists all applications servers associated with each profile. The status of the application servers is also shown. If the status is Running, the display includes a clickable link to the application server.

- *Related Managed Instances*

  Lists clickable links to EnterpriseOne servers that are deployed for this profile on this WebSphere application server.

Start, Stop, or Restart a J2EE Server

To start, stop, or restart a J2EE Server:

1. Select the existing *Managed Instance* for a running WebSphere Application Server with which you wish to start, stop, or restart J2EE Server.

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IBM WebSphere

General

Product Description
  IBM WebSphere Application Server - ND
Version
  7.0.0.19

Instance Properties

Application Server Install Location
  Z:\IBM\WebSphere\AppServer
Instance Name
  MyWAS7

Profiles and Servers

Select a profile from the list below to create or remove servers.

Select [Application Server]: [Start] [Stop] [Restart]

Select All | Select None

	Profile Name	Profile Path	Cell Name	Cluster Name	Node Name	Application Servers	Related Managed Instances
	AppSrv01	Z:\IBM\WebSphere\AppServer\profiles\AppSrv01					
☐			DENPBDS11Node01Cell		DENPBDS11Node01	server1 (⇧ Running)	None
☐			DENPBDS11Node01Cell		DENPBDS11Node01	SMC_Server_EOne_ManagementConsole3_Console (Undetermined)	None
	AppSrv02	Z:\IBM\WebSphere\AppServer\profiles\AppSrv02					
☐			DENPBDS11Node03Cell		DENPBDS11Node02	SMC_Server_EOne_ManagementConsole4_Console (Undetermined)	None
☐			DENPBDS11Node03Cell		DENPBDS11Node02	server1 (Undetermined)	None
	wp_profile	Z:\IBM\WebSphere\wp_profile					
☐			DENPBDS11		DENPBDS11	WebSphere Portal (⇧ Running)	• MyCP7 (EnterpriseOne Collaborative Portal Se
☐			DENPBDS11		DENPBDS11	server1 (⇧ Running)	None

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2. In the *Profiles and Servers* section of the page, click the Profile Name that contains the J2EE Server that you want to start, stop, or restart.

3. Click the *Start*, *Stop*, or *Restart* button as appropriate.

> **Tip:** The *Server Manager* displays a progress monitor indicating that the Start operation is in progress and will continue even if you close the browser. After the progress monitor is no longer displayed, you can refresh the *Management Console* page to verify that the J2EE Server is in the expected state.

Available Log Files

For information on log files for *Managed Instances* , refer to the chapter entitled: *Available Log Files*.

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15 Register a JD Edwards Deployment Server as a New Managed Instance

Register an Existing Deployment Server as a New Managed Instance

Only JD Edwards Deployment Servers (Tools 9.2 or later versions) that are registered with the Management Console can be managed by the Management Console.

> **Note:** Registration of a Deployment Server requires that a *Management Agent* first be installed on the Deployment Server. Refer to *Installing the Server Manager Management Console and Agent*.

1. Select the Managed Home with which you wish to register the Deployment Server.

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2. Click the *Create a New Managed Instance* button to create the Managed Instance within the Managed Home.

3. On Create/Register a Managed Instance, Instance Type, select the *Register an Existing Deployment Server* radio button.

4. Click Continue.

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5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

   ○ *Server Group*

   Use the dropdown to select the Server Group to which you want this instance to belong. Currently, the only available option is 'default'.

   ○ *Instance Name*

   Enter a name in the Instance Name field. This field must be populated.

   ○ *Install Location*

   Enter a valid install location for the existing Deployment Server. This field must be populated. For example:

   ```
   C:\JDEdwards\E920
   ```

   > **Note:** The Deployment Server is only installed on the Microsoft Windows platform.

6. Click Continue.

7. Verify the configurations settings, then click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type — Instance Properties — Confirmation — Finish

There are no configuration items to confirm. Please continue to the next step.

Cancel   Continue
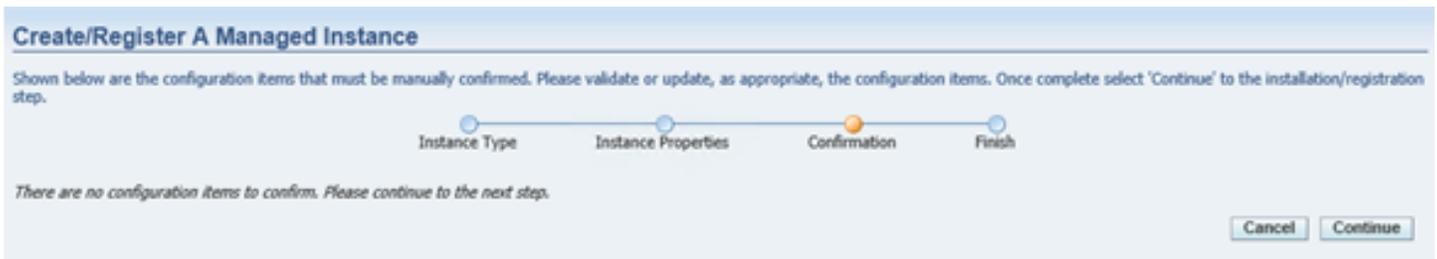
8. On Create/Register a Managed Instance, Confirmation, click Continue.
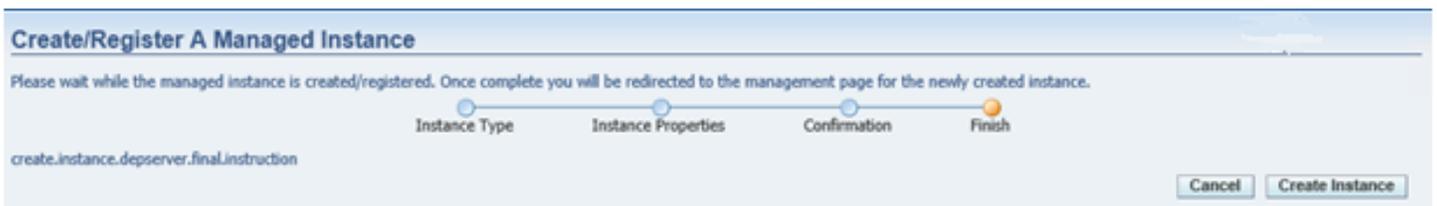
Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type — Instance Properties — Confirmation — Finish

create.instance.depserver.final.instruction

Cancel   Create Instance

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the registration for the Deployment Server.

After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered Deployment Server. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the web page:

- ○ *General*

  - − Status

    Valid values are:

    Running

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This status only indicates that Server Manager is able to communicate with the Management Agent on the Deployment Server machine.

Stopped

This status only indicates that Server Manager is not able to communicate with the Management Agent on the Deployment Server machine.

For information on log files, refer to the chapter entitled *Available Log Files*.

Change Component for the Deployment Server (Release 9.2.3)

This section discusses the changes in Server Manager to apply the Tools release including how to uplift the Deployment Server to 64-bit.

Setting Up the Password

Use the following procedure to set up the password for the Deployment server and the Enterprise server component change.

1. On the Server Manager Management Console, select the Server Manager Users in the CONFIGURE section of the tab on the left.
2. In the Server Manager User Authentication section, verify that the Primary Security Server is the Enterprise Server that is being used for the Security Server. Also, verify that the Outgoing JDENET Port value is same as the value in the jde.ini file.
3. Click the Save button.
4. Click the Management Dashboard link.
5. From the Select Instance drop-down menu, select the Home Management Console option.
6. In the Configuration section of the tab on the left, click JDBJ Database Configuration.
7. Enter the required values in the JDBJ Bootstrap Datasource field in this window.

    Click the information icon next to the text box for more information about the jde.ini section that contains this information. Do not use jde.ini file of the Deployment Server. Navigate to the OneWorld Client Instal\misc path, and then use the jde.ini file located in this path for the information.

    > **Note:** Do not enter any values in the JDBJ Connection Pools section. The values in the JDBC Drivers section are auto-populated.

8. In the Oracle Database Settings section, make sure that the path in the Location filed points to the location of the console. For example, /slot/ems6282/oracle/Middleware/jde_home_1/SCFMC/targets/home/config/tnsnames.ora
9. In the File Content field for the Oracle Database, add the content in the TNSNAMES.ora file of your Database. You can leave the field blank when connecting to a Microsoft SQL or an AS400 Database.

    Example 1:

    Navigate to the path C:\Oracle\E1Local\NETWORK\ADMIN, and then copy the section for the database that you are using for EnterpriseOne and paste it in the File Content field.

Example 2:

Copy and paste the following section for the database that you are using for EnterpriseOne:

```
ems6282 = (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP)(HOST = den60212jems)(PORT =
1603)) ) (CONNECT_DATA = (SID = ems6282) (SERVER = DEDICATED) ) ) ORACLR_CONNECTION_DATA = (DESCRIPTION
= (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521)) ) (CONNECT_DATA = (SID = CLRExtProc)
(PRESENTATION = RO) ) )
```

10. Click the Save button.
11. Log off, and then log in again to Server Manager.

Changing the Component for the Deployment Server

To change the Deployment Server Component:

1. Sign in to the Server Manager console, and access the Deployment Server.

   Note: (Tools Releases Prior to 9.2.9) The EnterpriseOne installers provided with Tools Release 9.2.3.3 are not compatible with those from the previous Tools releases. Because of these incompatibilities, the 9.2.3.3 installers must be placed into empty directories when the Deployment Server Component is updated by the Server Manager. To accomplish this requirement, update the Server Manager Agent to 9.2.3.3 or later before updating EnterpriseOne to Tools Release 9.2.3.3 or later. A change has been implemented in the Server Manager Agent that will place the EnterpriseOne installers into empty directories (install and stage directories), and then copy the relevant information from the old Development Client installer's oraparam.ini file into the new file. If the following directories under the *<E1_dep_svr_install_dir>\OneWorld Client Install* directory exist, they are updated by the Server Manager Agent.

   - install
   - stage
   - ThirdParty\WLSH4A\install
   - ThirdParty\WLSH4A\stage
   - ThirdParty\WASH4A\install
   - ThirdParty\WASH4A\stage

   Note: (Tools Releases Prior to 9.2.9) Make sure to use Release 9.2.3.3 or later `oraparam.ini` files (for Development Client, WLSH4A, and WASH4A installers) and the H4A installers' response files (for example, WLSH4A_install.rsp and WASH4A_install.rsp) during the installation.

2. Click the Change button.

You will see the following three new options at the bottom of the Change Tools Release window.

1. No multi-foundation, component change only

Selecting this option replaces the system and OneWorld Client Install directory without creating a backup of the current system and the OneWorld Client Install directory.

This option:

- Replaces the system and the OneWorld Client Install with the new component.
- Copies the jdbj.ini, jas.ini, tnsnames.ora, and jdelog.properties from the old location to the new location.
- Copies the JRE into the system directory either from the current system\jre if it is the same bitness or from the path entered by the user.
- Sets the PackageInfs and CurrentReleaseMasterPath entries in the oraparams.ini from the path in the current oraparams.ini.
- Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.
- Copies the OneWorld Client Install\misc directory from the previous OneWorld Client Install.
- Copies the jdbc directory to the OneWorld Client Install\ThirdParty\WebDevFeature directory from the previous OneWorld client install.
- Resets the Desktop and Program File JDEdwards path.
- Resets any environment variable changes in the registry.
- Compresses the system into the systemcomp directory.

2. Component change and backup current system for multi-foundation

Selecting this option backs up the current system, systemcomp, and OneWorld Client Install into a version directory, and replaces these directories with the new component.

This option:

- Backs up the current system, systemcomp, and OneWorld Client Install directory into a version directory called 'foundation_<version>_<X86 or X64>'. For example, foundation_9.2.2.2_X86.
- Replaces the system and OneWorld Client Install with the new component.
- Copies the jdbj.ini, jas.ini, tnsnames.ora, and jdelog.properties from the old location to the new location.
- Copies the JRE into the system directory either from the current system\jre if it is the same bitness or from the path entered by the user.
- Sets the PackageInfs and CurrentReleaseMasterPath entries in the oraparams.ini from the path in the current oraparams.ini.
- Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.
- Copies the OneWorld Client Install\misc directory from the previous OneWorld Client Install.
- Resets the desktop and Program File JD Edwards path.
- Resets any Environment variable changes in the registry.
- Compresses the system into the systemcomp directory.
- Changes all the <package name> .inf files that point to the default system to the version directory.

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- o Updates any package .inf files that points to the default system to point to the version directory.

- o Populates the F9883 table with a new Foundation item with the path pointing to the version directory.

- o Updates the package record in the F9631 table to have a Foundation item if any package .inf files were changed.

3. Component download for multi-foundation only

Selecting this option downloads the new component into a version directory.

This option:

- o Creates a directory called 'foundation_<version>_<X86 or X64>'. For example, foundation_9.2.2.3_X86.

- o Downloads the component into the version directory.

- o Copies the jre into the system directory either from the current system\jre if it is the same bit or from the path entered by the user.

- o Sets the PackageInfs and CurrentReleaseMasterPath entries in the oraparams.ini from the path in the current oraparams.ini.

- o Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.

- o Copies the OneWorld Client Install\misc directory from the current OneWorld Client Install.

- o Compresses the version directory system into the systemcomp directory.

- o Populates the F9883 table with a new Foundation item with the path pointing to the version directory.

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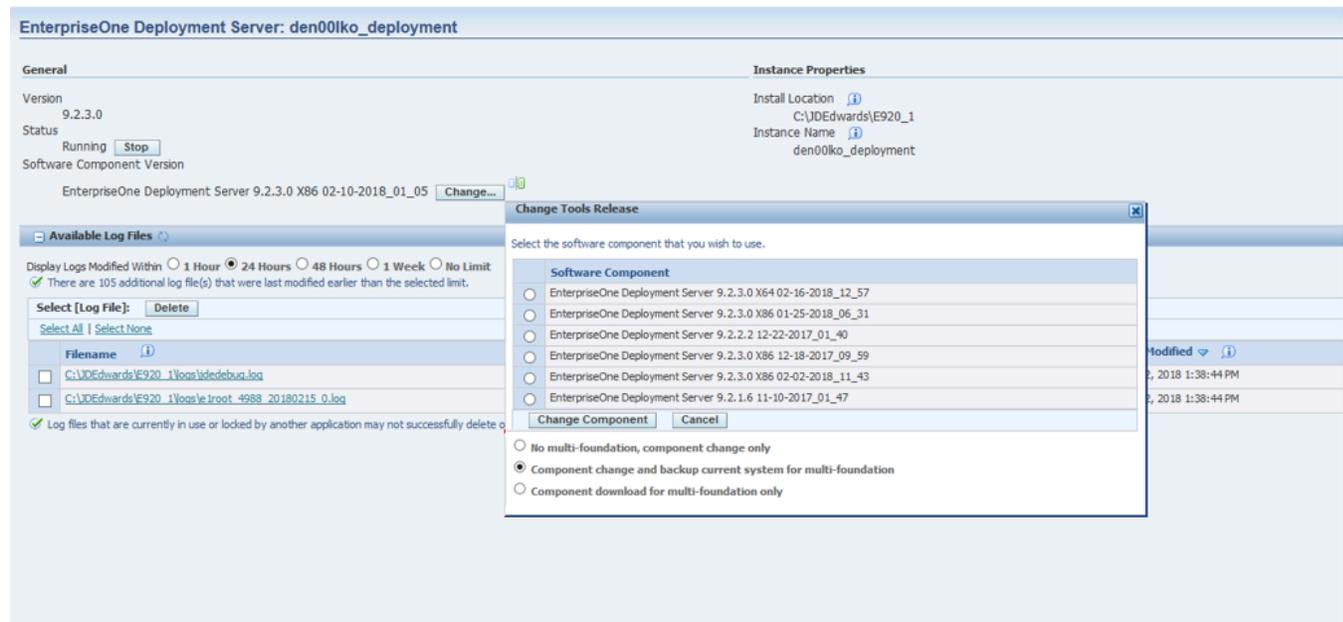
3. To download a 64-bit component, select the option Component download for multi-foundation Only, and then click the Change Component button.
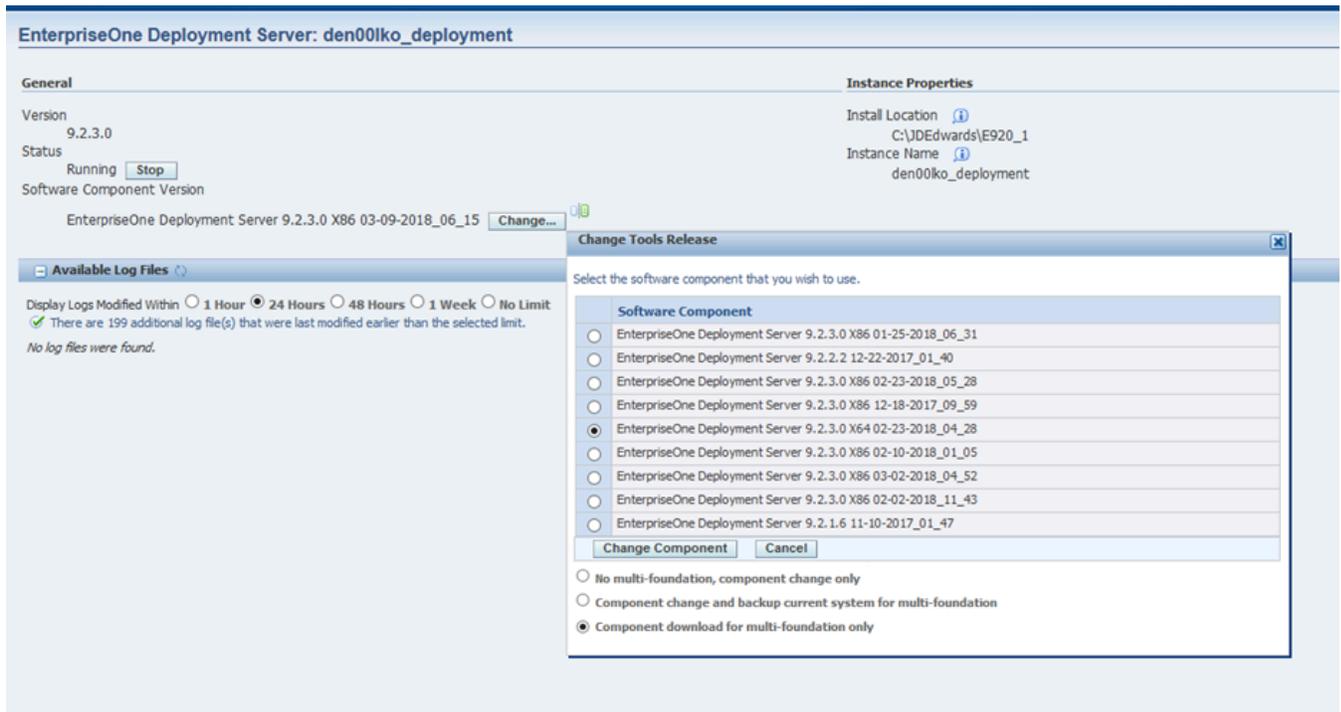
4. On the following message, click the OK button.

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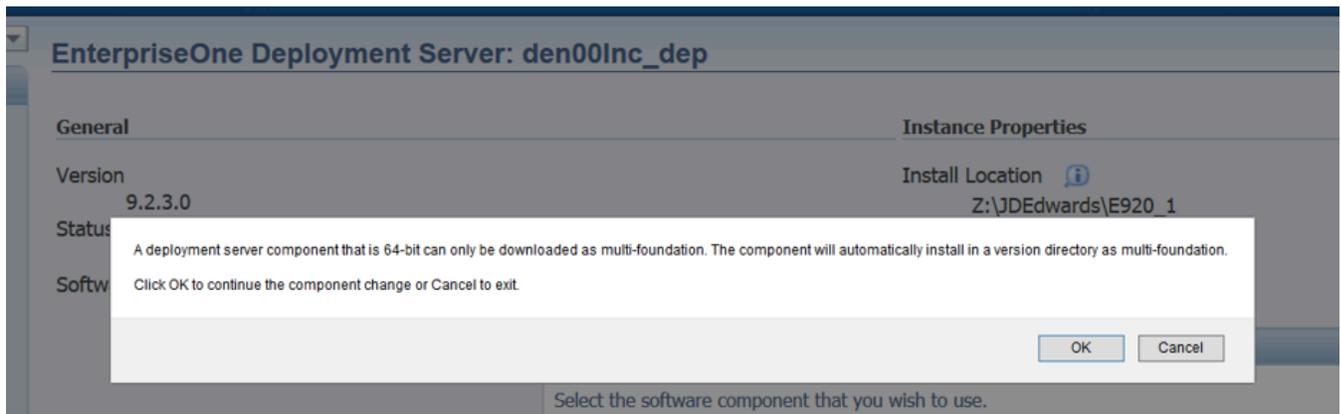
5. On the login window, enter the Username and Password for the SYSTEM Datasource tables such as F00942, and then click the Login button.
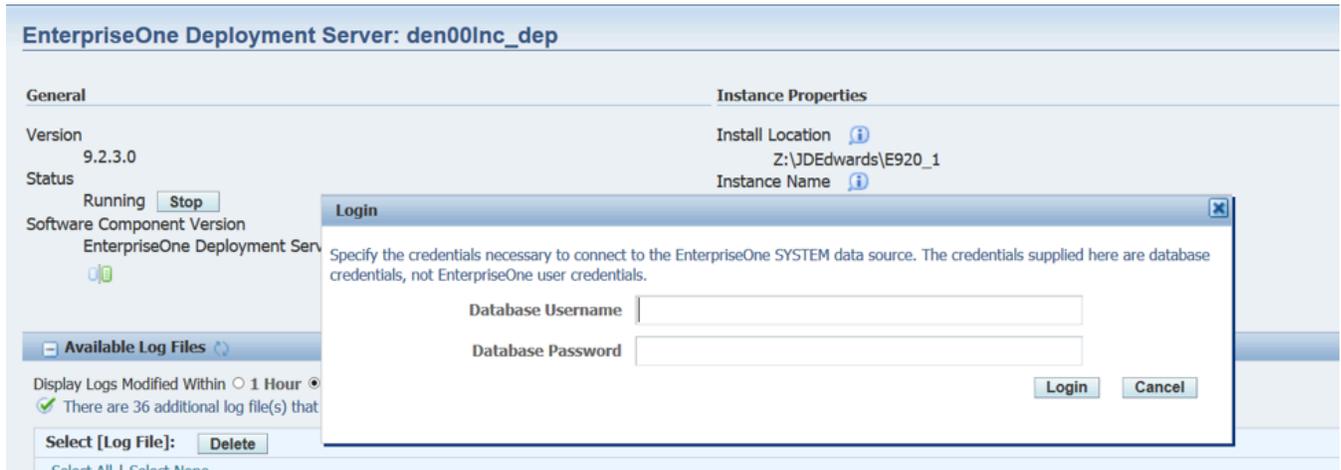
> **Note:** This is not the login for EntepriseOne or Server Manager.

6. On the 64-bit JRE path, specify the path to the 64-bit JRE home directory, and then click the OK button to download the 64-bit component to a 64-bit version directory.

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7. Verify the following to make sure that the component was downloaded successfully to a version directory such as 'foundation_9.2.3.0_X64'. The version directory will have a:

   - New system directory.
   - New systemcomp directory.
   - OneWorld client Install directory.

Change Component for the Deployment Server (Release 9.2.4)

This section discusses the changes in Server Manager to apply the Tools Release 9.2.4 including how to uplift the Deployment Server to 64-bit.

Setting Up the Password

Use the following procedure to set up the password for the Deployment Server and the Enterprise Server component change.

1. On the Server Manager Management Console, select the Server Manager Users in the CONFIGURE section of the tab on the left.
2. In the Server Manager User Authentication section, verify that the Primary Security Server is the Enterprise Server that is being used for the Security Server. Also, verify that the Outgoing JDENET Port value is same as the value in the jde.ini file.
3. Click the Save button.
4. Click the Management Dashboard link.
5. From the Select Instance drop-down menu, select the Home Management Console option.
6. In the Configuration section of the tab on the left, click JDBJ Database Configuration.
7. Enter the required values in the JDBJ Bootstrap Datasource field in this window.

   Click the information icon next to the text box for more information about the jde.ini section.

   > **Note:** Do not enter values in the JDBJ Connection Pools section. The values in the JDBC Drivers section are auto-populated.

8. In the Oracle Database Settings section, make sure that the path in the Location field points to the location of the console. For example, /slot/ems6282/oracle/Middleware/jde_home_1/SCFMC/targets/home/config/tnsnames.ora
9. In the File Content field for the Oracle Database, add the content in the TNSNAMES.ora file of your database. You can leave the field blank when connecting to a Microsoft SQL or an AS400 Database.

   Example 1:

   C:\Oracle\E1Local\NETWORK\ADMIN, and copy the section for the database that you are using for EnterpriseOne.

   Example 2:

   ```
   ems6282 = (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP)(HOST = den60212jems)(PORT = 1603)) ) (CONNECT_DATA = (SID = ems6282) (SERVER = DEDICATED) ) )
   ```

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```
ORACLR_CONNECTION_DATA =
(DESCRIPTION =
(ADDRESS_LIST =
(ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
)
(CONNECT_DATA =
(SID = CLRExtProc)
(PRESENTATION = RO)
)
)
```

10. Click the Save button.
11. Log off, and then log in again to Server Manager.

Changing the Component for the Deployment Server

Starting with Tools Release 9.2.4.0 the Deployment Server will allow 64-bit as the default system. If you apply 64-bit as the default system, you must upgrade the Deployment Server to 64-bit.

When you change the component for the Deployment Server you are presented with three options. When selecting the first two; No multi-foundation, component change only or Component change and backup current system for Multi-foundation, you can have 9.2.4.x 64-bit be installed as the default system. If you select a 64-bit component prior to 9.2.4.0, it will install the Deployment Server as multi-foundation. You can select 9.2.4.0 32-bit or 64-bit as default system. If you select 9.2.3.x 64-bit, it will install as multi-foundation regardless of the option selected.

To change the Deployment Server Component:

1. Access the Deployment Server Instance in the Server Manager Console.
2. Click the Change button.
   You will see the following three new options at the bottom of the Change Tools Release window.
   No multi-foundation, component change only
   Selecting this option replaces the system and OneWorld Client Install folder without creating a backup of the current system and the OneWorld Client Install folder.
   This option:
   ○ Replaces the system and the OneWorld Client Install with the new component.
   ○ Deletes the Oneworld Client Install\thirdparty\OEE and the Oneworld Client Install\thirdparty\SSE folders.
   ○ Copies the jdbj.ini, jas.ini, tnsnames.ora, and jdelog.properties from the old location to the new location.
   ○ Copies the JRE into the system folder either from the current system\jre if it is the same bitness or from the path you entered.

- Sets the Package.Infs, CurrentReleaseMasterPath, SourceTnsnamePath, DataByPathCode, and ConfigToolTimeoutMins entries in the oraparams.ini from the path in the current oraparams.ini.
- Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.
- Copies the OneWorld Client Install\misc directory from the previous OneWorld Client Install.
- Resets the Desktop and Program File JDEdwards path.
- Resets any environment variable changes in the registry.
- Compresses the system into the systemcomp folder.
- Copies in new CD Templates\ESU and ASU files.
- Verifies the path in the jde.ini for InprocessJVMHome is valid.

Component change and backup current system for multi-foundation

Selecting this option backs up the current system, systemcomp, and OneWorld Client Install into a version directory and replaces these directories with the new component.

This option:

- Backs up the current system, systemcomp, and OneWorld Client Install directory into a version directory called foundation_<version>_<X86 or X64, for example, foundation_9.2.2.2_X86.
- Replaces the system and OneWorld Client Install with the new component.
- Copies the jdbj.ini, jas.ini, tnsnames.ora, and jdelog.properties from the old location to the new location.
- Deletes the Oneworld Client Install\thirdparty\OEE and the Oneworld Client Install\thirdparty\SSE folders.
- Copies the JRE into the system folder either from the current system\jre if it is the same bitness or from the path you entered.
- Sets the PackageInfs, CurrentReleaseMasterPath, SourceTnsnamePath, DataByPathCode, and ConfigToolTimeoutMins entries in the oraparams.ini from the path in the current oraparams.ini.
- Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.
- Copies the OneWorld Client Install\misc directory from the previous OneWorld Client Install.
- Resets the desktop and Program File JD Edwards path.
- Resets any Environment variable changes in the registry.
- Compresses the system into the systemcomp folder.
- Copies in the new CD Templates\ESU and ASU files.
- Verifies the path in the jde.ini for InprocessJVMHome is valid.
- Changes the <package name> .inf files that point to the default system to the version directory.
- Populates the F9883 table with a new Foundation item with the path pointing to the version directory.
- Updates the package record in the F9631 table to have a Foundation item if any package .inf files were changed.

Component download for multi-foundation only

Downloads the new component into a version directory and updates the settings needed to install this system with a package.

This option:

- Creates a directory called foundation_<version>_<X86 or X64>, for example, foundation_9.2.2.3_X86.
- Downloads the component into the version directory.
- Copies the JRE into the system folder either from the current system\jre if it is the same bitness or from the path you entered.
- Deletes the Oneworld Client Install\thirdparty\OEE and the Oneworld Client Install\thirdparty\SSE folders.
- Sets the PackageInfs and CurrentReleaseMasterPath entries in the oraparams.ini from the path in the current oraparams.ini.
- Starting with Tools Release 9.2.9, copies the drivers located in E1 path\misc directory to the OneWorld Client Install\Thirdparty\jdbc directory.
- Copies the OneWorld Client Install\misc directory from the previous OneWorld Client Install.
- Compresses the version directory system into the systemcomp folder.
- Populates the F9883 table with a new Foundation item with the path pointing to the version directory.

3. Select EnterpriseOne Deployment Server 9.2.4.0 x64 software component.
4. Select Component change and backup current system for multi-foundation and click the Change Component button.
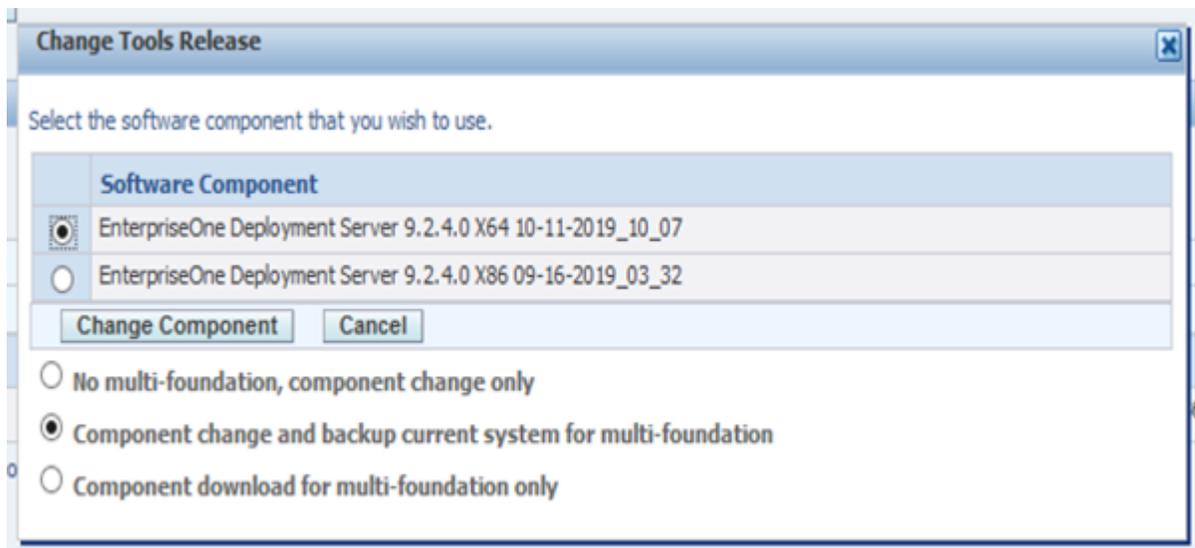
5. On the login window, enter the username and password for the SYSTEM data source an click the Login button.

> **Note:** This is not the login for EntepriseOne or Server Manager.

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6. On the 64-bit JRE path, specify the path to the 64-bit JRE home directory, and then click the OK button.
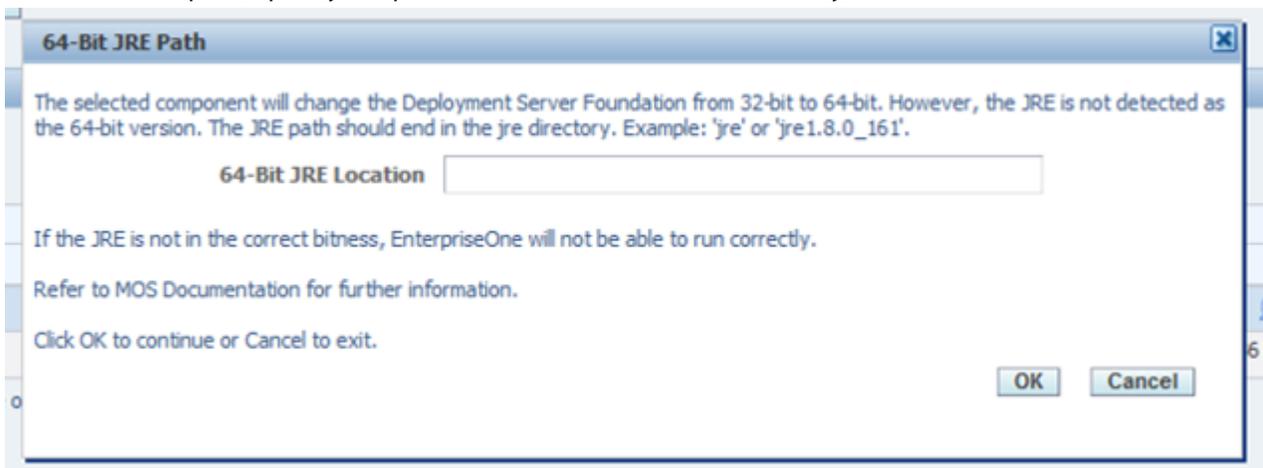
> **Note:** The previous default 32-bit foundation will be backed up to a version directory.

7. Verify the following to ensure a successful component change:
   - New system directory is: ..system\bin64
   - New systemcomp directory.
   - The OneWorld Client Install directory has been updated (files have today's date).
   - A version directory exists, for example: foundation_9.2.3.4_X86 with the system, systemcomp, and OneWorld Client install directory.

Change Component for the Deployment Server (Release 9.2.5)

This section discusses the changes in Server Manager to apply the Tools Release 9.2.5 including how to uplift the Deployment Server to 64-bit.

Updating the Deployment Server jde.ini

To run web packages, a new service JD Edwards EnterpriseOne Client Network is available on the deployment server that accepts messages from the enterprise server. A one-time setup is needed in jde.ini on the deployment server to run this service.

1. Open an enterprise server's jde.ini file and copy the User and Password values.
2. On the deployment server, edit C:\Windows\jde.ini.
3. Navigate to the Security section.
4. Paste the values of the User and Password fields that you copied from the enterprise server to the following fields:
   - User
   - Password
5. If you want to use a security server, enter the security server key's value. Leave the field blank if you do not want to use the security server.

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6. Save the jde.ini file.

Starting the Deployment Server Service

Starting with Tools Release 9.2.5.0 Microsoft Windows service is used. This service is used by Server Manager to perform various actions. This service was installed when you upgraded the deployment server component to Tools Release 9.2.5.0 or later. You must start this service manually from within the Server Manager console the first time after the upgrade. After the initial upgrade to Tools Release 9.2.5, the service will start automatically when the deployment server component is upgraded or the machine is rebooted.

1. Log in to Server Manager as the jde_admin user.
2. On the Managed Homes and Managed Instances page, under the Managed Instances column, locate the EnterpriseOne deployment server and select the deployment server.
3. Near the top of the page, click the Start button.

Note: For Tools Releases prior to 9.2.5.0 , clicking the Start and Stop buttons has no effect.

16 Register or Create a JD Edwards Enterprise Server as a New Managed Instance

Visual Studio Requirements for Microsoft Windows-based Enterprise Servers

Server Manager detects the supported and installed versions of Visual Studio for Microsoft Windows-based Enterprise Server.

> **CAUTION:** Not all JD Edwards EnterpriseOne Applications and Tools releases support various Visual Studio versions. Refer to the JD Edwards EnterpriseOne Certifications (MTRs) and *Package Management Guide* for support levels.

The JD Edwards EnterpriseOne Administrator can navigate to the Compiler Selection screen by navigating to the Enterprise Server Instance and clicking the **Package Builds** link.

As shown below, the supported and detected versions of Visual Studio on Microsoft Windows-based JD Edwards EnterpriseOne Enterprise Server. The Administrator can select the appropriate version of Visual Studio and click the **Apply** button. As a result, Server Manager updates the entries in the `[JDE_CG]` section and `[BSFN BUILD]` section of the `jde.ini` file.

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Prerequisites and Recommended Registration or Creation Sequence for an Enterprise Server as New Managed Instance

The following steps represent the prerequisites and recommended sequence for creating an Enterprise Server as a new *Managed Instance* :

1. Prerequisite: Management Agent is installed on target machine.

   Refer to *Getting Started*.
2. Prerequisite: The Enterprise Server Software Component is uploaded to the Management Console.

   Refer to *Upload Software Components*.
3. Prerequisite: The Enterprise Server Software Component is distributed to the target Managed Home.

   Refer to *Distribute Software Components to Managed Homes*.

Prerequisite and recommendation for registering an Enterprise Server as a new *Managed Instance* :

Prerequisite: Management Agent is installed on target machine.

Refer to *Installing the Server Manager Management Console and Agent*.

Register an Existing Enterprise Server as a New Managed Instance

The only *Managed Instance* that can be registered after being installed by a method other than *Server Manager* is a *JD Edwards EnterpriseOne* Enterprise Server. The Enterprise Server may have been installed using the Platform Pack installer or manually created outside of *Server Manager* . Regardless of the method of creation any Enterprise Server running Tools Release 8.91 (and later) may be registered with Server Manager in preparation for upgrading to 8.97 (and later). Management of Tools Releases 8.96 outside the immediate upgrade steps is not supported.

Only *JD Edwards EnterpriseOne* Enterprise Servers that are registered with the *Management Console* can be managed by the *Management Console* . The Enterprise Server may have been installed using the Platform Pack installer or manually created outside of *Server Manager* . Regardless of the method of creation, any Enterprise Server running Tools Release 8.97 (and later), including multi-foundation Enterprise Servers, is fully supported.

> **Note:** Registration of an Enterprise Server requires that a *Management Agent* first be installed on Enterprise Server. Refer to *Installing the Server Manager Management Console and Agent*.

Registration of Tools Release prior to 8.97 is only intended to facilitate an upgrade to Tools Release 8.97 (and later). Once you have upgraded to Tools Release 8.97 and later you cannot use *Server Manager* to revert to a release prior to the base release of Tools Release 8.97. If you want to run simultaneous releases of 8.97 (and later) and releases prior to 8.97, you should use Multiple Foundations, which is described in the *JD Edwards EnterpriseOne   Tools Release 9.2 Reference Guide*.

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UNIX Installation Note

On UNIX-based platforms, you must install and run the *Management Agent* as the same operating system user as the *JD Edwards EnterpriseOne* Enterprise Server.

To register an existing Enterprise Server instance:

1. Select the *Managed Home* with which you wish to register the Enterprise Server.

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2. Click the *Create a New Managed Instance* button to create the *Managed Instance* within the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

Register an Existing Enterprise Server

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4. Click Continue.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. The instance name must be unique within this management domain and may only contain the characters [a-zA-Z_0-9].

Instance Type — Instance Properties — Confirmation — Finish

Server Group   default

Instance Name   DENLCMLX1_EntServer

Install Location   /u02/jdedwards/e900/ddp

Cancel   Continue

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5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the dropdown to select the Server Group to which you want this instance to belong.

- *Instance Name*

  Enter the name in the Instance Name field.

- *Install Location*

  Enter a valid install location for the existing Enterprise Server. For example:

  UNIX:

  `/u02/jdedwards/e920`

  Windows:

  `c:\jdedwards\e920`

  For both Windows and UNIX, you must specify the *Install Location* as the full path.

  IBM i:

  `e900SYS`

  IBM i Enterprise Servers. These systems do not require a full path. Instead, you should only enter the library name that corresponds to the IFS directory in which *JD Edwards EnterpriseOne* is installed. Ensure that there are no slash characters in the Install Location.

  For example, E920SYS , E920SYS_1 , E920SYS_2.

  Based on this Install Path, the requested path code libraries and IFS directories are created accordingly by appending the addendum at the end of the pathcodes. For example,

  E920SYS will create the requested path codes in this format: DV920 , PY920, PS920, PD920.

  E920SYS_1 will create the requested path codes in this format: DV920_1 , PY920_1, PS920_1, PD920_1

  E920SYS_A will create the requested path codes in this format: DV920_A , PY920_A, PS920_A, PD920_A

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6. Click Continue.

7. On Create/Register a Managed Instance, Confirmation, review the key configuration items, where the web page displays a variety of fields depending on the database and environments of your installation

You can further configure any item as required.

> **Note:** If the server was installed using the Platform Pack installer, typically you are not required to perform further configuration. *Server Manager* reads these values from the existing Enterprise Server installation; they are valid if the Enterprise Server was functioning properly at the time of registration.

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8. Click Continue.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

Cancel   **Create Instance**

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the registration of the Enterprise Server.
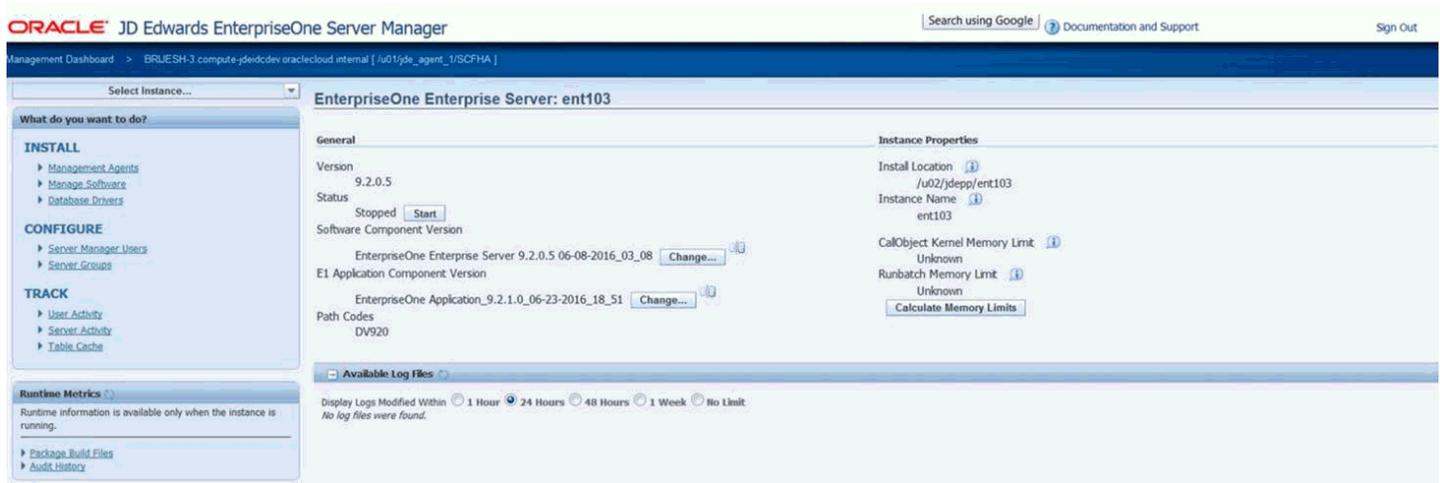
After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered Enterprise Server. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

You must re-link the Business Functions after you install the 9.2 or later Tools Release to an IBM i-based Enterprise Server using the Server Manager. For instructions, refer to the chapter entitled: Re-Linking Business Functions in the JD Edwards EnterpriseOne Tools Release 9.2 Reference Guide.

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For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the web page:

- ○ *General*

    - Software Component Version

        Displays the version of this software component.
    - Status

        Valid values are:

        Running

        When the status is Running, the *Stop* button is available.

        Stopped

        When the status is Stopped, the *Start* button is available.
    - E1 Application Component Version (Release 9.2.1)

        Displays the EnterpriseOne application component version.
    - Path Codes (Release 9.2.1)

        Displays the path codes.
- ○ *Instance Properties*

    Install Location

    Displays the full path for the install location of the selected *Managed Instance* .

    Instance Name

    Displays a clickable link for the name of the selected *Managed Instance* .

For information on log files, refer to the chapter entitled *Available Log Files*.

Create (Install) an Enterprise Server as a New Managed Instance

You can use *Server Manager* to install new Enterprise Servers. These Enterprise Servers only contain a system (foundation) and a path-code. There is no package delivered. These Enterprise Servers are not fully functional until the user adds a plan in EnterpriseOne. Refer to the Additional Task at the end of the screen prints. Additionally, at least one Enterprise Server in your installation must be installed outside of *Server Manager* using the Platform Pack installer which includes the platform and database dependent application data and path codes.

To create an Enterprise Server as a new *Managed Instance* using *Server Manager* , you must obtain the appropriate Enterprise Server software components either directly from the *Management Console* or from the Update Center. There are two software components needed. The foundation(system) par file and the application .par file from a Package Build. The Managed Software Components must be uploaded to the Management Console and distributed

to the Management Agent to which you wish to install the new Enterprise Server. For additional information, refer to *Managed Software Components*.

For more information on the application .par file needed from a package build, see *"How the System Builds a Full Server and Client Package"* in the *JD Edwards EnterpriseOne Tools Package Management Guide* .

To create an Enterprise Server as a new *Managed Instance* :

1. Select the *Managed Home* with which you wish to create the Enterprise Server as a new *Managed Instance* .

2. Click the *Create a New Managed Instance* button to create the *Managed Instance* in the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

Install New Enterprise Server

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4. Click Continue.

5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the dropdown to select the Server Group to which you want this instance to belong.
- *Instance Name*

  Enter the name for the instance.
- (Release 9.2.7.0) *Install Location*

  Enter a valid install location for the existing Enterprise Server.

  For both Windows and UNIX, you must specify the Install Location as the full path.

  IBMi:

  E920SYS

  IBMi Enterprise Servers. These systems do not require a full path. Instead, you should only enter the library name that corresponds to the IFS directory in which *JD Edwards EnterpriseOne* is installed. Ensure that there are no slash characters in the Install Location.

  For example, E920SYS , E920SYS_1 , E920SYS_2.

  Based on this Install Path, the requested path code libraries and IFS directories are created accordingly by appending the addendum at the end of the pathcodes.

  For example,

    - E920SYS will create the requested path codes in this format: DV920 , PY920, PS920, PD920.
    - Addendum '_1' creates E920SYS_1 with the requested path codes in this format: DV920_1 , PY920_1, PS920_1, PD920_1.
    - Addendum '_A' creates E920SYS_A with the requested path codes in this format: DV920_A , PY920_A, PS920_A, PD920_A.
- *Foundation Component*

  Select the required foundation component from the drop-down menu.
- *Application Component*

  Select the required application component from the drop down menu that was created by package build.

  Use the drop-down menus to select the foundation and application components from the list of Enterprise Server components distributed to this *Management Agent* .
- *Path Code*

  Pathcode built in the component will be automatically selected unless this is a PS package then all pathcodes are available to be selected. This is used for One-Click provisioning.

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6. Click Continue.

Validate or update the configuration items. Use the help which directs you to the setting in the ini file.
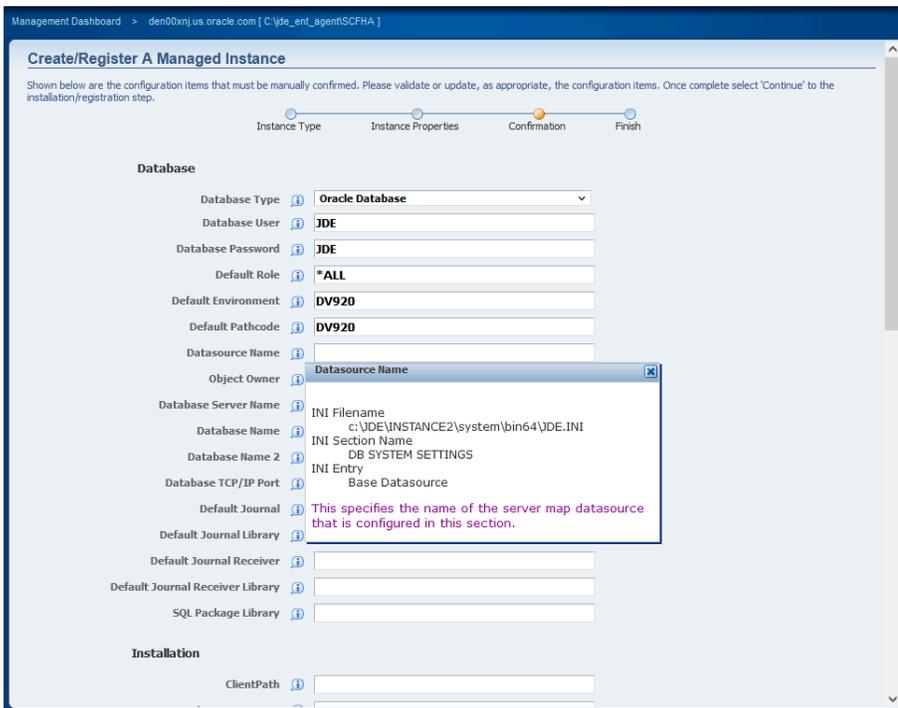
(Release 9.2.7.0) For IBMi, ensure that you fill out the Application Path Addendum under Installation section. This will identify the Tools Release (example: 'E920SYS<addendum>') with the pathcode (example: 'DV920<addendum>, PY920<addendum>').
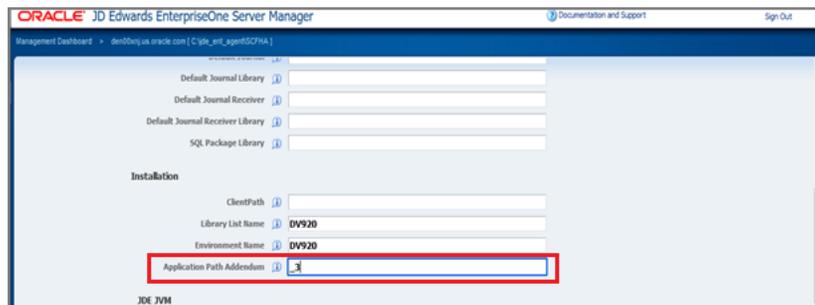
○

7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The web page displays a variety of fields depending on the database and environments of your installation.

You can further configure any item as required.

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8. Click Continue.

9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the Enterprise Server.

After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered Enterprise Server. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

Beginning with Release 9.2.7.0, IBMi-based Enterprise servers do not need to re-link the business functions. This is automatically done once the installation is complete.

Prior to Release 9.2.7.0 to an *IBMi* -based Enterprise Server, as in previous *JD Edwards EnterpriseOne* Tools Releases, you must re-link the Business Functions.

For instructions, refer to the chapter entitled: *Re-Linking Business Functions* in the *JD Edwards EnterpriseOne JD Edwards EnterpriseOne Deployment Server Reference Guide Reference Guide*.

> **Note:** *Click here to view a recording of this feature.*

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Additional Task (Release 9.2.7.0)

Before you start the component, perform these tasks:

1. If a site key is used, in Server manager on the Enterprise Server home page, enter the same passphrase and click the Generate button or copy from an existing jde.ini the site key.
2. Add the Enterprise Server through Add a Server Plan.

   On the Deployment Server, sign into EnterpriseOne JDEPLAN environment, and Add a Server Plan. For more information, refer to the Applications Upgrade Guides.
3. If the server is a Microsoft Windows based Enterprise Server, ensure you set the Visual Studio compiler settings. Refer to *Visual Studio Requirements for Microsoft Windows-based Enterprise Servers*.
4. If the server is UNIX based, then you should update these three settings on the enterprise server under /e920/ SharedScripts/enterpriseone.sh:
   - ORACLE_USER_ACCT= <database user>
   - ORACLE_HOME= < path to database>
   - ORACLE_SID=< name of database >
5. If you are installing Multi-Foundation or Multi-Instance on the same machine, when creating the new instance on the Configuration page for the 'Service Name Listen', Service Name Connect' and the 'Start IPC Key Value', ensure they are unique values.

   If the values are set at the same value as another instance, it can cause unpredictable issues. The 'Start IPC Key Value' can be whatever you want as long as startIPCKeyValue + maxIPCResources does not collide with a range on another EnterpriseOne instance on the machine.
6. Start the EnterpriseOne Enterprise Server Instance.

For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the web page:

- *General*

  - Software Component Version

    Displays the version of this software component.
  - Status

    Valid values are:

    Running

    When the status is Running, the *Stop* button is available.

    Stopped

    When the status is Stopped, the *Start* button is available.

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- o   E1 Application Component Version (Release 9.2.1)

    Displays the EnterpriseOne application component version.
  - o   Path Codes (Release 9.2.1)

    Displays the path codes.

- • *Instance Properties*

  - o   Install Location

    Displays the full path for the install location of the selected *Managed Instance* .
  - o   Instance Name

    Displays a clickable link for the name of the selected *Managed Instance* .

For information on log files, refer to the chapter entitled: *Available Log Files*.

Configuring an IBM i Enterprise Server to an Existing DB2 Database (Release 9.2.2.4)

After Installing an IBM i Enterprise Server as explained in *Create (Install) an Enterprise Server as a New Managed Instance*, you must configure it to point to a Pre-Existing DB2 Database.

Make changes to the jde.ini file as shown in the following example to get the Enterprise Server up and running by pointing it to an existing Database Server. These ini file changes may be different depending on the environment you are using.

[DB SYSTEM SETTINGS]

Base Datasource=DENQAS7 - 920 Server Map

Database=DENQAS7 - 920 Server Map

DatabaseName2=SVM920

Default Env=DV920

Default PathCode=DV920

Default Pwd=JDE

Default Role=*ALL

Default User=JDE

Server=DENQAS7

ServerPort=0

[JDENET]

serviceNameConnect=6099

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serviceNameListen=6099

[SECURITY]

DataSource=System - 920

SecurityServer=DENQAS1

[SVR]

ApplicationPathAddendum=_I

SpecPath=spec

[WORKFLOW]

WRIPassword=JDE

[SITE_KEYS]

CurrentKey=ADGkvS9o6gamyEF5Uwrqh7M54AX1mfNypjsLrksh4uiK4XG4bdgidkEkKqyOcXjwmYzCEfpsNnogl6tosZae0=

> **Note:** Configure the Spec.ini file to point to the Correct values.

Change Component for the Enterprise Server (Tools Release 9.2 Update 3)

This section discusses the changes in Server Manager to apply the Tools release including how to uplift the Enterprise Server to 64-bit.

> **Note:** See the section 14.2.1, "Setting Up the Password" to set up the password for the Enterprise server component change. Starting with Tools Release 9.2.6.0, the pathcode directory structure has changed to support the no lock on kernels during the deploy of the package. When there is a change component going from a Tools release prior to 9.2.6.0 to a Tools Release starting with 9.2.6.0, the directories under each pathcode for that Instance will change. The dll/.so under the <pathcode>/bin64 will now be under a <pathcode>/bin64/<package name>. For IBMi, the SVRPGM are under the package name library and not the pathcode library. The spec.ini is now under 2 locations, the <pathcode>/spec and <pathcode>/spec/<packagename>. The <pathcode>/spec/spec.ini references the deployed package. The <pathcode>/spec/<packagename>/spec.ini references the Central Objects Data source. The TAM files, dddict, ddtext and glbltbl are now under <pathcode>/spec/<packagename>. If you go back to a Tools Release prior to 9.2.6.0, it will restructure the pathcode directory back to the original way.

To change the Enterprise Server Component:

1. Sign in to the Server Manager console, and access the Enterprise Server.

2. Click the Change button.
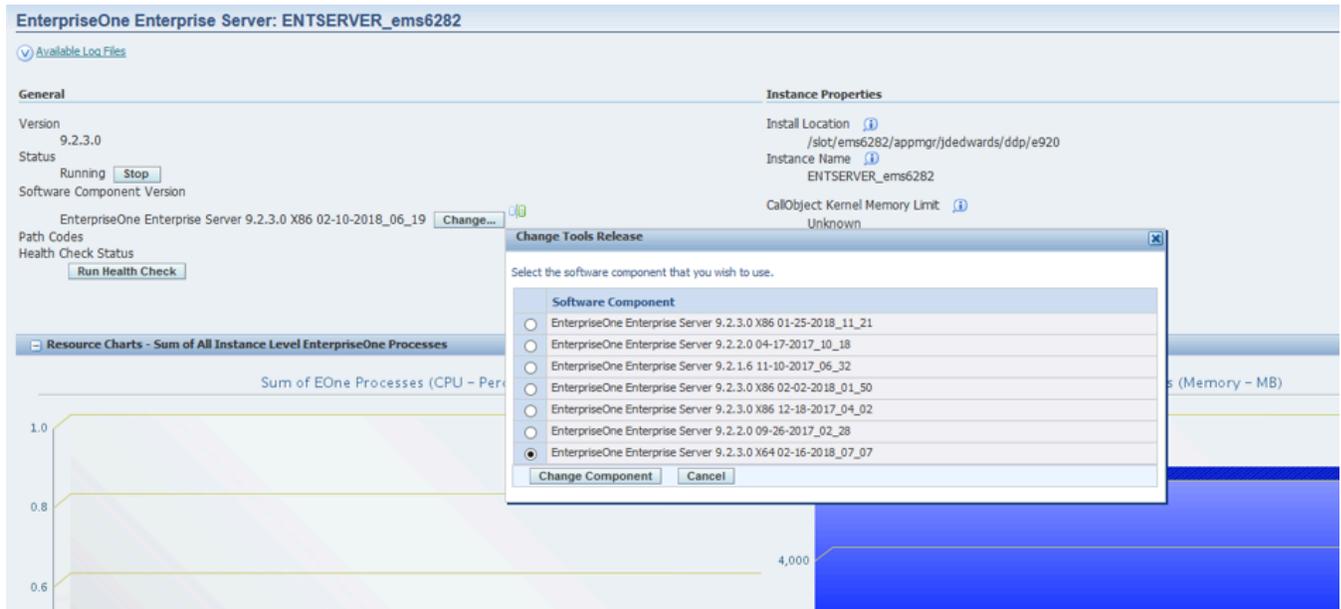
For IBM i starting with Tools Release 9.2.6.0, the component change links the business function at the end of the change if you select the Link the business functions option during the component change. After the change is complete, you must wait until the linking of the business functions are complete before starting the EnterpriseOne services.

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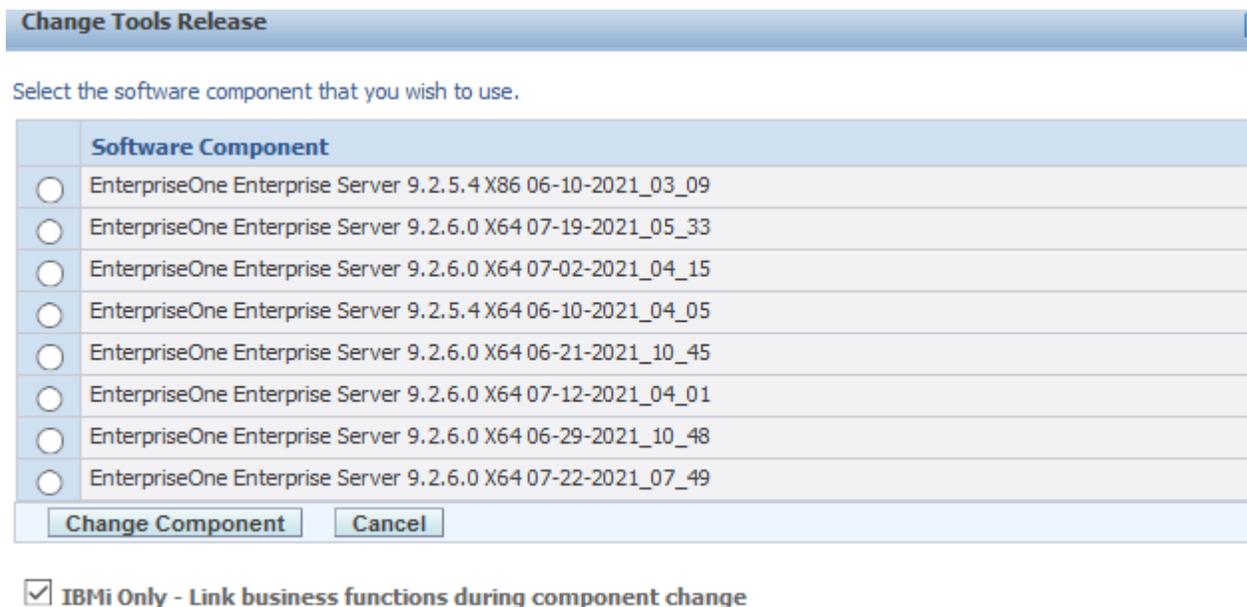
3. Select the EnterpriseOne Enterprise Server 9.2.3.0_X64 option to change your component from 32-bit to 64-bit.

   For IBM i, starting with Tools Release 9.2.6.0, an alert message is displayed to remind you to link the business function at the end of the change if you did not select the Link the business functions option or to ensure that the linking of the business function is complete before starting EnterpriseOne.

4. On the login window, enter the Username and Password for the Database Server, and then click the Login button.

   Note: Ensure that you have set the password correctly. For more information see Section 14.2.1, "Setting Up the Password".
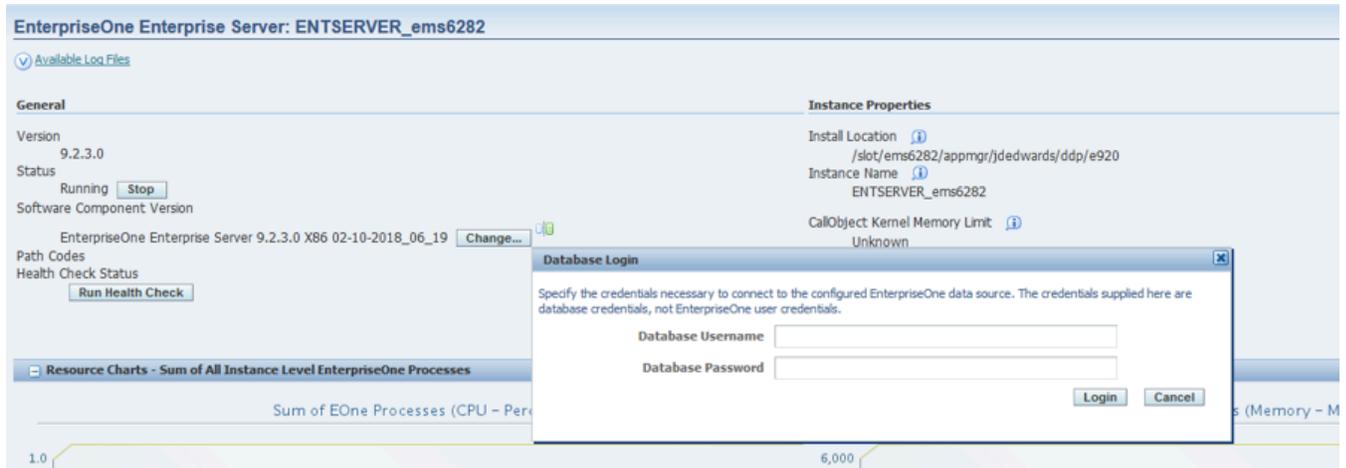
5. On the window that is displayed, as shown in the following image, click the OK button to change the Enterprise Server Foundation from 32-bit to 64-bit.
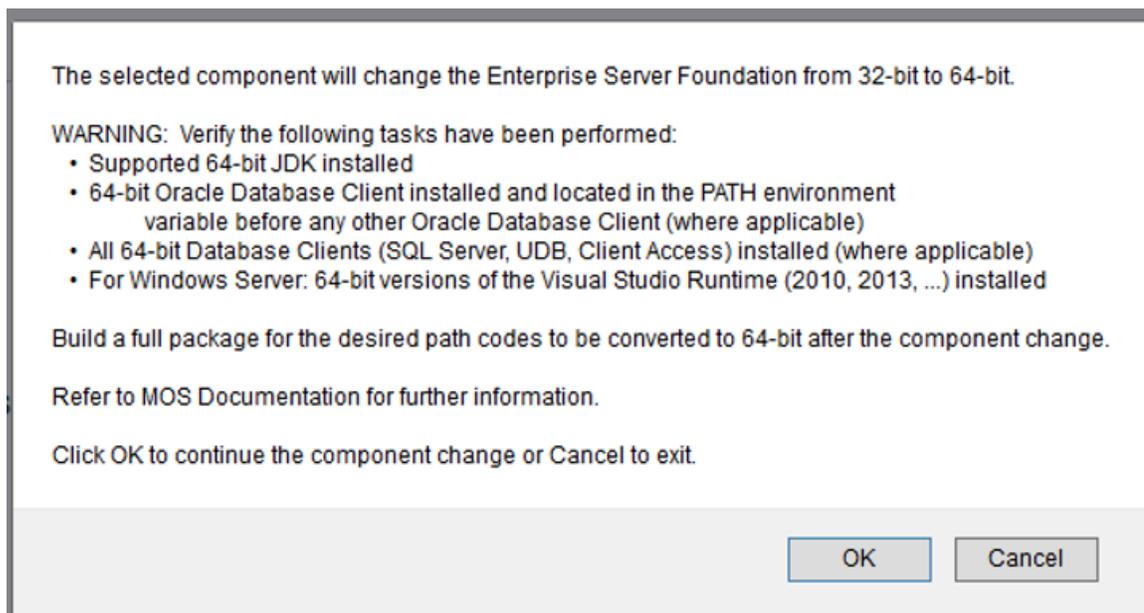
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6. On the window that is displayed, as shown in the following image, click the OK button.

> **Note:** This message is displayed only if your Enterprise Server requires an Oracle Client.

The selected component will change the Enterprise Server Foundation from 32-bit to 64-bit. However, the active Oracle Database Client version is not detected as the 64-bit version.

WARNING: The 64-bit version of the Oracle Database Client is not detected. Possible causes are:
 • The 64-bit Oracle Client is not installed.
 • The path to the 64-bit Oracle Database Client is not located BEFORE the path to the 32-bit Oracle Client in the Environment Variable PATH.

After the component change, verify these conditions are met. EnterpriseOne will be unable to connect to the E1Local database without the 64-bit version of the Oracle Database Client.

Refer to MOS Documentation for further information.

Click OK to continue.
☐ Prevent this page from creating additional dialogs

OK

7. On the 64-bit Database Client home directory window, enter the correct path, and then click the OK button.

> **Note:** Make sure that the 64-bit Database Client install directory has permissions to allow the Server Manager Agent to read and write contents into it's files. If you are on Unix, make sure that the system user has the permission to start the SVM Agent process.

64-bit Database Client home directory ☒

The selected component will change the Enterprise Server Foundation from 32-bit to 64-bit. However, the Oracle client home directory in the enterpriseone.sh script is not detected as the 64-bit version.

Database Client Home Directory /u01/app/oracle/product/12.1.0/client_1

OK Cancel

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8. On the 64-bit JRE Path window, enter the correct path, and then click the Submit button.
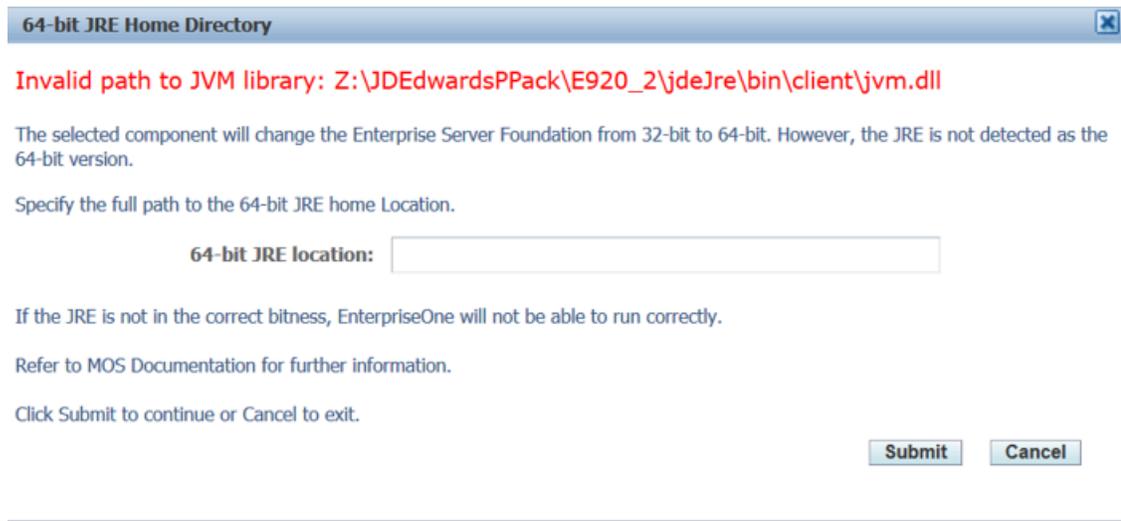
9. (Release 9.2.7.0) If the new component is of version 9.2.7.0 or newer, the old version is older than 9.2.7.0, and the Enterprise server is Windows with an Oracle database, you will see this popup to enter the path to the Oracle Database.
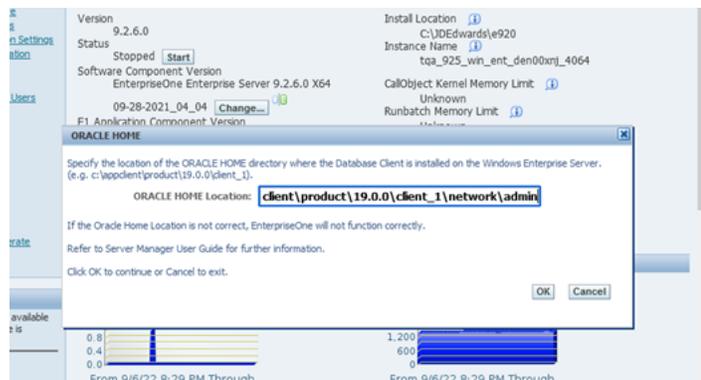
10. With Release 9.2.7.0 and newer, a Database Driver is needed on the Enterprise Server. The change component will check if the driver is already uploaded in the E920 misc folder on the Enterprise server. If there are no drivers uploaded, you will see this alert message.
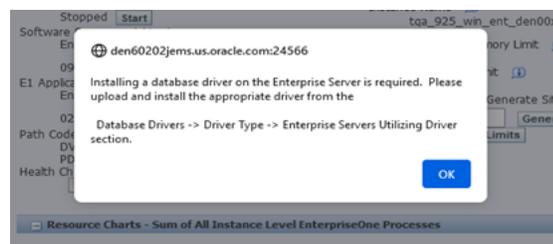
After the install, navigate to the **Database Driver -> Driver Type -> Enterprise Servers Utilizing Driver** to upload and install the necessary driver to the Enterprise Server. For any Enterprise Server component change, you will see this message until you upload the drivers.

11. Wait for the process to complete.
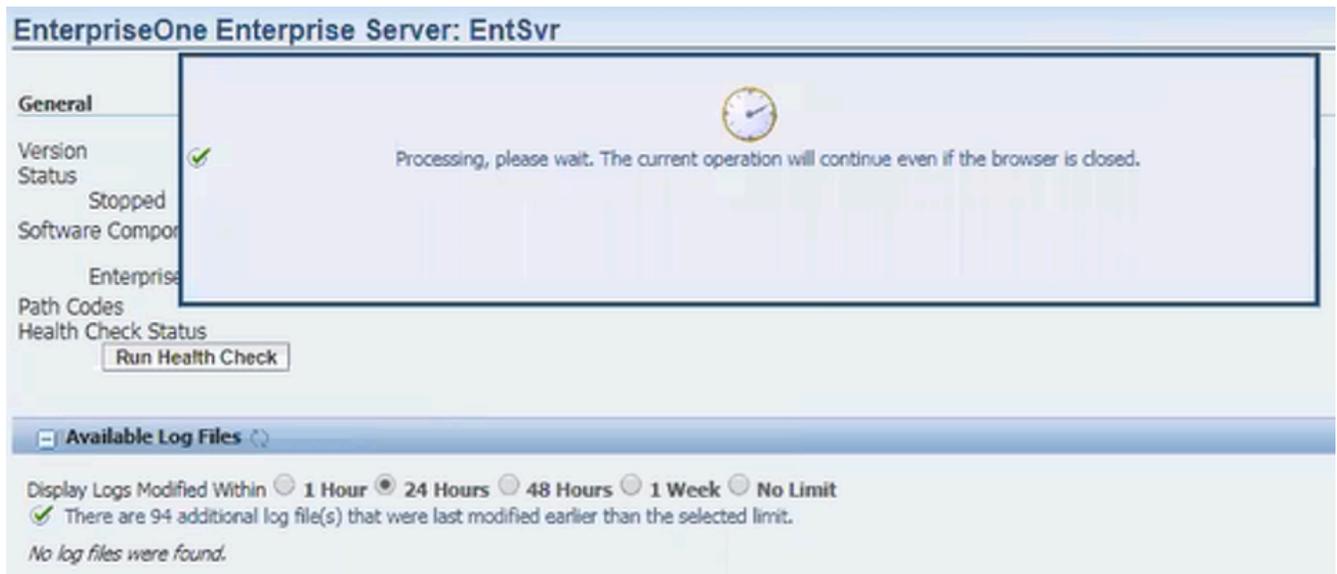
12. Verify that the component change is successful on the EnterpriseOne Enterprise Server window.

13. Verify that the values in the Installation, Package Builds, and JVM Location in the Miscellaneous section are updated with the 64-bit information.

> **Note:** To revert to a 32-bit component, access the Change Component window, and select a 32-bit component that ends with _X86.

> **Note:** Starting with Tools Release 9.2.8.2, your installed and custom fonts stored in the location `<System directory>/resource/truetype` are retained by the system. In case of fonts that have duplicate names, the system overrides the installed fonts with the fonts shipped with EnterpriseOne. The fonts that are no longer supported by EnterpriseOne must be deleted manually.

Enabling TLS on the Enterprise Server (Release 9.2.7.3)

Starting with Tools Release 9.2.7.3, you can enable TLS for communication between Enterprise Servers and database servers.

To enable communication between Enterprise servers and database servers using TLS, perform the following configuration steps on the Enterprise Server instance in the Server Manager Console:

Navigate to Enterprise Server Instance > Configuration > Advanced > Database > Bootstrap Datasource. Enter the secured port number in the Database TCP/IP Port field.

The Database TCP/IP Port field is not applicable to AS/400 database and is not displayed when AS/400 database is selected.

> **Note:** You must update the Database TCP/IP Port field for IBM UDB and Oracle Database. However, AS/400 and MS SQL Server have default Database TCP/IP Port and updating the Database TCP/IP Port field is not required.

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Navigate to Enterprise Server Instance > Configuration > Advanced > Java Runtime Properties > JDBj Bootstrap Datasource. Enter the secured port number in the Database TCP/IP Port field.

Navigate to Enterprise Server Instance > Configuration > Advanced > Java Runtime Properties > JDBj Runtime Properties. Use the drop-down menu to select true for the Use TLS field.

> **Note:** The Use TLS configuration is not applicable to Oracle Database.

Enabling TLS on the Deployment Server (Release 9.2.7.3)

Starting with Tools Release 9.2.7.3, you can enable TLS for communication between Deployment Server and database servers.

To enable communication between Deployment Server and database servers using TLS, perform the following configuration steps on the Deployment Server instance in the Server Manager Console.

To use secured database port in Database Configuration for Deployment Server, navigate to Deployment Server Instance > Configuration > Advanced > Database > Bootstrap Datasource. Enter the secured port number in the Database TCP/IP Port field.

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Note: You must update the Database TCP/IP Port field for IBM UDB and Oracle Database. However, AS/400 and MS SQL Server have default Database TCP/IP Port and updating the Database TCP/IP Port field is not required.

17 Create a JD Edwards EnterpriseOne Web-Based Server as a New Managed Instance

Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances

These steps represent the prerequisites and recommended installation sequence *Managed Instances* for *JD Edwards EnterpriseOne* web-based servers:

> **Note:** Please make sure HTTP Server install location doesn't contain the Space.

1. Prerequisite: Management Agent is installed on the target machine.

   Refer to *Installing the Server Manager Management Console and Agent*.
2. Prerequisite: Application Server (WLS or WAS) is installed on target machine.

   Refer to *JD Edwards EnterpriseOne HTML Web Server Reference Guide* for details on installing and configuring WLS and WAS.
3. Prerequisite: The Web-Based Server Software Component is uploaded to the Management Console.

   Refer to *Upload Software Components*.

   > **Note:** *Exception.* There is no Software Component available or required for creating the Business Services Server.

4. Prerequisite: The Web-Based Server Software Component is distributed to the Managed Home.

   Refer to *Distribute Software Components to Managed Homes*.

   > **Note:** *Exception.* There is no Software Component available or required for creating the Business Services Server.

5. Register an Application Server (WAS or WLS) to create a new Managed Instance for an Application Server in the target Managed Home.

   For WLS 11g, refer to *Register an Oracle WebLogic Server 11g*.

   For WLS 12c, refer to *Register an Oracle WebLogic Server 12c*.

   For WLS 14c, refer to *Register an Oracle WebLogic Server 14c*.

   For WAS 8.5 or WAS 9, refer to *Register a WebSphere Application Server, Version 8.5.5.0/9.0*.

   For WAS 7.0, refer to *Register a WebSphere Application Server, Version 7.0*.

6. Create a J2EE Container (WLS) or J2EE Server (WAS) in the Application Server.

> **Note:** There is a one-to-one relationship between a web-based server and a J2EE container. You cannot install more than one web-based server in each J2EE container.

For WLS 11g, refer to *Register an Oracle WebLogic Server 11g*.

For WLS 12c, refer to *Register an Oracle WebLogic Server 12c*.

For WLS 14c, refer to *Register an Oracle WebLogic Server 14c*.

For WAS 8.5 or WAS 9, refer to *Register a WebSphere Application Server, Version 8.5.5.0/9.0*.

For WAS 7.0, refer to *Register a WebSphere Application Server, Version 7.0*.

7. Install JDBC drivers to the J2EE Server (except Collaborative Portal Server).

Refer to *Install JDBC Drivers to the J2EE Server (WLS or WAS)*.

> **Note:** If you do not install the JDBC drivers before installing the Web-Based Server Instance, the Web-Based Server Instance does not start as expected at the end of the installation unless the server already has a bundled JDBC driver as part of the install.

8. Install the web-based server Managed Instance.

Refer to:

- *Create a HTML Web Server as a New Managed Instance*

- *Create a Transaction Server as a New Managed Instance*

- *Create a Collaborative Portal Server as a New Managed Instance*

- *Create a Business Services Server as a New Managed Instance*

Create a HTML Web Server as a New Managed Instance

You must use *Server Manager* to install a new *HTML Web Server* instance.

WebSphere Security Consideration for Federated Servers. For WebSphere Federated Servers only, if Administrative Security is turned on for the profile containing the deployment manager, you must turn it OFF before proceeding with the creation of the *Managed Instance* for the *HTML Web Server* . After disabling security, you must restart the deployment manager. All nodes in the management domain will also have to be restarted and resynchronized. The *Management Agent* to which the WebSphere Application Server is registered must also be restarted. For additional details, refer *Post Install for a Federated Server in Network Deployment Mode* to in this chapter.

See Also

- *Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances*

- *JD Edwards EnterpriseOne HTML Web Server Reference Guide* for details on installing and configuring WLS or WAS and additional tasks and topics related to *Server Manager* .

To install an *JD Edwards EnterpriseOne HTML Web Server* instance:

1. Select the *Managed Home* in which you wish to install the *HTML Web Server* .

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2. Click the *Create a New Managed Instance* button to create the *Managed Instance* in the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

   EnterpriseOne HTML Server

4. Click Continue.

Note: The Propagate Enterprise Server Config drop-down appears only if any enterprise server is registered within the Server Manager console. The Propagate Enterprise Server Config drop-down contains the available enterprise server instances registered with the SM console within a particular selected server group. NONE is added to the drop-down by default.

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5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the dropdown to select the Server Group to which you want this instance to belong.

  Also refer to *Administer Server Groups*.
- *Instance Name*

  Enter a name for the instance.

  > **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the *JD Edwards EnterpriseOne* server type, such as `Enterprise_Server, HTML_Web_Server, RTE_Transaction_Server, Collaborative_Portal,` or `Business_Services,` and where `SERVER` is the machine on which the instance is installed, and where `PORT` is the HTTP port which is defined for use by this server.

- *J2EE Server*

  Use the dropdown to select a valid J2EE server.
- *HTTP Port*

  You must ensure that the port that you specify is available and is not being used by any other application currently installed and running on the server on which the application server is running.

  > **Note:**
  >   - *Verify HTTP Ports*
  >   - *HTTP Ports on UNIX Operating Systems*

- *Software Component*

  Use the dropdown to select the version of this *Software Component* that you wish to install.
- *Propagate Enterprise Server Config*

  Select the enterprise server from the drop-down list to propagate the configurations.

  > **Note:** By default, the selected item is set to NONE. Selecting NONE signifies that you do not wish to propagate configurations from any available enterprise server. If any enterprise server is selected, all of the inherited values are seen in the next screen, otherwise the properties are seen with blank/default values. If propagated, the propagated values are not editable on the confirmation page, however they can be modified post installation.

6. Click Continue.

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Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

HTTP Server (WAS Only)   webserver2

Interop Inbound Settings

Enterprise Server Name	ⓘ	DNDEDASVM4
Enterprise Server Port	ⓘ	6015
Manual Timeout	ⓘ	30000000

JDBJ Database Configuration

System Datasource Name	ⓘ	TOOLS910I - 910 Server Map
Database Type	ⓘ	O
Database Name	ⓘ	TOOLS910E
Database Server Name	ⓘ	TOOLS910E
Database TCP/IP Port	ⓘ	1470
Physical Database	ⓘ	JDE910
Object Owner	ⓘ	SVM910
Bootstrap User	ⓘ	JDE
Bootstrap User Password	ⓘ	JDE
Bootstrap Role	ⓘ	*ALL
Bootstrap Environment	ⓘ	JDV900
TNSNAMES.ORA Location	ⓘ	C:\SMAgent\SCFHA\targets\HTML\config\tnsnames.ora
File Contents	ⓘ	

ORACLE

Network Settings

Outgoing JDENET Port	ⓘ	6015
Incoming JDENET Port	ⓘ	6080
Timeout Threshold	ⓘ	90000
Pool Size	ⓘ	30
Security Server Count	ⓘ	1
Primary Security Server	ⓘ	DNDEDASVM4
Secondary Security Server	ⓘ	NONE
Third Security Server	ⓘ	NONE
Fourth Security Server	ⓘ	NONE
Fifth Security Server	ⓘ	NONE

Web Runtime

Glossary Text Server	ⓘ	DNDEDASVM4:6015
Encoding Scheme	ⓘ	English and Western European ▼
Path Codes	ⓘ	('DV900')
Default Environment	ⓘ	JDV900
Default Role	ⓘ	*ALL
Max Users	ⓘ	100

⚠ All the configurations inherited from the selected Enterprise Server are displayed in readonly mode. If you choose to change these values you can do so only after the instance is created.

Note: This example illustrates an installation on a WebSphere Application Server by selecting an enterprise server to be propagated. If installing on WLS, the HTTP Server (WAS Only) field is not displayed.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

○ Instance Type   ○ Instance Properties   ● Confirmation   ○ Finish

| HTTP Server (WAS Only) | webserver2 | ▼ |

Interop Inbound Settings

Enterprise Server Name	ⓘ	
Enterprise Server Port	ⓘ	6079
Manual Timeout	ⓘ	30000000

JDBJ Database Configuration

System Datasource Name	ⓘ	
Database Type	ⓘ	Oracle Database ▼
Database Name	ⓘ	
Database Server Name	ⓘ	
Database TCP/IP Port	ⓘ	0
Physical Database	ⓘ	
Object Owner	ⓘ	
Bootstrap User	ⓘ	
Bootstrap User Password	ⓘ	
Bootstrap Role	ⓘ	
Bootstrap Environment	ⓘ	
TNSNAMES.ORA Location	ⓘ	C:\SMAgent\SCFHA\targets\HTML\config\tnsnames.ora
File Contents	ⓘ	▲

ORACLE

Network Settings

Outgoing JDENET Port	6080
Incoming JDENET Port	6080
Timeout Threshold	90000
Pool Size	30
Security Server Count	1
Primary Security Server	NONE
Secondary Security Server	NONE
Third Security Server	NONE
Fourth Security Server	NONE
Fifth Security Server	NONE

Web Runtime

Glossary Text Server	
Encoding Scheme	English and Western European
Path Codes	('PATHCODE')
Default Environment	
Default Role	
Max Users	100

Note: This example illustrates an installation on a WebSphere Application Server by selecting NONE under Propagate Enterprise Server Config. If installing on WLS, the HTTP Server (WAS Only) field is not displayed.

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7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The page displays a variety of fields depending on your application server (WAS or WLS). The values on this form must be confirmed manually. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
>
> ○ *Configure the Default Server Group Configuration Settings*

8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

The final step includes deploying the EnterpriseOne HTML server to the J2EE application server. This process may take five or more minutes to complete. Once complete the HTTP server associated with the J2EE application server must be restarted manually.

Cancel   Create Instance

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the *HTML Web Server* .

After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered HTML Server. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the page:

- ○ *General*

    - *Status*

        Valid values are:

        Running

        When the status is Running, the *Stop* button is available.

        Stopped

        When the status is Stopped, the *Start* button is available.

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> **Note:** *Start or Stop a Managed EnterpriseOne Software Component*

- *Software Component Version*

    Displays the version of this *Software Component* .

    > **Note:** *Change a Managed EnterpriseOne Software Component*

○ *Instance Properties*

  - *Instance Name*

      The name assigned to the *Managed Instance* at the time it was created or registered.
  - *HTTP Port*

      Displays the HTTP Port for this server and also provides a link to the HTTP server.
  - *Application Server Instance*

      Displays the application server into which this EnterpriseOne server is installed and also provides a link to the application server instance and associated domain (Oracle webLogic Server) or profile (WebSphere Application Server).

> **Note:** The display of some information is dependent on the status of the *Managed Instances* . For example, if a *Managed Instance* is not running, then the Software Component information cannot be displayed.

For information on log files, refer to the chapter entitled: *Available Log Files*.

Post Install for a Federated Server in Network Deployment Mode

After you have completed the creation of a *JD Edwards EnterpriseOne HTML Web Server* as a *Managed Instance* in *Server Manager* the *Management Console* displays this warning:

Do not click the *Synchronize Configuration* button yet. Follow the steps in this section.

To install a *HTML Web Server HTML Web Server* to a WebSphere Federated Server in Network Deployment Mode:

> **Note:** Steps *1* and *3* below are only applicable if the J2EE server you selected to create the *HTML Web Server* managed instance resides on a machine different that the deployment manager. The remainder of the steps are applicable to all federated deployments. You may ignore steps 2 and 4 if the federated server you selected resides on the same machine as the deployment manager.

1. If you are using an Oracle database, configure the `tnsnames.ora` setting using these steps:

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    a. Use this navigation path for the *Managed Instance* you just created in *Server Manager* :

    Configuration > JDBJ Database Configuration > Oracle Database Settings > TNSNAMES.ORA Location

    b. Configure the setting to `tnsnames.ora` without the full file path.

    For example:

2. If you have not already done so, install the JDBC driver to the J2EE container. Refer to *Install JDBC Drivers to J2EE Servers* in this guide.

3. After installing the JDBC driver, you must modify the WebSphere JDBC provider as described in these steps:

   a. Copy the JDBC driver file(s) appropriate to your database to a location on the physical machine on which the federated server resides. For example:

   `/u01/JDBCDriver`

   b. Use these steps to modify the JDBC provider for the remote J2EE container in WebSphere to point to the driver file in this new location.

   i. In the WebSphere Administrative Console (for the deployment manager), navigate to the section called *JDBC Providers* as shown in this screen:

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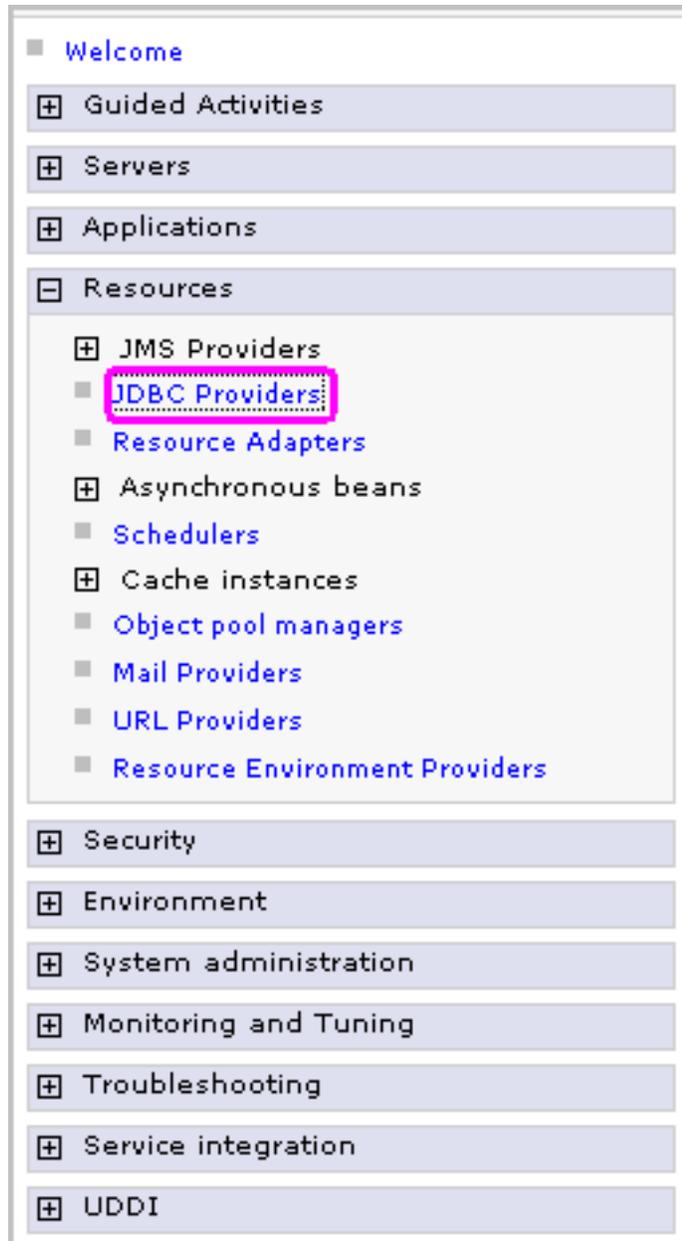
ii. Complete the filter fields with the appropriate Cell, Node and Server information for the J2EE Container to which the *HTML Web Server* was deployed.

For example:

iii. Click the **Apply** button.

iv. On JDBC Providers, click on the appropriate JDBC provider for the database which you are using with *HTML Web Server* .

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Note: The preceding example screen assumes an Oracle database.

v. Replace the path to the JDBC driver files as configured by *Server Manager* to the machine-specific path where you previously placed the drivers. Refer to the preceding Step *3* where you copied the JDBC

driver file(s) appropriate to your database to a location on the physical machine on which the federated server resides.

This example screen assumes Oracle JDBC driver files were placed in the location /u01/JDBCDriver:

vi. Click the **OK** button to save the configuration change and initiate node synchronization through the deployment manager.

c. This completes the modification of the WebSphere JDBC provider.

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4. Configure the HTTP Server by copying the appropriate text:

from this file:

`JDE_HOME/targets/e1_html_server_instance_name/Readme.txt`

to this file:

The `httpd.conf` file of the HTTP server you wish to use for this *Managed Instance* .

where **e1_html_server_instance_name** is the name you defined in *Server Manager* .

You must modify the path to the `Readme.txt` file to reflect the `JDE_HOME` location and the *Managed Instance* name in your environment. This is an example of a properly configured `Readme.txt` file:

```
# The following configuration was added by the EnterpriseOne Server Manager
Listen 15010
<VirtualHost *:15010>
Alias /jde
"/u01/WebSphere60/AppServer/profiles/FedProf/installedApps/denlchp3Cell30/JAS
_Remote.ear/webclient.war"
</VirtualHost>
<Directory
"/u01/WebSphere60/AppServer/profiles/FedProf/installedApps/denlchp3Cell30/JAS
_Remote.ear/webclient.war/WEB_INF">
Order Deny,Allow
Deny from All
</Directory>
<Directory
"/u01/WebSphere60/AppServer/profiles/FedProf/installedApps/denlchp3Cell30/JAS
_Remote.ear/webclient.war">
Order Deny,Allow
Allow from All
</Directory>
```

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5. Make any other configuration changes required to define this *Managed Instance* .

6. In *Server Manager* , navigate to the page for the *Managed Instance* and click on the *Synchronize Configuration* button.

The synchronization process may take a few minutes to complete. The *JD Edwards EnterpriseOne Managed Instance* is configured and ready to use after the preceding steps have been completed.

For any subsequent configuration changes made to this *Managed Instance* , *Management Console* re-displays the *Synchronize Configuration* button with the corresponding warning message. You must click the button to apply the configuration changes to the remote server. After the changes are applied, the *Management Console* no longer displays the button and warning message.

Create a Transaction Server as a New Managed Instance

You must use *Server Manager* to install a new Transaction Server instance.

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Note:

- *Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances*

- Refer to the *JD Edwards EnterpriseOne Transaction Server Reference Guide* for details on additional tasks and topics related to *Server Manager* .

To install a Transaction Server instance:

1. Select the *Managed Home* in which you wish to install the Transaction Server.
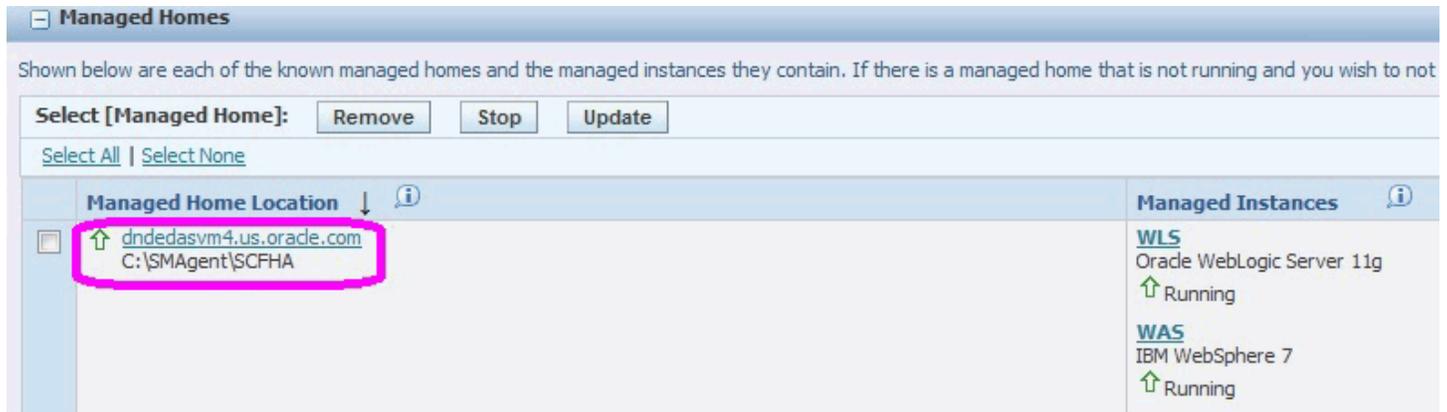
2. Click the *Create a New Managed Instance* button to create the *Managed Instance* in the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

EnterpriseOne Transaction Server

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4. Click Continue.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. The characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type — Instance Properties — Confirmation — Finish

Server Group	JDE
Instance Name	RTE
J2EE Server/Cluster	WebSphere Instance:WAS, Profile: Dmgr01, dndedasvm4Cell01/dndedasvm4Node02/TestServer
HTTP Port	7003
Software Component	EnterpriseOne RTE Server 9.1.3.1 04-03-2013_08_57
Propagate Enterprise Server Config	ES
	NONE
	ES

Note: The Propagate Enterprise Server Config drop-down appears only if any enterprise server is registered within the Server Manager console. The Propagate Enterprise Server Config drop-down contains the available enterprise server instances registered with the SM console within a particular selected server group. NONE is added to the drop-down by default.

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5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

○ *Server Group*

Use the dropdown to select the Server Group to which you want this instance to belong.

Also refer to *Administer Server Groups*.

○ *Instance Name*

Enter a name for the instance.

> **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the *JD Edwards EnterpriseOne* server type, such as `Enterprise_Server, HTML_Web_Server, RTE_Transaction_Server, Collaborative_Portal,` or `Business_Services,` and where `SERVER` is the machine on which the instance is installed, and where `PORT` is the HTTP port which is defined for use by this server.

○ *J2EE Server*

Use the dropdown to select a valid J2EE server.

○ *HTTP Port*

You must ensure that the port that you specify is available and is not being used by any other application currently installed and running on the server on which the application server is running.

> **Note:**
> - *Verify HTTP Ports*
> - *HTTP Ports on UNIX Operating Systems*

○ *Software Component*

Use the dropdown to select the version of this *Software Component* that you wish to install.

○ *Propagate Enterprise Server Config*

Select the enterprise server from the drop-down list to propagate the configurations.

> **Note:** By default, the selected item is set to NONE. Selecting NONE signifies that you do not wish to propagate configurations from any available enterprise server. If any enterprise server is selected, all of the inherited values are seen in the next scree, otherwise the properties are seen with blank/default values. If propagated, the propagated values are not editable on the confirmation page, however they can be modified post installation.

6. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

HTTP Server (WAS Only)   webserver2

JDBJ Database Configuration

System Datasource Name	TOOLS910I - 910 Server Map
Database Type	O
Database Name	TOOLS910E
Database Server Name	TOOLS910E
Database TCP/IP Port	1470
Physical Database	JDE910
Object Owner	SVM910
Bootstrap User	JDE
Bootstrap User Password	JDE
Bootstrap Role	*ALL
Bootstrap Environment	JDV900
TNSNAMES.ORA Location	C:\SMAgent\SCFHA\targets\RTE\config\tnsnames.ora
File Contents	

ORACLE

Network Settings

Outgoing JDENET Port	ⓘ	6015
Back Off Time	ⓘ	30000
Incoming JDENET Port	ⓘ	6080
Timeout Threshold	ⓘ	90000
Pool Size	ⓘ	50
Security Server Count	ⓘ	1
Primary Security Server	ⓘ	DNDEDASVM4
Secondary Security Server	ⓘ	NONE
Third Security Server	ⓘ	NONE
Fourth Security Server	ⓘ	NONE
Fifth Security Server	ⓘ	NONE

⚠ All the configurations inherited from the selected Enterprise Server are displayed in readonly mode. If you choose to change these values you can do so only after the instance is created.

Note: This example illustrates an installation on a WebSphere Application Server by selecting an enterprise server to be propagated. If installing on WLS, the HTTP Server (WAS Only) field is not displayed.

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Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

HTTP Server (WAS Only)	webserver2

JDBJ Database Configuration

System Datasource Name ⓘ	
Database Type ⓘ	Oracle Database
Database Name ⓘ	
Database Server Name ⓘ	
Database TCP/IP Port ⓘ	0
Physical Database ⓘ	
Object Owner ⓘ	
Bootstrap User ⓘ	
Bootstrap User Password ⓘ	
Bootstrap Role ⓘ	
Bootstrap Environment ⓘ	
TNSNAMES.ORA Location ⓘ	C:\SMAgent\SCFHA\targets\RTE\config\tnsnames.ora
File Contents ⓘ	

Network Settings

Outgoing JDENET Port	6080
Back Off Time	30000
Incoming JDENET Port	6080
Timeout Threshold	90000
Pool Size	50
Security Server Count	1
Primary Security Server	NONE
Secondary Security Server	NONE
Third Security Server	NONE
Fourth Security Server	NONE
Fifth Security Server	NONE

> **Note:** This example illustrates an installation on a WebSphere Application Server by selecting NONE under Propagate Enterprise Server Config. If installing on WLS, the HTTP Server (WAS Only) field is not displayed.

7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The page displays a variety of fields depending on your application server (WAS or WLS). The values on this form must be confirmed manually. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
> ○ *Configure the Default Server Group Configuration Settings*

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8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

The final step includes deploying the EnterpriseOne Transaction Server to the J2EE application server. This process may take fifteen or more minutes to complete. Once complete the HTTP server associated with the J2EE application server must be restarted manually.

Cancel   Create Instance

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the Transaction Server.

> **Note:** This process may take fifteen or more minutes to complete.

After you have completed the installation, the HTTP server associated with the J2EE Server (WAS) must be restarted manually. If you do not restart the HTTP server, you will not be able to login to *JD Edwards EnterpriseOne* .

After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered Transaction Server. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the page:

- ○ *General*

  - - *Status*

    Valid values are:

    Running

    When the status is Running, the *Stop* button is available.

    Stopped

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When the status is Stopped, the *Start* button is available.

> **Note:** *Start or Stop a Managed EnterpriseOne Software Component*

- *Software Component Version*

  Displays the version of this *Software Component* .

  > **Note:** *Change a Managed EnterpriseOne Software Component*

o *Instance Properties*

- *Instance Name*

  The name assigned to the *Managed Instance* at the time it was created or registered.
- *HTTP Port*

  Displays the HTTP Port for this server and also provides a link to the HTTP server.
- *Application Server Instance*

  Displays the application server into which this EnterpriseOne server is installed and also provides a link to the application server instance and associated domain (Oracle WebLogic Server) or profile (WebSphere Application Server).

For information on log files, refer to the chapter entitled: *Available Log Files*.

Create a Collaborative Portal Server as a New Managed Instance

You must use *Server Manager* to install a new Collaborative Server instance.

The WebSphere 7.0 or 8.5 installation must also include an HTTP Server.

> **Note:**
> - *Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances*
> - Refer to the *JD Edwards EnterpriseOne Collaborative Portal Server Reference Guide* for details on additional tasks and topics related to *Server Manager* .

To install a Collaborative Portal Server instance:

1. Select the *Managed Home* in which you wish to install the Collaborative Portal Server.

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Managed Homes and Managed Instances

Use the dropdown below to select the desired management view.

Select View   Managed Homes and Managed Instances ▼

Managed Homes

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you wish to not see it listed here you may remove it.

Select [Managed Home]: [Remove] [Stop] [Update]

Select All | Select None

Managed Home Location ↓ ⓘ	Managed Instances ⓘ
☐ ⇧ DENPBDS11.oradev.oraclecorp.com Z:\SMC_WAS85\SCFMC	**home** Management Console ⇧ Running
☐ ⇧ DENPBDS11.oradev.oraclecorp.com Z:\js_home_agent_11\SCFHA **Agent Update Required**	**EA_JS_10005** EnterpriseOne HTML Server ⇩ Undetermined **E1_JAS_C1** EnterpriseOne HTML Server ⇩ Undetermined **MyCP7** EnterpriseOne Collaborative Portal Server ⇧ Running **MyWAS7** IBM WebSphere 7 ⇧ Running **MyWLS1035** Oracle WebLogic Server 11g Undetermined

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2. Click the *Create a New Managed Instance* button to create the *Managed Instance* in the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

EnterpriseOne Collaborative Portal Server

4. Click Continue.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue'
instance name must be unique within this management domain and may only contain the characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type — Instance Properties — Confirmation — Finish

Server Group `default`

Instance Name [ ]

J2EE Server WebSphere Instance:WAS60, Profile: Portal, dentfrs3Node02Cell/dentfrs3Node02/WebSphere_P

Software Component EnterpriseOne Collaborative Portal Server Version 8.97.0.1

5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the dropdown to select the Server Group to which you want this instance to belong.

  Also refer to *Administer Server Groups*.
- *Instance Name*

  Enter a name for the instance.

  > **Tip:** A good business practice is to name your instances so that they are easily and consistently
  > identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the *JD Edwards EnterpriseOne* server
  > type, such as `Enterprise_Server`, `HTML_Web_Server`, `RTE_Transaction_Server`, `Collaborative_Portal`, or
  > `Business_Services`, and where `SERVER` is the machine on which the instance is installed, and where `PORT`
  > is the HTTP port which is defined for use by this server.

- *J2EE Server*

  Use the dropdown to select a valid J2EE server.
- *Software Component*

  Use the dropdown to select the version of this *Software Component* that you wish to install.

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6. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type — Instance Properties — Confirmation — Finish

HTTP Server (WAS Only)	websrvport
Bootstrap Environment	
Database Type	AS/400
Database Name	
Database Server Name	
Database TCP/IP Port	
Physical Database	
Object Owner	
Outgoing JDENET Port	6080
Incoming JDENET Port	6080
Server Name	
Node Name	_GLOBALNODE
Node Password	_GLOBALPWD

Cancel   Continue

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7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The values on this form must be confirmed manually. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
>   ○ *Configure the Default Server Group Configuration Settings*

8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

It may be necessary to restart the HTTP server once the installation has completed.

[Cancel] [Create Instance]

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the Collaborative Portal Server.

EnterpriseOne Collaborative Portal Server: MyCP7

General	Instance Properties
Status	Instance Name ⓘ
Running [Stop]	MyCP7
Software Component Version	Application Server Instance
EnterpriseOne Collaborative Portal Server 9.1.2.4 01-11-2013_01_43 [Change...]	MyWAS7 (WebSphere Instance:MyWAS7, Profile: wp_profile, DENPBDS11/DENPBDS11/WebSphere_Portal)
	Software Component
	EnterpriseOne Collaborative Portal Server 9.1.2.4 01-11-2013_01_43

⊟ Available Log Files ↻

Display Logs Modified Within ◯ 1 Hour ◉ 24 Hours ◯ 48 Hours ◯ 1 Week ◯ No Limit
No log files were found.

After you have completed the installation, the browser is redirected to the *Management Console* page for the newly registered Collaborative Portal. This server also appears as a *Managed Instance* in the corresponding *Managed Home* .

For each registered *Managed Instance* , the *Management Console* displays appropriate information at the top of the page:

○ *General*

- *Status*

Valid values are:

Running

When the status is Running, the *Stop* button is available.

Stopped

When the status is Stopped, the *Start* button is available.

> **Note:**
> ○ *Start or Stop a Managed EnterpriseOne Software Component*

- *Software Component Version*

Displays the version of this *Software Component* .

> **Note:**
> ○ *Change a Managed EnterpriseOne Software Component*

○ *Instance Properties*

- *Instance Name*

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The name assigned to the *Managed Instance* at the time it was created or registered.

- *Application Server Instance*

    Displays the application server into which this EnterpriseOne server is installed and also provides a link to the application server instance and associated WebSphere Application Server profile.

For information on log files, refer to the chapter entitled: *Available Log Files*.

Create a Business Services Server as a New Managed Instance

CAUTION: This Caution is applicable only if you are creating a Business Services Server on a WebSphere application server. Ensure that you have already installed a version of WebSphere that is compatible with the Business Services Server (refer to *Accessing the Certifications (Minimum Technical Requirements)* in this guide). In order to enable *Server Manager* to install a *Managed Instance* for a *Business Services Server* , you must have configured the supported version of WebSphere with a *secure profile*. For general security settings directly related to *Server Manager* , refer to *Configure WebSphere Application Server to Work With Server Manager When Administrative Security is Enabled* in this guide. For recommendations for securing the WebSphere profile, refer to the *Business Service Server Reference Guide.* You should also ensure that the server profile associated with the J2EE Server that you created for the Business Services Server is in the Running state before installing the Business Services Server through *Server Manager* . If this server is not running, the installation will fail.

Note: To deploy JAX-WS business services to a business services server instance on WebLogic Server or WebSphere Application Server, ensure that your Server Manager Console and Agent (under which the business services server instance on WebLogic Server or WebSphere Application Server are registered) are the same level as the Management Console.

Note: Starting with Tools release 9.2.1, when you build a new BSSV package for deployment, the files BSSVpackage.EAR and BSSVpackage.JAR are created. You can deploy this JAR file directly from the Server Manager Console See *Deploying the JAR file from the Server Manager Console*

See Also

- *Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances*

- Refer to the *JD Edwards EnterpriseOne Business Services Server Reference Guide* for details on additional tasks and topics related to *Server Manager* .

- Refer to the for details on other tasks and topics extraneous to *Server Manager* .

To install a *Business Services Server* Instance:

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1. Select the *Managed Home* in which you wish to install the *Business Services Server* .

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2. In the Managed Instances section of the page, click the *Create a New Managed Instance* button.

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3. On Create/Register a Managed Instance, Instance Type, select this radio button:

   EnterpriseOne Business Services Server

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. The characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type — Instance Properties — Confirmation — Finish

Server Group	JDE
Instance Name	BSSV
J2EE Server/Cluster	WebSphere Instance:WAS, Profile: Dmgr01, dndedasvm4Cell01/dndedasvm4Node02/TestServer
HTTP Port	7003
Propagate Enterprise Server Config	NONE
	NONE
	ES

Note: The Propagate Enterprise Server Config drop-down appears only if any enterprise server is registered within the Server Manager console. The Propagate Enterprise Server Config drop-down contains the available enterprise server instances registered with the SM console within a particular selected server group. NONE is added to the drop-down by default.

4. On Create/Register a Managed Instance, Instance Properties, complete these fields:

    o *Server Group*

       Use the dropdown to select the Server Group to which you want this instance to belong.

       Also refer to *Administer Server Groups*.

    o *Instance Name*

       Enter a name for the instance.

       > **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the *JD Edwards EnterpriseOne* server type, such as `Enterprise_Server, HTML_Web_Server, RTE_Transaction_Server, Collaborative_Portal,` or `Business_Services,` and where `SERVER` is the machine on which the instance is installed, and where `PORT` is the HTTP port which is defined for use by this server.

    o *J2EE Server*

       Use the dropdown to select a valid J2EE server.

       Ensure the J2EE Server that you choose is a secure WebSphere 7.0 or 8.5 profile (releases prior to 7.0 are not supported). Otherwise, *Server Manager* will not allow you to continue the installation.

    o *HTTP Port*

       You must ensure that the port that you specify is available and is not being used by any other application currently installed and running on the server on which the application server is running.

       > **Note:**
       > - *Verify HTTP Ports*
       > - *HTTP Ports on UNIX Operating Systems*

    o *Propagate Enterprise Server Config*

       Select the enterprise server from the drop-down list to propagate the configurations.

       > **Note:** By default, the selected item is set to NONE. Selecting NONE signifies that you do not wish to propagate configurations from any available enterprise server. If any enterprise server is selected, all the inherited values are seen in the next screen, otherwise the properties are seen with blank/default values. If propagated, the propagated values are not editable on the confirmation page, however, they can be modified post installation.

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5. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

HTTP Settings

Non Proxy Hosts	ⓘ	
Proxy Host	ⓘ	
Proxy User	ⓘ	
Proxy Password	ⓘ	
Proxy Port Number	ⓘ	0

Inbound Settings

Enterprise Server Name	ⓘ	DNDEDASVM4
Enterprise Server Port	ⓘ	6015
Manual Timeout	ⓘ	30000000

JDBJ Bootstrap Session

Bootstrap User	ⓘ	JDE
Bootstrap User Password	ⓘ	JDE
Bootstrap Environment	ⓘ	JDV900
Bootstrap Role	ⓘ	*ALL

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JDBJ Database Configuration

System Datasource Name	ⓘ	TOOLS910I - 910 Server Map
Database Type	ⓘ	O
Database Name	ⓘ	TOOLS910E
Database Server Name	ⓘ	TOOLS910E
Database TCP/IP Port	ⓘ	1470
Physical Database	ⓘ	JDE910
Object Owner	ⓘ	SVM910
TNSNAMES.ORA Location	ⓘ	C:\SMAgent\SCFHA\targets\BSSV\config\tnsnames.ora
File Contents	ⓘ	

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Network Settings

Security Server Count	ⓘ	1
Primary Security Server	ⓘ	DNDEDASVM4
Secondary Security Server	ⓘ	NONE
Third Security Server	ⓘ	NONE
Fourth Security Server	ⓘ	NONE
Fifth Security Server	ⓘ	NONE
Number of Security Servers	ⓘ	1

Runtime Settings

Glossary Text Server	ⓘ	DNDEDASVM4:6015
Encoding Scheme	ⓘ	1252
Incoming JDENET Port	ⓘ	6001
Outgoing JDENET Port	ⓘ	6015
Timeout Threshold	ⓘ	90000
Pool Size	ⓘ	30
OCM Enabled	ⓘ	☑

⚠ All the configurations inherited from the selected Enterprise Server are displayed in readonly mode. If you choose to change these values you can do so only after the instance is created.

Note: This example illustrates an installation by selecting an enterprise server to be propagated.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

HTTP Settings

Non Proxy Hosts	ⓘ	
Proxy Host	ⓘ	
Proxy User	ⓘ	
Proxy Password	ⓘ	
Proxy Port Number	ⓘ	0

Inbound Settings

Enterprise Server Name	ⓘ	
Enterprise Server Port	ⓘ	6079
Manual Timeout	ⓘ	30000000

JDBJ Bootstrap Session

Bootstrap User	ⓘ	EOSVM
Bootstrap User Password	ⓘ	
Bootstrap Environment	ⓘ	
Bootstrap Role	ⓘ	

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JDBJ Database Configuration

System Datasource Name	
Database Type	Oracle Database
Database Name	
Database Server Name	
Database TCP/IP Port	0
Physical Database	
Object Owner	ora
TNSNAMES.ORA Location	C:\SMAgent\SCFHA\targets\BSSV\config\tnsnames.ora
File Contents	

Network Settings

Security Server Count	ⓘ	1 ▾
Primary Security Server	ⓘ	NONE
Secondary Security Server	ⓘ	NONE
Third Security Server	ⓘ	NONE
Fourth Security Server	ⓘ	NONE
Fifth Security Server	ⓘ	NONE
Number of Security Servers	ⓘ	1

Runtime Settings

Glossary Text Server	ⓘ	denmlps11:6079
Encoding Scheme	ⓘ	1252
Incoming JDENET Port	ⓘ	6001
Outgoing JDENET Port	ⓘ	6003
Timeout Threshold	ⓘ	90000
Pool Size	ⓘ	30
OCM Enabled	ⓘ	☑

Note: This example illustrates an installation by selecting NONE under Propagate Enterprise Server Config.

6. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The values on this form must be confirmed manually. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
>   ○ *Configure the Default Server Group Configuration Settings*

7. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

Create/Register A Managed Instance

Please wait while the managed instance is created/registered. Once complete you will be redirected to the management page for the newly created instance.

Instance Type   Instance Properties   Confirmation   Finish

Select 'Create Instance' to finalize the creation of the EnterpriseOne Business Service instance.

Cancel   Create Instance

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8. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the Business Services Server.

    After you have completed the installation, the browser is redirected to the *Management Console* page for the newly created *Managed Instance*. This *Managed Instance* also appears as a *Managed Instance* in the corresponding *Managed Home*.

> **Note:** After you have created the EnterpriseOne Business Services Server *Managed Instance*, unlike all other web-based server products it does not start automatically. This is because the *Managed Instance* is not functional until the Business Services components are installed in it through the special *JD Edwards EnterpriseOne* package build process designed for that product. Refer to the *JD Edwards EnterpriseOne Tools Release 9.2 Package Management Guide.*

For each registered *Managed Instance*, the *Management Console* displays appropriate information at the top of the page:

- ○ *General*

    - - *Status*

        Valid values are:

        Running

        When the status is Running, the *Stop* button is available.

        Stopped

        When the status is Stopped, the *Start* button is available.

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> **Note:**
>
> - *Start or Stop a Managed EnterpriseOne Software Component*

- *Software Component Version*

  Displays the version of this *Software Component* .

  ○ *Instance Properties*

  - *Instance Name*

    The name assigned to the *Managed Instance* at the time it was created or registered.
  - *HTTP Port*

    Displays the HTTP Port for this server and also provides a link to the HTTP server.
  - *Application Server Instance*

    Displays the application server into which this EnterpriseOne server is installed and also provides a link to the application server instance and associated WebSphere Application Server profile.

For information on log files for *Managed Instances* , refer to the chapter entitled: *Available Log Files*.

Configuring a Clustered Business Services Server Instance for Consumer Business Services

> **Note:** If you do not configure a clustered business services server instance, then clustering for consumer business services cannot be attained and only one business services server will run all consumer business services requests. This configuration is not applicable if you are using a standalone business services server instance.

You can configure a clustered business services server instance to support clustering for consumer business services. This clustering feature enables scalability, load balancing, and high availability for consumer business services by providing multiple incoming ports so that multiple servers in the cluster can open socket connection to different ports to receive incoming JDENet messages from the Enterprise Server, and the Enterprise Server can send JDENet messages to multiple clustered business services server ports.

After you create and register a managed instance of a business services server, you can configure the business services server instance to support clustering for consumer business services.

To create a cluster for consumer business services:

1. Open the Server Manager console.
2. In the Managed Homes pane, click the EnterpriseOne Business Services Server instance.

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3. In the left-hand side Configuration pane, select Advanced from the View drop-down list, and then click the Miscellaneous link.
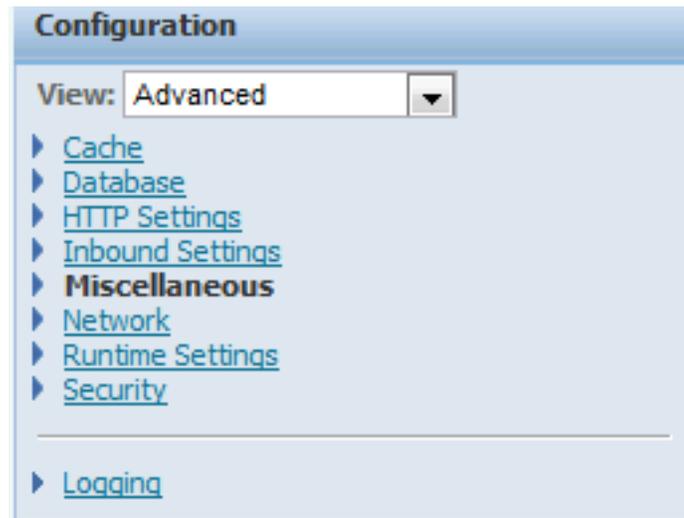
4. In the Miscellaneous pane, expand the cluster Outbound Configuration item.
5. In the Cluster Listen Host/Port field, enter cluster servers with assigned ports.

Specify multiple servers in the cluster with assigned JDENet listen ports for each server in host1:port1| host2:port2|host3:port3 format. Host can be specified with machine name or fully qualified machine name and IP address.

Deploying the JAR file from the Server Manager Console

To deploy the JAR file from the Server Manager Console, complete the following steps:

1. In the INSTALL section of the Server Manager Console, click the Manage Software.
2. Upload the JAR file generated from the BSSV Package build process.
3. Select the uploaded file, and then click the Distribute button.
4. Navigate to the BSSV Server in the Server Manager Console.
5. Stop the BSSV Server.
6. To change the deployed component version, click the Change button.
7. Choose the previously uploaded package and then click the OK button.
8. Start the BSSV server.

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Create an Application Interface Services (AIS) Server as a New Managed Instance

You must use Server Manager to install a new EnterpriseOne AIS Server instance.

If you are using Oracle WebLogic Server 12.2.1 to host the AIS Server, then you must upgrade the AIS Server and Server Manager to EnterpriseOne Tools 9.2.0.5. You cannot run AIS Server releases 9.2.0.4 and lower on Oracle WebLogic Server 12.2.1.

> **Note:**
> - *Prerequisites and Recommended Installation Sequence for Managed Instances for Web-Based Server Instances*
> - *JD Edwards EnterpriseOne Application Interface Services Server Reference Guide*

> **Note:** Starting with Tools Release 9.2.7, you can select the JAS server while creating an AIS server as a New Managed Instance. The Propagate JAS settings column enables you to choose the JAS server and the settings for JDBj.ini and tnsnames.ora are copied directly from the JAS server to the AIS instance.

To install an AIS Server instance:

1. Select the Managed Home in which you wish to install the AIS Server.

2. Click the Create a New Managed Instance button to create the Managed Instance in the Managed Home.

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Create/Register A Managed Instance

Select the type of managed target you wish to create/register. This is the first of a four step process:

1. **Select the Target Type**
   Choose the type of managed target you wish to create.
2. **Enter Instance Properties**
   The instance properties are the required information used to create or register the managed target.
3. **Confirm Configuration Items**
   Some configuration items cannot be configured automatically or require validation of the default values.
4. **Installation**
   This is the final step where the actual installation or registration of the managed target occurs.

Register a Deployment Server Instance

Register an Existing Deployment Server ○

Register or Create an Enterprise Server Instance

Install New Enterprise Server ○
Register an Existing Enterprise Server ○

Register a Microsoft SQLServer Database

Register an Existing Microsoft SQLServer Database ○

Register an Oracle Database Server

Register an Existing Oracle Database ○

Register a Web Server Instance

Oracle Application Server 10.1.3.x ○
Oracle WebLogic Server 11g ○
Oracle WebLogic Server 12c ○
Oracle WebLogic Server 14c ○
Websphere Application Server 6.x ○
WebSphere Application Server 7.0 ○
WebSphere Application Server 8.5/9.x ○

Deploy a New EnterpriseOne Web Component

EnterpriseOne ADF Server ○
EnterpriseOne Collaborative Portal Server ○
EnterpriseOne Data Access Driver ○
EnterpriseOne Data Access Server ○
EnterpriseOne Orchestrator Studio Server ○
EnterpriseOne Application Interface Services ●
EnterpriseOne Transaction Server ○
EnterpriseOne Business Services Server ○
EnterpriseOne HTML Server ○

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

   EnterpriseOne Application Interface Services

4. Click Continue.

5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the dropdown menu to select the Server Group where you want this instance to belong.

  Also refer to *Administer Server Groups*

- *Instance Name*

  Enter a name for the instance.

  > **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the JD Edwards EnterpriseOne server type, such as JAS, RTE, CollabPortal, AIS, or BusSvcs; where `SERVER` is the machine on which the instance is installed; where `PORT` is the HTTP port which is defined for use by this server.

- *J2EE Server*

  Use the dropdown to select a valid J2EE server.

- *HTTP Port*

  You must ensure that the port that you specify is available and is not being used by any other application currently installed and running on the server on which the application server is running.

  > **Note:**
  >   - *Verify HTTP Ports*
  >   - *HTTP Ports on UNIX Operating Systems*

- *Software Component*

  Use the dropdown to select the version of this Software Component that you wish to install.

- *Propagate JAS Settings (Tools Release 9.2.7)*

  Use the dropdown to select the JAS instance to propagate the JDBj.ini and tnsnames.ora file of the JAS instance into the AIS instance.

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6. Click Continue.

7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The page displays the settings that are typically required to successfully start your instance. The values on this form must be confirmed manually. You should validate or update, as appropriate, all configuration items.

> **Note:** When setting up an AIS server instance, you should also review the **Allowed Hosts** setting for the corresponding EnterpriseOne HTML server instance.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:** *Configure the Default Server Group Configuration Settings*

8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

9. On Create/Register a Managed Instance, Finish, click the Create Instance button to complete the installation of the AIS Server.

After you have completed the installation, if you are running on WebSphere, the HTTP server associated with the J2EE Server must be restarted manually. If you do not restart the HTTP server, you will not be able to login to the AIS instance.

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You can verify the updated fields for JDBj.ini and tnsnames.ora after you have created the new managed instance. To check

1. Open the newly created managed instance.
2. Navigate to the Configuration section on the left
3. Click Database.
4. Scroll down to view the JDBj.in and tnsnames.ora sections. The information is updated, except the password fields, as per the JAS server you selected while creating the managed instance.

If you want to use TLS with AIS server, ensure that you update the field Use TLS to true under JDBj Runtime Properties section.

Note: AIS instances created prior to this enhancement will also have the Database configuration with default values for JDBj.ini and tnsnames.ora. You can configure the fields as per your requirement.

To verify the installation is successful:

1. Navigate to the AIS Server instance.
2. Click on the Test connection link.

   Note: The Test connection link is only enabled when the server is running.

3. Review the DefaultConfig file.

Note: *Click here to view recordings on monitoring the AIS Server.*

After you have completed the installation, the browser is redirected to the Management Console page for the newly registered AIS Server. This server also appears as a Managed Instance in the corresponding Managed Home.

For each registered Managed Instance, the Management Console displays appropriate information at the top of the page:

- *General*
  - *Status*

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Valid values are:

Running

When the status is Running, the Stop button is available.

Stopped

When the status is Stopped, the Start button is available.

> **Note:** *Start or Stop a Managed EnterpriseOne Software Component*

○ *Software Component Version*

Displays the version of this Software Component.

> **Note:** *Change a Managed EnterpriseOne Software Component*

- *Instance Properties*

  ○ *Instance Name*

  The name assigned to the Managed Instance at the time it was created or registered.
  ○ *HTTP Port*

  Displays the HTTP Port for this server and also provides a link to the HTTP server.
  ○ *Application Server Instance*

  Displays the application server into which this EnterpriseOne server is installed and also provides a link to the application server instance and associated managed server (Oracle WebLogic Server) or profile (WebSphere Application Server).

For information on log files, refer to the chapter entitled: *Available Log Files*

Instance Access Configuration (Tools Release 9.2.2.2)

The Instance Access Configuration section enables the Server Manager Console Administrative user to configure the properties to access the managed instance.

> **Note:** This option is available only to the Administrative users.

The Instance Access Configuration fields are prepopulated with default values in the Managed Instance home page. The administrative user can edit these values in the Instance Access Configuration section and save the values by clicking the Apply button. The Instance URL field in the Instance Properties section is updated based on the values provided by the user.

Instance Name ⓘ
        EA_JS_8080
Instance URL
        http://den00xaa.us.oracle.com:8080/jde/owhtml/

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Note: The value in the Hostname/ IP Address configuration field is used as the Instance URL. If your managed instance is on Cloud, enter the Public IP in the Hostname/ IP Address configuration field. The Health Check feature uses the Fully Qualified Domain Name to access the managed instance.

The following example shows the Instance Access Configuration window for the HTML Web Server and the EnterpriseOne Application Interface Services Server.

You can click the help icon next to each of these fields to see the details.

The following configuration options are available for the EnterpriseOne Transaction Server and EnterpriseOne Business Services Server:

- SSL Enabled
- Port
- Fully Qualified Domain Name

Similarly, the following configuration options are available for the Enterprise One ADF Server and Enterprise One Orchestrator Studio:

- SSL Enabled
- Port
- Hostname/ IP Address

Note: As of Tools Release 9.2.2.2, the Instance URL is displayed instead of the HTTP port in the Instance Properties section of the HTML Server, AIS Server, ADF Server and the Orchestrator Studio. This instance URL is displayed only if the instance is running.

Configure the Scripting Libraries (Release 9.2.6)

Starting with Tools Release 9.2.6, the AIS Server is no longer preconfigured to create and run Groovy scripts. To edit or run the existing Groovy scripts or to create new ones, you must first configure the AIS Servers with the Groovy libraries using the Server Manager. You must follow the same process for Jython. The AIS Servers are preconfigured for JRuby.

The previously shipped release for Groovy was Groovy 2.5.8. The following five jars are recommended to support the main functionality in orchestrations using Groovy.

```
groovy-2.5.8.jar
```

```
groovy-json-2.5.8.jar
```

```
groovy-jsr223-2.5.8.jar
```

```
groovy-sql-2.5.8.jar
```

```
groovy-xml-2.5.8.jar
```

You can also upload additional `groovy-*` jar files based on the use of the Groovy API.

Download the Groovy JAR files from *https://groovy.apache.org/download.html*

Download the Jython JAR file from *https://www.jython.org* .

Uploading the JAR File

1. Navigate to the AIS Server instance.
2. Stop the AIS Server instance.
3. On the AIS Server instance page, in the Upload JAR section in the left panel, click the Scripting JAR upload link. The Scripting JAR Upload page is displayed.
4. In the Upload JAR section, click **Choose File**, and then browse and select the JAR file.
5. Click the **Upload** button.

   > **Note:** Verify that the uploaded JAR file is listed in the Available Scripting Libraries section along with the scripting library file name, type, and version details. To delete an already uploaded scripting JAR file, select the required JAR file in the Available Scripting Libraries section and then click **Delete**.

6. Restart the AIS Server instance to apply the changes.

Development HTML Server (Release 9.2.9)

Starting with Tools Release 9.2.9, you must use Development HTML Servers in EnterpriseOne to perform development activities. See *JD Edwards EnterpriseOne Development Client Installation Guide* for details.

In order to allow an HTML server to perform development activities (LOCAL BSFN callbacks to development clients, ER Debugging on development clients, etc.), a single configuration setting in Server Manager must be enabled. To enable web development for an HTML server, in the left-hand side Configuration pane, select Advanced from the View drop-down list, and then click Miscellaneous. Under the section Web Development, select Web Development Allowed.
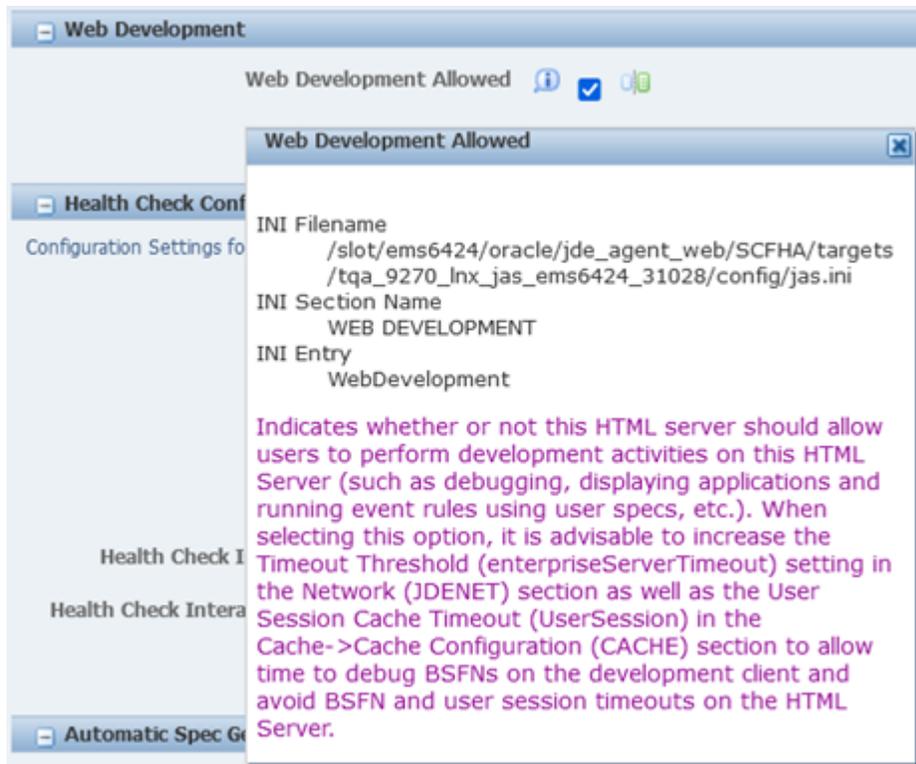
> **Note:** It is advisable to increase the Timeout Threshold and the User Session Cache Timeout settings to allow development users time to debug BSFNs as well as extend their session times on the HTML Server. These values will differ depending on the needs of the developers.

Understanding How to Use Manage HTML Logs Application (P982101W) (Tools Release 9.2.9)

Starting with Tools Release 9.2.9, JD Edwards EnterpriseOne provides a new Manage HTML Logs application (P982101W). This application enables the developers to manage the HTML Server log settings and log files for a logged-in user in EnterpriseOne.

With the Manage HTML Logs application, developers can use the JD Edwards Web Client to view and update their HTML server logging settings; and view, download, and delete their HTML server log files.

> **Note:** The Manage HTML Logs application is only accessible from HTML Servers that have the Web Development setting enabled. See *Development HTML Server (9.2.9)* for details.

The HTML Client can be accessed either through JD Edwards Solution Explorer from a windows development client or directly from a browser. The Manage HTML Logs link on the drop-down menu under the user name will only be available when accessing the HTML Client through JD Edwards Solution Explorer.

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In EnterpriseOne, click Navigator, and then click EnterpriseOne Menus. From the EnterpriseOne Life Cycle Tools, select Application Development, and then select Manage HTML Logs (P982101W). Alternatively, you can use the fast path to access the application.

Note: Only Administrators can grant access to Manage HTML Logs application. For details see (Tools Release 9.2.9) Web Product Log Instance Management webProductLogInstance in *Assign Server Group Permissions*.

The Manage HTML Logs application consists of two sections. The first section, Log File Configuration, is used to manage (add/modify/remove) the log configuration. The second section, Available Log Files, is used to manage (refresh/download/delete) the log files.

Managing Log File Configuration

Follow the steps in this section to understand how to configure a new log file.

1. Access Manage HTML Logs application.
2. To create a new log file configuration, click the **Add** button. This creates a new log file configuration under the Log File Configuration section with the default settings.

   Note: There can only be one log file configuration for the currently signed-in user. After a log file configuration is created, the Add button is disabled until the log file configuration is deleted.

   The log file configuration is also displayed in Server Manager in the User Specific Log File Configuration section. The log file configuration has the same modifiable settings described in the section *Accessing User Logging in Server Manager Console*.
3. To modify which Log Components are active, select the Log File Configuration record.
4. Click the Row menu, and then click **Log Components**. This displays all available log components.
5. To choose log components different from the default, select the desired components and then click the Close button.
6. After all modifications have been made to the log file configuration record, click the **Save** button.

To disable logging, select the record from the Log File Configuration section and then click the **Delete** button.

Note: Logging for the currently signed-in user remains active (even on subsequent logins to the HTML Server) until the log file configuration record is deleted. It is always a good practice to delete the log file configuration record when logging is no longer needed.

Managing Available Log Files

This section explains how to manage available log files.

To refresh the list of available log files, click the **Refresh** button in the Available Log Files section.

Use the Display Logs Modified Within Range drop-down menu to filter the list of available log files.

To download one or more log files, select the log file(s), and then click **Download**. Depending on the browser used, the developers may need to select a location for the file(s). The selected log files are downloaded in a compressed folder (.zip)

The first part of the log file name(s) matches the log file(s) selected. However, there are some extra characters at the end of the log file name(s). These are simply a time stamp and other characters to make the log file name(s) unique during the transfer from the HTML Server to the browser.

To delete log files, select the log files you want to delete from the Available Log Files section and then click the **Delete** button.

> **Note:** Log files for the currently signed-in user remains on the HTML Server until they are deleted. It is always a good practice to delete log files when they are no longer needed.

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18 Install a JD Edwards EnterpriseOne Data Access Driver

Prerequisites and Recommendation Installation Sequence for the Data Access Driver

It is important to note that the Data Access Driver differs from the existing Data Access Server. In addition to implementation differences, the Data Access Driver utilizes a different, more efficient, read-only JDBC driver to access the database.

Tip: For integration with BI Publisher, the recommended configuration is the Data Access Driver.

For implementation details, refer to the *JD Edwards Interoperability Guide* on the Oracle Technology Network:

`http://www.oracle.com/technology/documentation/index.html`

This list shows the prerequisites and recommended installation sequence for the JD Edwards EnterpriseOne Data Access Driver:

1. *Prerequisite:* Management Agent is installed on target machine.

    Refer to *Installing the Server Manager Management Console and Agent*.
2. *Prerequisite:* The Data Access Driver Software Component is uploaded to the Management Console.

    Refer to *Upload Software Components*.
3. *Prerequisite:* The Data Access Driver Software Component is distributed to the target Managed Home.

    Refer to *Distribute or Delete Managed EnterpriseOne Software Components*.
4. *Prerequisite:* Create a Data Access Driver.

    Refer to *Create a Data Access Driver*.

Note:

- Refer to the *JD Edwards EnterpriseOne Interoperability Guide* in the chapter *Using Java Database Connectivity* for additional tasks and topics related to the Data Access Driver.

- *JD Edwards EnterpriseOne BI Publisher for JD Edwards EnterpriseOne Guide*

Create a Data Access Driver

You must use Server Manager to create a Data Access Driver.

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Note:

- *Prerequisites and Recommendation Installation Sequence for the Data Access Driver*

To install a JD Edwards EnterpriseOne Data Access Driver:

1. Select the Managed Home in which you wish to install the Data Access Driver.

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2. Click the *Create a New Managed Instance* button to create the Managed Instance in the Managed Home.

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

EnterpriseOne Data Access Driver

> **Tip:** Ensure you choose the correct instance type for your intended installation. That is, there are two similar appearing instance types, one for Data Access Server and one for Data Access Driver.

4. Click Continue.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step. characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

Instance Type — Instance Properties — Confirmation — Finish

Server Group	JDE
Instance Name	BIP
Usage Type	10g BI Publisher
Install Location	<BIPUB_ROOT>\xmlpserver\xmlpserver\WEB-INF\lib
Software Component	EnterpriseOne Data Access Driver 9.1.3.1 04-03-2013_08_39
Propagate Enterprise Server Config	NONE
	NONE
	ES

> **Note:** The Propagate Enterprise Server Config drop-down appears only if any enterprise server is registered within the Server Manager console. The Propagate Enterprise Server Config drop-down contains the available enterprise server instances registered with the SM console within a particular selected server group. NONE is added to the drop-down by default.

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5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the pull-down to select the Server Group to which you want this instance to belong.

  Also refer to *Administer Management Console Users and User Groups*.
- *Instance Name*

  Enter the name for the instance.

  > **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the JD Edwards EnterpriseOne instance type, such as `Data_Access_Driver`, and where `SERVER` is the machine on which the instance is installed, and where `PORT` is the HTTP port which is defined for use by this server.

- *Usage Type*

  Use the pull-down to select the usage type for this Data Access Driver.

  If you choose *BI Publisher*, that application must already be installed. By default, Server Manager populates this field with the typical value for a BI Installation location, where you must manually complete this variable value for your installation:

  `<BIPUB_ROOT>`

  For example, a typical completed location to a BI Publisher installation might be:

  BI_Home\applications\xmlpserver\xmlpserver\WEB-INF\lib

  If you choose *Generic*, you must provide the complete path to the application directory into which you wish to install the Data Access Driver. For example:

  `C:\jde_generic_read_only_driver_application`

  This location must be unique, must be empty, and must *not* be within the Management Agent directory structure.
- *Software Component*

  Use the dropdown to select the version of this Software Component that you wish to install. For example:

  `EnterpriseOne Data Access Driver Version 8.98.0.5_09225`

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6. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

JDBJ Database Configuration

System Datasource Name	TOOLS910I - 910 Server Map
Database Type	O
Database Name	TOOLS910E
Database Server Name	TOOLS910E
Database TCP/IP Port	1470
Physical Database	JDE910
Object Owner	SVM910
Bootstrap User	JDE
Bootstrap User Password	JDE
Bootstrap Role	*ALL
Bootstrap Environment	JDV900
TNSNAMES.ORA Location	C:\SMAgent\SCFHA\targets\BIP\config\tnsnames.ora
File Contents	

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Network Settings

Managed Home	ⓘ	C:\SMAgent\SCFHA
Instance Name	ⓘ	BIP
Outgoing JDENET Port	ⓘ	6015
Back Off Time	ⓘ	30000
Incoming JDENET Port	ⓘ	6080
Timeout Threshold	ⓘ	300000
Pool Size	ⓘ	50
Primary Security Server	ⓘ	DNDEDASVM4

⚠ All the configurations inherited from the selected Enterprise Server are displayed in readonly mode. If you choose to change these values you can do so only after the instance is created.

> **Note:** This example illustrates an installation by selecting an enterprise server to be propagated.

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Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to the installation/registration step.

Instance Type   Instance Properties   Confirmation   Finish

JDBJ Database Configuration

System Datasource Name	
Database Type	Oracle Database
Database Name	
Database Server Name	
Database TCP/IP Port	0
Physical Database	
Object Owner	
Bootstrap User	
Bootstrap User Password	
Bootstrap Role	*ALL
Bootstrap Environment	
TNSNAMES.ORA Location	C:\SMAgent\SCFHA\targets\BIP\config\tnsnames.ora
File Contents	

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> **Note:** This example illustrates an installation by selecting NONE under Propagate Enterprise Server Config.

7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The values on this form must be manually confirmed. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
>   ○ *Administer Management Console Users and User Groups*

8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

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9. On Create/Register a Managed Instance, Finish, click the *Create Instance* button to complete the installation of the EnterpriseOne Data Access Driver.

Once the installation is complete the browser is redirected to the Management Console page for the newly registered Data Access Driver. This driver also appears as a Managed Instance within the corresponding Managed Home.

For each registered Managed Instance, the Management Console displays appropriate information at the top of the page:

- *General*

  o *Status*

    Valid values are:

    - Running

      This status is set whenever the Management Agent on the machine where the Data Access Driver is installed reports that the Java class is loaded for use by BI Publisher or the Generic application. The agent checks and reports status periodically so the status shown by Server Manager will be accurate within a few minutes.

      Note that unlike Managed Instances for Servers, there is no option to Stop the driver from Server Manager. Therefore, no Stop button is displayed.

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- Stopped

  This status is set whenever the Management Agent on the machine where the Data Access Driver is installed reports that the Java class is unloaded by BI Publisher or the Generic application. The agent checks and reports status periodically so the status shown by Server Manager will be accurate within a few minutes.

  Note that unlike Managed Instances for Servers, there is no option to Start the driver from Server Manager. Therefore, no Start button is displayed.

- *Software Component Version*

  Displays the version of this Software Component.

  You must stop the system using the Data Access Driver (BI Publisher or Generic) before you can change the Software Component Version.

> **Note:**
>
> - *Change a Managed EnterpriseOne Software Component*

- *Instance Properties*

  - *Install Location*

    The location where the Data Access Driver was installed.

  - *Instance Usage Type*

    Identifies the usage type of the Data Access Driver as either *BI Publisher* or *Generic*.

  - *Instance Name*

    The name assigned to the Managed Instance at the time it was created or registered.

For information on log files, refer to the chapter entitled: *Available Log Files*.

Configuring Multiple Environments for Data Access Driver (Release 9.2.9)

Starting with Tools Release 9.2.9, you can configure Data Access Driver to access multiple environments by entering path code details in the **Path Codes** field. If you leave this field blank, the system enables Data Access Driver to access all the pathcodes.

To configure multiple JD Edwards environments for the Data Access Driver, follow these steps:

1. Log in to Server Manager.
2. In the Server Manager Console, click **DAD_FND** in the **Managed Instances**.
3. Navigate to **Configuration** section, select **Advanced** option from the View drop-down list.
4. Select **Installation** option.
5. In the **Data Access Driver Pathcode Configuration** window, enter the names of JD Edwards environments separated by commas in the following format: `('DV920','PD920')` in the **Path Codes** field.
6. Click **Apply**.

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☐ Data Access Driver Pathcode Configuration

The values were saved at Mon Sep 02 2024 14:44:08 GMT+0530 (India Standard Time), please check for errors before proceeding.
These settings control the usage of environments in a multi-pathcode setup.

Path Codes   ⓘ   ('DV920','PD920')

Revert to Defaults   Apply

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19 Manage an Oracle Database Instance

Prerequisite for registering an existing Oracle Database as a new Managed Instance

This chapter discusses the topics that are necessary to register an existing Oracle Database as a Managed Instance.

1. Management Agent is installed on the same target machine where you have installed the Oracle Database which you are trying to register.
2. As an oracle user, you must be able to login to the database using the following value:

   sqlplus / as sysdba.

   Ensure that the ORCL_SID, ORACLE_HOME, and PATH environment variables are properly configured.
Refer to Chapter 1, "Installing the Server Manager Management Console and Agent".

Register an Existing Oracle Database as a New Managed Instance

> **Note:** The steps explained in this section are applicable only for Linux OS.

To register an existing Oracle Database instance:

1. Select the Managed Home with which you wish to register the Oracle Database. Click the Create a New Managed Instance button to create the Managed Instance within the Managed Home.

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2. On Create/Register a Managed Instance, Instance Type, select this radio button:

Register an Existing Oracle Database

3. Click Continue.

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4. On Create/Register a Managed Instance, Instance Properties, complete these fields:

   ◦ *Server Group*

     Use the drop-down menu to select the Server Group to which you want this instance to belong.
   ◦ *Instance Name*

     Enter a name for the instance.
   ◦ *Oracle Database Server Host/IP*

     Enter the name of the Oracle Database Server Host or IP.
   ◦ *Port*

     Enter the Port.
   ◦ *SID*

     Enter the System ID.
   ◦ *Password*

     Enter the password.

5. Click Continue.
6. On Create/Register a Managed Instance, Confirmation, review the key configuration items, where the web page displays a variety of fields depending on the database and environments of your installation.

   You can further configure any item as required.
7. Click Continue.
8. On Create/Register a Managed Instance, click the Finish to complete the registration of the Oracle Database.

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9. After you have completed the installation, the browser is redirected to the Management Console page for the newly registered Oracle Database. This Oracle Database also appears as a Managed Instance in the corresponding Managed Home.

For each registered Managed Instance, the Management Console displays appropriate information at the top of the web page:

General

- *Software Component Version*

    Displays the version of this software component.
- *Status*

    Valid values are:

    Running

    When the status is Running, the Stop button is available.

    Stopped

    When the status is Stopped, the Start button is available.

    Instance Properties
- *Instance Name*

    Displays the name of the instance.
- *Oracle Database Server Host/IP*

    Displays the name of the Oracle Database Server Host or IP.
- *Port*

    Displays the port number.
- *SID*

    Displays the System ID.
- *SYS/SYSTEM Password*

    To change the Oracle Database password, click the Reset button, enter the new password, and then click the Save button. Note that this functionality works only with the Database Cloud Service if the PDB name is jdeorcl.

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20 Manage an IBM i Database Instance

Prerequisites for Registering an Existing IBM i Database as a New Managed Instance

This chapter discusses the topics that enable you to register an existing IBM i Database as a managed instance.

1. Management Agent is installed on the same target machine where you have installed the DB2 that you are planning to register.

   Note: Refer to Chapter 1 of this guide, "Installing the Server Manager Management Console and Agent".

2. As an IBM i user, you must be able to log in to the database with the following authority:

   `*ALLOBJ *SECADM *SAVSYS *IOSYSCFG *JOBCTL`

3. You must enable the IBMi DB2 database for Transport Layer Security (TLS). Refer to the *JD Edwards EnterpriseOne Applications Installation Guide for Code Current*.

Register an Existing IBM i Database as a New Managed Instance

Note: The steps explained in this section are applicable only to the IBM i OS.

To register an existing IBM i Database instance:

1. Select the Managed Home with which you want to register the Oracle Database. Click the **Create a New Managed Instance** button to create the Managed Instance within the Managed Home.

2. On Create/Register a Managed Instance, Instance Type, select this option:

   Register an Existing IBM i Database

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3. Click **Continue**.
4. On Create/Register a Managed Instance, Instance Properties, complete these fields:

   ○ **Server Group**

      Use the drop-down menu to select the Server Group to which you want this instance to belong.

   ○ **Instance Name**

      Enter a name for the instance.

5. Click **Continue**.
6. On Create/Register a Managed Instance, Confirmation, review the key configuration items, where the web page displays a variety of fields depending on the database and environments of your installation.

   You can further configure any item as required.
7. Click **Continue**.
8. On Create/Register a Managed Instance, click **Finish** to complete registering the Oracle Database.
9. After you have completed the installation, the browser redirects you to the Management Console page for the newly registered Oracle Database. This Oracle Database also appears as a managed instance in the corresponding Managed Home.

   For each registered managed instance, the Management Console displays the appropriate information at the top of the web page:

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General

○ *Software Component Version*

Displays the version of this software component.

○ *Status*

Valid values are:

Running

When the status is Running, the Stop button is available.

Stopped

When the status is Stopped, the Start button is available.

Instance Properties

○ *Instance Name*

Displays the name of the instance.

○ *IBM i Database Server Host/IP*

Displays the name of the Oracle IBM i Server Host or IP.

○ *IBM i Current Job User*

Displays the current job user name.

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Update an HTML Instance (JAS) to Enable TLS (Release 9.2.6.0 – IBM DB2 only)

> **Note:** The steps explained in this section are applicable only for connections to the database for IBM i DB2 for IBMi and DB2 for Linux, UNIX, and Windows.

To update an HTML Server to enable Transport Layer Security (TLS) to an IBM DB2 database server:

1. Select the Managed Home of the JAS instance for which you want to enable TLS.
2. Navigate to <HTML Server Instance > Configuration > Advanced > Database > JDBj Runtime Properties.
3. Set the following value:

    Use TLS = true

For additional information on setting up TLS for the IBMi, refer to the *JD Edwards EnterpriseOne Applications Installation Guide for Code Current* , in the section *Enabling TLS (Release 9.2.6)* .

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? Documentati

Management Dashboard >

Configuration

View: Advanced

▶ Cache
▶ **Database**
▶ Miscellaneous
▶ Network
▶ Security
▶ Web Runtime

▶ Logging

Work with Configurations

▶ Compare Instances
▶ Save or Restore
▶ Configuration Summary

JDBj Runtime Properties

These settings correspond to system runtime properties applicable to JDBj logical connections.

Property	Value
Maximum Data Cache Row Size	500
Double Byte Conversion Tolerance	☑
Maximum Number of Data Cache Entries	100
Force Single Data Source	☐
ResultSet Timeout	60000
Retry Interval	0
Maximum Retries	5
OCM Cache Purge Timeout	600000
Allow Personal Specs	☐
Security Cache Purge Timeout	600000
Service Cache Purge Timeout	600000
Spec Cache Purge Timeout	600000
Menu Cache Timeout	600000
Spec Consistency Check	minimal
Transaction Isolation	default
Transaction Timeout	120000
Auto Fetch Triggers	none
Updateable ResultSet Timeout	-1
Usage Execution Threshold	5000
Maximum Fetch Size	500
Open ResultSet Timeout	60000
Open ResultSet Timeout	60000
Enable Usage Tracking	☐
Enable Usage Tracking for Unused Fetched Fields	☐
Usage Tracking Output	log
Usage Tracking Active Timeout	120000
Maximum Simultaneous Generations	10
No Where Parentheses	☐
Native JDBC driver on AS400	☑
MS SQL Query Timeout	10000
MS SQL Query Attempts	3
Enable Data Privacy Skip Record	false
Use TLS	true

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Update the Development Client to Enable TLS on an IBM DB2 Database

To update an HTML Server to enable Transport Layer Security (TLS) to an IBMi database server:

1. Import the Database Server certificate to the WebLogic Server Java trust store on the HTML Web Server.
2. Select the Managed Home of the JAS instance for which you want to enable TLS.
3. Navigate to <HTML Server Instance > Configuration > Advanced > Database > JDBj Runtime Properties.
4. Set the following value:

   Use TLS = true

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ORACLE JD Edwards EnterpriseOne Server Manager

Management Dashboard >

Configuration

View: Advanced

▶ Cache
▶ **Database**
▶ Miscellaneous
▶ Network
▶ Security
▶ Web Runtime

▶ Logging

Work with Configurations

▶ Compare Instances
▶ Save or Restore
▶ Configuration Summary

⊟ JDBj Runtime Properties

These settings correspond to system runtime properties applicable to JDBj logical connections.

Maximum Data Cache Row Size	500
Double Byte Conversion Tolerance	☑
Maximum Number of Data Cache Entries	100
Force Single Data Source	☐
ResultSet Timeout	60000
Retry Interval	0
Maximum Retries	5
OCM Cache Purge Timeout	600000
Allow Personal Specs	☐
Security Cache Purge Timeout	600000
Service Cache Purge Timeout	600000
Spec Cache Purge Timeout	600000
Menu Cache Timeout	600000
Spec Consistency Check	minimal
Transaction Isolation	default
Transaction Timeout	120000
Auto Fetch Triggers	none
Updateable ResultSet Timeout	-1
Usage Execution Threshold	5000
Maximum Fetch Size	500
Open ResultSet Timeout	60000
Open ResultSet Timeout	60000
Enable Usage Tracking	☐
Enable Usage Tracking for Unused Fetched Fields	☐
Usage Tracking Output	log
Usage Tracking Active Timeout	120000

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21 Deploy an Oracle Application Development Framework (ADF) Server Instance (Release 9.2.1.2)

Overview

> **Note:** Alternatively, you can use the **createadfinstance** Server Manager REST API to create the ADF Server instance. *See REST API for Server Manager guide.* Although not recommended, you can manually install an ADF Server using the EnterpriseOne ADF Application Build Scripts. See the *JD Edwards EnterpriseOne Tools Deploying and Developing Oracle Application Development Framework (ADF) Applications for EnterpriseOne* guide.

Applications built with Oracle Application Development Framework (ADF) must be deployed on an Oracle WebLogic Server with ADF runtime, hereafter referred to as an ADF Server.

Oracle delivers EnterpriseOne applications developed with Oracle ADF. This chapter describes how to deploy an ADF Server instance through Server Manager, which involves installing the EnterpriseOne ADF Foundation and determining which EnterpriseOne ADF applications you want to deploy in the ADF Server instance.

Prerequisites

> **Note:** This configuration supports Oracle WebLogic Server version 12c (also known as 12.1.3 and 12.2.1.x). Refer to the Oracle Certifications for more information about minimum technical requirements for your particular environment.

Deploying an ADF Server through Server Manager requires the following prerequisites:

- A minimum of EnterpriseOne Tools 9.2.1.2.
- An Oracle Fusion Middleware WebLogic Server with ADF runtime installed.

  For Oracle WebLogic Server 12.1.3, you have to install Oracle WebLogic Server and then configure it with the runtime libraries for Oracle ADF.

  If using Oracle Fusion Middleware Infrastructure 12.2.1.2 to install Oracle WebLogic Server, it comes preconfigured to support ADF applications; the additional configuration of ADF runtime libraries is not required. Oracle Fusion Middleware Infrastructure also provides an option to install Oracle WebLogic Server separately, which after installing, requires configuring it with the runtime libraries for Oracle ADF.

- A Management Agent installed on the target machine where Oracle WebLogic Server resides.

  Refer to Installing the Server Manager Console and Agent.

- The Oracle WebLogic Server registered with the Server Manager Management Agent.
- A J2EE Container installed in this domain. See Install JDBC Drivers to the J2EE Server (WLS or WAS).

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- An EnterpriseOne Application Interface Services (AIS) Server configured with an EnterpriseOne HTML Server.

Downloading EnterpriseOne ADF Foundation

To download the EnterpriseOne ADF foundation, complete the following steps:

1. Access the Oracle Update Center.

   https://updatecenter.oracle.com
2. In the Type field, select EnterpriseOne ADF, and then make sure that All Releases is selected in the Release field.
3. Click SEARCH.
4. Download the E1 ADF Foundation.

   The download includes the ADF Par file, which you can save to your destination server.

Downloading EnterpriseOne ADF Applications

To download the EnterpriseOne ADF applications, complete the following steps:

1. Access the Oracle Update Center.

   https://updatecenter.oracle.com
2. In the Type field, select EnterpriseOne ADF, and then make sure that All Releases is selected in Release field.
3. Click SEARCH.

   The results display a list of available EnterpriseOne ADF applications.
4. Download the latest version of the EnterpriseOne ADF applications that you want to deploy, making sure the version is supported on your current EnterpriseOne release.

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Installing an ADF Server Instance Using Server Manager Console

1. In the Managed Software Components window, click Choose File, select the EnterpriseOne ADF Foundation component downloaded from the Update Center, and click Open.
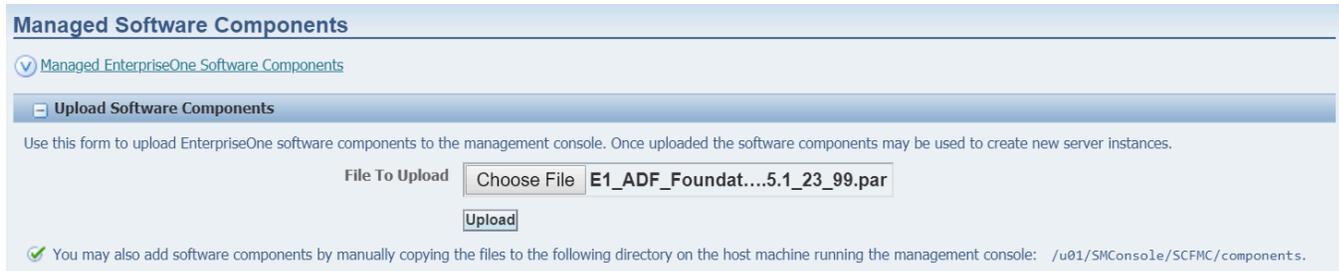
Managed Software Components

ⓥ Managed EnterpriseOne Software Components

➖ **Upload Software Components**

Use this form to upload EnterpriseOne software components to the management console. Once uploaded the software components may be used to create new server instances.

File To Upload　[Choose File] **E1_ADF_Foundat....5.1_23_99.par**

[Upload]

✅ You may also add software components by manually copying the files to the following directory on the host machine running the management console:　/u01/SMConsole/SCFMC/components.

2. Click Upload.

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3. Verify that the EnterpriseOne ADF server components are uploaded as shown in the following example.

4. Select the EnterpriseOne ADF server components, and then click Distribute.

5. In the Managed Software Components window, select required Managed Instances, and then click Distribute Software.

The Distributed ADF Server Components will be available in the selected Server Manager Agent as shown in the following example.
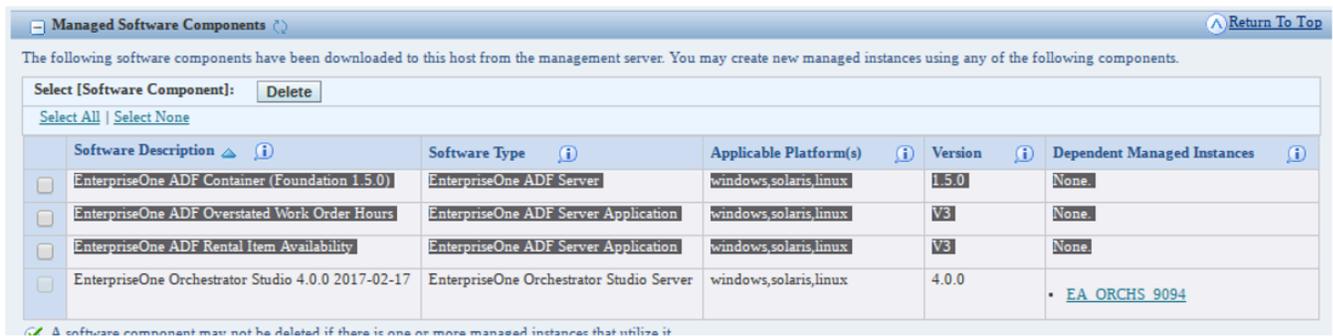
6. To create a new ADF Server instance, select EnterpriseOne ADF Server in the "Deploy a New EnterpriseOne Web Component" window.

Deploy a New EnterpriseOne Web Component

EnterpriseOne ADF Server ⦿

EnterpriseOne Collaborative Portal Server ◯

EnterpriseOne Data Access Driver ◯

EnterpriseOne Data Access Server ◯

EnterpriseOne Orchestrator Studio Server ◯

EnterpriseOne Application Interface Services ◯

EnterpriseOne Transaction Server ◯

EnterpriseOne Business Services Server ◯

EnterpriseOne HTML Server ◯

7. On Create/Register a Managed Instance, Instance Properties, complete these fields:
   - **Server Group**
     Use the pull-down to select the Server Group to which you want this instance to belong.
     Also refer to *Administer Management Console Users and User Groups*
   - **Name**
     Enter a name for the instance.
   - **J2EE Server/Cluster**
     Select the already created J2EE Container for creating the ADF Server Instance.
   - **Foundation Component**
     Select the Foundation Component. The distributed ADF Server Foundation component(s) will be available in the drop-down menu.

   - **Application Components**
     The ADF Application components are auto selected. Select or deselect the ADF Application Components as required.
8. In the AIS Server URL field, enter the AIS Server to use with this ADF Server.

9. In the HTML Server Whitelist field, enter the URLs to the supported EnterpriseOne HTML Servers for this ADF Server. For each EnterpriseOne HTML Server, you must provide the long and short host name along with port number.

10. Click Continue, and then click Create Instance.
11. You can modify or update the configuration entries after the ADF Server instance is created successfully.

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> **Note:** After the ADF Server instance is created, you must update the HTML Server configuration setting in Server Manager to point to this ADF Server.

It is not necessary to install the JDBC Driver on the ADF Server instance since it does not connect to the EnterpriseOne database directly.

By default, the ADF Server timeout setting is 20 minutes and the AIS Server timeout setting is 30 minutes. If you adjust these settings, make sure that the timeout for the ADF Server is less than the timeout for the AIS Server.

22 Install an EnterpriseOne Orchestrator Studio

Overview

> **Note:** As an alternative to following the instructions in the chapter, you can use the **createorchinstance** Server Manager REST API to create the Orchestrator Studio instance. See *REST API for Server Manager guide.*

> **Note:** Support for deploying the EnterpriseOne Orchestrator Studio with Server Manager starts with the 9.2.1.2 Tools Release for Server Manager and Orchestrator Studio version 5.0.0.

The JD Edwards EnterpriseOne Orchestrator Studio was built with Oracle Application Development Framework (ADF). Applications built with Oracle ADF must be deployed on an Oracle WebLogic Server with ADF runtime, hereafter referred to as an ADF Server.

This chapter describes how to use Server Manager to install the EnterpriseOne Orchestrator Studio on an ADF Server instance.

> **Note:** You **cannot** deploy the EnterpriseOne Orchestrator Studio on the same ADF Server instance used for running other EnterpriseOne ADF applications. When you install the Orchestrator Studio through Server Manager, the steps include deploying an ADF Server instance for running the Orchestrator Studio.

> **Note:** Orchestrator Studio 9.2.4.0 is the latest version which requires a minimum of EnterpriseOne Tools 9.2.4.0. The Orchestrator Studio 9.2.4.0 is deployed as a component of the Application Interface Services (AIS) server. The standard Server Manager process is used to deploy an AIS server, and the Orchestrator Studio 9.2.4.0 is immediately available through a URL endpoint to that server. The Orchestrator Studio 9.2.4.0 does not require the installation and maintenance of a discrete WebLogic Server or ADF environment.

Prerequisites

> **Note:** This document covers installations for Oracle WebLogic Server version 12c (also known as 12.1.3 and 12.2.x). Follow the Oracle Certifications to determine which version is supported for your particular environment.

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Installing the EnterpriseOne Orchestrator Studio 5.0.0 or higher through Server Manager requires the following prerequisites:

- A minimum of:

    EnterpriseOne Tools 9.2.1.2 to support Orchestrator Studio 5.x.0.

    EnterpriseOne Tools 9.2.2 to support Orchestrator Studio 6.0.1.

    EnterpriseOne Tools 9.2.2.4 to support Orchestrator Studio 6.1.0.

    EnterpriseOne Tools 9.2.3 to support Orchestrator Studio 7.x.0.

    EnterpriseOne Tools 9.2.4 to support Orchestrator Studio 8.

    EnterpriseOne Tools 9.2.4 to support Orchestrator Studio 9.2.4.0.

    > **Note:** The Orchestrator Studio 9.2.4 is deployed along with the AIS Server 9.2.4.0 and can be accessed by using the AIS server URL. Therefore, the Orchestrator Studio 9.2.4 does not require additional set-up or installation steps. The JD Edwards EnterpriseOne Orchestrator Studio 9.2.4 is installed on AIS server instance.

- An EnterpriseOne Application Interface Services (AIS) Server configured with an EnterpriseOne HTML Server. See *Create an Application Interface Services (AIS) Server as a New Managed Instance* for more information.

    You can use an existing AIS Server or deploy a new AIS Server instance through Server Manager for the sole purpose of running orchestrations. It is recommended that you set up two AIS Server instances for an Orchestrator configuration, one for testing orchestrations and one for production.

    For an AIS Server deployed on Oracle WebLogic Server, there is an additional required configuration that enables the Orchestrator Client (the tool for testing orchestrations) to run properly. See *"Configuring Oracle WebLogic Server Domain for HTTP Basic Authentication" in the   JD Edwards EnterpriseOne Application Interface Services Server Reference Guide   .*

- An Oracle Fusion Middleware WebLogic Server with ADF runtime installed.

    For Oracle WebLogic Server 12.1.3, you have to install Oracle WebLogic Server and then configure it with the runtime libraries for Oracle ADF. For instructions on how to install Oracle WebLogic Server with ADF Runtime, see *"Setting Up Oracle WebLogic Server with ADF Runtime" in the   JD Edwards EnterpriseOne Tools Deploying and Developing Oracle Application Development Framework (ADF) Applications for EnterpriseOne Guide.*

    If using Oracle Fusion Middleware Infrastructure 12.2.1.2 to install Oracle WebLogic Server, it comes preconfigured to support ADF applications; the additional configuration of ADF runtime libraries is not required. Oracle Fusion Middleware Infrastructure also provides an option to install Oracle WebLogic Server separately, which after installing, requires configuring it with the runtime libraries for Oracle ADF.

- A Management Agent installed on the target machine where Oracle WebLogic Server resides.

    Refer to *Installing the Server Manager Management Console and Agent*

- The Oracle WebLogic Server registered with the Server Manager Management Agent.

- A J2EE Container installed in this domain. See *Install JDBC Drivers to the J2EE Server (WLS or WAS)*.

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Download the Orchestrator Components

The Orchestrator Components download contains files for deploying the EnterpriseOne Orchestrator Studio.

1. Access the Oracle Update Center.

    https://updatecenter.oracle.com
2. In the Type field, select EnterpriseOne Orchestrator, and then make sure that All Releases is selected in the Release field.
3. Click SEARCH.
4. Download the Orchestrator Components file, making sure the version is supported with your EnterpriseOne Tools release.

The download contains additional files that are not needed for the Orchestrator Studio installation. The additional files are for developing custom Java for orchestrations. See *"API and JAR Files for Developing Custom Java for Orchestrations" in the JD Edwards EnterpriseOne Tools Orchestrator Guide for Studio Version 8 and Prior* .

Install an EnterpriseOne Orchestrator Studio

To install an Orchestrator Studio instance using the Server Manager Console:

1. In the Managed Software Components window of the Server Manager Console, click Choose File, select the Orchestrator Components file downloaded from the Update Center and click Open.

Managed Software Components

(V) Managed EnterpriseOne Software Components

[-] **Upload Software Components**

Use this form to upload EnterpriseOne software components to the management console. Once uploaded the software components may be used to create new server instances.

File To Upload   [Choose File] Orchestrator_Co...2_26_99 (1).par

[Upload]

✅ You may also add software components by manually copying the files to the following directory on the host machine running the management console: /u01/SMConsole/SCFMC/components.

2. Click Upload.

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3. Verify that the EnterpriseOne Orchestrator components are uploaded as shown in the following example. Select the Enterprise Orchestrator components, and then click Distribute.

4. In the Managed Software Components window, select required Managed Instances, and then click Distribute Software.

5. The Distributed EnterpriseOne Orchestrator Components will be available in the selected Server Manager Agent as shown in the following example.
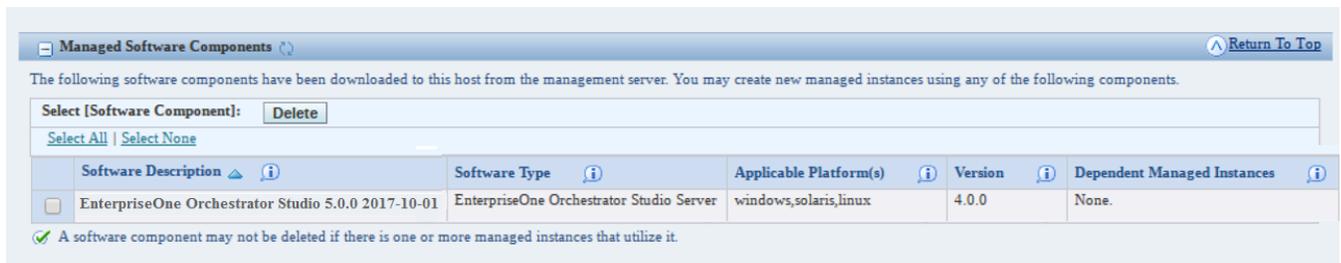
6. To create a new EnterpriseOne Orchestrator instance, select EnterpriseOne Orchestrator Studio Server in the Deploy a New EnterpriseOne Web Component window.

Deploy a New EnterpriseOne Web Component

EnterpriseOne ADF Server ○

EnterpriseOne Collaborative Portal Server ○

EnterpriseOne Data Access Driver ○

EnterpriseOne Data Access Server ○

EnterpriseOne Orchestrator Studio Server ●

EnterpriseOne Application Interface Services ○

EnterpriseOne Transaction Server ○

EnterpriseOne Business Services Server ○

EnterpriseOne HTML Server ○

7. On Create/Register a Managed Instance, Instance Properties, complete these fields:
   o **Server Group**

   Use the pull-down to select the Server Group to which you want this instance to belong.

   Also refer to *Administer Management Console Users and User Groups*
   o **Name**

   Enter a name for the instance.
   o **J2EE Server/Cluster**

   Select the already created J2EE Container for creating the EnterpriseOne Studio Server Instance.
   o **HTTP Port**

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Enter the HTTP Port.

o **Software Component**

Select EnterpriseOne Orchestrator Studio Components available in the drop-down menu as required.

o **Propagate Application Interfaces Services**

Select the value from the drop-down menu as required.

8. The Orchestrator Studio connects with a working AIS Server in order to function. In the CONFIGURATION section, enter the AIS Server Details, and then click Continue.

9. The Orchestrator Studio instance is created successfully as shown in the following example. You can start the EnterpriseOne Orchestrator Studio instance after it is created.

10. You can also modify the configuration entries after the installation is created successfully.

It is not required to install the Database JDBC Driver into the Orchestrator Studio instance since it does not connect to the EnterpriseOne Database directly.

After installing the Orchestrator Studio, you need to set up the Orchestrator Studio as described in the "Setting Up the Orchestrator Studio" section of the *JD Edwards EnterpriseOne Tools Orchestrator Guide for Studio Version 8 and Prior.*

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23 Remove a Managed Instance

Remove an Application Server Managed Instance

You cannot remove an application server (either WebSphere Application Server or Oracle Application Server) *Managed Instance* that has a Server Manager dependent *Managed Instance* . You must remove all dependent *Managed Instances* before removing the application server *Managed Instance* .

To remove an application server *Managed Instance* :

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DENPBDS11.oradev.oraclecorp.com [Z:\jde_home_agent_11\SCFHA]

☑ Managed Software Components   ☑ Available Log Files

⊟ **Managed Instances**

Shown below are all the managed instances owned by the managed home. Use caution when removing instances. Depending on the instance type this may involve uninstalling and/or deleting the EnterpriseOne server installation.

Select [Managed Instance]:   Remove Instance

Select All | Select None   Remove Instance

Instance Name ↓ ⓘ	Managed Instance Type ⓘ	State ⓘ
☐ E1_JAS_C1	EnterpriseOne HTML Server	⬇ Undetermined
☐ EA_JS_10005	EnterpriseOne HTML Server	⬇ Undetermined
☐ MyCP7	EnterpriseOne Collaborative Portal Server	⬆ Running
☑ MyWAS7	IBM WebSphere 7	⬆ Running

1. On the Managed Instances section of the page, select the Managed Instance Type associated with the application server that you want to remove.

DENPBDS11.oradev.oraclecorp.com [Z:\jde_home_agent_11\SCFHA]

☑ Managed Software Components   ☑ Available Log Files

⊟ **Managed Instances**

Shown below are all the managed instances owned by the managed home. Use caution when removing instances. Depending on the instance type this may involve uninstalling and/or deleting the EnterpriseOne server installation.

Select [Managed Instance]:   Remove Instance

Select All | Select None   Remove Instance

Instance Name ↓ ⓘ	Managed Instance Type ⓘ	State ⓘ
☐ E1_JAS_C1	EnterpriseOne HTML Server	⬇ Undetermined
☐ EA_JS_10005	EnterpriseOne HTML Server	⬇ Undetermined
☐ MyCP7	EnterpriseOne Collaborative Portal Server	⬆ Running
☑ MyWAS7	IBM WebSphere 7	⬆ Running

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2. Click the Remove Instance button to remove the selected application server *Managed Instance* .
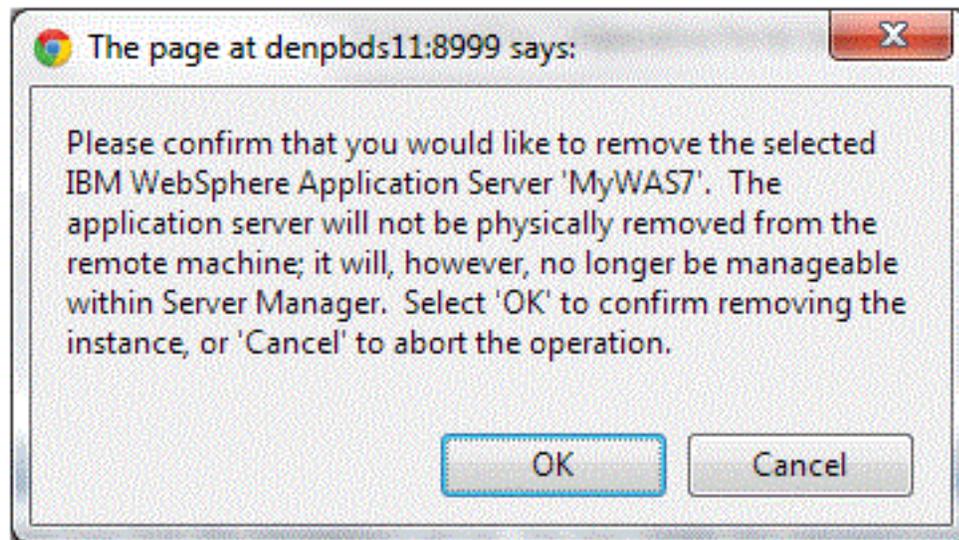
3. On the confirmation dialog, click OK if you are sure that you want to remove the selected *Managed Instance* .

   If you choose OK, the application server will not be physically removed from the remote machine. It will, however, no longer be manageable with *Server Manager* .

If you attempt to remove an application server that has a dependent *Managed Instance* , the *Management Console* displays this error message:

Remove a JD Edwards EnterpriseOne Server Instance

Note: This section uses screen captures of the *JD Edwards EnterpriseOne* "RTE" (Transaction Server) as an example. However, the procedure is identical for all *JD Edwards EnterpriseOne* servers with the exception of a *JD Edwards EnterpriseOne* Enterprise Server that was registered to (not created by) *Server Manager* . If you used *Server Manager* to register an existing *JD Edwards EnterpriseOne* Enterprise Server that was created outside of *Server Manager* , and you use *Server Manager* to remove that *Managed Instance* , the *JD Edwards EnterpriseOne* Enterprise Server is not actually removed from the machine; only the *Managed Instance* is removed from *Server Manager* .

To remove a *JD Edwards EnterpriseOne* server *Managed Instance* :

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1. On the Managed Instances section of the page, select the Managed Instance Type associated with the *JD Edwards EnterpriseOne* server you want to remove.

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2. Click the Remove Instance button to remove the selected *JD Edwards EnterpriseOne* server *Managed Instance*
.
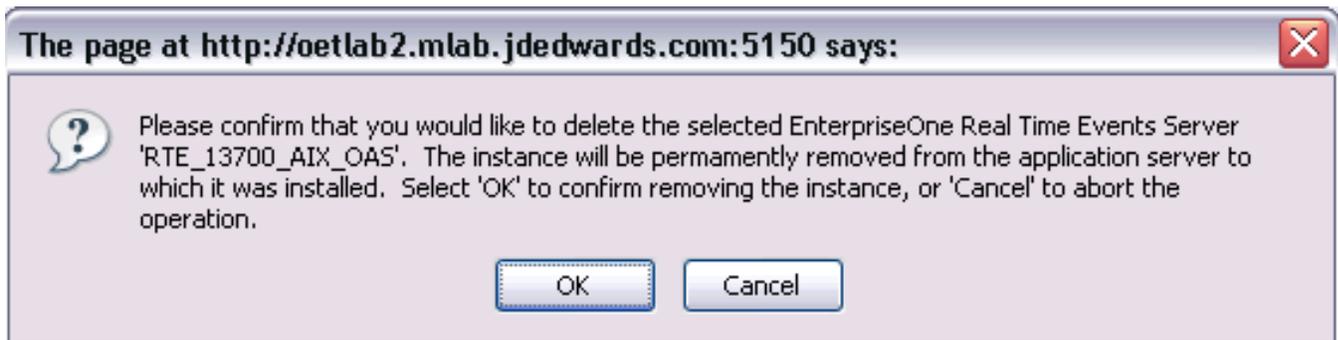
> **The page at http://oetlab2.mlab.jdedwards.com:5150 says:**
>
> (?) Please confirm that you would like to delete the selected EnterpriseOne Real Time Events Server 'RTE_13700_AIX_OAS'. The instance will be permamently removed from the application server to which it was installed. Select 'OK' to confirm removing the instance, or 'Cancel' to abort the operation.
>
> [OK]   [Cancel]

3. On the confirmation dialog, click OK if you are sure that you want to remove the selected *Managed Instance* .

If you choose OK, the *Managed Instance* will be permanently removed from the application server to which it was installed.

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24 Management Console Administration

Overview of Management Console Administration

Administering the *Management Console* involves these tasks:

- Setting up *Management Console* users and user groups

  The *Management Console* supports granular control of the managed instances a user may view and actions a user may perform. The *Management Console* employs user groups as an efficient way to manage permissions and servers. Instead of administering these items at the user level, you can associate permissions to a user group. You can determine which JD Edwards EnterpriseOne users have access to the *Management Console* and the user group or user groups to which the user should belong.

- Assigning permissions to user groups

  The *Management Console* contains two sets of permissions that you can assign to user groups: global permissions and server group permissions. Global permissions allow members of a user group to perform particular administrative tasks in the *Management Console* . Server group permissions allow users to perform certain administrative tasks on the servers that are managed centrally through the *Management Console* .

- Creating server groups

  - Control the default configuration for all servers in a group.

  - Manage updates to the server group members from one release to the next.

  - Control the tasks that *Management Console* users can perform on the servers in a server group.

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25 Administer Management Console Users and User Groups

Configure the Management Console for User Setup

This section describes:

- *Specify the JD Edwards EnterpriseOne Server Used for User Authentication*
- *Change the jde_admin User Password*

You must use the jde_admin user ID and password to sign into the Management Console initially. This non-JD Edwards EnterpriseOne user ID and password are configured during the Server Manager installation. The jde_admin user has the authority to perform all functions within the Management Console and is responsible for adding and setting up the initial Management Console users from JD Edwards EnterpriseOne, as well as assigning permissions to those users.

You can import users from JD Edwards EnterpriseOne using the Management Console Setup and Configuration Wizard, or you can add them as needed using the Management Console. JD Edwards EnterpriseOne users are authenticated using the security server services of an EnterpriseOne Enterprise Server. The Enterprise Server name and port used by the Management Console must be properly configured.

Note: JD Edwards EnterpriseOne users cannot access the Management Console with their JD Edwards EnterpriseOne user IDs and passwords until they have been added as Management Console users.

See **Complete the Management Console Setup Wizard** for information about using the Management Console Setup Wizard to add JD Edwards EnterpriseOne users to the Management Console.

Specify the JD Edwards EnterpriseOne Server Used for User Authentication

In addition to user authentication, you must define the name and port number of the security server to enable the use of site keys for the encryption of sensitive data stored in EnterpriseOne configuration (ini) files. If site keys are set up in the Security Server jde.ini file, when sensitive data such as a password is entered in a server configuration setting in Server Manager, Server Manager accesses the site keys to encrypt the data. The Server Manager agent will return the site key to the Server Manager Console even if the Security Server is not running. See *"Encrypting Sensitive Data in EnterpriseOne" in the   JD Edwards EnterpriseOne Tools Security Administration Guide*   for more information on how to generate site keys.

Note: All servers managed by an instance of Server Manager must use the same site key. For example, to have a production environment with servers that use one site key and a test environment with servers that use a different site key, you would need to install two separate Management Consoles, one for all servers in the production environment and one for all servers in the test environment. The configured Security Server must be a managed instance in the Server Management Console. Previously, the Security Server could have been managed by a different Server Manager Console.

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1. In the Quick Links section of the Management Console, click the Server Manager Users link.

Server Manager User Authentication

Specify the security server name, system datasource, and JDENET port to use when authenticating EnterpriseOne users to the management console.

Server Name ⓘ DENLCMLX2

Outgoing JDENET Port ⓘ 6018

Save

✓ Changes made to the security server or outgoing JDENET port may not take effect immediately; it may be necessary to restart the management console.
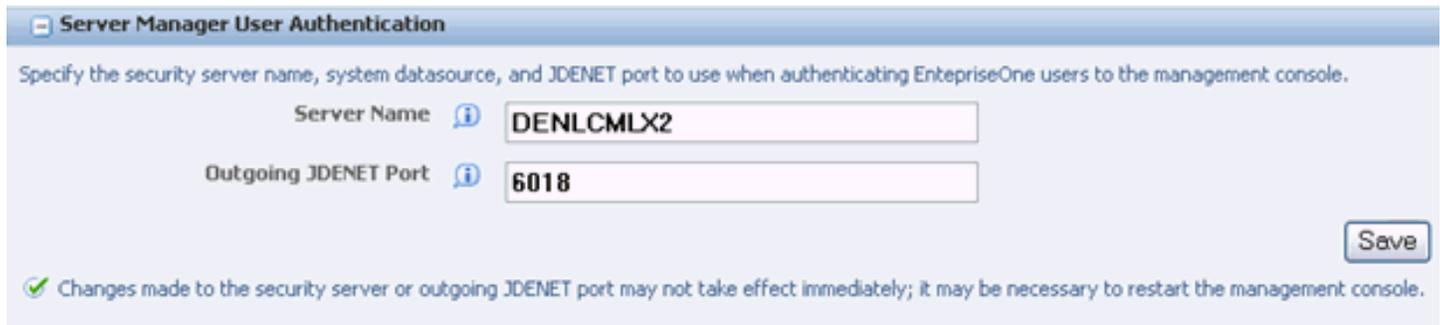
2. In the Server Manager User Authentication pane, in the *Server Name* field, enter the name of the Enterprise Server to use for security services. The server must be running and listening on the same JDENET port that this instance is configured to use for outgoing connections.
3. In the Outgoing JDENET Port field, enter the TCP port to use for outgoing JDENET communications with a JD Edwards EnterpriseOne Enterprise Server. This value must match the JDENET Incoming Port (ServiceNameListen) defined for the Enterprise Server(s) with which this web server will communicate.
4. Click the *Save* button.

> **Note:** It may be necessary to restart the management console application for the new settings to take effect.

Change the jde_admin User Password

The jde_admin user password is the only password that you can change in the Management Console. All other Management Console users use their JD Edwards EnterpriseOne user ID and password to sign in to the Management Console and these passwords are changed in JD Edwards EnterpriseOne.

1. In the Quick Links section of the Management Console, click the *Server Manager Users* link.

jde_admin Password

Use this form to change the password for the jde_admin user.

Old Password

New Password

Verify New Password

Change

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2. In the jde_admin Password section in the left pane, complete the Old Password, New Password, and Verify New Password fields to change the jde_admin password.

> **Note:** If you lose the jde_admin password, there is no way to recover it. You will have to reinstall the Management Console.

Manage Management Console Users

All users that you add to the Management Console are displayed in a grid in the interface. The Management Console displays the name of the user along with the user groups that are assigned to the user. You can sort each column alphabetically by clicking a column heading. All changes made to Management Console users and user groups take effect immediately.

This section describes:

- *Add a User*
- *Remove a User*

Add a User

1. In the Quick Links section of the Management Console, click the *Server Manager Users* link.

2. On *Server Manager Users*, in the *Management Console Users* pane, enter the name of the JD Edwards EnterpriseOne user in the EnterpriseOne *User Name* field.

3. Click *Add User*.

The Management Console adds the user to its user repository. The added user will not belong to any user groups.

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Remove a User

1. On Server Manager Users, in the Management Console Users pane, select the check box next to the user that you want to delete.
2. Click the *Delete* button.

Manage User Groups

This section describes:

- *Create a User Group*
- *Delete a User Group*
- *Assign Users to a User Group*
- *Remove Users from a User Group*

The Management Console employs user groups to manage permissions and group together users who perform similar tasks. Permissions are assigned to user groups, not individual users. A user may belong to zero or more user groups and will be authorized to perform the actions that are granted to each user group to which the user belongs.

See *Assign Server Manager Permissions* for a list of all the permissions that you can assign to user groups in Server Manager.

The Management Console displays each user group that you add in a grid. You can sort alphabetically on each column of the grid by clicking the column heading. The Management Console displays this information for each user group:

- User Group Name
- User Group Description
- Users Belonging to User Group
- Granted Permissions

The Management Console is delivered with the following predefined groups:

- console_user

  Any user who successfully authenticates and possesses this role may utilize the management console. If users do not belong to this user group, they cannot access any of the management console pages. You must have this permission to sign into the Management Console.

- console_admin

  This role is equivalent to having all permissions granted to a user. Users who belong to this user group automatically assume the rights of the console_user user group; it is not necessary to assign them to the console_user user group. The jde_admin user is always a member of the console_admin user group.

  Note: The user groups that are delivered with Server Manager cannot be altered or deleted.

Create a User Group

1. In the Quick Links section of the Management Console, click the *Server Manager Users* link.

2. In the User Groups pane, click the Create User Group button.
3. Complete the User Group Name and Description fields and then click the Add User Group button.

The Management Console adds the new user group and displays the details about the user group in the grid.

Delete a User Group

Note: You cannot delete a user group if one or more users belong to that group.

1. In the User Groups pane, select the check box of the row that contains the user group that you want to delete.
2. Click the *Delete User Group* button.

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Assign Users to a User Group

1. On the Server Manager Users page, scroll down to the Management Console Users pane and select the check box next to the user that you want to add to a user group.
2. Click the Grant or Revoke User Groups button.
3. In the User Group Name drop-down menu, select the user group to which you want to assign the user and then click the Grant User Group button.

Remove Users from a User Group

1. On the Server Manager Users page, select the check box next to the user that you want to remove from the user group.
2. Click the Grant or Revoke User Groups button.

Assign Server Manager Permissions

This section provides an overview of Server Manager permissions and discusses how to:

- *Assign Global Permissions*
- *Assign Server Group Permissions*

Understand Server Manager Permissions

Server Manager contains two types of permissions that you can assign to user groups global permissions and server group permissions. Both types of permissions are only assigned to user groups, not individual users. Server Manager follows Oracles secure by default security model. Management Console users cannot perform any functions unless they are authorized and have been assigned the appropriate permission to do so.

Global permissions allow users to perform administrative tasks in the Management Console that do not pertain to a particular server group, such as updating the Management Console software, distributing software components to managed homes, and granting other JD Edwards EnterpriseOne users access to the Management Console.

Server group permissions allow users to perform certain tasks on a particular server group. When you assign a server group permission, the permission applies to all servers that belong to the server group.

See *Administer Server Groups* for information about setting up and managing server groups.

Assign Global Permissions

Global permissions include:

- Application Server Management appServerConfig

  This permission is required to perform management tasks on an application server (Oracle WebLogic or IBM WebSphere). A user who has this permission may register new application server instances, create new

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J2EE servers within the application server, start and stop application server components, and modify the configuration of the application server components. Users without this permission may see the application servers within the management console but may not perform any actions directly on those servers.

- Manage Software Components managedComponents

  This permission allows users to manage software components within Server Manager. With this permission, users can add software components to the Management Console User Repository, distribute or copy those components to managed homes, and delete software components both from the managed homes and from the management consoles.

- Monitor Configuration monitorConfig

  This permission allows users to manage the monitoring components of Server Manager. With this permission, users can create, delete, and start or stop configured monitors. Any user allowed to use Server Manager may view the contents of a running monitor; however, this permission is required to make any changes to the configuration of an existing monitor. In addition, users with this permission may remove any monitor reports from the monitor history.

- Console Configuration and Administration consoleConfig

  This permission allows users to manage the configuration of Server Manager. With this permission, users can update the Server Manager release, update deployed managed home agents, remove managed homes, configure the TCP/IP ports used by Server Manager, and download managed home agent installers. This permission is not required to manage the Management Console user repository; that permission is granted by the userManagement permission.

- Server Manager User Management userManagement

  This permission allows users to administer the Server Manager user management repository. With this permission, users can add additional JD Edwards EnterpriseOne users as Management Console users and assign permissions.

- Web Product User Session Management

  This permission allows users to manage web product user sessions. It allows users to terminate OWVirtual sessions, terminate user sessions including any running OWVirtual sessions, broadcast messages to OWVirtual clients, and temporarily disable logins to a web product.

To assign global permissions to a user group:

1. In the Quick Links section of the Management Console, click the Server Manager Users link.

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2. In the User Groups pane, click the link of the user group to which you want to add permissions. For example, if you chose Global Permissions you would have these available options:

3. On Modify a User Group, in the Global Permissions pane, select a permission from the Available Options box.
4. Click the Move link (single right arrow) to move the permission to the Selected Options box.

You can also grant the user group all global permissions by clicking the Move All link (double right arrow).

To remove global permissions from a user group:

1. In the User Groups pane, click the link of the user group to which you want to remove permissions.
2. In the Global Permissions pane, select the permission that you want to remove from the Select Options box.
3. Click the Remove link (single left arrow).

You can also remove all permissions in the Selected Options box by clicking the Remove All link (double left arrow).

Assign Server Group Permissions

Server group permissions include:

- Permit Clearing JDBj Caches clearCache

  This permission allows users to clear the JDBj caches that are maintained with the JD Edwards EnterpriseOne web products.

- Enterprise Server Instance Management - enterpriseServerInstance

  This permission allows users to create new Enterprise Servers, remove existing Enterprise Servers, configure Enterprise Servers, and start or stop Enterprise Servers. This permission also allows users to change the JD Edwards EnterpriseOne Tools release of a corresponding server. This permission is required to manage a JD Edwards EnterpriseOne Enterprise Server.

- View Group Members viewGroupMembers

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This permission allows users to view the JD Edwards EnterpriseOne servers that are members of a server group. Without this permission, users cannot view the server group members in the Management Console. You must explicitly grant this permission to each desired server group; no other permission implies or inherits this permission.

- Web Product Instance Management webProductInstance

This permission allows users to create new web product instances, remove existing web product instances, configure web products, register/de-register application servers, configure application servers, and start or stop application servers and web products. This permission also allows users to change the JD Edwards EnterpriseOne Tools release of a corresponding server. This permission is required to allow users to manage JD Edwards EnterpriseOne web products including HTML servers, Transaction Servers, Business Service servers, and the corresponding application servers (Oracle WebLogic and IBM WebSphere).

- (Tools Release 9.2.9) Web Product Log Instance Management webProductLogInstance

This permission is required to manage HTML severs and AIS servers. This permission allows the user to create user log configuration in web product instances. This permission also allows the user to manage user log configuration like creating, updating, deleting, modifying, and operations on user log like listing, downloading, and deleting. This permission only allows a user to interact with API calls. With this permission users can access user logs from EnterpriseOne web products.

- Web Product User Session Management webSessions

This permission allows users to manage web product user sessions. With this permission, users can terminate OWVirtual sessions and user sessions (including any running OWVirtual sessions), broadcast messages to OWVirtual clients, and temporarily disable anyone from signing onto a web product.

To assign server group permissions to a user group:

1. In the Quick Links section of the Management Console, click the Server Manager Users link.

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2. In the User Groups pane, select the user group to which you want to assign server group permissions.

   The Management Console displays a separate pane for each server group in the Management Console. Each pane displays the permissions for that particular server group.

3. On Modify A User Group, scroll to the server group to which you want to add server group permissions for the user group.
4. Select the permission from the Available Options box and then click the Move link (single right arrow) to move the permission to the Selected Options box.

   You can also grant the user group all server group permissions by selecting the Move All link (double right arrow).

To remove server group permissions from a user group:

1. In the User Groups pane, select the user group to which you want to remove server group permissions.
2. On Modify A User Group, scroll to the server group to which you want to remove server group permissions from the user group.
3. On Modify A User Group, in the Server Group pane, select the permission from the Selected Options box and then click the Remove link (single left arrow) to remove the permission.

   You can also remove all server group permissions from the user group by selecting the Remove All link (double left arrow).

Run the User Access Report

The User Access Report generates a list of all the Management Console users and lists the following information for each user:

- The user groups that a user is a member of
- Global permissions assigned to each user group of which a user is a member

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- Server group permissions assigned to each user group of which a user is a member

Use this report to verify that you have added users to the appropriate user groups and that you have applied the appropriate permissions to each user group.

You must have the userManagement global permission to be able to view the report.

To run the User Access Report:

1. In the Quick Links section of the Management Console, click the Server Manager Users link.
2. In the User Management Tasks section, click the User Access Report link.

User Access Report

User: jde_admin

Assigned User Groups	Non-Group Permissions	Server Group: default	Server Group: Demo
	All Permissions Granted	All Permissions Granted	All Permissions Granted

User: JDE

Assigned User Groups	Non-Group Permissions	Server Group: default	Server Group: Demo
	No permissions granted.	*No permissions granted.*	*No permissions granted.*

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26 Monitor JD Edwards EnterpriseOne Servers

E-Mail Configuration

When you click the *Server Activity* link in the *What do you want to do?* pane, the *Management Console* displays another pane under *What do you want to do?* called *E-Mail Configuration*.

E-Mail is sent through SMTP and is SMS/pager friendly.

Starting With **Tools Release 9.2.7,** JD Edwards EnterpriseOne provides secured email communication by enabling the TLSv1.2 and SMTP authentication for the email notification framework.

What do you want to do?

INSTALL
- Management Agents
- Manage Software
- Database Drivers
- TLS Configuration Settings
- Offline Orchestration

CONFIGURE
- Server Manager Users
- Server Groups
- Centralized Configuration

TRACK
- User Activity
- Server Activity
- Table Cache
- Health Check

Diagnostics
- Collect and Generate Diagnostics

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To configure e-mail notification for monitors:

1. Complete these fields:

   o *Mail Server (SMTP)*

     Defines the name of the SMTP mail server Server Manager will utilize for sending e-mails.

   o *SMTP Port*

     The TCP/IP port to use when connecting to the SMTP mail server for sending e-mails. The default value is 25, though some mail servers may be configured to use an alternate port.

   o *Sender Email*

     The e-mail address to use as the sender for e-mail notifications sent by Server Manager.

   o *Email Address*

     Enter an email address (or multiple addresses separated with a comma).

   o *Connection Security*

     Enter any one of these connection types as per your requirement:

Connection Type	Description
PLAIN	Connection shall be established/made with the SMTP server without encryption.
STARTTLS	Informs the mail server to upgrade the non-encrypted connection to an encrypted connection.
SSL/TLS (Secure Sockets Layer/ Transport Layer Security)	A secured connection shall be established or made with the SMTP server by encrypting the communication with the TLS1.2 protocol.

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Connection Type	Description

- o *Enable Authentication*

  Enter True or False. The email is delivered only when the value is True and when authentication is enabled on the SMTP server.
- o *(Release 9.2.26.0) Authentication Type*

  From the Authentication Type drop-down list, select the authentication type you want to use.

  > **Note:** Note: When you select OAUTH2 authentication type, additional fields including OAUTH Client Id, OAUTH Client Password, OAUTH Tenant Id, and OAUTH Service Provider appear. You can obtain OAUTH Client Id, OAUTH Client Password, and OAUTH Tenant Id by registering an application in Microsoft Entra. For more information, see the `Register an application in Microsoft Entra ID`

- o *(Release 9.2.26.0) OAUTH Client ID*

  Enter the client ID that you obtained after registering your application in Microsoft Entra.
- o *(Release 9.2.26.0) OAUTH Client Password*

  Enter the client password that you obtained after registering your application in Microsoft Entra.
- o *(Release 9.2.26.0) OAUTH Tenant ID*

  Enter the tenant ID that you obtained after registering your application in Microsoft Entra.
- o *(Release 9.2.26.0) OAUTH Service Provider*

  Select Microsoft as the SMTP service provider.
- o *Proxy Host*

  Enter the proxy host to connect to the SMTP server.
- o *(Release 9.2.26.0) Proxy Port*

  Enter the proxy port to connect to the SMTP server.
- o *SMTP Username*

  Enter the username to authenticate with the SMTP server. This applies only when basic authentication is enabled on the authentication type.
- o *SMTP Password*

  Enter the password to authenticate with the SMTP server. This applies only when basic authentication is enabled on the authentication type.

2. Click the *Save* button to save your settings.
3. To verify your settings and email address for use by Monitors, click the *Test* button. If the test is not successful, an error appears.

> **Note:** If the Server Manager is TLS enabled, the system selects the Keystore name, Truststore name, and password settings automatically from the global Server Manager settings. Therefore, separate TLS level settings are not provided in the Email Configuration pane.

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JD Edwards EnterpriseOne Email delivery system has been tested and certified with the SMTP Server for Microsoft Office 365 Exchange.

Consider the following to ensure that the EnterpriseOne email delivery system works with Microsoft Office 365 Exchange:

- The Sender's email address must be valid.
- If the SMTP Username is different than the sender's email ID, you must provide the "Send As" permissions to the sender's email address. Otherwise, the email delivery fails and the system displays the "Send As Denied" error message.
- Multi-factor/2FA authentication should be disabled for the FROM email ID/SMTP Username.
- SMTP Auth should be enabled.

Note: *Click here to view a recording of this feature.*

See Clients and Mobile Exchange Online

Note: *Click here to view the OBE for this feature.*

Monitors

This section describes:

- *Create a Monitor*
- *Monitor Configuration*
- *Available Monitors*
- *Monitor History*

Create a Monitor

You use monitors to track events that occur within the management domain and record historical data of managed instances. Once you create the monitor, the configuration page for the new monitor will be displayed. Multiple monitors can be created with different parameter settings to monitor various aspects of managed instances. An email can then be sent to the appropriate person or group alerting them to specified status changes in the managed instances.

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Monitors

ⓥ Monitor History

Monitors are used to track events that occur within the management domain and record historical data of managed instances. To create a new monitor specify a unique name and select the type of monitor you wish to create. Once created the monitor configuration page for the new monitor will be displayed.

Monitor Name	
Monitor Type	Event Notification Monitor ▼
	Create

To create a new monitor:

1. Complete these fields:

   ○ *Monitor Name*

   Defines the name of the new monitor. The monitor name must be unique.
   ○ *Monitor Type*

   Defines the type of the new monitor. The available monitor types appear in the drop down selection.
2. Click the *Create* button to create your new monitor. When the new monitor has been created a monitor configuration page is displayed.

Monitor Configuration

All configuration items for the new monitor are displayed on this page.

This section describes:

- General Properties
- Managed Instances
- Monitored Events
- Notification Hours
- E-Mail Subscriptions

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General Properties

To configure *General Properties* for monitors:

1. Complete these fields:

    o   *Query Interval (Seconds)*

        Specifies the number of seconds between collections. Some monitored events are pushed to the management console, in which case the corresponding notifications will be sent soon after the event occurs. Other events require periodic polling to identify. This value specifies the amount of time between those polls. Use caution when setting this to a low value (such as under a minute), as this may negatively impact performance of the managed instances.

    o   *Automatically Start Monitor*

        You select this to automatically start the new monitor. If the Management Console should stop and restart, the monitor will start automatically if this has been selected.

2. Click the *Save* button to save your settings.

Note: The Save button applies only to the pane where the Save button is located. It does not save the entire page. The Save button must be clicked within each pane for changes made within that pane.

Managed Instances

This section describes:

*   *Include a Managed Instance(s) in a Monitor*
*   *Remove a Managed Instance(s) from a Monitor*

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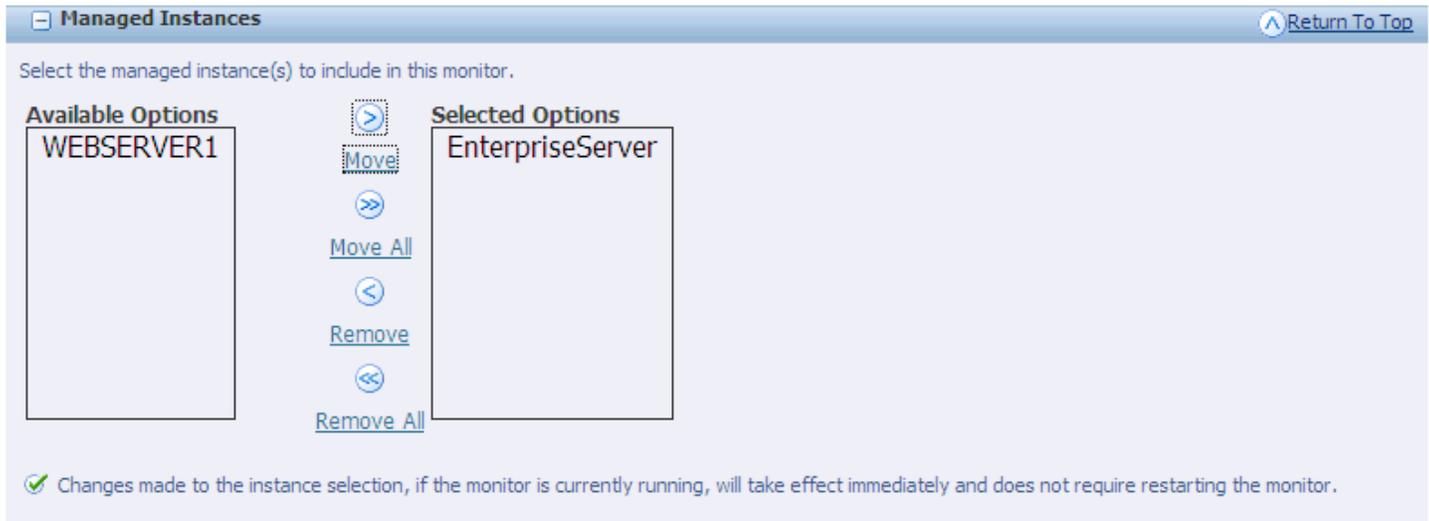
Include a Managed Instance(s) in a Monitor

One or more managed instances may be selected to be monitored.

To include a managed instance(s) in a monitor, either:

1. Select an instance from *Available Options* and click *Move*, or
2. Click *Move All* to include all managed instances.

Remove a Managed Instance(s) from a Monitor

To remove a managed instance(s) from a monitor, either:

1. Select an instance from *Selected Options* and click *Remove*, or
2. Click *Remove All* to remove all managed instances.

Note: Changes made to the instance selection, if the monitor is currently running, will take effect immediately and does not require restarting the monitor.

Monitored Events

You can select the individual events that a specific monitor should observe that will trigger an e-mail alert.

Examples include:

- Enterprise server kernel crashes
- Web user unable to sign in due to system error
- Security server down
- Simultaneous users exceeding specified thresholds

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- Low disk space on enterprise server

- Managed instance down

- Managed home down

> **Note:** Some events may require threshold values.

To specify the events to monitor:

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Monitored Events

Select the individual events this monitor should observe. Some events may require threshold values.

Zombie Kernel Process	☐	ⓘ
Managed Instance Down	☐	ⓘ
Managed Home Down	☐	ⓘ
Managed Home Up	☐	ⓘ
Managed Instance Restarted	☐	ⓘ
Simultaneous Users	☐	ⓘ

HTML Server Sessions

CallObject Kernel Users

Security Kernel Users

HTML Server Login Failure - System	☐	ⓘ
Enterprise Server Disk Space	☐	ⓘ

Percent Used Threshold

Remaining Space Threshold (KB)

Long Running UBEs	☐	ⓘ

Time Limit (Seconds)

Web Server CallObject Errors	☐	ⓘ

Application Error Threshold

System Error Threshold

Timeout Error Threshold

Outstanding Requests	☐	ⓘ

Outstanding Requests Threshold

Security Server Connection Failure (Web Products)	☐	ⓘ

Save

✅ Changes to the event selection for a monitor, if running, will take effect immediately and do not require restarting the monitor.

Events may be dynamically enabled or disabled for a particular monitor.

1. On Monitored Events, select from these fields:

   o *Zombie Kernel Process*

     This event occurs when an enterprise server process (including network, kernel, and runbatch processes) unexpectedly terminates.

     Starting with Tools Release 9.2.5.0, the email notification will contain contextual and actionable information that will enable you to troubleshoot the issue.

     The email includes information such as the ID of the EnterpriseOne process which crashed, process type (kernel process or UBE process), Enterprise Server host name, name and number of the business function that crashed, the last modified time of the business function, name and email address of the user who last modified the business function, and a link to navigate to the Server Manager Console instance details page of the Enterprise Server instance where the zombie occurred.

     The email notification also contains two attachments, a call stack trace file of the problem process or thread and the whole dump file of the zombie process.

     > **Note:** As the business function details and the user details are retrieved from the respective EnterpriseOne databases, you must upload the correct JDBC drivers during the initial Server Manager Console configuration. If the Enterprise Server JDE.INI files are encrypted, then Server Manager Console will have a valid Enterprise Server registered which will be used during the site key decryption to retrieve the EnterpriseOne database authentication details.

   o *Managed Instance Down*

     This event occurs when a matching instance was in the running state on the previous collection but is no longer running.

   o *Managed Home Down*

     This event occurs if the connection between the management console and a connected managed home is lost. This could be because the management agent within the managed home is down, or the network connection was severed.

   o *Managed Home Up*

     This event occurs if when the connection between a managed home and the management console is established.

   o *Managed Instance Restarted*

     This event occurs when a managed instance is stopped and restarted within the last sampling interval. If a server is stopped and restarted but the operation does not complete within the sleep interval of this monitor the notification will be handled as a managed instance down rather than restart.

   o *Simultaneous Users*

     This event is triggered when the specified threshold of users is reached. This event is checked on the timed interval specified for the monitor. You may set thresholds for the number of simultaneous users active in an EnterpriseOne HTML server, connected to a single CallObject kernel on the enterprise server, or connected to a security server kernel on the enterprise server. This notification will be sent the first time the threshold value is met, and each time thereafter when the value is larger than any previously sent notification.

   o *HTML Server Sessions*

Specifies the threshold when the event will be triggered.

○ *CallObject Kernel Users*

Specifies the threshold when the event will be triggered.

○ *Security Kernel Users*

Specifies the threshold when the event will be triggered.

○ *HTML Server Login Failure - System*

This event occurs when a user cannot sign onto a HTML server due to a system related failure. It does not include login failures caused by incorrect user activity, such as supplying incorrect login credentials.

○ *Enterprise Server Disk Space*

This event occurs when a physical disk on a monitored enterprise server meets the specified threshold value(s). You may specify the 'Percent Used Threshold', in which an event will be triggered if the usage on the disk/volume reaches or exceeds the specified percentage. An event may also be specified when the disk has less than a specified number of kilobytes available. The enterprise server must be running at the time of collection for this metric to be evaluated.

○ *Percent Used Threshold*

Specifies the threshold when the event will be triggered.

○ *Remaining Space Threshold (KB)*

Specifies the threshold when the event will be triggered.

○ *Long Running UBEs*

Allows you to specify, in seconds, a threshold value for the duration of UBEs. If a UBE takes longer than the specified threshold to complete a notification will be sent.

○ *Time Limit (Seconds)*

Specifies the threshold when the event will be triggered.

○ *Web Server CallObject Errors*

This event enables receiving notification whenever a problem occurs while performing a CallObject (business function) request from an EnterpriseOne HTML server to an enterprise server. You may specify a threshold for each of the error types that may occur. Once reached notifications will be sent for the corresponding CallObject error.

○ *Application Error Threshold*

Specifies the threshold when an event will be triggered.

○ *System Error Threshold*

Specifies the threshold when the event will be triggered.

○ *Timeout Error Threshold*

Specifies the threshold when the event will be triggered.

○ *Outstanding Requests*

This event occurs when a kernel process reaches the supplied threshold value for outstanding request. Outstanding requests are requests that are queued for the kernel but have not yet executed to do current

work. The notification will be sent each time outstanding requests are greater than the last sample period and above the specified threshold value.

○ *Outstanding Requests Threshold*

   Specifies the threshold when the event will be triggered.

○ *Security Server Connection Failure (Web Products)*

   This event occurs if a user attempts to sign on to a web product and the configured security server did not successfully respond to the authentication request.

2. Click the *Save* button to save your settings.

> **Note:** Changes to the event selection for a monitor, if running, will take effect immediately and do not require restarting the monitor.

> **Note:** If input values are used in the enterable fields, the parameter field immediately above the input section must have the check box selected in order for the input values to be applied.

Notification Hours

You may specify the hours of the day in which e-mail notifications will be sent. If an event occurs outside the configured times the event will still be recorded in the monitor history. An email per event, per threshold, per duration will be sent.

You may have identical monitors assigned to different time frames to notify different people. A monitor may be set up to notify a person during prime hours, and a different identical monitor to notify a different person for non-prime hours.

To specify notification hours, enter start and stop times using the twenty four hour clock. For example 11:33 PM would be specified as 23:33. The day's range is between 00:00 and 23:59.

E-Mail Subscriptions

Specified e-mail addresses, including distribution lists, will receive a notification when any of the subscribed events occur. An unlimited amount of e-mail addresses may be added to a monitor.

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To add e-mail subscriptions:

1. Enter an email address (or multiple addresses separated with a comma).
2. Click the *Add* button.

To remove e-mail subscriptions:

1. Select the check box for an email address(es).
2. Click the *Remove* button.

Available Monitors

Displays each of the monitors. Use the links to modify the configuration of the individual monitor. If the monitor is currently running or has been run since the management console was started you may view the monitor results.

This section describes:

- *Start a Monitor*
- *Stop a Monitor*
- *Delete a Monitor*
- *Modify the Monitor Configuration*
- *View a Monitor Report*
- *Create a Duplicate Monitor*

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Monitors

Ⓥ Other Monitors   Ⓥ Monitor History

Monitors are used to track events that occur within the management domain and record historical data of managed instances. To create a new monitor, specify a unique name and select the type of monitor you wish to create. Once created the monitor configuration page for the new monitor will be displayed.

Monitor Name	
Monitor Type	Event Notification Monitor ▾

Create

Start a Monitor

To start a monitor:

1. Select the check box for a monitor(s).
2. Click the *Start* button.

Stop a Monitor

To stop a monitor:

1. Select the check box for a monitor(s).
2. Click the *Stop* button.

Delete a Monitor

To delete a monitor:

1. Select the check box for a monitor(s).
2. Click the *Delete* button.

Modify the Monitor Configuration

To modify the monitor configuration, click the icon in the *Configure* column for the monitor.

View a Monitor Report

To view a monitor report, click the icon in the *View Report* column for the monitor. The icon will change if the report has run.

Create a Duplicate Monitor

To create a duplicate monitor:

1. Click the icon in the *Create Duplicate* column for the monitor.

2. Specify a name for the new monitor, by completing the *Monitor Name* field.

> Specify a name for the new monitor.
>
> **Monitor Name** [   ]
>
> [Cancel] [Continue]

3. Click the *Continue* button.
4. Complete the *Monitor Configuration* page.
5. Click the *Save* button for every pane.

Monitor History

The Monitor History section displays all monitors that are currently or have previously run.

This section describes:

- *Delete Monitor History*
- *View the Monitor Start Time*
- *View Report*

> **Monitor History** ∧ Return To Top
>
> Shown below are all the monitors that are currently or have previously run.
>
> Select [Monitor History]: [Delete]
>
> Select All | Select None
>
> | | Monitor Name ⓘ | Monitor Start Time ⓘ | View Report ⓘ |
> | --- | --- | --- | --- |
> | ☐ | monitor 1 | 9/19/07 10:09 AM | 📊 |
>
> ☑ Currently running monitors will also appear in the monitor history list. Their history may not be deleted while the monitor is active.

Delete Monitor History

To delete monitor history:

1. Select the check box for a monitor(s).
2. Click the *Delete* button.

View the Monitor Start Time

To view a monitor start time look in the *Monitor Start Time* column for the monitor.

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View Report

To view a monitor history report:

1. Select the check box for a monitor(s) history.
2. Click the icon in the *View Report* column.

View Monitor Results - roger_test3

10/1/07 10:35 AM through Now

Shown below are a summary of the events that have occurred.

Event Name	Number of Occurrences
Managed Home Up	2

Event History

10/1/07 10:35 AM - Managed Home Up

```
Host Name: dentfrs3.mlab.jdedwards.com
Managed Home: /u01/dev_oas10131
Instances Managed by Home Agent:
  RTE_13700_AIX_OAS (rteserver)
  OAS10131_AIX_DEV (oas_1013)
```

Timestamp	Emails Sent	Emails Not Sent	Failed Emails
10/1/07 10:35 AM	kevin.clearwater@oracle.com		

The report provides information for the event and email. The Emails Not Sent field will report the number of emails accumulated outside the Notification Hours designated in the configuration settings for the monitor. The Failed Emails field will report the number of emails not delivered due to any issues with the email system, such as an email server being down.

Note: Currently running monitors will also appear in the monitor history list. Their history may not be deleted while the monitor is active.

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27 Available Log Files

Managed Home Log Files

This section describes:

- *Details*

- *Agent Log Level*

  Server Manager generates log files detailing its activity within the *Managed Homes* . *Managed Home* logging can be accessed from the main menu. Upon logging into *Server Manager* , find the *Managed Home* that you want to access by selecting the view in the *Select View* field called *Managed Homes* and Managed Instances. In the grid field called *Managed Home Location*, select the *Managed Home Location* with the logs that you want to view.

Details

When a *Managed Home Location* has been selected, the *Managed Home Details* section appears on the next screen. This section provides selection options for configuring the messaging level for the *Management Agent* logs.

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Managed Home Details

Version
  8.97 (897930)
Managed Home Location
  /u02/management-agent
Host Operating System
  Linux
OS Architecture
  i386
OS Version
  2.4.21-40.ELsmp
Agent Log Level
  FINER
Agent Java Runtime
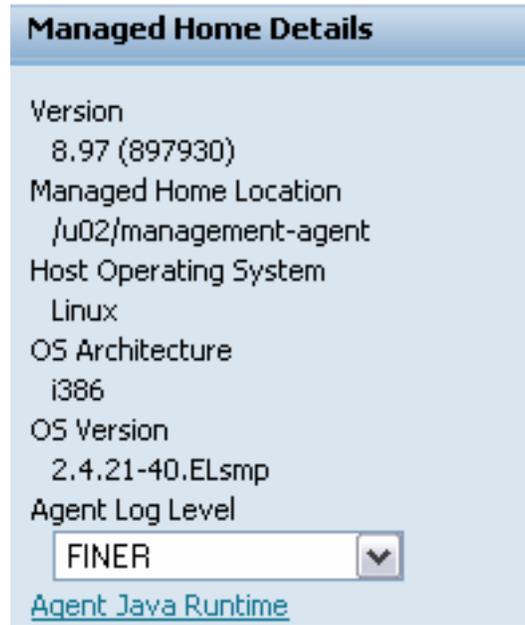
Agent Log Level

The *Management Agent* generates log messages at various log levels. Use the *Agent Log Level* dropdown to change the level of the messages are written to the *Management Agent* logs. Any changes to the log level are stored in the *Managed Home* configuration and are used even after the *Management Agent* is restarted.

The log file receives all messages that are at or above the selected log level. For example, if the log level is configured to Fine the log files will receive all generated messages at the Fine, Config, Info, Warning, and Severe level.

The default and recommended level is Fine. The finer and finest log levels should only be used for troubleshooting a specific *Server Manager* issue.

- *Off*

    This setting prevents any log messages from being written. It is not recommended to disable logging.

- *Severe*

    This level is for errors from which the system is not able to recover. Severe events are very rare for *Server Manager* and indicate a significant problem that needs to be addressed.

- *Warning*

    This level is for errors from which the system can recover; however these errors indicate a deviation from the expected path of least resistance scenario and are indicative of failure points in overall system health.

- *Info*

    This level receives messages that indicate the high-level tasks the agent is performing.

- *Config*

    This level includes information about the configuration or environment used by the *Management Agent* .

- *Fine*

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This level includes trace-level logging messages used to understand not just which actions the *Management Agent* is performing but also details about how it is performing those tasks.

- *Finer*

  This level contains more detailed messages.

- *Finest*

  This level contains the most detailed messages and may generate large log files.

- *All*

  At this level all log messaging levels are displayed; it is equivalent to selecting Finest.

The *Management Agent* writes log files to a subdirectory named logs on its the installation path. The log files may be viewed using the *Server Manager* log file viewer.

The *Management Agent* maintains up to ten log files with a maximum size of 10MB each. The most recent log file always has _0 in the filename. As the current log file reached the 10MB limit, the last log file is removed, the log index file for existing log files is increased, and the logging continues with a new file using the zero log index.

Managed Instance Log Files

Log files for all *Managed Instances* , including the *Management Agent* , are viewable through *Server Manager* . Log files for the *Managed Home* are available by selecting the *Managed Home* from the *Management Dashboard* page. Log files for *Managed Instances* , including EnterpriseOne servers, Oracle application servers, and third party application servers, are available by selecting the corresponding *Managed Instance* anywhere throughout the *Management Console* . In all cases the management page contains an *Available Log Files* section.

This section describes:

- *View Available Log Files*
- *Write Log Message [Web Products Only]*
- *Delete Log Files*
- *Log File Viewer*

View Available Log Files

The log files for the managed instance or *Managed Home* are listed in a table in this section. A filter is provided to limit the list of log files based on the last time they were updated. By default only logs modified with the last 24 hours are displayed. You can use the available options to expand or narrow the subject of log files to be displayed.

- *Filename*

  The complete path and name of the log file.
- *File Size*

  The size of the log file, in bytes.
- *Last Modified*

  The date and time the log file was last modified as reported by the operating system.

Write Log Message [Web Products Only]

Server Manager provides a mechanism for adding messages to the active log files. This mechanism is available only for the web-based *JD Edwards EnterpriseOne* servers and only when the instance is running. A free-form text message can be entered that is written to all the active log files for the *Managed Instance* . After entering the message, click the *Write Log Message* button to post the message to the active log files.

- *Message to Write*

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A free-form text message can be entered that is written to all the active log files for the managed instance.

Delete Log Files

Log files that are no longer of interested can be deleted using *Server Manager* . To remove a log file select the check box next to the desired log file(s) and click the *Delete* button. The selected log files are removed from the file system and no longer appear in the *Available Log Files* section.

Log files that are currently in use cannot be deleted. A warning indicates which log files cannot be deleted because they are in use.

On UNIX-based operating systems it might be possible to delete a log file while it is still in use. The file is removed from the file system and no additional log messages are written to the file.

Log files should be deleted only if you are sure they are no longer needed.

Log File Viewer

Selecting a log file from the *Available Log Files* transfers the file to the *Management Console* and display the contents using the integrated log file viewer. Transferred log files are cached by the *Management Console* and only fetched again if the contents of the file have changed. On *IBM i* machines, the EBCDIC conversion is performed automatically.

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This section describes:

- *Filter Log Files*

- *Criteria*

- *Apply Filter*

- *Save As Favorite*

- *Download*

- *Results*

Filter Log Files

The first segment of the log file viewer is the *Filter Criteria*. Advanced filtering capabilities are provided for locating only the log entries of interest. Any number of filter criteria may be added to limit the log lines displayed. Filter criteria may be saved as a favorite for reuse at a later time.

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Criteria

Criterion may be added to narrow the results that are returned. Additional rows can be added by clicking the *Add Another Row* button.

- *Criterion Type*

  The *Criterion Type* field has a dropdown list with the following filter criteria:

  Contains

  Does Not Contain

  Matches regex

  Does Not Match regex

  Log Level Message Is

  Log Level Message Is Not

- *Value*

  The Value field is a free-form text input field.

Note: Multiple criteria are evaluated in the order listed.

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Apply Filter

Available filter fields are:

- *Page Size*

  Log file contents are displayed using finite page lengths. Use this dropdown to customize the maximum number of lines that may be displayed in a single returned page. Select from these options:

  250 Lines

  500 Lines

  1000 Lines

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- *Match Type*

  Select how multiple criteria will be evaluated. Selecting Any Criterion returns log lines that match one or more of the supplied filter criteria. Selecting All Criterion (should be criteria, but if its that way in the software, then leave it of course) returns only those lines that match all of the supplied criteria.

After selecting the filtering preferences, click the *Apply Filter(s)* button to apply the filtering.

Save As Favorite

This section describes:

- *Save a Favorite*
- *Run a Favorite*
- *Remove a Favorite*

Save a Favorite

To save a favorite:

1. Click the *Save As Favorite* button.
2. Specify a name for the save criteria.
3. Click the *OK* button.

The favorite appears in the Favorite field drop down list for selection. These filter favorites are saved to the user account used to sign in to the management console.

Run a Favorite

To run a favorite:

1. Click the *Favorite* dropdown arrow.
2. Select a favorite from the list.
3. Click the *Go* button.

Remove a Favorite

To remove a favorite:

1. Click the *Favorite* dropdown arrow.
2. Select a favorite from the list.
3. Click the *Remove* button.

ORACLE

Download

You can download log files for viewing or parsing using other tools.

To download a log file:

1. Click the *Download Entire Log File* link or
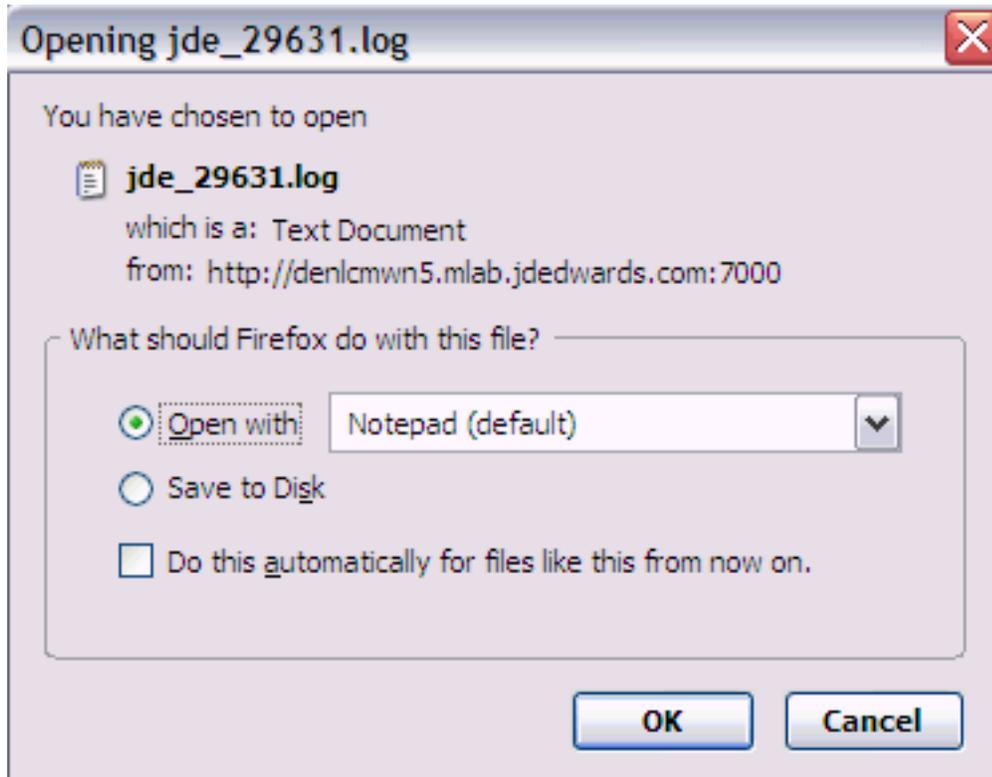
2. Select one of these options:

   ○ Open with

   ○ Save to Disk

3. Click the *OK* button.

Some very large log files might not be displayed properly within the log file viewer. If a file is too large for viewing using the integrated viewer, an appropriate message appears. You can still download these large log files for viewing with tools more suited to handling large text files.

Results

The second segment of the log file viewer is the log file. Results are color-coded and displayed in pages. EnterpriseOne log files are color coded for improved readability. The last date modified and file size information appears in the *Last Modified* and *File Size fields*.

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If the log file contains more lines than the current page size a dropdown appears on the upper and bottom right of the log contents. Use the dropdown or Previous/Next links to view the page of interest.

jde.properties Logging

The web based EnterpriseOne servers use the jdelog.properties file to configure their logging activity. The Java-based Enterprise Server kernels also utilize the `jdelog.properties` file to configure their own logging activity. *Server Manager* provides an interface to configure these log files without having to directly modify the corresponding properties file.
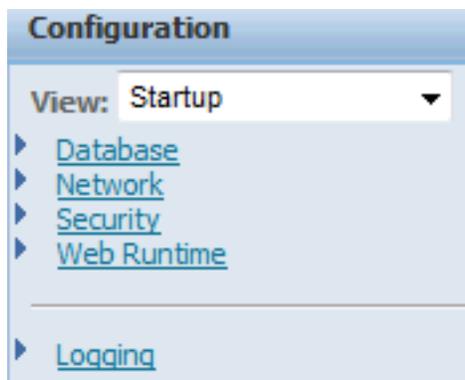
From the management page for an EnterpriseOne server select the *Database* link in the *Configuration* pane. A page appears that provides details about the current configuration defined within the properties file.

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Each configured log file appears as a row in the *Log File Configuration* section.

The grid fields in this section are:

- *Log Name*

  A unique identifier for this logging configuration. It is used as the section name in the jdelog.properties log configuration file.

- *Log File Name*

  The file name used to construct the actual file name. The actual log file is in the directory specified. The log file name is appended with the date the file was created and possibly the backup index of the file if the maximum size has been reached. For web products running using multiple JVMs a JVM specific identifier may also be appended to the generated log filename.

- *Log Level Threshold*

  Defines the threshold of log messages that should be written to the file. The order is Critical Errors, Warnings and Recoverable Errors, Application Level Activity, and Low Level Troubleshooting Messages (Verbose). Selecting Application Level Activity, for example, will receive all Critical Errors, Warnings and Recoverable Errors, and Application Level Activity level messages and Low Level Troubleshooting Messages (Verbose is ignored).

  The available values are:

  - Critical Errors
  - Warnings and Recoverable Errors
  - Application Level Activity
  - Low Level Troubleshooting Messages (Verbose)

- *Log Format*

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There are three different formats available that differ in the amount of technical information included with each log message.

The recommended format is Applications Format. The technical format contains the same information but adds the line number of the originating logging call. Line number information is not included in the EnterpriseOne products. Technical with Threads adds the name of the thread in which the log message originated.

- *Append Log Files*

  If TRUE, log files will append to existing log files with the same name. If FALSE, existing log files with the same name is truncated prior to writing the first log message.

- *Max. Log Size*

  This value defines the maximum size a log file may reach before it is renamed to a backup file and new log is created. The value should be specified in xxMB, where xx is a number specifying the number of Megabytes. Example: 10MB.

- *Max. Backup Index*

  The maximum number of backup files to retain. When a log file reaches the maximum allowed file size it is archived to another log file. This value specifies the maximum number of those backup entries to keep.

- *Log Components*

  Specifies the components within the EnterpriseOne product to log. You may specify ALL or the individual components (such as Runtime, JDBJ, etc.) that should be logged.

Remove Log Definitions

You can delete the log file definition by selecting the check box in the desired row and clicking the *Delete* button.

Apply Changes

After making changes, click the *Apply* button to save any modifications. Changes including adding new log configurations are dynamically re-loaded by the running managed instance each time the *Apply* button is selected.

For the web-based server products adding, modifying, or removing log files takes effect immediately after pressing *Apply* if the corresponding server is running. Java based enterprise server kernels will take up the modifications the next time the server is started.

New Log Configuration

New log definitions may be created by selecting the *Create New Log Configuration* button. The application prompts for a name for the new definition. The supplied name contains only characters and must not already be used by an existing log configuration. Select *OK* to create the new definition.

Server Manager creates a new log definition using default values based on the E1LOG definition, if present. The log file path is created based on the log definition name supplied. You can change any of the default values created just as you would modify any of the log configurations.

User Specific Log File Configuration

The *JD Edwards EnterpriseOne HTML Web Server* supports user-specific log definitions. Any activity by the configured user is logged to the corresponding file as configured. Creating and modifying a user-specific log definition is nearly identical to creating a regular log definition.

Create SQL Bind Values Inline Log File Configuration (Release 9.2.2.4)

You can merge the SQL bind values and the SQL statements instead of logging them in seperate HTML server log files by enabling the setting in the JDBJ log, as shown in the following example. You can specify a delimiter to separate the clause columns.

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The following example shows the SQL log statements.

```
SELECT * FROM OL920.F9860 WHERE (SIOBNM = 'F95820A   ')
SELECT TPTXTSEURL,TPTXTENGSL FROM SY920.F95820A WHERE (TPTXTPRTYP = 0 )
```

Create New User Specific Log File Configuration

Rather than prompt for the name of the log definition the application prompts for the user name instead.
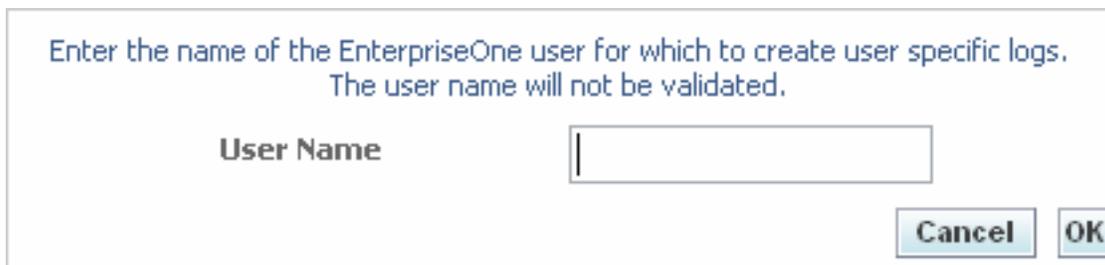
Understanding User Logging (Release9.2.8)

Starting with Tools Release 9.2.8, you can enable user-level logs for all the HTML and AIS server managed instances, the user is connected to, using User Logging in the Server Manager Console. You can also enable user logs for CallObject Kernels of EnterpriseOne servers from the same location. The User Logging option also allows you to disable, search, collect, download, and delete user-level logs.

The configuration for the user-level logs is stored in the `userloggingconfig.xml` file on the Server Manager Console and contains the user name and component information.

User Logging also enables you to combine logs for a specific user and download them in a single compressed file.

Accessing User Logging in Server Manager Console

To access User Logging, navigate to What do you want to do? section and under Diagnostics click User Logging.

Under User Logging Configuration, enter the name of the user in the User Name field for whom you want to configure user logs. You can enter only one user at a time.

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From Instance Type list, you can select the server type for which you want to configure user level logs. By default, Enterprise servers have CallObject as the defined Log Component.

For HTML and AIS servers you have the below log configurations available to update:

- Log Level Threshold

  Defines the threshold of log messages that should be written to the file. The order is Critical Errors, Warnings and Recoverable Errors, Application Level Activity, and Low Level Troubleshooting Messages (Verbose). Selecting Application Level Activity, for example, will receive all Critical Errors, Warnings and Recoverable Errors, and Application Level Activity level messages and Low Level Troubleshooting Messages (Verbose is ignored).

- Log Format

  There are three different formats available that differ in the amount of technical information included with each log message.

  The recommended format is Applications Format. The technical format contains the same information but adds the line number of the originating logging call. Line number information is not included in the EnterpriseOne products. Technical with Threads adds the name of the thread in which the log message originated.

- Append Log Files

  If TRUE, log files will append to existing log files with the same name. If FALSE, existing log files with the same name is truncated prior to writing the first log message.

- Max. Log Size

  This value defines the maximum size a log file may reach before it is renamed to a backup file and new log is created. The value should be specified in xxMB, where xx is a number specifying the number of Megabytes. Example: 10MB.

- Max. Backup Index

  The maximum number of backup files to retain. When a log file reaches the maximum allowed file size it is archived to another log file. This value specifies the maximum number of those backup entries to keep.

- Log Components

  Specifies the components within the EnterpriseOne product to log. You may specify ALL or the individual components (such as Runtime, JDBJ, etc.) that should be logged.

After you have entered the user name, selected the instance type, and updated the fields for HTML and AIS servers, you can use the below options to manage the user-level logs.

Enable User Logs

Updates and syncs the jdelog.properties file of all HTML and AIS server instances registered on the Sever Manager Console. It also updates JDE.ini file to add the selected user to User Debug Logging and sends a JDENET message to all Enterprise Server CallObject kernels.

To enable the user-level logs:

1. Enter the user name in Configure Logging for User Name field.
2. Select the instances type for which you want to enable user logs.
3. Configure the fields if you have selected HTML or AIS servers.
4. Click **Enable User Logs**.

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> **Note:** The time taken to enable user logs depends on the total number of server instances registered on the Server Manager Console.

Disable User Logs

Updates and syncs the jdelog.properties file of all HTML and AIS server instances to disable the user-level logs for the selected user. It also updates jde.ini file to remove the selected user from the User Debug Logging and sends a JDENET message to all Enterprise Server CallObject kernels to disable user-level logs for the selected user.

This removes the user-level log entry from the `userloggingconfig.xml` file for the selected user in the Sever Manager Console. Additionally, all the selected servers stop logging the user-level logs for the selected user.

Search User Logs

After you have enabled the user-level logs for a specific user, you can use the **Search User Logs** button to fetch the list of all the HTML, AIS, and Enterprise servers (Kernels) the user is connected to. The list includes links to the user-level logs. The Search User Logs options behaves as a refresh of user logs since the last activity.

Based on the instance type, the log files are divided in different sections. Enterprise Server Resources section lists the user-level logs for the Enterprise servers and EnterpriseOne HTML Server Sessions and EnterpriseOne AIS Server Sessions list the user-level logs for HTML and AIS servers respectively.

Collect User Logs

Each time you click the **Collect User Logs** button, compressed user-level log files are copied from all the Server Manager Agents to the Management Server. The collective user-level log files are compressed further and is saved in the temp directory, CaptureDiagnosticsZip.

Delete User Logs

Deletes all the user logs from all the HTML, AIS, and Enterprise servers registered on the Server Manager Console for the selected user.

> **Note:** After you delete the user logs, you must disable the user-level logs and enable it again to get the CallObject Kernel logs.

Downloading User Logs

User Logging provides you an option to download all the user-level logs for all the server instances registered on the Server Manager Console. After you collect the most recent user-level logs using the **Collect User Logs** option, you can download them using the Download Latest Zip--UserLogs link.

ORACLE

28 Update Server Manager

Update the Management Console

The *Management Console* and the *Management Agents* have codependent release levels. The *Management Console* constantly monitors the version levels of the registered *Management Agents* and if it determines that a registered *Management Agent* is out of sync (mismatched) with the *Management Console* 's own release level, then it notifies the user that an update is required for a specific *Management Agent* . This can happen any time you change the release level of the *Management Console* , either to a newer release or to an older release.

You must manually update a *Management Agent* when notified, as described in this chapter. If you do not update the *Management Agent* , unpredictable and undesirable results can occur in the execution of *Server Manager* requests on the target machine on which the *Management Agent* resides.

If you update the *Management Console* to a new Tools Version (for example, 8.98.3), you must upgrade the *Management Agents* to the same version. Otherwise your Server Manager cannot communicate and operate with the target machines as expected.

You update the *Management Console* by changing its *Software Component* using the same method as changing any other *Server Manager* *Managed Instance* (refer to Managed Software Components).

> **CAUTION:** Changing the *Software Component* version for the *Management Console* will automatically restart the *Management Console* application and terminate any active user sessions.

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Use the dropdown below to select the desired management view.

Select View   Managed Homes and Managed Instances   ▾

▬ Managed Homes

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you wish to not see it listed here you may remove it.

Select [Managed Home]:   Remove   Stop   Update   Start All Instances   Stop All Instances

Select All | Select None

Managed Home Location ↓ ⓘ	Managed Instances ⓘ
⇧ OETLAB2.mlab.jdedwards.com C:\jde_home	**home** Management Console ⇧ Running

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To update the *Software Component* :

1. On Managed Homes and Managed Instances, locate the Managed Home Location for your *Software Component* and click the link for the associated *Managed Instance* for *home*.

   This is the location you specified when you installed the *Software Component* , where the default is `c:\jdehome.`

2. In the General section of the page, under Software Component Version, click the *Change ...* button.

   The *Management Console* displays a popup with a list of available *Managed Software Components* is displayed. For example:

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3. On the Change Tools Release popup, you can select a *Software Component* radio button and click the *Change Component* button to change to that version.

The update process starts immediately and upon completion the *Management Console* application will automatically restart. If the *Management Console* fails to restart as expected, refer to *Troubleshooting an Unsuccessful Management Console Update* in this chapter for a description of symptoms and recovery.

> **Note:** To update the WebLogic Server to 12.2.1.3, you must first update the Tools Release to 9.2.2.4.

Update a Management Agent

After you update a Management Agent to a new tools version (for example, Tools Version 8.98.3), any existing WAS 6.x instances will display this message:

⚠ **Warning**

The Management Agent has acquired WebSphere Admin Client jars for WAS administration purposes and needs to be restarted to load the jars.

To resolve the Warning you must restart the Management Agent to complete the update process.

When the *Management Console* determines that a *Management Agent* version is out of sync (mismatched) with the version of the *Management Console* itself it displays a notification under the Managed Home Location of the applicable *Management Agent* . For example:

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Managed Homes and Managed Instances

Use the dropdown below to select the desired management view.

Select View   Managed Homes and Managed Instances ▼

⊟ Managed Homes

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you wish to not see it listed here you may remove it.

Select [Managed Home]:   Remove   Stop   Update   Start All Instances   Stop All Instances

Select All | Select None

Managed Home Location ↓ ⓘ	Managed Instances ⓘ
⇧ QELCMAS1.MLAB.JDEDWARDS.COM /Management Agents/dev_was **Agent Update Required**	QELCMAS1_WAS60_DEV IBM WebSphere 6 ⇧ Running

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To update a *Management Agent* :

1. On Managed Homes, select the Managed Home Location for which indicates: *Agent Update Required*.

2. Use the check box to select the appropriate Managed Home Location.

3. Click the *Update* button.

   The *Management Console* displays this confirmation dialog:

4. Click OK to immediately begin updating the selected *Management Agent* . Once the update is complete, *Server Manager* will automatically restart the *Management Agent* .

   When the pre 9.2 Server Manager Agent is updated to 9.2 (the update process initiated from the Server Manager Console itself when the "Agent Update Required" message is seen by the Administrator and the Administrator selects the checkbox and performs the update operation) from an earlier tools release, it is necessary for the Administrator to manually change/replace the $SCFHA/jdk/jre within the Server Manager Agent after the update.

   The Administrator should use a 32-bit jdk/jre if the Server Manager Agent is going to manage a Deployment/ Enterprise Server, otherwise use a 64-bit jdk/jre.

   It is recommended not to use the existing jdk/jre which came with the older Server Manager Agent installation.

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(Release 9.2.1) To start or to stop all the instances, on Managed Homes and Managed instances, click Start All Instances or Stop All Instances button.
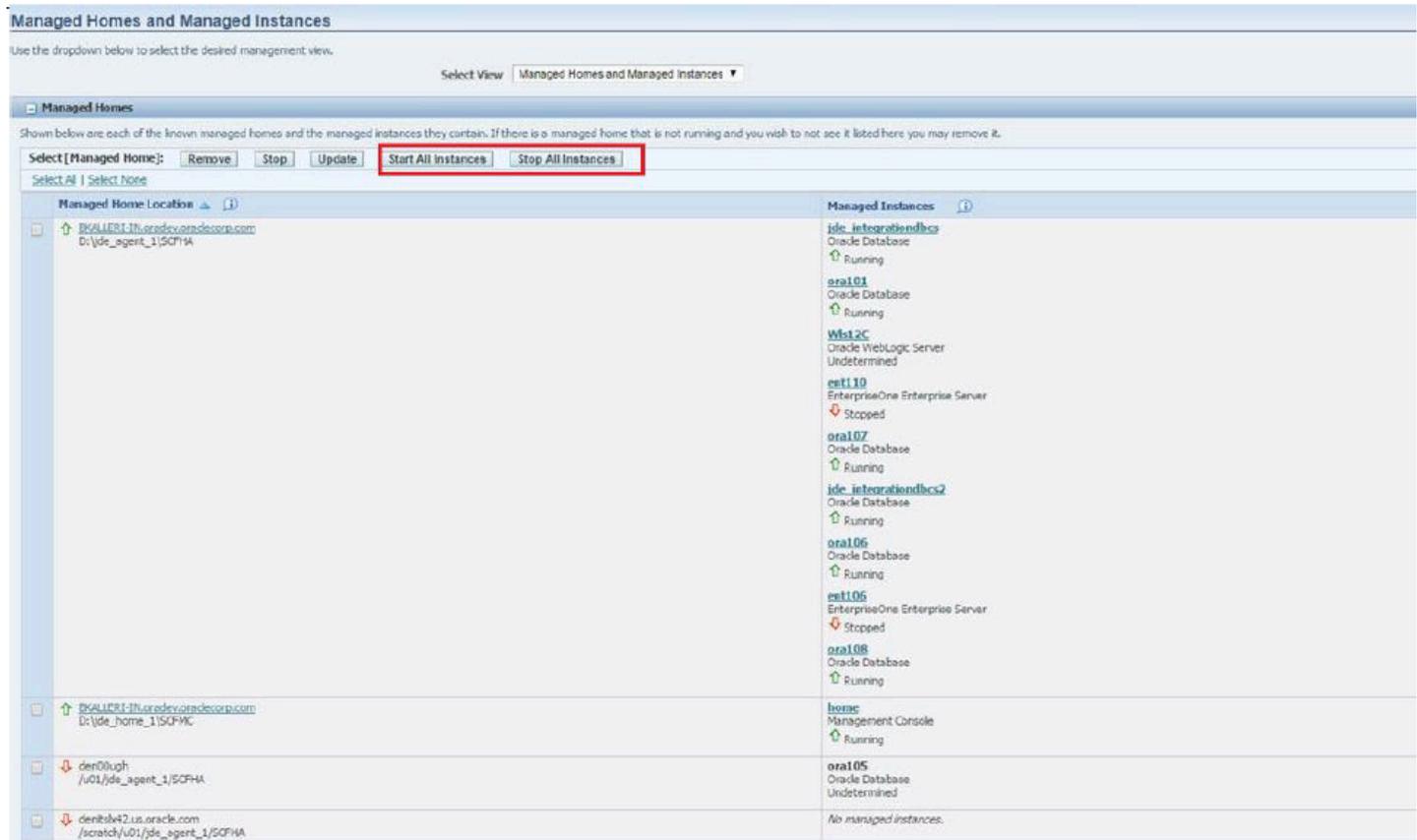
Troubleshooting an Unsuccessful Management Console Update

There may be times when updating the *Management Console* application is not successful. The symptoms of a failed updated is the lack of a logon screen after the update completes, even after restarting the *Management Console* . *Server Manager* provides a fallback script that can be used to redeploy the application and recover the *Management Console* without any data loss. The script will deploy the intended (change-to) release.

To troubleshoot an unsuccessful *Management Console* update:

1. Stop the *Management Console* service.
2. Start the *Management Console* service.
3. Open a command prompt and navigate to this directory:

   `\jde_home\targets\home\_staging`

   where `jde_home` is the install path of the *Management Console* .

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4. Invoke the `redeployManagementConsole.cmd` recovery script.

   The script takes one parameter, which is the password used to initially install the *Management Console* . For example

   ```
   redeployManagementConsole.cmd password
   ```

   Upon successful execution of this script, you can log on to the *Management Console* application.

(Release 9.2.2.4) If you updated WebLogic Server to 12.2.1.3 and the Management Console update was unsuccessful, troubleshoot the Management Console update before updating to EnterpriseOne Tools release 9.2.2.4 or later.

1. Ensure that the Server Manager Console is on a Tools Release earlier than 9.2.2.4.
2. Stop the Managed Server where Server Manager Console is installed on the WebLogic Server.
3. Extract the ManagementAgent_JAR file from 9.2.2.4 Server Manager JAR file. The ManagementAgent_JAR file is located at `<E1_ServerManagerConsole.jar>\ManagementConsole_WAR.ear\ManagementConsole_WAR.war\WEB-IN\lib\`.
4. Replace the ManagementAgent_JAR file with the file you have extracted in the previous step at following locations:

   o `<jde_home>/SCFMC/stage/ManagementConsole_WAR.ear/ManagementConsole_WAR.war/WEB-INF/lib`

   o `<WLS_HOME>/user_projects/domains/<domain_name>/servers/<server_name>/tmp/_WL_user/<application_name>/<folder_name>/war/WEB-INF/lib`

   You need not replace the ManagementAgent-JAR file at this location if the **lib** folder is not available.
5. Start the Managed Server.
6. Update the Tools Release for Server Manager to 9.2.2.4.

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29 Create a JD Edwards EnterpriseOne Data Access Server as a New Managed Instance

Prerequisites and Recommended Installation Sequence for Managed Instances for Data Access Server Instance

This list shows the prerequisites and recommended installation sequence for Managed Instances for JD Edwards EnterpriseOne Data Access Servers:

1. Prerequisite: Management Agent is installed on target machine.

   Refer to *Installing the Server Manager Management Console and Agent*.

2. Prerequisite: The Data Access Server Software Component is uploaded to the Management Console.

   Refer to *Upload Software Components*.

3. Prerequisite: The Data Access Server Software Component is distributed to the target Managed Home.

   Refer to *Distribute Software Components to Managed Homes*.

4. Create a Data Access Server as a New Managed Instance

   Refer to *Create a Data Access Server as a New Managed Instance*.

> **Note:**
> - Refer to the *JD Edwards EnterpriseOne Interoperability Guide* in the chapter *Using Java Database Connectivity* for additional tasks and topics related to the Data Access Server.
> - *JD Edwards EnterpriseOne BI Publisher for JD Edwards EnterpriseOne Guide*
> - Refer to various Red Papers in the Red Paper Library on Customer Connection.
>
>   Navigation: Customer Connection > Implement, Optimize, and Upgrade > Implementation Guide > Implementation Documentation and Software > Red Paper Library
>
>   *http://www.peoplesoft.com/corp/en/iou/red_papers/index.jsp*

Create a Data Access Server as a New Managed Instance

You must use *Server Manager* to install a Data Access Server instance.

> **Note:**
> - *Prerequisites and Recommended Installation Sequence for Managed Instances for Data Access Server Instance*

To install a JD Edwards EnterpriseOne EnterpriseOne Data Access Server instance:

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Managed Homes

Shown below are each of the known managed homes and the managed instances they contain. If there is a managed home that is not running and you wish to not see it listed here you may remove it.

Select [Managed Home]:   Remove   Stop   Update

Select All | Select None

Managed Home Location	Managed Instances
☐ ⬆ DENIS5.MLAB.JDEDWARDS.COM /jdehome_jdbc	No managed instances.

1. Select the *Managed Home* in which you wish to install the Data Access Server.

Managed Instances

Shown below are all the managed instances owned by the managed home. Use caution when removing instances. Depending on the instance type this may involve uninstalling and/or deleting the EnterpriseOne server installation.

Select [Managed Instance]:   Remove Instance

Select All | Select None

Instance Name	Managed Instance Type	State
☐ DENLCMLX2_EnterpriseServer	EnterpriseOne Enterprise Server	⬆ Running
☐ ocm	Oracle Configuration Manager	⬇ Stopped

Create New Managed Instance

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2. Click the *Create a New Managed Instance* button to create the *Managed Instance* in the *Managed Home* .

3. On Create/Register a Managed Instance, Instance Type, select this radio button:

EnterpriseOne Data Access Server

4. Click Continue.

Create/Register A Managed Instance

Shown below are all the instance properties that are required to create/register a new instance of the selected type. Complete the required fields and select 'Continue' to proceed to the next step.
characters [a-zA-Z_0-9]; spaces or other special characters are not permitted.

| Instance Type | Instance Properties | Confirmation | Finish |

Server Group	JDE
Instance Name	BIP
Usage Type	10g BI Publisher
Install Location	<BIPUB_ROOT>\xmlpserver\xmlpserver\WEB-INF\lib
Software Component	EnterpriseOne Data Access Driver 9.1.3.1 04-03-2013_08_39
Propagate Enterprise Server Config	NONE
	NONE
	ES

5. On Create/Register a Managed Instance, Instance Properties, complete these fields:

- *Server Group*

  Use the pulldown to select the Server Group to which you want this instance to belong.

  Also refer to *Administer Server Groups*.
- *Instance Name*

  Enter a name for the instance.

  > **Tip:** A good business practice is to name your instances so that they are easily and consistently identifiable. For example: `PRODUCT_SERVER_PORT` where `PRODUCT` is the *JD Edwards EnterpriseOne* server type, such as `Data Access_Server`, and where `SERVER` is the machine on which the instance is installed, and where `PORT` is the HTTP port which is defined for use by this server.

- *Install Location*

  Specify where the Data Access Server is to be installed.

  This location must be unique and *not* within the *Management Agent* directory structure.
- *Software Component*

  Use the dropdown to select the version of this *Software Component* that you wish to install.

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6. Click Continue.

Create/Register A Managed Instance

Shown below are the configuration items that must be manually confirmed. Please validate or update, as appropriate, the configuration items. Once complete select 'Continue' to

Instance Type   Instance Properties   Confirmation   Finish

Outgoing JDENET Port	6014
Incoming JDENET Port	6014
System Datasource Name	System - 812
Database Type	Oracle Database
Database Name	ora102.denfnhp1
Database Server Name	denfnhp1
Database TCP/IP Port	1521
Physical Database	
Object Owner	SY812
Supports Large Objects (LOBS)	☑
Unicode Database	☑
Primary Security Server	denfnhp1
Bootstrap User	JDE
Bootstrap User Password	JDE
Bootstrap Role	*ALL
Bootstrap Environment	DV812

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7. On Create/Register a Managed Instance, Confirmation, review the key configuration items. The values on this form must be manually confirmed. You must validate or update, as appropriate, all configuration items.

> **Tip:** For help, click the Information icon next to the title of a field.

> **Note:**
>   ○ *Configure the Default Server Group Configuration Settings*

8. After you have validated and updated all configuration items, click Continue to proceed to the next installation step.

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9. On Create/Register a Managed Instance, Finish, click the Create Instance button to complete the installation of the EnterpriseOne Data Access Server.

Once complete the browser is redirected to the Management Console page for the newly registered Data Access Server. This server also appears as a Managed Instance within the corresponding Managed Home.

For each registered Managed Instance, the Management Console displays appropriate information at the top of the page:

- *General*

  - *Status*

    Valid values are:

    Running

    When the status is Running, the *Stop* button is available.

    Stopped

    When the status is Stopped, the *Start* button is available.

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> **Note:**
>
> o *Start or Stop a Managed EnterpriseOne Software Component*

- *Software Component Version*

  Displays the version of this *Software Component* .

  > **Note:**
  >
  > o *Change a Managed EnterpriseOne Software Component*

- *Data Access Server Password*

  Allows you to change the Data Access Server Password when the Data Access Server is running.
  The new password is taken from the current configuration value for the Data Access Server
  Password.

o *Instance Properties*

- *Install Location*

  The location Data Access Server was installed.

- *Instance Name*

  The name assigned to the *Managed Instance* at the time it was created or registered.

For information on log files, refer to the chapter entitled: *Available Log Files*.

30 View Runtime Metrics for a Managed Instance

Enterprise Server Runtime Metrics

The runtime metrics provide operational information about insight to the EnterpriseOne servers. Runtime metrics are only available when the server is running.
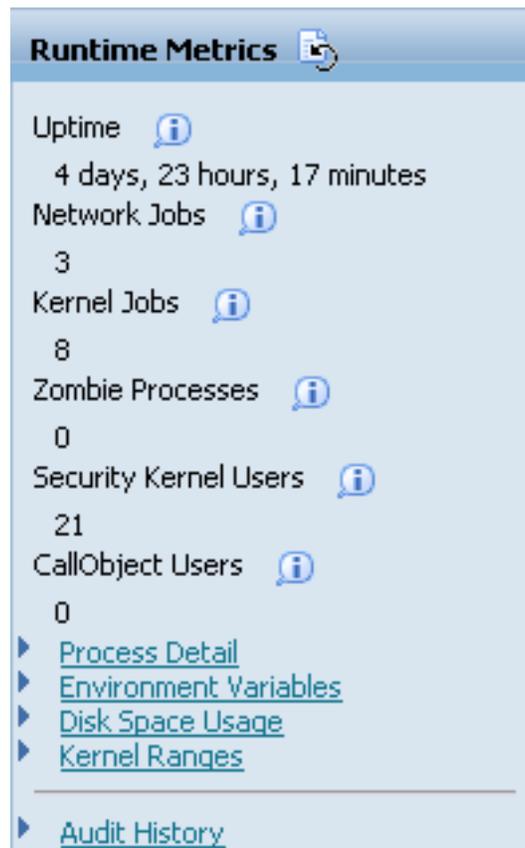
A Runtime Metrics information summary and links to detailed information are available for each Enterprise Server that is running. Metrics are provided by an embedded variant of the management agent built into each EnterpriseOne server. A new kernel definition, the management kernel, was added in 8.97. A single management kernel process is created when the enterprise server is started. The management kernel is responsible for securely networking between the enterprise server and the server manager management console while providing the runtime details of the enterprise server.

> **Note:** You must import the Server Manager Console certificate to the Trust Sore of all the Managed Targets that have the Runtime Metrics. Otherwise, the Runtime feature will not work with the Server Manager Console configured on HTTPS/SSL.

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The following runtime metrics are available for a running enterprise server:

- *General*
- *Process Detail*
- *Environment Variables*
- *Disk Space Usage*
- *Kernel Ranges*
- *Audit History*

General

Runtime Metrics will display runtime information for these parameters:

- *Uptime*

  The amount of time the Enterprise Server has been running.

- *Network Jobs*

  The number of network listener processes (jdenet_n) that are currently running.

- *Kernel Jobs*

  The total number of kernel processes (jdenet_k) that are currently running.

- *Zombie Processes*

  Zombie status refers to an Enterprise Server process that has unexpectedly terminated without properly cleaning ups its resources. This value will display the total number of zombie processes that are tracked in the enterprise server shared memory segment.

- *Security Kernel Users*

  The number of EnterpriseOne users that have a currently active security server connection to the Enterprise Server.

- *Call Object Users*

  The number of EnterpriseOne users that have a currently active CallObject (business function) connection to the Enterprise Server.

Process Detail

Information about all of the running network, kernel, and other enterprise server processes can be viewed by selecting the Process Detail hyperlink from the Runtime Metrics pane. The management kernel process will periodically query the enterprise server to retrieve the runtime information. This polling will occur approximately every thirty seconds; therefore it is possible that the information displayed through the server manager process detail pages may be up to 30 seconds old.

The process detail page includes:

- *A Process Summary*
- *A Batch Summary*

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- *A Process Table*

The top of the page includes a Process Summary section providing a quick reference to the number of active enterprise server processes and provides a Batch Summary that displays the running batch queues, active batch jobs, and pending batch jobs.

A Process Summary

The status information fields for Process Summary are:

- *Network Jobs*

  The total number of network listener jobs active on the Enterprise Server.

- *Kernel Jobs*

  The total number of kernel jobs active on the Enterprise Server.

- *Thread Count*

  The total number of threads active on the Enterprise Server.

A Batch Summary

The status information fields for Batch Summary are:

- *Batch Queues*

  The number of batch queues that are managed by the queue kernel process on the Enterprise Server.

- *Active Jobs*

  The number of jobs that are currently being processed (running) in the batch queues.

- *Waiting Jobs*

  The number of jobs that are currently in the queue awaiting processing.

A Process Table

The process table contains a row for each EnterpriseOne server process contained within the shared memory segment. The shared memory segment is created by the first server process created during server startup. Each additional server process will register itself within that shared memory segment. Server Manager uses this shared memory to identify and display all the running server processes.

The process table lists each of the processes found. Each process is displayed along with some key columns. The table also provides links to directly view the associated JDE and JDEDEBUG log files.

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Selecting the process name will display more detailed information.

This section describes:

- *Remove Zombie*
- *Process Detail*

| Select [Process]: | Remove Zombie | | | | | | | | |

Select All | Select None

Process Name	Process Type	Process ID	Process Status	JDELOG File Size	Debug Log Size	Connected Users	Total Requests	Outstanding Requests
☐ SAW KERNEL	Kernel Process	16118	RUNNING	394	97	0	135243	0
☐ METADATA KERNEL	Kernel Process	16001	RUNNING	593	97	0	33935	0
☐ SECURITY KERNEL	Kernel Process	16014	RUNNING	759	97	1	42089	0
☐ SECURITY KERNEL	Kernel Process	16022	RUNNING	759	97	1	42084	0
☐ QUEUE KERNEL	Kernel Process	15994	RUNNING	397	97	0	42081	0
☐ WORK FLOW KERNEL	Kernel Process	17448	RUNNING	1409	97	0	33757	0
☐ jdenet_n	Network Listener	16535	RUNNING	664	97	-	85	-
☐ jdenet_n	Network Listener	16376	RUNNING	702	97	-	6	-
☐ jdenet_n	Network Listener	16375	RUNNING	329	97	-	2	-
☐ jdenet_n	Network Listener	16117	RUNNING	143	97	-	220013	-
☐ SECURITY KERNEL	Kernel Process	16005	RUNNING	759	97	1	42087	0
☐ /u04/e812/system/bin32/jdenet_n	Network Listener	15990	RUNNING	166	97	-	4	-
☐ MANAGEMENT KERNEL	Kernel Process	16003	RUNNING	420	97	0	33917	0

Remove Zombie

A zombie process is an enterprise server process registers itself within the shared memory segment then terminates without removing its registration information shared memory. The most likely cause of a zombie process is a process that performs an illegal operation and is terminated by the host operating system.

Zombie process may have their information removed from the shared memory segment. Removing the zombie process will prevent it from showing up in the process table. To remove a zombie process select the check box next to a process in the zombie state and click the Remove Zombie button. Selecting and attempting to remove a process that is not in the zombie state will have no effect.

Process Detail

Selecting the process name in the process table section will display additional information about that process.

The additional detail includes:

- General Information
- Connected Users
- Log File Configuration
- Thread Detail

Process ID: 29517

(V) Connected Users   (V) Log File Configuration   (V) Thread Detail

When an individual process is selected for viewing, a process detail screen will be displayed with the Process ID number in the heading of the page. The General Information section is always displayed followed by additional relevant sections. Hyperlinks will appear below the Process ID that will link to the additional sections.

General Information

General Information	
Process Name	SECURITY KERNEL
Process Type	Kernel Process
Kernel Range	3
Process ID	16014
Process Index In Shared Memory	5
Start Time	9/12/07 10:45 AM
Last Active Time	9/12/07 10:45 AM
Messages Received	42504
Outstanding Requests	0
Parent Process ID	15990
iSeries Job Number	0
Process User Id (OS)	529
OS Group ID	534
OS Username	jde812
OS Status	1

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The General Information section will provide information for these parameters:

- *Process Name*

  The name of the kernel process. The name indicates which kernel definition the kernel belongs to.

- *Process Type*

  The description of the Enterprise Server process type.

- *Kernel Range*

  The kernel definition index. The Enterprise Server is composed of kernels that process messages from other servers and clients. There are more than thirty different types of kernels. The range index indicates which kernel group this kernel belongs to.

- *Process ID*

  The operating system assigned process identifier for the kernel process.

- *Process Index In Shared Memory*

  An internal identifier used to locate the process position in the shared memory resources that track kernel and network processes.

- *Start Time*

  The time the process was created.

- *Last Active Time*

  The last time the kernel performed any activity such as processing incoming JDENET messages.

- *Messages Received*

  The total number of messages (requests) that have been processed by the kernel process.

- *Outstanding Requests*

  The number or requests that are queued and awaiting processing by the kernel process.

- *Parent Process ID*

  The operating system assigned process identifier of the parent process.

- *IBM i Job Number*

  The job number of the process, valid on the *IBM i* platform only.

- *Process User ID (OS)*

  The operating system user id under which the process is running.

- *OS Group ID*

  The group identifier of the os user running the process; valid only on unix based platforms.

- *OS Username*

  The operating system user name under which the process is running.

- *OS Status*

  The status of the process as reported by the operating system:

0 = Sleeping

1 = Running

2 = Stopped

3 = Zombie

4 = Other

Connected Users

Security and CallObject kernel processes have active users associated with the process. The page will display a section containing the names, originating machine, and connection time of each remote user that is active on the kernel process.

Log File Configuration

Logging may be dynamically enabled or disabled for an individual process.

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The Log File Configuration section will contain up to three segments. The first segment allows for configuration enablement of the JDE.LOG and the JDEDEBUG.LOG, and for setting the log levels for different log files.

The parameters available to change log files are:

- *Enable JDE.LOG*

  This setting controls whether error and other significant messages are written to the jde.log. It is highly recommended this logging type always be enabled.

- *Enable JDEDEBUG.LOG*

  This setting controls whether debug and trace messages are written to the jdedebug.log. These messages are very useful when troubleshooting an Enterprise Server; however, enabling debug logging will impact performance.

- *JDECACHE log level*

  Configures the level of logging generated by the cache manager. This setting will have no effect if JDEDEBUG logging is disabled.

- *IPC log level*

  Configures the level of logging generated by the interprocess communication (IPC) related functionality. This setting will have no effect if JDEDEBUG logging is disabled.

- *JDENET log level*

  Configures the level of logging generated by the JDENET network related functionality. This setting will have no effect if JDEDEBUG logging is disabled.

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- *Thread log level*

  Configures the level of logging generated by the thread handling functionality. This setting will have no effect if JDEDEBUG logging is disabled.

- *JDETAM log level*

  Configures the level of logging generated by the TAM specification access routines. This setting will have no effect if JDEDEBUG logging is disabled.

- *Security log level*

  Configures the level of logging generated by the security related functionality. This setting will have no effect if JDEDEBUG logging is disabled.

- *ENVDOC log level*

  Configures the level of logging generated by the EVNDOC (Interop) functionality. This setting will have no effect if JDEDEBUG logging is disabled.

- *IEO log level*

  Configures the level of logging generated by the IEO (Interop) functionality. This setting will have no effect if JDEDEBUG logging is disabled.

Click the Save button to save any changes made to the parameters.

The second segment will display the filename, size, and last modified date of the JDE.LOG file. Select the View button to retrieve and view the log file contents using the integrated log file viewer.

See *Log File Viewer*

The third segment will display the filename, size, and last modified date of the JDEDEBUG.LOG file. Select the View button to retrieve and view the log file contents using the integrated log file viewer.

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JDEDEBUG.LOG Log File

The filename of the log file.

/u04/e812/log/jdedebug_29517.log

The size of the log file, in bytes.

97

The last modified date of the log file

9/17/07 9:41 AM

View

Thread Detail

The active threads for the Enterprise Server process are displayed in the Thread Detail section. Each thread is displayed along with its thread identifier, index in shared memory, and thread name. If thread metrics are enabled selecting a thread identifier will display additional thread related metrics.

Thread Detail   ∧ Return To Top

Thread ID	Thread Index	Thread Name
-1218586400	6	MAIN_THREAD

If Thread metrics has been enabled, then when the hyperlink for a Thread ID is clicked, then a Thread metrics screen will appear with additional information for the Thread ID. If Thread metrics has not been enabled, then this screen will appear:

Thread metrics

Thread metrics are not enabled for the selected kernel. You may enable thread metrics configuring the "Thread Level Debug" configuration value to 1 or 2.

Environment Variables

The Environment Variables hyperlink, when selected, will display the environment variables that are active on the selected Enterprise Server. The displayed environment variables are those that were used to create the server process. Changes made after the kernel process was started will not be reflected.

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Environment Variables

Shown below are the environment variables for the selected enterprise server. The displayed environment variables are those that were used to create the server process. Changes made after the kernel process was started will not be reflected.

```
-

-
ACRO_RES_DIR
        /u02/jdedwards/e812/system/resource/cmap
APPDEV
        /u02/jdedwards/e812/appdev
BASH
        /bin/sh
BASH_VERSINFO
        ([0]="2" [1]="05b" [2]="0" [3]="1" [4]="release" [5]="i386-redhat-linux-gnu")
BASH_VERSION
        '2.05b.0(1)-release'
DB2BASEDIR
DB2DIR
DB2INSTANCE
DIRSTACK
        ()
EUID
        529
EVRHOME
        /u02/jdedwards/e812
GROUPS
        ()
G_BROKEN_FILENAMES
        1
```

Disk Space Usage

The Disk Space Usage hyperlink, when selected, displays this information on the disks that make up the Enterprise Server that you are monitoring.

Disk Space Usage

Shown below are all the disk volumes on the enterprise server.

Name	Volume	Used Space (KB)	Free Space (KB)	Volume Size (KB)
/dev/sda6	/u03	25097188	3922264	30572444
/dev/sda1	/	9129772	2352292	12096536
/dev/sda3	/u01	32920	13744124	14514336
/dev/sda2	/u02	14917380	11874032	28225188
10.139.150.182:/denkcmlx2	/u04	240	314405776	314406016
none	/dev/shm	0	1277912	1277912

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The information available on the Disk Space Usage screen is:

- *Name*

  The name of the physical disk.

- *Volume*

  The volume, or mount point, of the disk.

- *Used Space (KB)*

  The amount of space that is currently in use on the disk, in kilobytes.

- *Free Space (KB)*

  The amount of space that is available on the disk, in kilobytes.

- *Volume Size (KB)*

  The total amount of space available on the disk, in kilobytes.

Kernel Ranges

Selecting the Kernel Ranges hyperlink will link to the Kernel Ranges screen. This screen has two sections:

- *Network Listener Jobs (JDENET_N)*
- *Kernel Process Jobs (JDENET_K)*

Network Listener Jobs (JDENET_N)

Kernel Ranges

Network Listener Jobs (JDENET_N)

Use the form below to specify the maximum number of simultaneous network listener jobs.

Maximum Net Listeners   ⓘ   `10`   Save

The first section of this screen is for Network Listener Jobs (JDENET_N). The maximum number of simultaneous network listener jobs can be designated by entering a number into the Maximum Net Listeners field.

- Maximum Net Listeners

  The maximum number of network listener jobs (jdenet_n) that may be active at any given time.

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Kernel Process Jobs (JDENET_K)

Kernel Process Jobs (JDENET_K)

Shown below are each of the kernel types and the current number of active processes for each type.

Kernel Index ↓ (i)	Kernel Type (i)	Active Kernel Count (i)	Current Maximum (i)	New Maximum (i)
1	JDENET RESERVED KERNEL	0	1	1 [Save]
2	UBE KERNEL	0	1	1 [Save]
3	REPLICATION KERNEL	0	1	1 [Save]
4	SECURITY KERNEL	3	3	3 [Save]
5	LOCK MANAGER KERNEL	0	1	1 [Save]
6	CALL OBJECT KERNEL	0	3	3 [Save]

This section will list each of the kernel types and the current number of processes for each type. The information in this section includes:

- *Kernel Index*

  The kernel definition index. Each kernel type has a distinct value, which corresponds to the JDENET_KERNEL_DEF## section in the JDE.INI where ## represents the kernel index value.

- *Kernel Type*

  A textual description to the kernel process type.

- *Active Kernel Count*

  The number of kernel processes of the specified type that is running.

- *Current Maximum*

  The current maximum number of processes of the specified type that may simultaneously exist. This value is an in-memory value only; if the Enterprise Server is restarted the maximum processes will be reloaded from the INI configuration file.

- *New Maximum*

  You may specify a new maximum number of simultaneous processes for a particular kernel. The value must be equal to or greater than the current number of processes of the specified kernel type.

If the *New Maximum* has been changed, click the *Save* button next to the changed number to save the change.

Audit History

You may view the configuration changes that have occurred over time by selecting the audit history link. Each configuration item that has changed will be listed in chronological order. You may also use the filter criteria to narrow

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down the results returned. Audit history will also contain a record for each start and stop of the server that was performed using server manager. This screen has three sections:

- *Report Configuration*
- *Deployment History*
- *Changed Metrics*

Report Configuration

The Report Configuration section will display all of the timestamps in which audit events have been recorded.

The fields and values that are reported are:

- *Timestamp*

  This field will have values that can be selected from a dropdown box in the format of date, then time.

- *Granularity*
- This field allow you to choose:

  Minute

  Hour

  Day

- *Metric Name*

  This field permits narrowing down the returned results to specific configuration topics.

After selecting the values for these parameters, click the *Submit* button to process your selection.

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Deployment History

Deployment History will provide information for the selected instance including installs, uninstalls, and changes to the tools release within the selected time period.

Deployment History Since 12/31/69 5:16 PM

Shown below are the deployment history for the selected instance including installs, uninstalls, and changing the tools release within the selected time period.

Previous | 1 - 10 | Next

Timestamp	User Name	Activity	Description
7/18/07 2:18 PM	Unknown	performDefaultConfig	The instance was configured to factory default values.
7/18/07 2:22 PM	jde_admin	start	The managed instance was started.
7/31/07 2:55 PM	jde_admin	stop	The managed instance was stopped.
7/31/07 2:55 PM	jde_admin	start	The managed instance was started.
7/31/07 3:09 PM	jde_admin	stop	The managed instance was stopped.
7/31/07 3:11 PM	jde_admin	start	The managed instance was started.
7/31/07 5:02 PM	jde_admin	stop	The managed instance was stopped.
7/31/07 5:02 PM	jde_admin	start	The managed instance was started.
8/1/07 11:08 AM	jde_admin	stop	The managed instance was stopped.
8/1/07 11:08 AM	jde_admin	start	The managed instance was started.

Changed Metrics

Changed Metrics will display all the configuration metric changes within the selected time period.

Changed Metrics Since 12/31/69 5:16 PM

Previous | 1 - 10 | Next

Timestamp	User	Metric Name	Configuration Item	Old Value	New Value
7/18/07 2:18 PM	Unknown	JDENET Configuration	Net Temporary Directory	/u02/management-agent/targets/812_Enterprise/temp	/u02/management-agent/targets/DENLCMLX2_EnterpriseServer/temp
7/18/07 2:18 PM	Unknown	Workflow	Interoperability Flag	Empty	ON
7/18/07 2:18 PM	Unknown	Server Manager Configuration	Instance Name	812_Enterprise	DENLCMLX2_EnterpriseServer
7/31/07 2:36 PM	jde_admin	JDENET Configuration	Interop Timeout	60	0
7/31/07 2:36 PM	jde_admin	JDENET Configuration	entserver_jdenet.servicenameconnect	6014	6015
7/31/07 2:36 PM	jde_admin	JDENET Configuration	Service Name Listen	6014	6015
7/31/07 2:36 PM	jde_admin	JDENET Configuration	entserver_jdenet.servicenameconnect	6015	6018
7/31/07 2:36 PM	jde_admin	JDENET Configuration	Service Name Listen	6015	6018
7/31/07 2:56 PM	jde_admin	DB System Settings	Server Port	Empty	1521
7/31/07 3:10 PM	jde_admin	JDENET Configuration	Maximum Kernel Processes	31	50

EnterpriseOne Web-based Servers Runtime Metrics

Runtime Metrics for EnterpriseOne web products provides metric information for:

- *User Sessions (HTML Server Only)*

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- *CallObject Stats*

- *JDBj Database Caches*

- *Database Connections*

- *JDBj Runtime*

- *JDENET Stats*

- *Java Environment*

Runtime Metrics

- User Sessions
- CallObject Stats
- JDBj Database Caches
- Database Connections
- JDBj Runtime
- JDENET Stats
- Java Environment
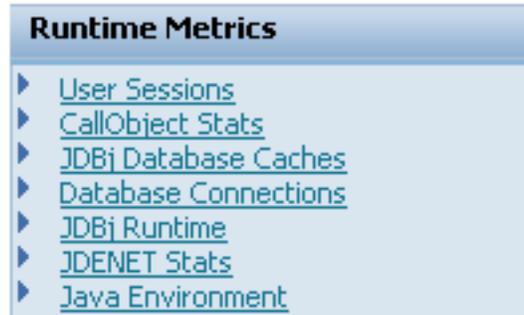
User Sessions (HTML Server Only)

Active user sessions may be viewed for a single HTML server instance or across all instances you are authorized to view.

This section describes:

- *Terminate*

- *Send Message*

User Sessions

Select the instance name of the managed instance from which you wish to view user sessions. You may also select the 'All' option to view all currently running managed instances.

Instance Name   DEVWEB6

In the Instance Name field, select the instance name of the managed instance from which you wish to view user sessions, or select ALL to view all instances.

- *Instance Name*

    The name of the instance. The selections available are:

    ALL

    individual instance name

    home

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Active User Sessions information includes:

- *JVM Node Id*

  An identifier that uniquely identifies a singe JVM.

- *User Name*

  The user name that created the HTML server session.

- *Client Address*

  The name of the remote machine used to create the user session. This may be returned as the machine name or IP address. If proxy servers are used the machine name may be that of the proxy server and not the actual remote client.

- *Environment*

  The name of the user's sign in environment.

- *Display Mode*

  This value indicates the type of user session: 'HTML' for HTML server session, 'Data Browser', or 'Portal'.

- *Login Time*

  The time the user session was created.

- *Idle Time*

  The amount of time, in seconds, that the user has been idle.

- *Remote Environments*

  Each remote environment represents a call object kernel session that has been created for the user. The format is host:port PID:pid, where host indicates the name of the enterprise server, port indicates the JDENET port of the enterprise server, and pid indicates the process id of the corresponding call object kernel process.

- *Session Identifier*

  A unique identifier for each user session.

- *Open Applications*

Each application stack currently active for the user session will be listed.

Terminate

The *Terminate* button is available to terminate user sessions. You may terminate a user session along with any applications that are running. Use caution because the user will not be informed of this action and any work in progress may be lost. Select a check box for the user session that needs termination, and then click the *Terminate* button. A management console user must posses the userSession permission granted for the managed instance on which the user is active in order to terminate the session.

Send Message

The *Send Message* button is available to send messages to the applications active within a user session. You may select users and send a message. Messages will be received only by users who have an application running, and only when they perform an activity within the application such as pressing *Find* on the toolbar.

CallObject Stats

The CallObject statistics detail the business functions that have been invoked by a web product. Each business function that is called is recorded and displayed along with timing, invocation counts, and error counts.

Call Object (BSFN) Stats

Shown below are the business function executation statistics for all web servers.

Instance Name | All | ⌄ |

Submit Query

Business function invocations and related statistics may be viewed for a single instance or multiple instances In the Instance Name field, select the instance name of the managed instance from which you wish to view user sessions, or select ALL to view all instances you are authorized to view. After making the selection, click the Submit Query button to refresh the results.

- *Instance Name*

   The name of the instance. The selections available are:

   ALL

   individual instance name

   home

CallObject Table

Statistics may be dynamically cleared for individual or all business function invoked.

Select [Business Function Statistic]:   Reset Statistic

Select All | Select None

	JVM Node Id	Enterprise Server	Business Function Name	Total Invocations	First Time	Average Time	Shortest Time	Longest Time	Total Time	Timeout Errors	Application Errors	System Errors
☐	CONTAINER1.default_group.1	DENLCMLX2:6018	[init-remote-env]	1668	67135	60220	30090	66018	100386824	0	0	1668

✓ The first invocation of a business function will not be included in the cumulative time.

The Call Object (BSFN) Stats window displays cumulative data about each type of business function that has run during a server session. This table summarizes the information displayed for each business function:

- *JVM Node Id*

  An identifier that uniquely identifies an individual JVM. This column will appear only if an instance was detected with multiple JVMs.

- *Enterprise Server*

  The Enterprise Server name and port of the Enterprise Server to which the statistic applies.

- *Business Function Name*

  The name of the business function.

- *Total Invocations*

  The total number of invocations of the business function.

- *First Time*

  The amount of time, in milliseconds, that a first invocation of the business function took. The first invocation is not counted towards the average due to its initial overhead.

- *Average Time*

  The average time, in milliseconds, that a first invocation of the business function took. The first invocation is not counted towards the average due to its initial overhead.

- *Shortest Time*

  The shortest amount of time, in milliseconds, that an invocation of this business function took.

- *Longest Time*

  The longest amount of time, in milliseconds, that an invocation of this business function took.

- *Total Time*

  The longest amount of time, in milliseconds, that an invocation of this business function took.

- *Timeout Errors*

  The number of invocations of this business function that resulted in a JDENET timeout rather than a successful completion.

- *Application Errors*

  The number of invocations of this business function that resulted in an application returned error rather than a successful completion.

- *System Errors*

  The number of invocations of this business function that resulted in a system error rather than a successful completion.

The CallObject Information view also displays the number of business function processes in progress. This number can be important for troubleshooting purposes. A large number of in-progress processes may indicate that the Enterprise Server is running slowly and alert you that you need to investigate the possible causes.

Reset Statistic

The *Reset Statistic* button will reset the statistics for the selected business functions.

JDBj Database Caches

JDBj Database Caches cache management enables one to select the Instance that they want to look at, and within the Instance the Cache name that they want to track. Based on this selection the appropriate JDBj Service Cache metrics are displayed. Caches maintained by the HTML server may be viewed and cleared across a single or multiple instances.

Cache Management

Instance Name	WEBSERVER1 ▾
Cache Name	All ▾
	Submit Query

In the *Instance Name* field, select the instance name of the managed instance from which you wish to view user sessions, or select ALL to view all instances. After making the selection, click the *Submit Query* button.

The fields in the Cache Management section are:

- *Instance Name*

  All can be selected which will display every instance selected, or an individual instance can be selected. The selections available are:

  All

  individual instance name

  home

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- *Cache Name*

  All can be selected which will display every cache within the instance selected, or an individual cache can be selected.

  Values available are:

  Data Dictionary Glossary Text

  Data Dictionary Alpha Cache

  Row Column Cache

  JDBJ Security Cache

  JDBJ Service Cache

  Serialized Objects

  Menu Cache

Select a value from the Instance Name and Cache Name field. When both fields have been selected, then click on the Submit Query button.

JDBj Service Caches

	Instance Name	Cache Name	Cache Hit Ratio	Cache Size (Entries)	Cache Accesses	Cache Hits	Cache Misses
☐	WEBSERVER1	Serialized Objects	0.0	0	0	0	0
☐	WEBSERVER1	Row Column Cache	0.0	0	0	0	0
☐	WEBSERVER1	Data Dictionary Glossary Text	0.0	0	0	0	0
☐	WEBSERVER1	JDBj OCM Cache	0.0	0	0	0	0
☐	WEBSERVER1	Data Dictionary Alpha Cache	0.0	0	0	0	0
☐	WEBSERVER1	JDBj Service Cache	0.0	0	0	0	0
☐	WEBSERVER1	JDBj Security Cache	0.0	0	0	0	0

JDBj Services Caches are displayed for the selected managed instances.

- *Instance Name*

  This will display based on the Instance Name selected in the previous Instance Name drop down selection. The unique name assigned to the managed instance at the time it was created or registered.

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- *Cache Name*

  This will display based on the Instance Name selected in the previous Instance Name drop down selection. The name of the JDBj service cache.

- *Cache Hit Ratio*

  The ratio of cache requests that find an object in cache, as a faction of 1.

- *Cache Size (Entries)*

  The number of items that are stored with the cache.

- *Cache Accesses*

  The total number of requests the cache has serviced.

- *Cache Hits*

  The total number of requests the cache has serviced and returning a matched result.

- *Cache Misses*

  The total number of requests the cache has serviced and did not find within its cache.

Clear Cache

The *Clear Cache* button will clear cache for the selected Instance/JVM.

Database Connections

Database connections and prepared statement caches can be viewed across a single instance or multiple instances simultaneously. The Database Connections hyperlink will link to the JDBj Connection Caches screen.

JDBj Connection Caches

(V) Prepared Statement Cache Detail

Instance Name   WEBSERVER1 ▾

Submit Query

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The Instance Name field allows for all instances to be selected which will display every instance, or an individual instance can be selected. Once the Instance Name has been selected, click the Submit Query button.

- *Instance Name*

    All can be selected which will display every instance selected, or an individual instance can be selected. The selections available are:

    All

    individual instance name

    home

JDBj Pooled Database Connections

JDBj Pooled Database Connections shows the number of available pooled connections for each JDBj logical data source. The numbers below represent the number of available, unused connections and do not include open connections that are currently in use.

Prepared Statement Cache Detail

The Prepared Statement Cache Detail shows each of the SQL prepared statements being cached on each managed web server. The numbers indicate the number of pooled database connections that are caching that prepared statement. These values are further broken down by the logical database connection URL.

> **Note:** Prepared statement caches are not maintained for the Oracle products; Oracle products use the Oracle native prepared statement caching instead.

JDBj Runtime

The JDBj Runtime screen allows for viewing or modifying the runtime configuration of JDBj, which can be done across a single instance or multiple instances simultaneously.

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JDBj Runtime

Shown below are the JDBj runtime properties for the selected instance. Any changes made will be lost when the instance is restarted. To permanently change the JDBj runtime properties see the corresponding JDBj Runtime Properties section in the JDBj Database Configuration link.

Instance Name WEBSERVER1 ▼

In the *Instance Name* field, select the instance name of the managed instance from which you wish to view user sessions, or select ALL to view all instances. After making the selection, click the *Submit Query* button.

- *Instance Name*

  All can be selected which will display every instance selected, or an individual instance can be selected. The selections available are:

  All

  individual instance name

  home

Properties

The *Properties* section allows the Value of the property to by dynamically changed.

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The Properties section allows the value of the property to by dynamically changed.

- *Value*

  The current value in use for the property. This value may be defined in a drop down menu or may be a text field that allows free-form entry of the value.

Apply

When a value has been entered, click the Apply button to dynamically apply the change.

Serialized Objects (Release 9.2.8.2)

Starting with Tools Release 9.2.8.2, you can use the Serialized Objects feature to delete all the specs related to the selected serialized objects.

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> **Note:** You can access the **Serialized Objects** page from the **Serialized Objects** link in **Runtime Metrics** pane when you log in as a Server Manager Console Administrative user.

Delete Serialized Objects

Specify the criteria to delete serialized objects in the Delete Serialized Objects form. The system deletes all serialized objects for the specified type and name including default, language, and user specs. Click **Delete**.

- *Type*

  Select the type of serialized object you want to delete. You can select the following object types:

  Application

  Report

  NER

  Business View

  Table

  Data Dictionary

- *Name*

  Enter the name of the serialized object you want to delete.

JDENET Stats

The JDENET Stats hyperlink connects to the JDENET Connections screen, which has these sections:

- *JDENET Connections*
- *JDENET Connection Pools*
- *JDENET Socket Connections*

JDENET Connections

EnterpriseOne web products maintain a pool of JDENET connections that are shared among all the active users of the web product. A connection pool is created for each foreign host, such as an Enterprise Server, that the web product contacts using JDENET. Each connection pool has a number of established JDENET connections to the foreign host. A request to a particular host will use one of these sockets, or if no sockets are available, wait until a socket in the pool becomes available.

Viewing the JDENET statistics for connections established by the HTML server can be viewed across a single instance or multiple instances simultaneously.

The *Instance Name* field allows for all instances to be selected which will display every instance, or an individual instance can be selected. Once the Instance Name has been selected, the screen will refresh with the updated information. In the *Instance Name* field, select the instance name of the managed instance from which you wish to view user sessions, or select ALL to view all instances.

- *Instance Name*
  All can be selected which will display every instance selected, or an individual instance can be selected. The selections available are:
  All
  individual instance name
  home

JDENET Connection Pools

The JDENET Connection Pool Information view displays connection and messaging data for each Enterprise Server connected to the web server. Information about the volume of data and messages transmitted and received is contained in this set of parameters:

- *Host Name*
  The name of the Enterprise Server the connection pool represents.
- *JDENET Port*

The JDENET port used to initially contact the Enterprise Server.

- *Threads Waiting for Socket*

  The number of threads that are currently waiting to use a socket connection contained within this thread pool. If this number is non-zero then one or more threads are being held up. In this case it may be beneficial to increase the maximum pool size.

- *Max Threads Blocked*

  The maximum number of threads that have been simultaneously been waiting for a socket from the connection pool.

- *Maximum Pool Size*

  The maximum number of sockets that may be created for this connection pool. Once this threshold is retrieved any additional threads attempting to connect to the Enterprise Server/port will wait until a in use socket is returned to the pool.

JDENET Socket Connections

JDENET Socket Connections displays all of the available socket connections in the connection pools for the selected managed instance(s). Sockets currently in use (check-out) are not displayed.

The grid fields for JDENET Socket Connections are:

- *Enterprise Server*

  The name of the Enterprise Server the connection pool represents.

- *Local TCP/IP Port*

  The TCP/IP port actually used by the connection.

- *Enterprise Server Connect Port*

  The initial port (connect port) used to contact the Enterprise Server.

- *Actual Foreign Port*

  The actual port on the Enterprise Server used.

- *Socket Good?*

  If true the socket is valid and usable.

- *Timeout (ms)*

  Timeout in milliseconds.

- *Messages Written*

   The number of JDENET messages that have been written on the socket connection.

- *Bytes Written*

   The number of bytes that have been written on the socket connection.

- *Socket in Use?*

   If true the socket is in use by a thread

- *Checkout Time*

   The time the socket was checked out by the thread using it.

Java Environment

The java environment runtime metrics provide insight into the JVM(s) running the EnterpriseOne Web products. This information may be helpful in understanding or troubleshooting the java environment in which these products operate. The Java Environment hyperlink, when selected, will link to the Java Environment Runtime Detail screen.

Java Environment Runtime Detail

Viewing Java JVM runtime information such as memory used, threads created, and system properties can be viewed across a single instance or multiple instances simultaneously. Garbage collection on the JVM may also be invoked.

The Java Environment Runtime Detail information includes:

- *General Java Information*
- *Java Memory Usage*
- *Run Garbage Collection*
- *Java Thread Information*
- *Java System Properties*

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General Java Information

General information about the Java virtual machine for the managed instance is displayed in the General Java Information section:

- *JVM Node Id*

  An identifier that uniquely identifies a single JVM.

- *Name*

  A description of the java system property.

- *Value*

  The value of the system property.

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Java Memory Usage

Information about the current memory usage is available. The information is current at the time the page is initially loaded.

Run Garbage Collection

Each container will have a Run Garbage Collection button that initiates the garbage collection process for each container providing more current usage information.

Java Thread Information

Each of the threads contained within the JVM are displayed.

- *Thread Name*

  The name of the java thread.

- *Thread Group*

  The group in which the thread belongs.

- *Is Alive?*

  True if the current thread.

- *Is Daemon Thread*

  True if the thread is a daemon, or background thread.

- *Thread Priority*

  The priority assigned to the thread.

Java System Properties

The Java System Properties displays all of the java system properties. This list is current at the time the page is loaded.

The Java System Properties displayed are:

- *System Property Name*
  The name of the system property.
- *System Property Value*
  The value of the system property.

Application Interface Services Server Runtime Metrics

Runtime metrics for Application Interface Services Servers provide metric information for:

- *AIS Information*
- *Login Metrics*
- *User Info Metrics*
- *Runtime Configuration*
- *Form Metrics*
- *Session Metrics*
- *Java Environment*

AIS Information

The AIS Information section provides metrics for:

- AIS JVM Count
- AIS Uptime
- Online Users

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See the context sensitive help for more information on each metric.

Login Metrics

Displays the login request and response metrics for the AIS Server.

User Info Metrics

Displays user information contained in the F0092 table.

Runtime Configuration

Displays the runtime configuration settings being used by the AIS Server.

Form Metrics

Displays the form related metrics specific to user activity with a particular application and form.

Session Metrics

Displays the user session SSO metrics.

Java Environment

See: *Java Environment Runtime Detail*

Transaction Server Administration

The Transaction Server Admin section has hyperlinks for:

- *Failed Events*
- *Subscribers*
- *Event Metrics*

Failed Events

The Failed Events section contains:

- *Select [Failed Events]*
- *Delete Failed Events*
- *Delete All Failed Event*

Select [Failed Events]

Failed Events and their associated failure messages are listed for the transaction server.

Failed Events

The following table outlines the failed events for the transaction server. If you wish to delete all failed events use the 'Delete All Failed Events' button.

Delete All Failed Events

Select [Failed Event]:   **Delete Failed Event**

Select All | Select None

	Event ID ↓	Type	Category	Business Function	Environment	Host	Failure Message
☐	1	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	2	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	3	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	5	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	6	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	7	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	8	Event Name	RTE	B01012	JDV812	DENLCMLX1	This is an error message....
☐	DENCINTG04_176916365_7014_4292_052420071132432.0	RTABOUT	RTE	CFIN	JDV812	DENCINTG04	Failed to send event message to output queue: [subscriber=PM7082504] [error=Failed to send event message: Method not permitted in global transaction]
☐	DENCINTG04_176916365_7014_4292_052420071132433.0	RTABOUT	RTE	CFIN	JDV812	DENCINTG04	Failed to send event message to output queue: [subscriber=PM7082504] [error=Failed to send event message: Method not permitted in global transaction]

Delete Failed Events

The *Delete Failed Event* button will delete selected events.

Delete All Failed Event

The *Delete All Failed Events* button will delete all failed events.

Subscribers

The Subscribers section contains:

- *Select [Subscriber]*
- *Purge Subscriber Queued Messages*

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Select [Subscriber]

Subscribers

The following table outlines the subscribers for the transaction server.

Select [Subscriber]: | Purge Subscriber Queued Messages

Select All | Select None

	User Name ↓	Description	Active	Number of Queued Messages	Number of Routed Messages
☐	KV6782197	KV6782197_JDENET	false	0	0
☐	PM7082504	PM7082504_JAVACONN	true	0	128

The subscribers section outlines the subscribers for the transaction server.

Purge Subscriber Queued Messages

The *Purge Subscriber Queued Messages* button, when selected, will purge all subscriber queued messages.

Event Metrics

The Event Metrics section outlines the event metrics for the transaction server. Information is provided for the *Metric Name* and the Metric Value grid fields.

Event Metrics

The following table outlines the event metrics for the transaction server.

Metric Name ↓	Metric Value
Number of Committed RTE Events	133
Number of Committed Workflow Events	0
Number of Committed XAPI Events	1
Number of Committed Z-Events	0
Remaining Queue Storage Space (KB)	Unavailable
Total Queue Storage Space (KB)	Unavailable

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31 Configure Enterprise Server Instances

Configuration Overview

Every configuration setting (*.INI, .PROPERTIES, etc.) is manageable through the management console. The configuration files still exist in the same form as prior tools releases. The management console provides a front end for modifying the configuration values and adds the following benefits:

- Every configuration item is present and documented with online help.

- A list of values, when applicable, is used for settings that have distinct allowed values.

- Changes to configuration settings are recorded for historical analysis and auditing, including the user that made the change.

- The configurations of multiple managed instances may be compared to identify differences.

- New configuration settings are merged into existing configuration files when a tools release upgrade is performed.

Configuration is accessed from the management page for an instance. Configuration settings are grouped into high level categories. Selecting a category displays all the settings contained within.
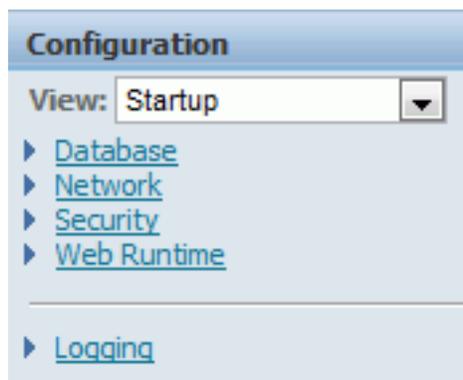
Each high level category is divided into sub-categories containing the individual configuration parameters.

There is also a drop down menu that displays options for Standard and Dynamic views.

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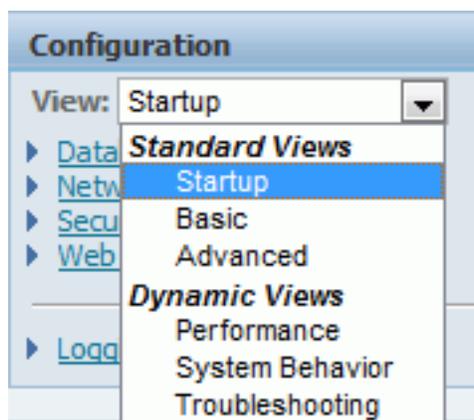
The Work with Configurations section provides the following:

- Compare Instances
- Save or Restore
- Configuration Summary
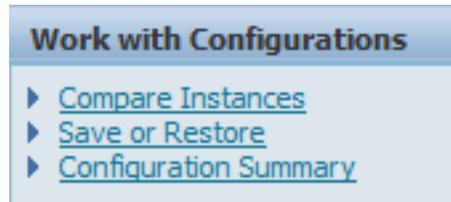
Save or Restore

Save or Restore allows users to:

1. Save a copy of the current configuration for later reference.
2. Restore the configuration to a previously saved state.
3. Export a saved configuration to a zip file format (by clicking on the link to the configuration name)
4. Import a previously exported configuration from another instance or server.

Configuration Summary

The Configuration Summary provides a list of all current configuration values for an instance on one page.

Configuration Summary for HTML_srv1

Group	INI Section	Name	Description	Value	Help Text
Cache	CACHE	CacheCheck	Cache Object Expiration Check Interval	300000	The time interval, in milliseconds, between the consecutive system checks of the cached objects for expirations. This interval applies to all cache objects, unless otherwise specified.
Cache	CACHE	E1PageCheckInterval	E1Page Check Interval	300000	The interval of time to sleep between checking the table for an updated E1Page content, in milliseconds. Zero interval will trigger the check for update each time E1Page content is requested.
Cache	CACHE	GlossaryText	Glossary Text Cache Expiration Check Interval	7200000	The time interval, in milliseconds, between the consecutive system checks of the cached glossary text objects for expirations.
Cache	CACHE	Menu	Menu Cache Timeout	3600000	The timeout interval, in milliseconds, for cached menu items.
Cache	CACHE	SpecExpire	Spec Expire	0	This is used by the EnterpriseOne connectors to set expiration period for cached items.
Cache	CACHE	UserSession	User Session Cache Timeout	1200000	Time out setting for user session within the cache. These intervals are in milliseconds. For example, 60000ms = 1 minute.
Web Runtime	ERPINTERACTIVITY	AccessibilityMenu	Use Accessible Menus	false	Enables or disables the generation of accessible menus. If not specifically needed it is recommended to not enable this feature.
Web Runtime	ERPINTERACTIVITY	DBFetchLimitBeforeWarning	DB Fetch Limit	2000	The number of records fetched for each database fetch before getting a system warning.
Web Runtime	ERPINTERACTIVITY	InteractivityLevel	Interactivity Level	HIGH	This setting affects how often events (such as data changing on a form) are posted to the server. With LOW interactivity, events will only be posted when the full page is submitted. With HIGH interactivity, events are posted as they happen. With MEDIUM interactiviy, events are put on a queue and posted when a 'critical' event happens. HIGH interactivity is appropriate for most environments, but in a low bandwidth environment, setting the interactivity level to LOW or MEDIUM may reduce client to server round trips.
Web Runtime	ERPINTERACTIVITY	LogoutOnBrowserClose	Logout On Browser Close	true	When enabled an active user session with be logged out when their last open browser window is closed.
Web Runtime	ERPINTERACTIVITY	MaxOpenBrowsers	Maximum Open Browsers	10	Specifies the maximum number of open browsers a user may simulateanously utilize.
Web Runtime	ERPINTERACTIVITY	MultipleBrowserEnabled	Enable Multiple Browsers	true	Specifies whether a user may utilize multiple browsers simultaneously with the same user session. Pop-ups must not be blocked for the EnterpriseOne HTML server site to enable multi-browser capability.
Miscellaneous	EVENTS	initialContextFactory	Initial Context Factory	none	Installing the JD Edwards EnterpriseOne Transaction Server component automatically configures the jas.ini file used by the JD Edwards EnterpriseOne Transaction Server, but not the jas.ini used by the JD Edwards EnterpriseOne HTML Web Server. You can copy and paste the initialContextFactory value from the jas.ini on your Transaction Server for this setting.

General and Instance Properties

When you click an instance name from the list of servers the *Management Console* displays another page called *server name: instance name*.
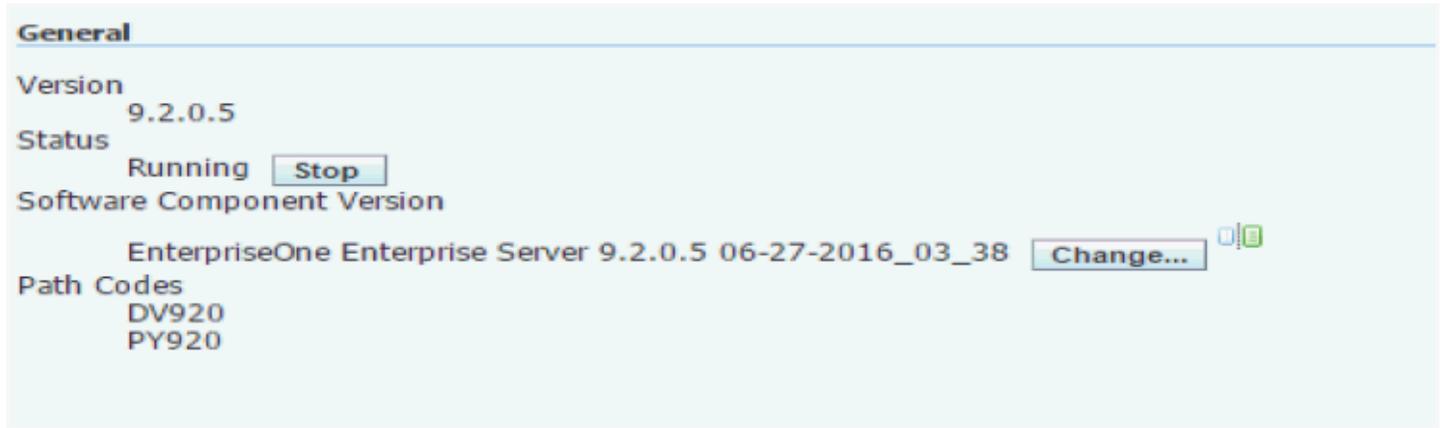
In the *General* section of the page you can:

- Start or stop a *Managed Instance* .
  Refer to the section entitled: *Start or Stop a Managed EnterpriseOne Software Component* in this guide.
- Change a Software Component Version.
  Refer to the section entitled: *Change a Managed EnterpriseOne Software Component* in this guide.
- View Software Release History.
  Refer to the section entitled: *View the Software Release History for a Managed Instance* in this guide.
- View Path Codes.

Instance Properties

The Instance Properties section of the page lists specific properties for a managed instance. For example, the properties for a *Managed Instance* for a *JD Edwards EnterpriseOne HTML Web Server* would include:

- Instance Location
- Instance Name
- CallObject Kernel Memory Limit
- Runbatch Memory Limit

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Instance Properties

Install Location   ⓘ
    /u01/jdepp/ent6113
Instance Name   ⓘ
    ent6113

CallObject Kernel Memory Limit   ⓘ
    Unknown
Runbatch Memory Limit   ⓘ
    Unknown
Enter Passphrase To Generate Sitekey   ⓘ

[   ]   Generate

Enter Passphrase To Generate Sitekey   ✖

Please enter passphrase to generate the sitekey.

Sum of EOne Processes (Memory – MB)
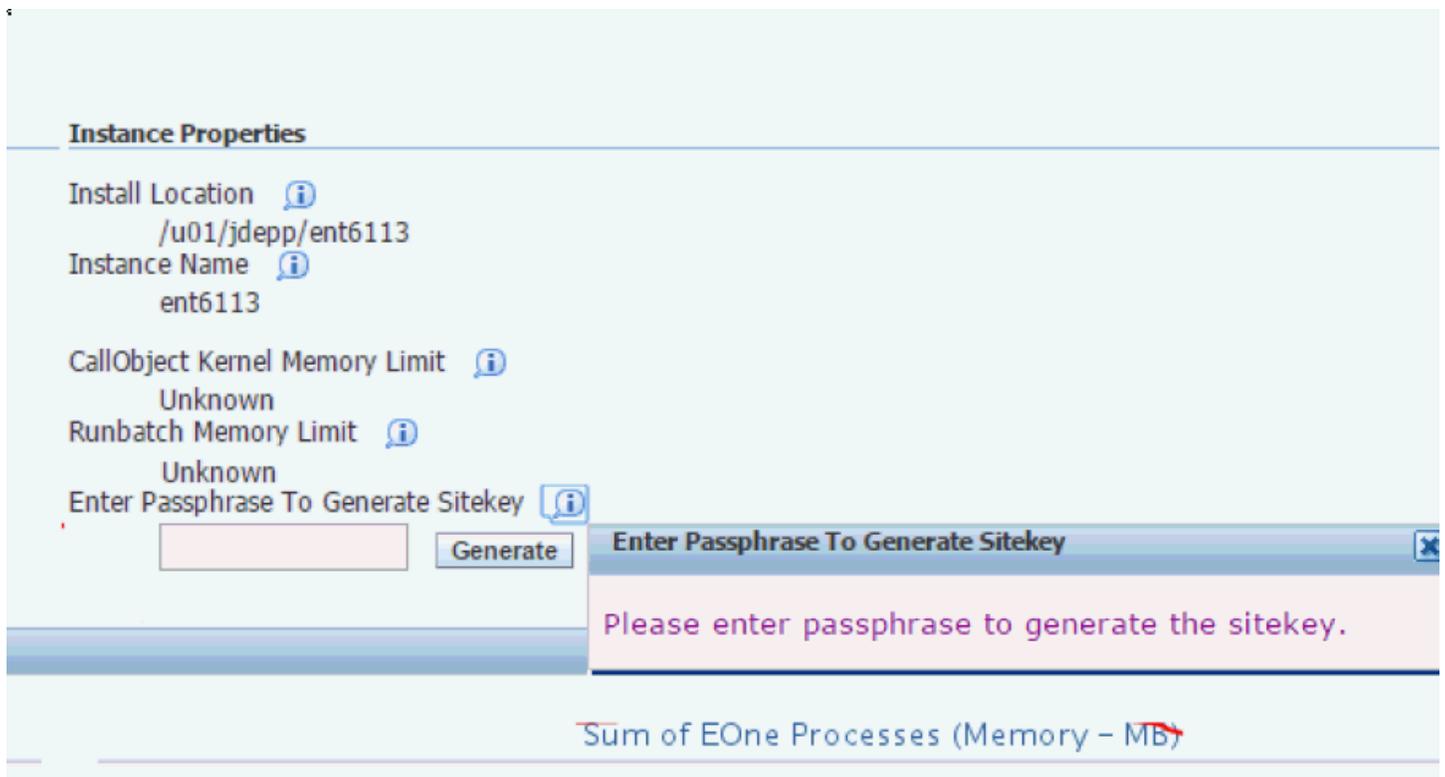
Generating the Site Key (Release 9.2.1)

To generate the site key:

1. Enter the passphrase in the Enter Passphrase to Generate the Site Key field. The conditions to set the pass phrase are as shown in the following screenshot. This window is displayed if you enter an invalid passphrase.
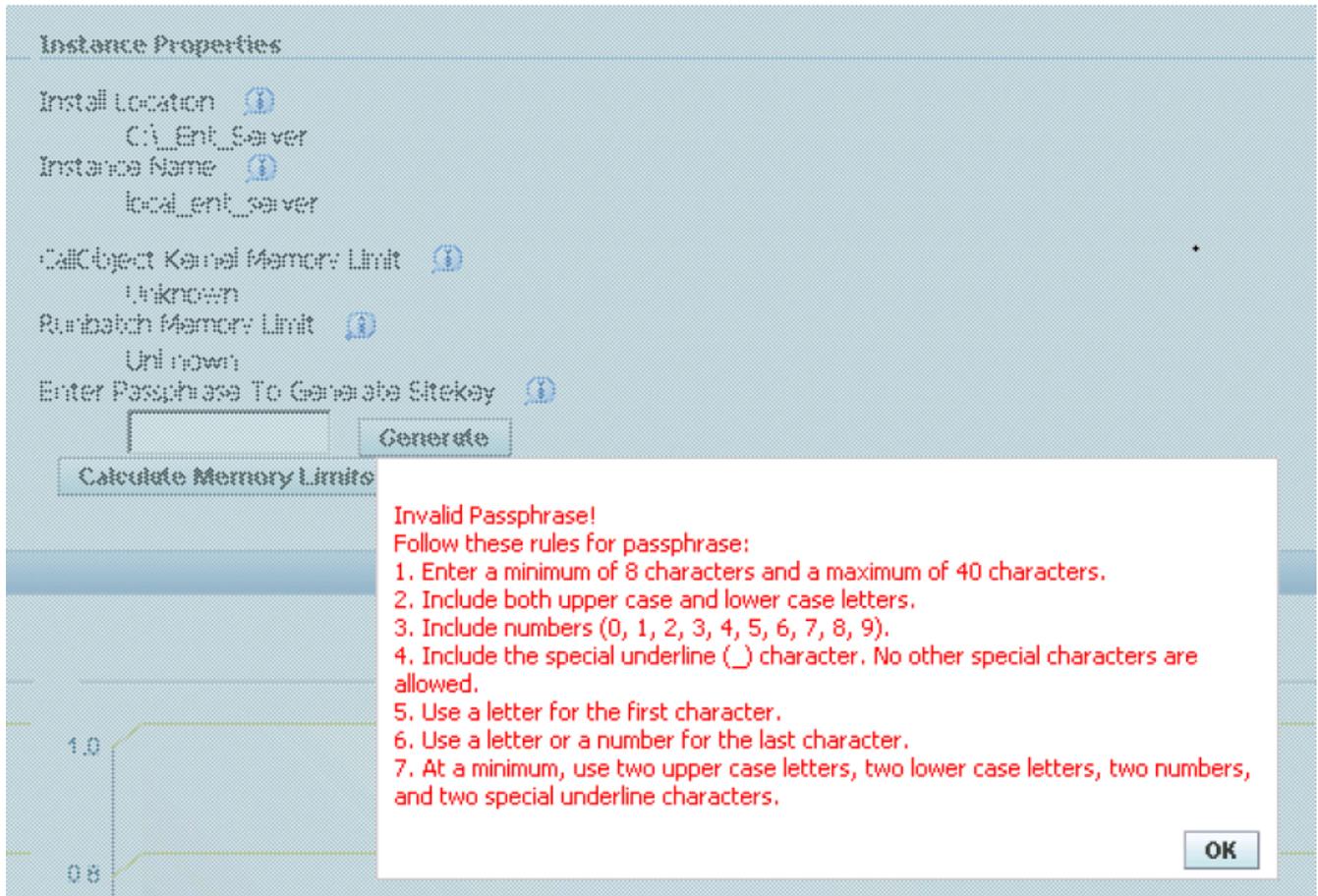
2. Click Generate. You will see the following window if the site key is generated successfully. Also, you will see a warning window saying "Both Current Key and Previous Key are found in JDE.ini." if you enter a duplicate value.
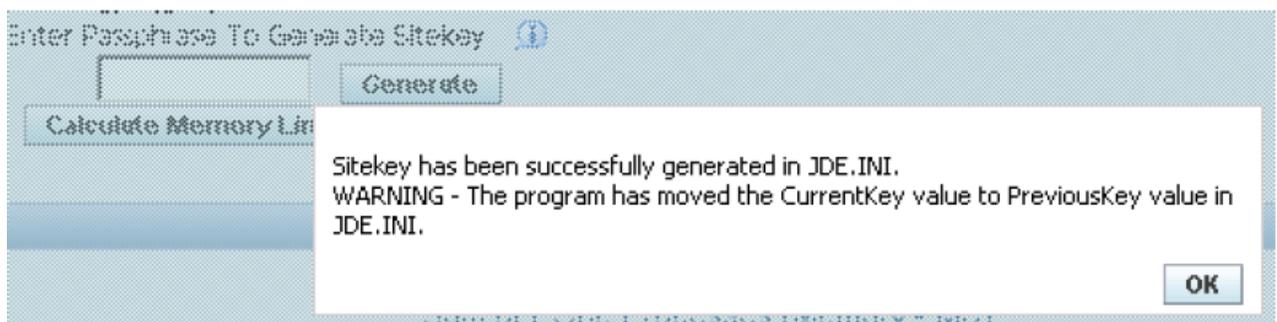
3. Click OK. Verify the site key in the JDE.ini file.

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Refreshing Kernels (Release 9.2.6)

Understanding Kernel Refresh

To optimize overall system workload into logical segments, JD Edwards EnterpriseOne assigns processing tasks to various kernel processes running on a JD Edwards EnterpriseOne Enterprise Server. These kernels use static and dynamic database connections at process initiation and maintains those connections to a database for the entire EnterpriseOne process life cycle. In case of any interruption to the database connection or connection sessions therein, the connection or session must be recovered or restarted. Understanding how static and dynamic EnterpriseOne database connections work and their impact on the JD Edwards system is important.

The JDBC interface of the EnterpriseOne HTML Server is a single-process connection to a database; on the other hand, multiple connections are made through the Enterprise Server kernel processes using JD Edwards EnterpriseOne CallObject kernels. The EnterpriseOne HTML Server depends on communication to the Enterprise Server Security kernel for authentication and other security process requests to function properly; thus loss of database connections on the Enterprise Server Security and Metadata kernel processes has a subsequent downstream effect on the EnterpriseOne HTML Server performance.

Kernels that are classified as static use a bootstrap login to establish the connection. This means that the login credentials are stored in and read from the jde.ini of the Enterprise Server. This is called the login environment. Unlike dynamic connections, a login to a static kernel is never logged out during the process lifetime. Again, this is because unlike dynamic connections, a static login environment is not subject to timeouts due to inactivity or logouts. Under normal conditions, these static kernels are only restarted when the Enterprise Server is restarted. Otherwise static kernels can only be restarted by manually killing the process and restarting it.

Among the key functions of a static kernel are database connections. If the connection to the database is temporarily lost for any reason such as network unavailability, the kernels have fault-tolerant logic to retry the connection for up to 75 seconds reusing the same connection. If the connection cannot be reestablished within 75 seconds, the process is failed. As previously mentioned, an entire static process can only be restarted by either restarting the Enterprise Server or by manually killing and restarting the process.

In order to avoid the situation where the database connection within a kernel process are in a failed state (timed out for more than 75 seconds) that is unknown to the system, functionality is added to Server Manager to refresh those database connections in static environments either periodically or on demand. This functionality is only available to an Admin user for Server Manager. When invoked, this function refreshes each static kernel for all database connections. The list of such static kernels may change from release to release, so it is not important that they be individually listed. Additionally, a static environment type, such as Security, may include multiple kernels of the same type. In such cases, this function will refresh each kernel in a static environment type.

It is important to note that the intent of a "refresh" is primarily to reestablish the database connections without resorting to a destructive "kill" action. As such, a refresh preserves the other logical states in the kernel and the kernel maintains the same internal functional state as it was prior to the refresh of the database connections.

One exception to the static kernel model is the Workflow kernel. This kernel can only free expired environments, that is, environments that have timed out. If a workflow environment is still active, it will not be forcibly freed by the refresh process.

Automatic Kernel Refresh

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> **Note:** The implementation of Automatic Kernel Refresh is only compatible with Oracle databases that are using multi node Real Time Application Cluster (RAC). This is because the process depends on the availability of a functioning node, which is not the case in a single node database in the event of a failure due to such factors are hardware or network issues. Multi node RAC environments are typically available for Oracle Autonomous Database (ADB) implementations.

In order to avoid disrupting normal processing, the JD Edwards kernel automatic kernel refresh logic only executes on an idle kernel process. If a kernel uses multiple threads, the logic will wait to refresh until all threads are idle. Basically a refresh involves a logout and a bootstrap login which reestablishes the database connections either using existing connections or establishing new connections; thus ensuring the connections are valid. This logout/login process does not kill a process or establish a new process - it reuses the existing process with reestablished database connections and returns the kernel to its prior state.

For implementation details, refer to the following section entitled: *Using Automatic Kernel Refresh*.

On-Demand Manual Kernel Refresh

You can use the **Refresh Environments** button to force a refresh for all static environments ***and*** CallObject kernels (which are dynamic kernels).

For static environments, the refresh will occur regardless of whether the kernel is idle. However, the refresh will wait until all threads of the kernel are complete. As with the automatic kernel refresh, the refresh does not kill a process or establish a new process - it reuses the existing process with reestablished database connections.

For CallObject kernels, these are dynamic kernels which are created by actual or programmatic user logins. Clicking the **Refresh Environment** button flags these kernels for recycling. In this case, recycling means the system will attempt to terminate a CallObject kernel gracefully, which means when all users of the CallObject kernel are either voluntarily logged out or forcibly logged out by an inactivity timeout (typically either 6 or 12 hours, for inactive or forced logouts, respectively). New CallObject kernels are created upon user login. This reestablishes the database connections for the kernel.

For example, in Production environments you might use the on-demand function if you are performing database patching during a planned maintenance window. In this case you would not be constrained by a short loss in system availability.

For implementation details, refer to the following section entitled: *Using On-Demand Kernel Refresh*.

Using Automatic Kernel Refresh

> **Note:** The implementation of Automatic Kernel Refresh is only compatible with Oracle databases that are using multi node (2 or more nodes) in a Real Time Application Cluster (RAC). This is because the process depends on the availability of a functioning node, which is not the case in a single node database in the event of a failure due to such factors are hardware or network issues. Multi node RAC environments are typically available for Oracle Autonomous Database (ADB) implementations.

> **Note:** You must have Administrator privileges in Server Manager in order to enable automatic kernel refresh.

The automatic kernel setting is set by Server Manager in the Security section for the Enterprise Server. The **Bootstrap Environment Refresh Interval** setting allows you to set the automatic refresh environmental interval for all static environments. Values can be set in one hour increments 0 to 24. If the value is set to 0, then no automatic refresh will occur for static environments. For a description of the logic, refer to the preceding section entitled: *Understanding Kernel Refresh*.

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Note: This function creates Server Manager logs which you can use to verify program functionality or to perform additional debug, if necessary.

To use automatic kernel refresh:

1. In Server Manager, select the Enterprise server that you wish to configure for automatic kernel refresh.
2. Navigate to Configuration > Advanced > Security

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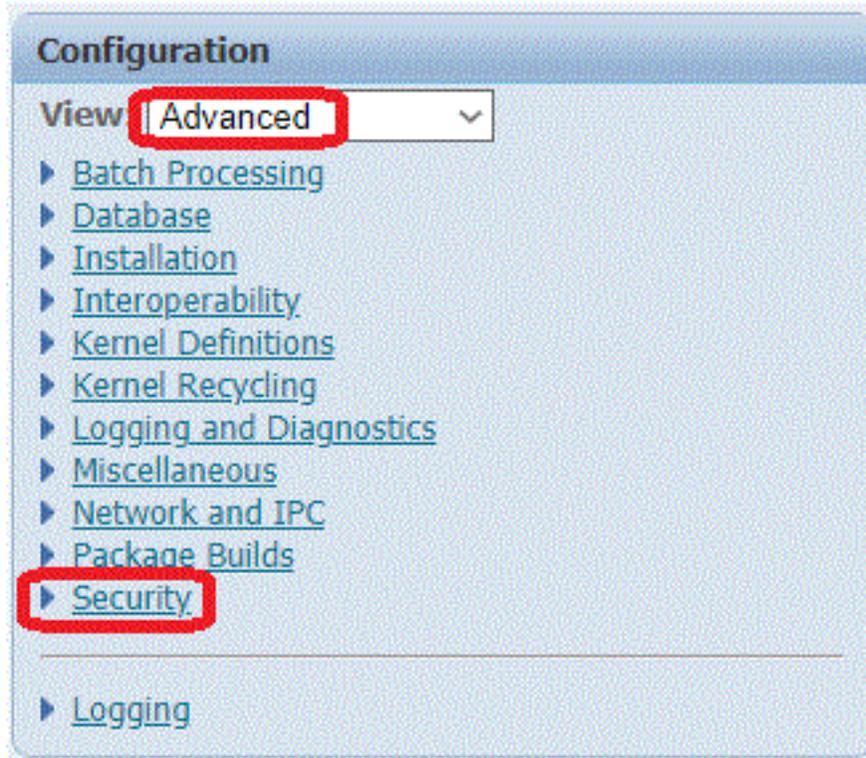
3. On Security, complete the following field:

o *Bootstrap Environment Refresh Interval*

Specify a value (in seconds) for the interval to refresh all static kernels.

Valid values are from 0 to 24 hours (0 to 86,400 seconds), where the default value is 3600 (one hour). Enter a value of 0 if you want to disable this functionality.

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4. You can also set a value for this database setting that enables, disables, and controls the broadcast functionality for Automatic Kernel Refresh.

> **Note:** This function is related to the implementation of Automatic Kernel Refresh, which is only compatible with Oracle databases that are using multi node (2 or more nodes) in a Real Time Application Cluster (RAC). This is because the process depends on the availability of a functioning node, which is not the case in a single node database in the event of a failure due to such factors are hardware or network issues. Multi node RAC environments are typically available for Oracle Autonomous Database (ADB) implementations.

Navigate to Configuration > Advanced > Database.
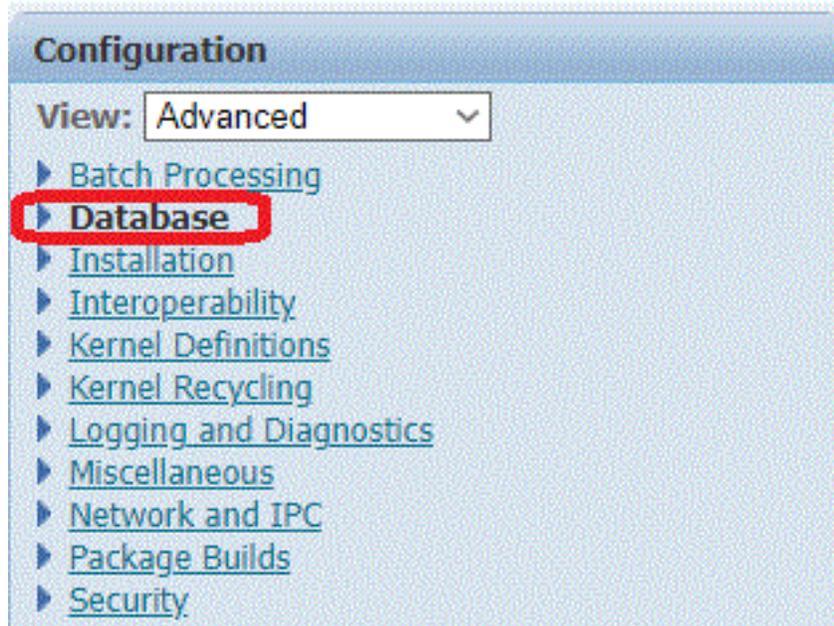
5. On Database, complete the following field:

   ○ *Refresh Environment On OCI Server Not Connected Interval*

   Specify a value (in seconds) for the interval to send a broadcast message regarding the availability of a RAC node for kernel refresh.

   Valid values are from 0 to 30 seconds, where the default value is 0. Enter a value of 0 if you want to disable this broadcast functionality.

   When enabled, after connections are drained from one of the multiple RAC nodes, for every SQL statement execute and call to refresh the environment, if the system detects that the database connection is not connected to the database server, it sends a broadcast message indicating the

database is not connected. Examples of reasons why a database might be disconnected are for planned maintenance, or some type of node malfunction.

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Using On-Demand Kernel Refresh

> **Note:** You must have Administrator privileges in Server Manager in order to perform an on-demand kernel refresh.

You can trigger an on-demand kernel refresh (which also includes a recycle of CallObject kernels) from Server Manager. For a description of the logic, refer to the preceding section entitled: *Understanding Kernel Refresh*.

> **Note:** This function creates Server Manager logs which you can use to verify program functionality or to perform additional debug, if necessary.

To use on-demand kernel refresh:

1. In Server Manager, select the Enterprise server that you wish to trigger an on-demand kernel refresh.

2. In the Instance Properties section, click the **Refresh Environments** button.
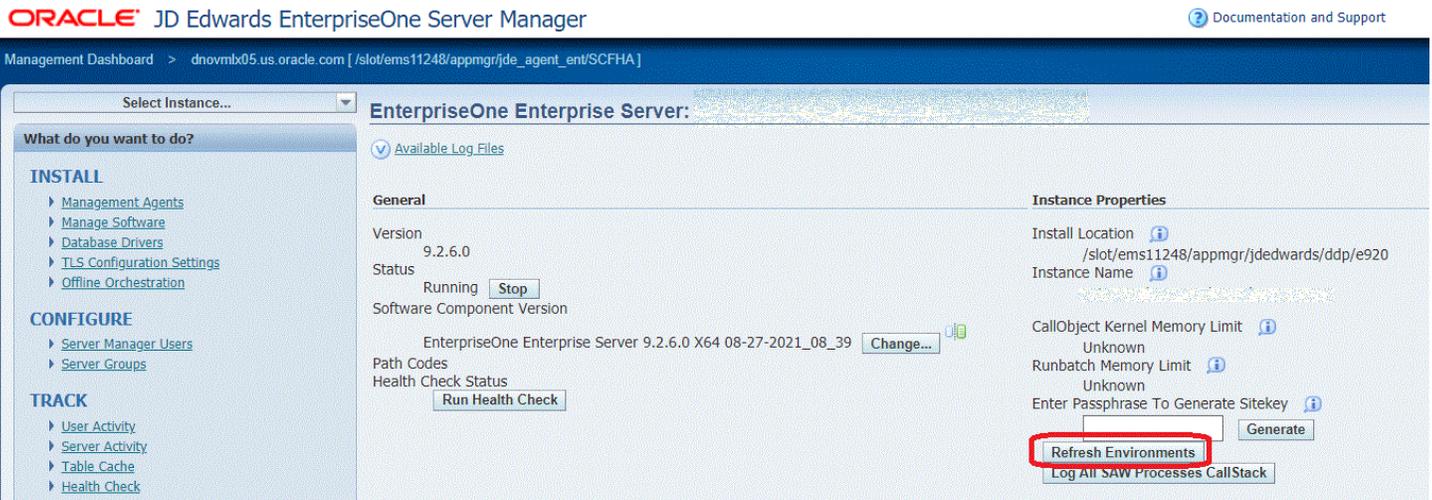
3. The following dialog is displayed.
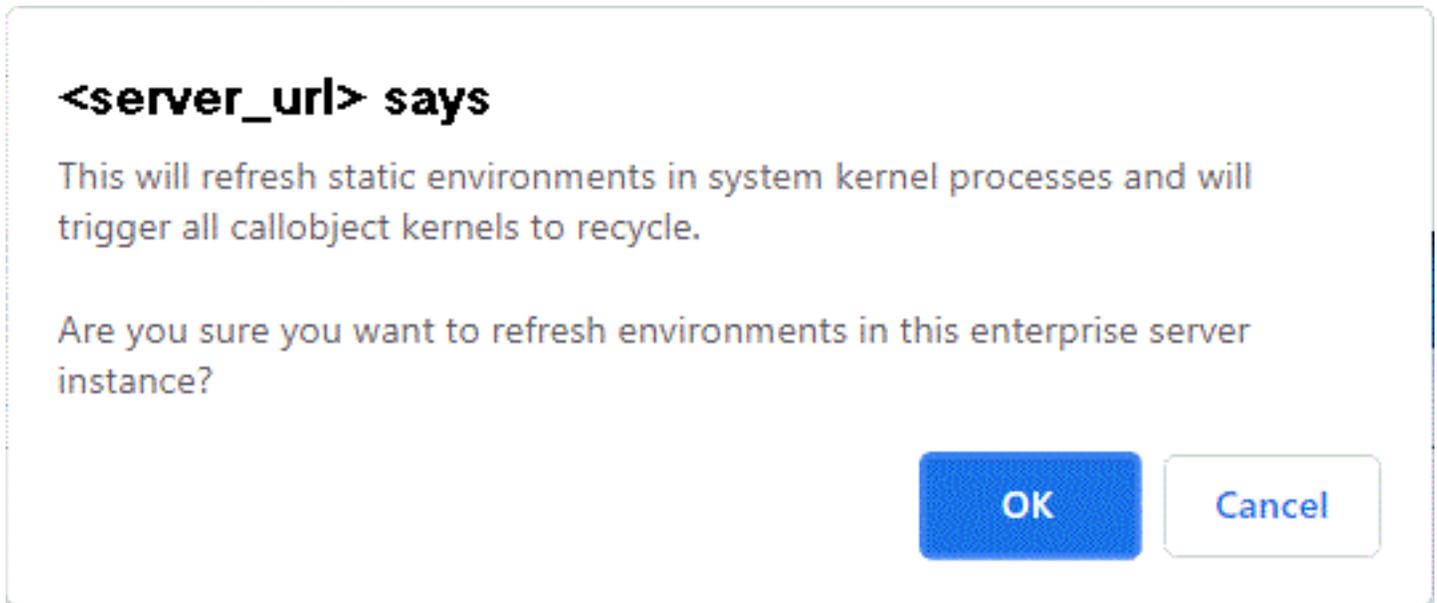
4. Review the content of the dialog which states:

   This will refresh static environments in system kernel processes and will trigger all callobject kernels to recycle.

   Are you sure you want to refresh environments in this enterprise server instance?

5. Click the **OK** button to begin the processes to refresh the static environments and to trigger all CallObject kernels to recycle.

Log All SAW Processes Callstack (9.2.6)

Enhanced logging functionality is invoked by clicking the **Log All SAW Processes Callstack** button for an Enterprise Server instance. This deep diagnostic tool can be used to determine the root cause for why a kernel did not respond as expected to a broadcast message that was sent by an on-demand refresh, or has other outstanding requests that are not being addressed. Potential reasons for unresponsive kernels are that they are deadlocked, looping, or in some other similar undesirable zombie state. This diagnostic function is not necessarily restricted to debugging kernel refreshes; it can be helpful to debug any suspected kernel anomaly.

Logging SAW process callstacks creates a log with a snapshot of each active kernel process, including associated threads, in their current state at the point in time that this function executes.

> **Note:** A practical debugging use case might be to take multiple snapshots over time and compare the callstacks to the expected function.

This section contains these procedures:

- Logging the callstack for all SAW Processes
- Logging the callstack for a Specific SAW Process on Linux
- Logging the callstack for a Specific SAW Process on Microsoft Windows
- Logging the callstack for a Specific Process ID on IBMi

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Logging the callstack for all SAW Processes

1. Use Server Manager to select an Enterprise Server.
2. In the Instance Properties section, click the **Log All SAW Processes CallStack** button.

Note: The snapshot includes the callstack of every active kernel and every thread within that kernel. Therefore, depending the volume of threads in your environment, the entire process can take some time.

3. The following dialog is displayed.

<server_url> says

This will log call stacks for all active SAW processes in this enterprise server
and will log them in the jdelogstk program's jde.log in the enterprise server
log folder.

Are you sure you want to log all active SAW processes call stacks in this
enterprise server instance?

OK   Cancel
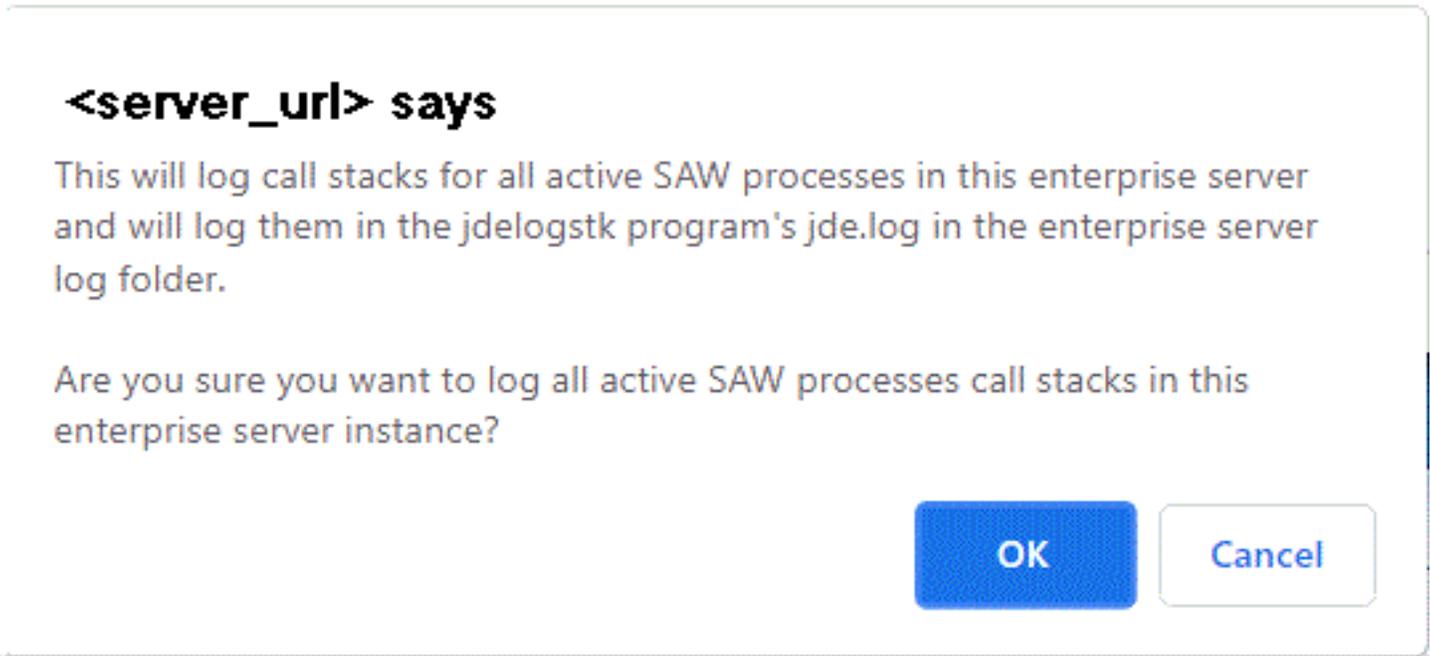
4. Review the content of the dialog which states:

   This will log call stacks for all active SAW processes in this enterprise server and will log them in the jdelogstk program's jde.log in the enterprise server log folder.

   Are you sure you want to log all active SAW processes in this enterprise server instance?

5. Click the **OK** button to begin the processes to log all callstacks.

6. | **Note:** The resulting log files are named: `jdelogstk.xnn`. For example, `jdelogstk.c42`.

Logging the callstack for a Specific Process ID on Linux

1. Open a command prompt.

2. Change directory to the `bin64` directory within the JD Edwards EnterpriseOne installation directory.

   ```
   cd <E1 ES Install Folder>/system/bin64/
   ```

   For example:

   ```
   cd /slot/ems12345/appmgr/jdedwards/ddp/e920/system/bin64
   ```

3. Launch the jdelogstk program using the following command:

   ```
   jdelogstk <pid of JD Edwards EnterpriseOne process>
   ```

   For example:

   ```
   > jdelogstk 727
   ```

4. The command returns a message indicating it completed successfully and also indicates the location of the log file.

   For example:

   ```
   Logged call stack for process id <727>
   ```

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```
Logged call stack in /slot/ems12345/appmgr/jdedwards/ddp/e920/log/jde_67890.log
```

5. Below is an example of the contents for a generated log file:

```
-bash-4.2$ cat /slot/ems11248/appmgr/jdedwards/ddp/e920/log/jde_32329.log
32329/140335261185856 MAIN_THREAD Mon Apr 25 17:10:53.065597 jdelogstk.c47
#0 0x00007fc4b6452983 in __select_nocancel () from /lib64/libc.so.6
#1 0x00007fc4b820f7d6 in processAsyncEvent (thread=thread@entry=0, waitTime=5, waitTime@entry=0) at
netflow.c:711
#2 0x00007fc4b821fa45 in JDENET_RunNet (listenService=listenService@entry=0x7fff12bd8930,
username=username@entry=0x7fff12bd89b0, password=password@entry=0x7fff12bd8a30) at netpub.c:3614
#3 0x0000000000400ad1 in main (argc=1, argv=<optimized out>) at jdenet_n.c:144

32329/140335261185856 MAIN_THREAD Mon Apr 25 17:10:53.067705 jdelogstk.c57
Logged call stack for process id <31799>
```

Logging the callstack for a Specific Process ID on Microsoft Windows

1. Open a command prompt.
2. Change directory to the bin64 directory within the JD Edwards EnterpriseOne installation directory.

   ```
   cd <E1 ES Install Folder>\system\bin64\
   ```

   For example:

   ```
   cd \slot\ems12345\appmgr\jdedwards\ddp\e920\system\bin64
   ```
3. Launch the jdelogstk program using the following command:

   ```
   jdelogstk <pid of JD Edwards EnterpriseOne process>
   ```

   For example:

   ```
   C:\EnterpriseServer\system\bin64>jdelogstk.exe 7228
   ```
4. The command returns a message indicating it completed successfully and also indicates the location of the log file. For example, if the above command is issued the console displays the following:

   Logged call stack for process id <7228>

   Logged call stack in C:\EnterpriseServer\log\jde_7228.log

   5. Below are the contents of the log file generated in this example:

   7940/7152 MAIN_THREAD Fri Apr 22 12:53:53.544001 jdelogstk.c47
5. Below are the contents of the log file generated in this example:

   ```
   7940/7152 MAIN_THREAD Fri Apr 22 12:53:53.544001 jdelogstk.c47
   =====Call stack of thread 6964=====
   NtOpenDirectoryObject! C:\Windows\SYSTEM32\ntdll.dll
   0x746ddbd3.<nosymbols>! C:\Windows\SYSTEM32\USER32.dll
   MsgWaitForMultipleObjects! C:\Windows\SYSTEM32\USER32.dll
   _processAsyncEvent@8! C:\EnterpriseServer\system\bin32\jdenet.dll
   _JDENET_RunNet@12! C:\EnterpriseServer\system\bin32\jdenet.dll
   _WinMain@16! C:\EnterpriseServer\system\bin32\jdenet_n.exe
   ?invoke_main@@YAHXZ! C:\EnterpriseServer\system\bin32\jdenet_n.exe
   ?__scrt_common_main_seh@@YAHXZ! C:\EnterpriseServer\system\bin32\jdenet_n.exe
   ?__scrt_common_main@@YAHXZ! C:\EnterpriseServer\system\bin32\jdenet_n.exe
   _WinMainCRTStartup! C:\EnterpriseServer\system\bin32\jdenet_n.exe
   0x74846a14.<nosymbols>! C:\Windows\SYSTEM32\KERNEL32.DLL
   0x76faa9ff.<nosymbols>! C:\Windows\SYSTEM32\ntdll.dll
   ```

```
=====Call stack of thread 1544=====
NtWriteFile! C:\Windows\SYSTEM32\ntdll.dll
0x74846a14.<nosymbols>! C:\Windows\SYSTEM32\KERNEL32.DLL
0x76faa9ff.<nosymbols>! C:\Windows\SYSTEM32\ntdll.dll

7940/7152 MAIN_THREAD Fri Apr 22 12:53:53.546001 jdelogstk.c57
Logged call stack for process id <7228>
```

Logging the callstack for a Specific Process ID on IBMi

Use the command syntax in this example to get the callstack for a specific process ID, with these assumptions:

- Kernel job number: 157619

- PID: 1832185

`SBMJOB CMD(CALL PGM(PP926SYS20/JDELOGSTK) PARM('1832185')) JOB(JDELOGSTK)`

After the job is submitted, the console displays the following to confirm the progress of the callstack logging.

```
1832185 Tue Apr 19 12:48:24.375624 netcfg.c316
Starting 64Bit Kernel of Type: QUEUE KERNEL
1832195/22030 MAIN_THREAD Tue Apr 19 12:55:18.066520 jdelogstk.c47
Generating Call Stack for PID 1832185 from PID 1832195 with 1 active threads out of 1 total threads
available
===============================
PID/PSThread_ID: 1832185/3604
System Thread ID: 3604
Thread Name:
CALLSTACK:
Level Program Library Module Statement Procedure
0 QC2UTIL1 QSYS QC2MI3 0000000001 deq
1 JDEIPC PP926SYS20 MSG 0000000018 JDE_msgrcv
2 JDEIPC PP926SYS20 IPCSYSV 0000000011 receiveMessage
3 JDEIPC PP926SYS20 IPCPUB 0000000032 ipcGetQueueEntry
4 JDENET PP926SYS20 EXTMSGQ 0000000032 getExternalQueueEntry
5 JDENET PP926SYS20 NETQUEUE 0000000015 processKernelQueue
6 JDENET PP926SYS20 NETPUB 0000000041 JDENET_RunKernel
7 JDENET_K PP926SYS20 JDENET_K 0000000019 main
8 JDENET_K PP926SYS20 JDENET_K _C_pep
9 QP0ZPCPN QSYS QP0ZPCPN 0000000286 Qp0zNewProcess
10 QP0ZPCP2 QSYS QP0ZPCP2 _CXX_PEP__Fv

1832195/22030 MAIN_THREAD Tue Apr 19 12:55:18.075328 jdelogstk.c57
Logged call stack for process id <1832185>
```

Refresh Environment on Oracle Database (9.2.7)

You can use a setting to enable the time interval in seconds to send a broadcast message to refresh the environment whenever any JD Edwards EnterpriseOne Enterprise Server receives a message from an Oracle database indicating the Oracle Call Interface (OCI) Server is not connected.

> **Note:** This setting is only applicable for an Oracle Real Application Cluster (RAC) database. Do not enable this setting for a standalone non-RAC single instance or single node database.

To configure the **Refresh Environment on OCI Server Not Connected Interval** setting, navigate to Configuration > Advanced > Database
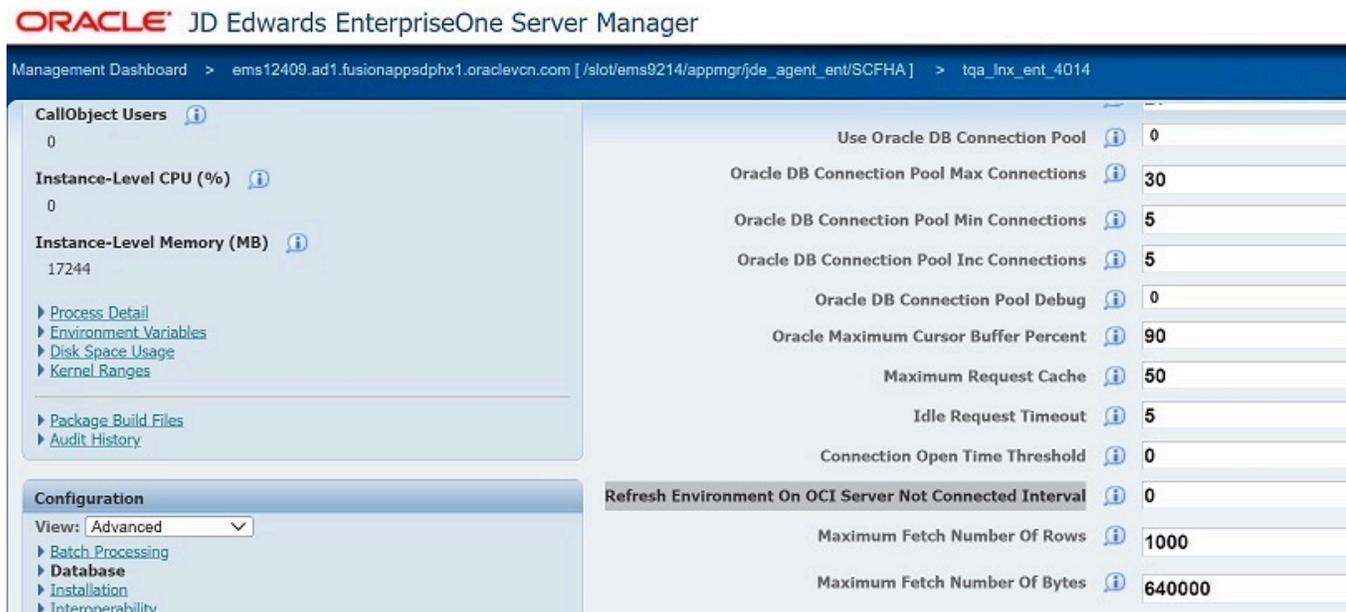
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Improve Workload Performance for an Oracle Database (9.2.7)

Increasing the fetch size for JD Edwards EnterpriseOne components to an optimal value may improve the performance of queries from the JD Edwards database driver to an Oracle database.

By default JD Edwards EnterpriseOne fetches a preset number of rows and bytes from an Oracle database. However, you can override the default setting by using Server Manager to:

- Configure the Database Fetch Size on the Enterprise Server
- Set the SQL Statement Fetch Size on the HTML Server

Configure the Database Fetch Size on the Enterprise Server

Using Server Manager, you can configure these database fetch size settings on the Enterprise Server:

- Maximum Fetch Number of Rows (MaxFetchNumRows)
- Maximum Fetch Number of Bytes (MaxFetchNumBytes)

Use these steps to use Server Manager to configure the Oracle database fetch size parameters for an Enterprise Server:

1. Select the Enterprise Server instance that you want to configure.
2. Navigate to Configuration > Advanced > Database > Bootstrap Datasource
3. Complete these fields:
   o **Maximum Fetch Number Of Rows**

   This is the maximum number of rows to fetch for a SQL select statement for an Oracle database. If the buffer size of the maximum rows is less than the maximum number of bytes, then the maximum number of rows is used. Otherwise, the number of rows is adjusted to fit into the maximum number of bytes limit.

○   **Maximum Fetch Number Of Bytes**

This is the maximum number of bytes to fetch for a SQL select statement for an Oracle database. If the buffer size of the maximum rows is less than the maximum number of bytes, then the maximum number of rows is used. Otherwise, the number of rows is adjusted to fit into the maximum number of bytes limit.

The following shows example settings.
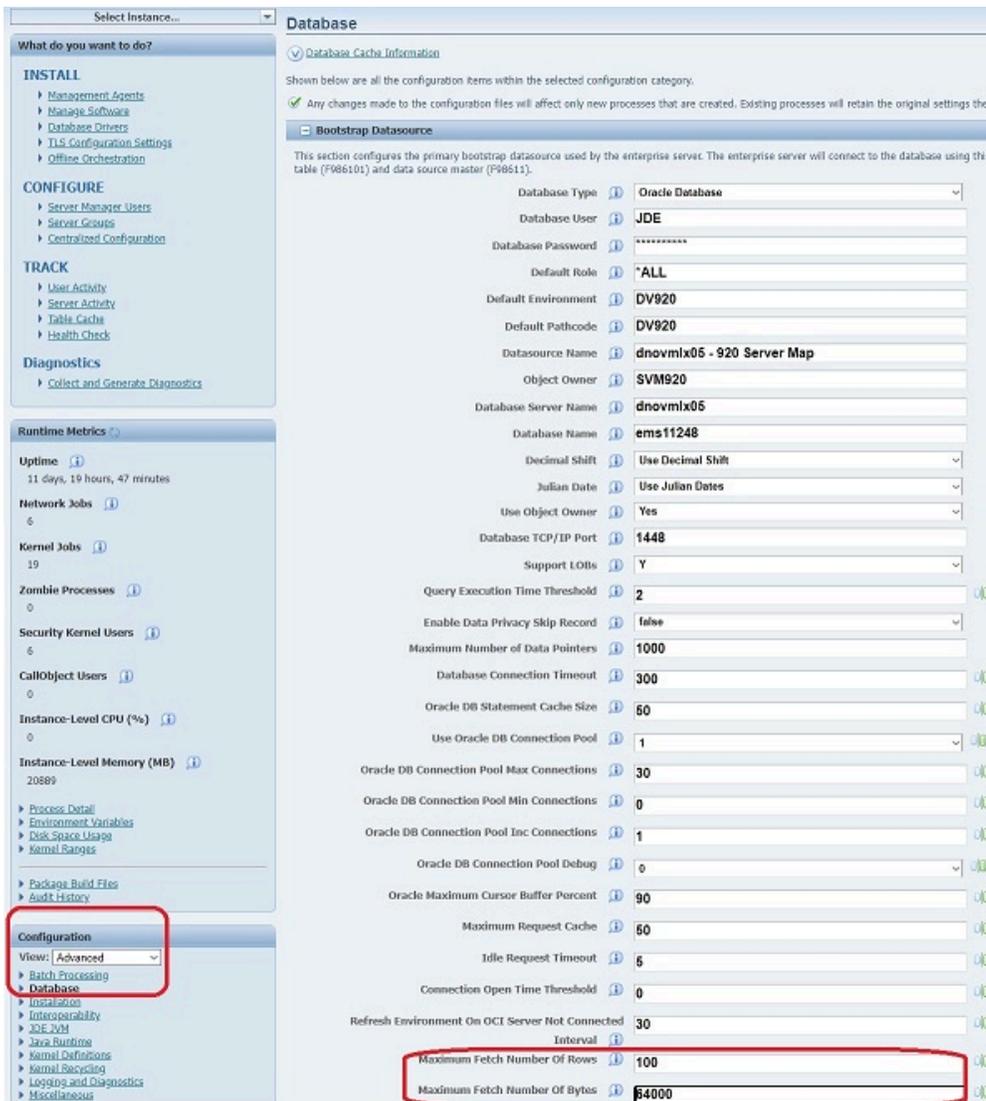
Set the SQL Statement Fetch Size on the HTML Server

You can override the default setting for database fetches by the HTML Server.

1. Use Server Manager to select the HTML server for which you want to override the default fetch size to an Oracle database.
2. Navigate to Configuration > Advanced > Database > JDBj Runtime Properties

3. Configure the **Statement Fetch Size** parameter:

    You can set this integer value greater than the default value of 0 to override the number of records to fetch for a
    SQL select statement. This is used only for Oracle database. The default value of 0 uses the default value of the
    Oracle JDBC driver to fetch a number of records to fetch for a SQL select statement.

The following shows example settings.

Available Log Files

Refer to the section entitled: *Available Log Files* in this guide.

Configuration Groups

The Configuration section displays a list of Configuration Groups that varies according to the server type. This section lists the Configuration Groups for these *JD Edwards EnterpriseOne* servers:

- *EnterpriseOne Enterprise Server*
- *EnterpriseOne HTML Server*
- *EnterpriseOne Business Services Server*
- *EnterpriseOne Application Interface Services (AIS) Server*
- *EnterpriseOne Transaction Server*
- *EnterpriseOne Data Access Server*
- *EnterpriseOne Data Access Driver*

EnterpriseOne Enterprise Server

This section lists these Configuration Groups for an Enterprise Server:

- Batch Processing
- Database
- Installation
- Interoperability
- Kernel Definitions
- Logging and Diagnostics
- Miscellaneous
- Network and IPC
- Package Builds
- Security

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

EnterpriseOne HTML Server

This section lists these Configuration Groups for a *HTML Web Server* :

- Cache
- Database
- Miscellaneous
- Network
- Security

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- Web Runtime

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

> **Note:** In the Cache group, you can use the UDOCheckInterval setting to set a specified time for the system to automatically clear the shared UDOs cache. The default value for this setting is 24 hours (86400000 milliseconds). Depending on the number of shared UDOs a user has access to, the UDOCheckInterval setting can be set to an appropriate value. If the number of shared UDOs available to a user is small (for example: less than 100), you can set a shorter time, so that the purging can take place more frequently. The UDOCheckInterval setting is applicable to UDOs such as notification, orchestration, rule, whitelist, cross reference, form service, schedule, search group, form extension, and personal form. (Release 9.2.3.4)

EnterpriseOne Business Services Server

This section lists these Configuration Groups for a Business Services Server:

- Cache
- Database
- HTTP Settings
- Inbound Settings
- Miscellaneous
- Network
- Runtime Settings
- Security

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

> **Note:** In the Cache group, you can use the UDOCheckInterval setting to set a specified time for the system to automatically clear the shared UDOs cache. The default value for this setting is 24 hours (86400000 milliseconds). Depending on the number of shared UDOs a user has access to, the UDOCheckInterval setting can be set to an appropriate value. If the number of shared UDOs available to a user is small (for example: less than 100), you can set a shorter time, so that the purging can take place more frequently. The UDOCheckInterval setting is applicable to UDOs such as notification, orchestration, rule, whitelist, cross reference, form service, schedule, search group, form extension, and personal form. (Release 9.2.3.4)

EnterpriseOne Application Interface Services (AIS) Server

This section lists these Configuration Groups for an AIS Server:

- All Settings

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

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EnterpriseOne Transaction Server

This section lists these Configuration Groups for a Transaction Server:

- Database
- Network
- Real Time Events
- Security

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

EnterpriseOne Data Access Server

This section lists these Configuration Groups for a Data Access Server:

- JDBJ Database Configuration
- Network Settings

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

EnterpriseOne Data Access Driver

This section lists these Configuration Groups for a Data Access Server:

- Database
- Installation
- Network
- Security

For details of each Configuration setting within a configuration group, refer to the Server Manager internal help for each setting.

Configuration Items

This section describes:

- Help
- History

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Help

Each configuration item is identified using a short, readable name. Clicking the Help icon will link to the following information

- The INI section the parameter pertains to.

- The INI entry the parameter pertains to.

- The location of the INI file being updated.

- A list of allowed values, if applicable.

- An extended description detailing the purpose of the configuration parameter.

- The default value, if applicable.
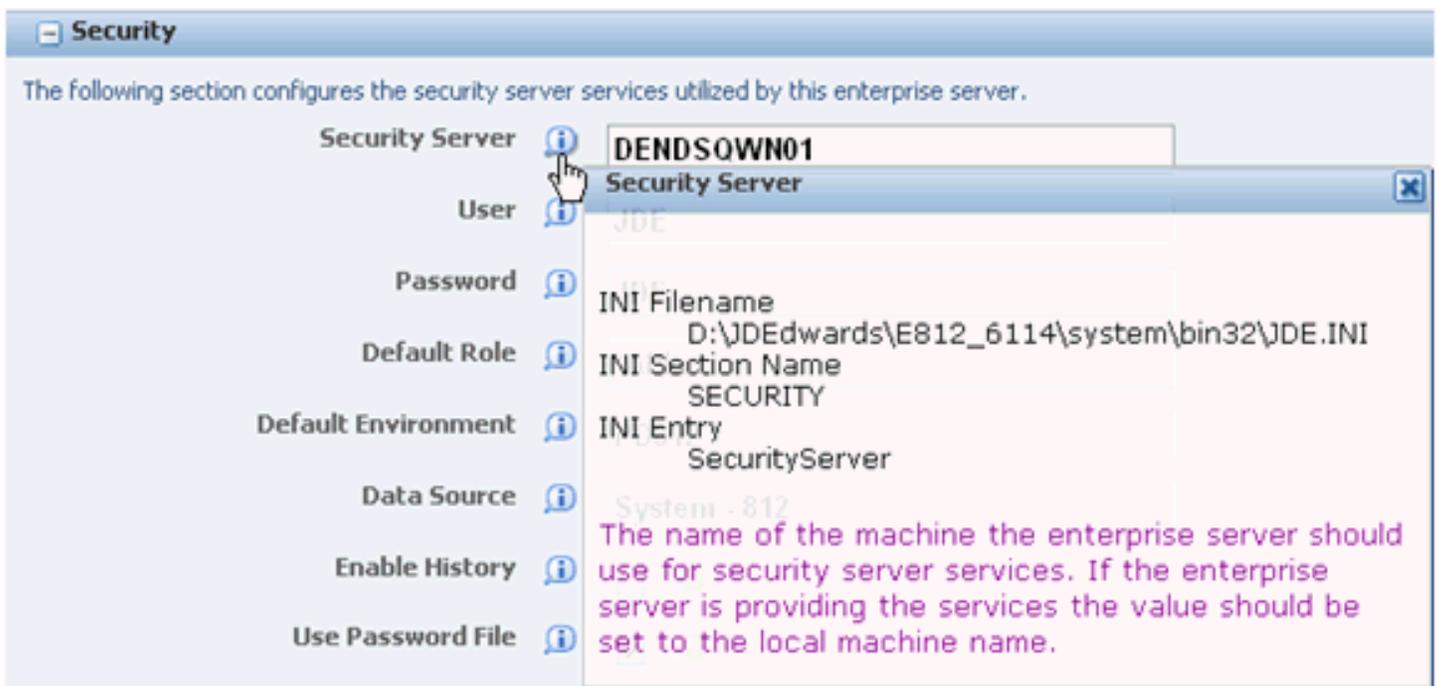
History

History is maintained for each configuration item. The old and new values are recorded along with the user that made the change. Changes made directly to the configuration files are not audited.

To view History, click on the History icon.

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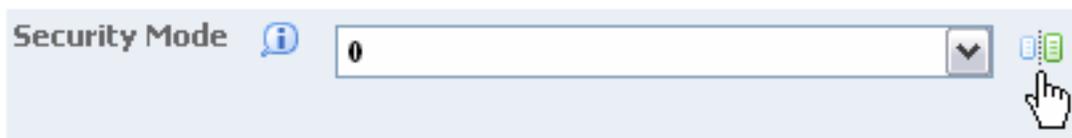
The History - <configuration item> popup screen that appears contains these fields:

- *Date*

  The date the change occurred.

- *User*

  The user that made the change.

- *Old Value*

  The value before the change.

- *New Value*

  The value after the change.
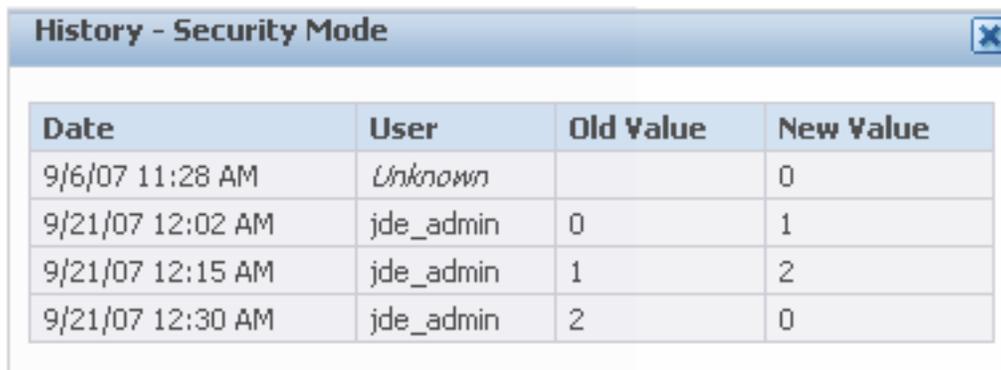
History may also be viewed for all configuration parameters for an instance.

See Also

- *Audit History*

Compare Instances

Two or more managed instances may be selected to identify configuration differences. Each selected instance will also be compared with the default configuration of the server group to which it belongs.

This section describes:

- *Create Comparison*
- *Comparison Results*

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Comparison Results

ⓥ Comparison Results

⊟ Instance Selection

Shown below are all the managed instances you are authorized to view. Select the instance(s) you wish to compare. Each instance is compared to the server group default values for that instance, in addition to any other selected instances.

Select All | Select None

	Instance Name ⓘ	Server Group ⓘ	Managed Instance Type ⓘ	Managed Home Location ⓘ
☑	HTML_srv1	default	EnterpriseOne HTML Server	ADC6160631.us.oracle.com (C:\jde_agent\SCFHA)
☐	cordvsn1_jas_server	example	EnterpriseOne HTML Server	cordvsn1 (/u01/appmgr/jde_home/SCFHA)

Show All Values ⓘ ☐

Run Comparison

✅ In addition to comparing the configuration of the selected instance(s), each selected instance will also be compared with the default configuration of the server group to which it belongs.

Comparison Results

Shown below are the results of the configuration comparison.

Apply Server Group Default ⓘ

Select All | Select None

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	Configuration Group ⓘ	Configuration Item ⓘ	Default Values for Server Group "default"	HTML_srv1
☐	Miscellaneous	Enterprise Server Name		bstravin-us
☐	Miscellaneous	Enterprise Server Port		6015
☐	Database	Database Type	O	I
☐	Database	Supports Large Objects (LOBS)	false	true
☐	Database	System Datasource Name		System - 910
☐	Database	Physical Database		SY910
☐	Database	Database Server Name		DENQAS3
☐	Database	Unicode Database	false	true
☐	Database	Bootstrap Environment		JDV910
☐	Database	Initial Connections	50	5

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Create Comparison

To create an instance comparison:

1. Click *Compare Instances* in the *Work With Configurations* section.
2. Select the check box for the instances to compare.
3. Select the check box for *Show All Values.*

   If selected all configuration items for each selected instance and corresponding server group(s) will be displayed. If not selected only configuration items that are not identical between the selected instances and their server groups will be displayed.
4. Click the *Run Comparison* button.

Comparison Results

This section describes:

- *Results*
- *Modifications*

Results

The comparison results appear in a new pane under the *Instance Selection* section.

The comparison is detailed by these columns:

- Configuration Metric

  Configuration items are associated into logical groupings, which are referred to as a Configuration Metric.
- Configuration Item

  The individual configuration item that is being compared between the selected instance(s) and their corresponding server group.
- Permissions for Server Group: <Server Group Name>

  Specifies configuration values.
- <Instance Name>

  Specifies configuration values and paths.

Comparison Results

Shown below are the results of the configuration comparison.

	Apply Server Group Default	ⓘ

Select All | Select None

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	Configuration Group ⓘ	Configuration Item ⓘ	Default Values for Server Group "default"
☐	Logging and Diagnostics	PrintUBEJoblog	
☐	Logging and Diagnostics	PrintUBEJoblogOnError	
	Package Builds	Package Build Location	
☐	Package Builds	Compile Output	
☐	Package Builds	Compiler Flags	/nologo /c
☐	Package Builds	Debug Flags	/FD /GZ /Gz /Od /Zi /MDd /W4 /EHs /Gy /D "_DEBUG"
☐	Package Builds	Define Flags	/D "WIN32" /D "_WINDOWS" /D "IAMASERVER" /D "KERNEL" /D "UNICODE" /D "_UNICODE"
☐	Package Builds	Inline Functions	
☐	Package Builds	Link Flags	/DLL /DEBUG /SUBSYSTEM:windows /FORCE:MULTIPLE /FORCE:UNRESOLVED /INCREMENTAL:YES /VERBOSE /MAP /W/
☐	Package Builds	Link Libraries	jdekrnl.lib jdel.lib jdenet.lib jdeipc.lib owver.lib jdeunicode.lib v_verify.lib xerceswrapper.lib xmlpublisher.lib

Modifications

You can apply the Server Group default values to an instance by selecting the configuration items and then selecting the *Apply Server Group Default* button.

Troubleshooting the Configuration of EnterpriseOne Server Instances

This section describes:

- Permission Denied

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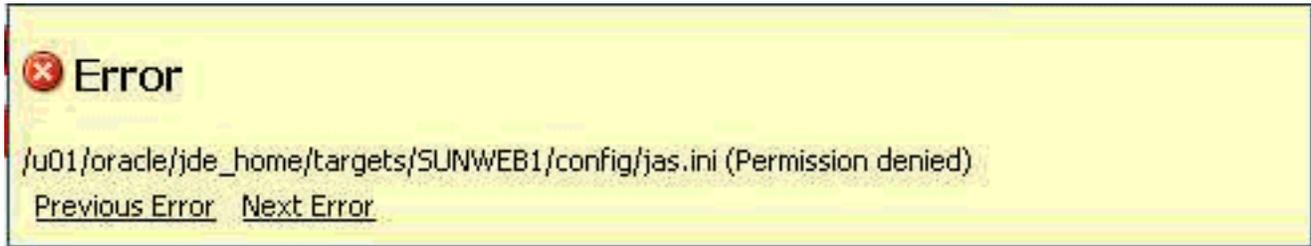
Permission Denied

If you receive an error that permission is denied to write to a configuration file, you need to ensure that the file is not purposely locked in a manner that prevents the user under which *Server Manager* is running from modifying it. You should check the file permissions to ensure the file is writable.

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32 Administer Server Groups

Overview of Server Groups

In Server Manager, you manage servers by grouping similarly purposed servers into logical groupings called server groups. You determine how you want to group servers depending on your particular JD Edwards EnterpriseOne implementation. For example, you may want to put all production servers in one server group and manage development servers in another. Or, you may decide to place servers in separate server groups based on geographical location. How you organize and manage servers in server groups is up to you.

The Management Console provides a default server group that you can use to initially manage servers. You can move any server from the default server group to a newly created server group. A server cannot belong to more than one server group, including the default server group.

You can include the following types of servers in a server group:

- JD Edwards EnterpriseOne Enterprise Server
- JD Edwards EnterpriseOne HTML Server
- JD Edwards EnterpriseOne Collaborative Portal Server
- Transaction Server
- PIM Synch Server
- Business Services Server

In the Management Console, you can configure default configuration settings for each type of server in a server group. When you add a server to a server group, Server Manager automatically applies the default configuration settings for that type of server to the newly added server.

> **Note:** You can manage and monitor certain features of application servers (Oracle WebLogic or IBM WebSphere Application Server) through the Management Console, but these types of servers cannot be members of a server group. See Overview of Basic Instance Administration for more information.

Server Group Security

Server Manager contains a set of server group permissions that enable you to control the activities Management Console users can perform on the servers within a particular server group. This layer of security enables you to control the tasks that Management Console users can perform on a server as well as the configuration data that they can access. You can grant permissions that allow a set of users to perform certain types of tasks in one server group, but not another. For example, you can permit developers total access to a server group that manages servers for a test environment, but not give the same developers access to production servers managed in another server group.

Security for server groups, or server group permissions, is assigned to user groups. See *Assign Server Manager Permissions* for more information.

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Manage Server Groups

You can create your own unique server groups to manage different sets of servers. How you choose to manage servers in server groups, and whether you choose to use server groups at all or just manage all servers in the default server group, is up to you.

> **Note:** When you create a server group, the Management Console copies default configuration settings from the default server group to the new server group. In the new server group, you can modify the default configuration settings as appropriate.

Create Server Group

To create a server group:

1. In the Quick Links section of the Management Console, click the Server Groups link.

2. On Server Groups, enter a unique name in the Server Group Name field.
3. Complete the Group Description field.

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4. Click the Create Group button.

The Management Console displays the new server group in the grid.

> **Note:** You must have the consoleConfig permission to create a new server group.

Modify Server Group

This section describes:

- *Add Server Group Members*
- *Delete Server Group*

Add Server Group Members

You can move servers from the one server group to another server group, provided a second server group has been created. Moving a server changes its group membership only; it does not modify the configuration of the server.

A server, or managed instance, cannot belong to more than one server group.

To add server group members:

1. In the Quick Links section of the Management Console, click the *Server Groups* link.
2. On Server Groups, click the group name link for the group that you want to add a server to the server group.

3. In the Add Server Group Members section, click the *Instance Name* drop-down menu to select a managed instance (server) that you want to migrate to the server group. The list contains all the servers that do not belong to the current server group. The group to which the servers belong is shown in parenthesis.
4. Click the *Add Group Member* button to add the server as a member of the server group.

The system displays all members of the server group under the Server Group Members heading.

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Delete Server Group

To delete a server group:

1. On Server Groups, click the check box next to the server group that you want to delete.

Select [Server Group]: **Delete** ⓘ		
Select All	Select None		
Server Group Name ⓘ	**Group Description** ⓘ	**Server Group Members** ⓘ
☐ 9242G1		• JAS2 (den00lkk.us.oracle.com,C:\jde_home_3\SCFHA) • ais_21311_inst (den00lkk.us.oracle.com,C:\jde_home_3\SCFHA)

2. Click the *Delete* button.

   Note: You may not remove a server group that has server members.

33 Clear Table Cache

Understanding Clear Table Cache

The JDB feature called Clear Table Cache can be used to improve performance by caching specific tables in the Call Object Kernel. For tables cached by JDB, any update or delete of a record in a cached table requires a clear of the cache on that kernel for the data to be available to all users. The adoption of the JDB Clear Cache API in specific EnterpriseOne Applications provides up-to-date data availability. CNC administrators with administrator access can use Server Manager to perform a dynamic cache refresh while users are logged on.

Clear Table Cache refresh allows a specific JDB table cache that is registered in the F98613 table to be cleared across kernel processes and across all Enterprise Servers as long as they are managed by the same Server Manager. As a result, all Enterprise Servers and all JD Edwards EnterpriseOne HTML Web Servers managed by the same Server Manager no longer need to be bounced (restarted) in order to clear cache. Since there is no table caching for the HTML Web Servers, it is not necessary to clear the cache on those machines.

Using the Clear Table Cache Feature

To use the Clear Table Cache feature in Server Manager:

1. Launch the Server Manager Management Console.
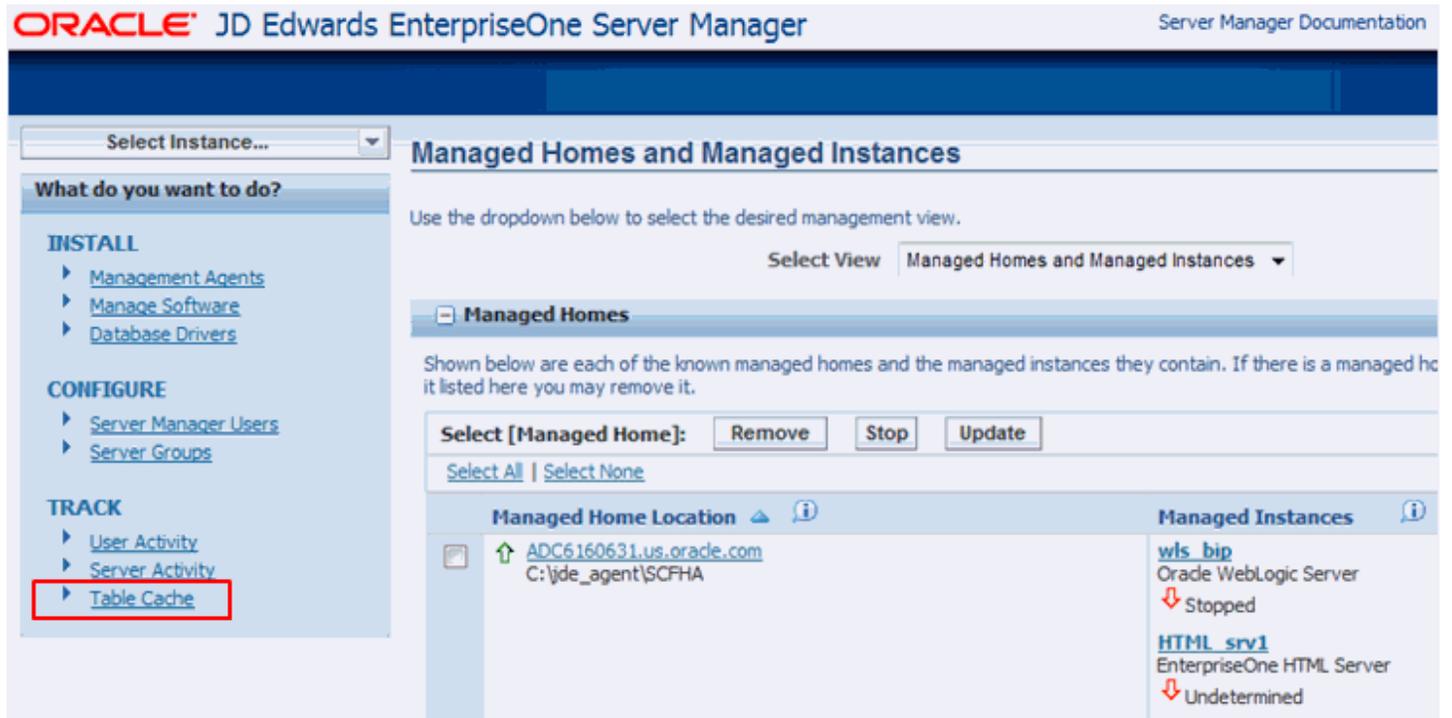
2. In the *What do you want to do?* section, click the **Table Cache** link.
3. On the Clear Table Cache Results page there are two sections:

   o *Clear Table Cache by Environment*
   o *Clear All Tables Caches in All Environments*

Clear Table Cache by Environment

To clear all caches for all tables which are registered in F98613 in all environments across all Enterprise Servers that are managed by the same Server Manager:

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Clear Table Cache Results

Ⓥ Clear All Tables Caches in All Environments

⊟ **Clear Table Cache by Environment**

This will clear cache for specified table which is registered in F98613 in specified environment across all enterprise servers

Table Name ⓘ [   ]

Environment Name ⓘ [   ]

Clear JDBJ Cache on Affected Html Servers ⓘ ☐

[Clear Table Cache]

⊟ **Clear All Tables Caches in All Environments**

This will clear caches for all tables which are registered in F98613 in all environments across all enterprise servers for this

Clear JDBJ Cache on All Html Servers ⓘ ☐

[Clear All Tables Caches]

1. On the Clear Table Cache Results page, go to this section:

   Clear Table Cache by Environment

2. Complete these fields:

   ○ *Table Name*

     Enter a valid table name that is registered as a cached table in F98613 table using the P98613 application.

   ○ *Environment Name*

     Enter a valid JD Edwards EnterpriseOne environment from which the table cache will be cleared.

   ○ *Clear JDBJ Cache on Affected HTML servers (Tools Release 9.2.9.3 and later)*

     Select the check box to clear the JDBj cache on the HTML servers connected to the respective Enterprise servers.

3. Click the **Clear Table Cache** button.

   The system displays a section that lists all cache that has been cleared for the requested table.

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Clear All Tables Caches in All Environments

To clear all caches for all tables which are registered in F98613 in all environments across all Enterprise Servers that are managed by the same Server Manager:

1. On the Clear Table Cache Results page, go to this section:

   Clear All Table Caches by Environment
2. Tools Release 9.2.9.3 and later: Select *Clear JDBJ Cache on All HTML Servers* to clear the JDBj cache across all the HTML servers.
3. Click the **Clear All Table Caches** button.

   The system displays a section that lists all cache that has been cleared for all tables in the selected environment.

Clear Data Cache (Release 9.2.3.4)

Clear Data Cache can be used for clearing the data cache on the AIS and HTML Servers. If the HTML Server and AIS Server are setup in a cluster, Clear Cache will clear all the relevant cache on all the members of the cluster. In the case of

HTML Server, cache is cleared for Form Extension, Personalized Forms, and Search Group entries, and EnterpriseOne pages (Tools Release 9.2.9.3 and later).

In the case of AIS Server, the cache is cleared for Orchestration, Notification, Form Service and Data Service, and Read Data entries.

Using the Clear Data Cache Feature

To use the Clear Cache feature in Server Manager:

1. Launch the Server Manager Management Console.
2. On the Managed Instances section of the Server Manager Management Dashboard, click on the required managed instance of the HTML or the AIS Server for which you want to clear the cache.
3. Do one of the following:

   a. On the EnterpriseOne HTML Server managed instance page, click the Clear Caches button to clear the Form Extension, Personalized Forms, and Search Group caches.

   > **Note:** Starting with Tools Release 9.2.9.3, you can clear the cache for EnterpriseOne pages as well with the Clear Caches button.

   b. On the EnterpriseOne Application Interface Services managed instance page, click the Clear Caches button to clear the Notification and Orchestration caches. Click the second Clear Caches button to clear the Form Service and Data Service, and Read Data caches.

> **Note:** The Clear Caches button is disabled if the status of the HTML or AIS server is anything other than "Running".

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34 Health Check (Release 9.2.2)

Understanding Health Check

Beginning with Tools Release 9.2 Update 2, the Server Manager supports on-demand health checks on the following servers:

- Enterprise Server
- HTML Server
- Application Interface Services (AIS) Server
- Business Services Server (BSSV)
- Transaction (RTE) Server
- Oracle Database Server

> **Note:** The health check feature is supported only for the instances running with Tools Release 9.2.2.0 and higher. The health check feature is available only to administrative users. If the user does not have permission to run the health check on a particular instance, the message " User <user name> doesn't have access to run Health Check on this instance" is displayed.

This section contains the following topics:

- *Understanding Health Check Tasks*
- *Setting Permissions for Target Servers*
- *Granting Access to the Server Groups*
- *Prerequisites for an One View Report (OVR)*

Understanding Health Check Tasks

The following table lists the tasks the system performs when you run the health check on an instance:

Instance Name	Health Check Task

HTML Server	Checks the following:
	
	- **Login**
	
	  Logs in to the server using the health check user name and password.
	
	- **Interactive App**
	
	  By default, launches the interactive application P01012_W01012B with version ZJDE0001.
	
	  Tools Release 9.2.6. An administrator can specify the interactive application and version to run as part of executing the Health Check through Server Manager and Server Manager APIs. The Server Manager navigation to configure a specific application and version for a health check is **Configuration → Advanced View → Miscellaneous → Health Check Configurations**.
	
	- **UBE**

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Instance Name	Health Check Task
	By default, runs the UBE R0006P with version XJDE0001. **Tools Release 9.2.6.** An administrator can specify the UBE and version to run as part of executing the Health Check through Server Manager and Server Manager APIs. The Server Manager navigation to configure a specific UBE and version for a health check is **Configuration → Advanced View → Miscellaneous → Health Check Configurations**. • **OVR** Runs the OVR using the task ID OVRHEALTHCHECK.
Enterprise Server	Checks the following: • **Port Test** Runs the port test. • **UBE** By default, runs the UBE R0006P with version XJDE0001. **Tools Release 9.2.6.** An administrator can specify the UBE and version to run as part of executing the Health Check through Server Manager and Server Manager APIs. The Server Manager navigation to configure a specific UBE and version for a health check is **Configuration → Advanced View → Miscellaneous → Health Check Configurations**. • **BSFN** Runs the GetEffectiveAddress BSFN.
AIS Server	Checks the following: • **Login** Logs in to the server using the health check user name and password. • **Form Service App** By default, launches the interactive application P01012_W01012B with version ZJDE0001. **Tools Release 9.2.6.** An administrator can specify the interactive application and version to run as part of executing the Health Check through Server Manager and Server Manager APIs. The Server Manager navigation to configure a specific application and version for a health check is **Configuration → Advanced View → Miscellaneous → Health Check Configurations**. • **Form Service UBE** By default, runs the UBE R0006P with version XJDE0001. **Tools Release 9.2.6.** An administrator can specify the UBE and version to run as part of executing the Health Check through Server Manager and Server Manager APIs. The Server Manager navigation to configure a specific UBE and version for a health check is **Configuration → Advanced View → Miscellaneous → Health Check Configurations**. • **JWT Trust Login** Checks the JWT Trust login. • **Basic Auth (Release 9.2.5.2)** Checks if Basic Authentication is configured properly for the AIS Server.

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Instance Name	Health Check Task
BSSV	Checks the following: • **BSSV login and BSSV DB Service** Checks the BSSV login and runs the dbservice BSSV (JPR01000 – getAddressBook). • **BSFN Execution** Runs the GetEffectiveAddress BSFN.
RTE Server	Checks the following: • **DB Connection** Connection to the bootstrap database. • **Deployment** All the available JMS resources. This includes JMS Queue/Topic/QueueConnectionFactory/TopicConnectionFactory/EJB and JDBC DataSource (if applicable). Connection to the Event client. • **Event Trigger** If the event trigger is available and active.
Oracle Database Server	Checks the following: • **Connection** Connection to the DB. • **Configuration** The File System I/O options of the DB. Displays the status as success if the value is SETALL; otherwise a warning is displayed. The DB log mode. Displays the status as success if the DB log mode is ARCHIVELOG; otherwise a warning is displayed. The password profile information. Displays the status as success if PASSWORD_LIFE_TIME parameter is set to UNLIMITED; otherwise a warning is displayed. • **E1 User Account** The account status for the user JDE. • **Schema Deployment** The schema deployment status. Displays the status as success if the pathcode/shared shemas are available else, displays an error.

Setting Permissions for Target Servers

This procedure is optional. If you do not set up permissions for the Target Servers, the health check uses the user name, password, and environment of the default Bootstrap user.

To set up the permissions for the Target Servers, add the following ini entries in jas.ini, jdeinterop.ini, jde.ini, rest.ini files for the RTE and JAS server, BSSV server, Enterprise server, and AIS server respectively.

```
[HEALTHCHECK]

HealthCheckEnvironment=JDV920

HealthCheckPwd=JDE

HealthCheckUser=JDE
```

Granting Access to the Server Groups

To grant access to the server groups:

1. In the Server Manager Management Dashboard, click Server Groups link in the Configure section.
2. In the User Groups section, click the required name of the user group.

	User Group Name	User Group Description	Users Belonging to User Group	Granted Permissions
☐	console_user	Any user who successfully authenticates and posses this role may utilize the management console. If a user does not have this role they will not be permitted to access any of the management console pages.	• jde_admin • NAREN • JDE	*No permissions have been assigned.*
☐	console_admin	This role is equivalent to having all permissions granted to a user. The jde_admin user will always have this role assigned. This permission permits to delete the console log files.	• jde_admin	*No permissions have been assigned.*
☐	testusergroup		• JDE	• managedComponents • monitorConfig • appServerConfig • consoleConfig • userManagement

Select [User Group]:   Create User Group...   Delete User Group
Select All | Select None

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3. In the Permissions for Server Group: default section, move the HealthCheck from the Available Options window to the Selected Options window.
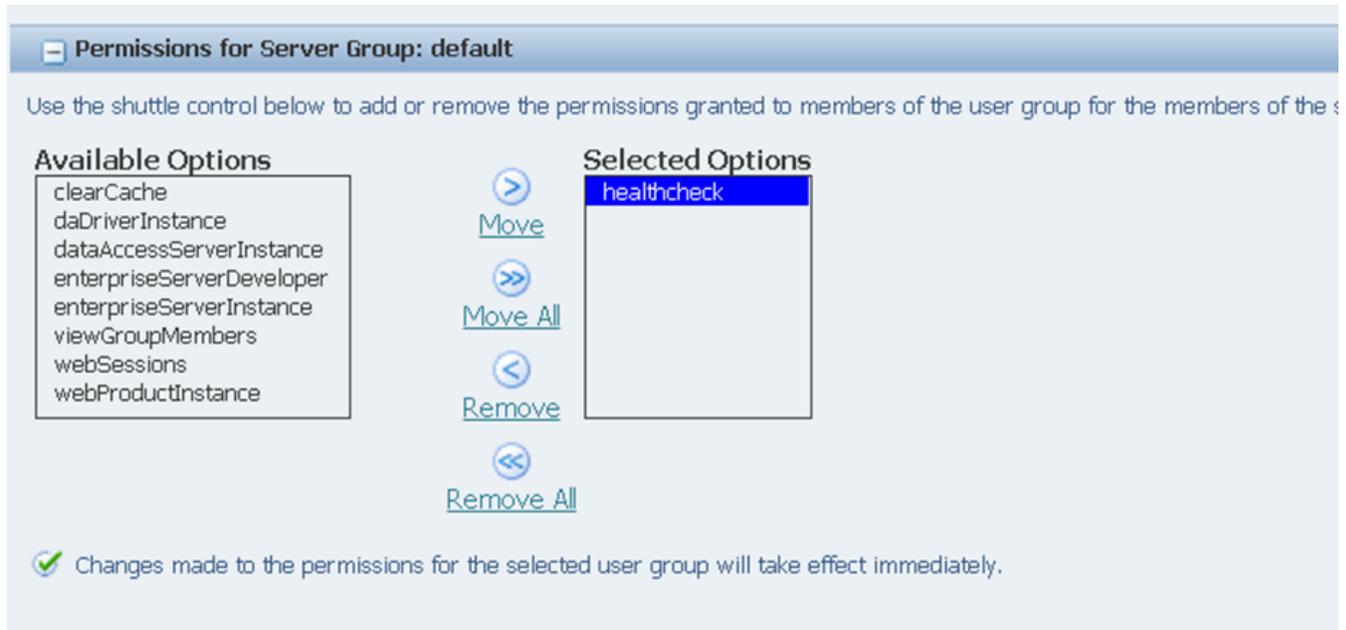
4. Navigate to the Server Manager Users Page and in the Management Console Users section, select the required user to whom you want to grant the Health Check permission.
5. Click Grant or Revoke User Groups, and select the user group to which you added the Health Check permission in step 3.

6. Click Save.

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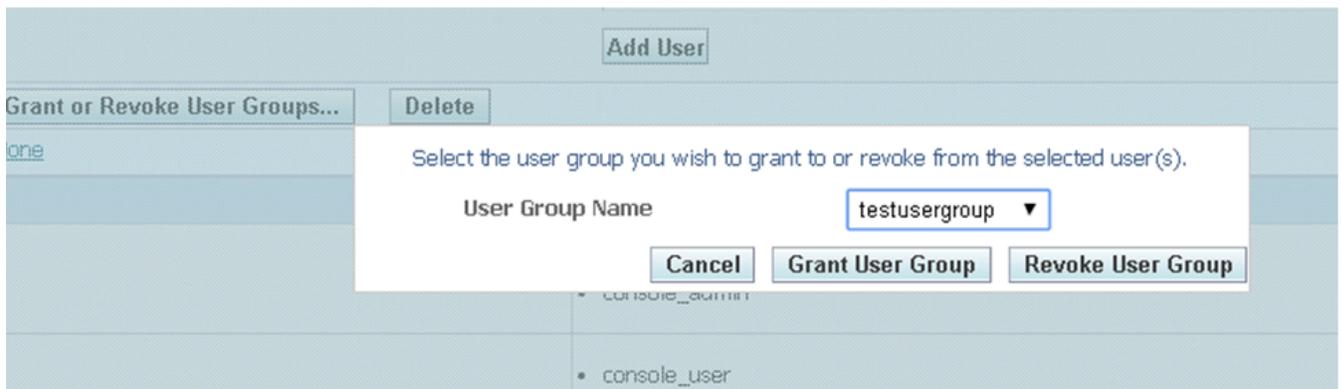
Prerequisites for an One View Report (OVR)

The health check summary of an OVR instance is displayed along with the EnterpriseOne HTML server. Ensure that you meet the following prerequisites to view the health check summary of an OVR instance.

1. The BI Publisher connection with the name ONEVIEW_BIP_CONN is available.
2. A task of Task Type as One View Report and Task ID as OVRHEALTHCHECK is available in the Work With Tasks program (P9000).

Note: The OVR should not contain any sensitive or critical data because this report is used while running the Health Check.

To create a Task ID called OVRHEALTHCHECK:

1. Access the JD Edwards EnterpriseOne application.
2. Type P9000 in the Fast Path field and press Enter.
3. On the Work With Tasks form, click Add.
4. Enter the Task ID as OVRHEALTHCHECK.
5. Enter the required Task Name.
6. In the Common tab, enter the required values in the Product Code, Jargon, and Country Code fields.

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7. Click the Executable tab, select the Task Type as One View Report, and complete the fields as shown in the following example.

8. Click the Task Description tab, and enter the description for your new Task ID.
9. Click OK.

> **Note:** You can create a new OVR or use an existing OVR to create the Task ID called OVRHEALTHCHECK.

Using the Health Check Feature

You can run the health check and view the summary of the server instances by using these two methods:

- Health check of an individual instance
- Health check of an individual or multiple instances from the Server Manager

When you run a health check for single or multiple instances, you will see a summary window with these icons. You can hover over these icons to see the details.

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Icon	Description
✔	Indicates that the health check is completed successfully.
✖	Indicates that there is an error while running the health check. See the following log files for more details: • Server Manager log files if the error is NOT RUN. • Embedded Agent log files of the JDE instance on which Health Check is running if the error is FAILED. • SM Agent log files of the registered Database server if the error is FAILED. • Jde log files of the instance on which the health check is running if the error is FAILED.
⚠	Indicates a warning. For example, warning occurs if the pre-requisites for running the health checks are not configured properly.

Health Check of an Individual Instance

To view the health check summary of an individual instance, select the required managed instance from the Server Manager Management Dashboard, and then click Run Health Check. The following is an example screenshot of the Health Summary window of the EnterpriseOne AIS Server instance.

Health Check from the Server Manager

To view the Health Check summary of a single instance or multiple instances from Server Manager:

1. Launch the Server Manager Management Console.
2. Click the Health Check link in the TRACK section.

3. In the Health Check Results window, select the following options as required, and then click Run Health Check:

- Target Type – Select this option to choose your target type.
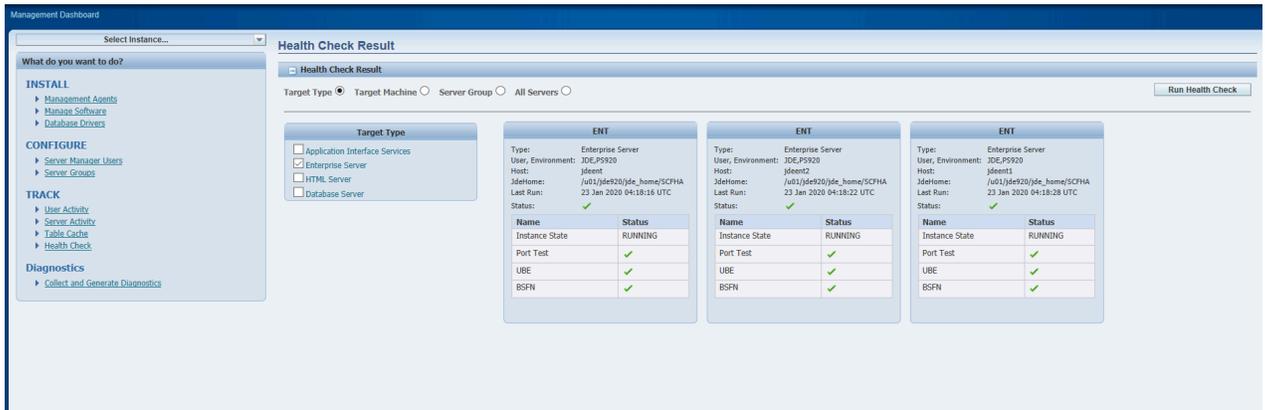
- Target Machine – Select this option to choose the required target machine.

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   o Server Group - Select this option to choose the required server group.

o   All Servers - Select this option to view the health check information for all the servers of the supported target types configured in Server Manager.

Understanding Pod Health Check (Release 9.2.6)

Note: The pod health check described in this section is not invoked from the Server Manager console nor as a Server Manager REST API. It is included here because of its relativity to the other Server Manager health checks.

In the recommended EnterpriseOne production architecture, the web tier comprises a set of interrelated servers:

- An HTML Server, sometimes called a "front-end" HTML Server because it receives the requests from end users' browsers

- An application interface services (AIS) Server

- A second HTML Server, sometimes called a "back-end" HTML Server because it fulfills the requests from the AIS Server

Taken collectively, these servers are called a "pod". For scalability and fault tolerance, it is common to deploy redundant sets of pods, often behind a load balancer, which directs traffic across the pods. The Enterprise Server and the database

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are also essential parts of the complete stack. If any servers in the stack are experiencing a fault, EnterpriseOne transactions will fail.

The pod health check is a lightweight service which returns the health information of the POD. In a load-balanced environment, the load balancer can run this service to determine if it is possible to forward load to a particular POD. You can send a HTTP GET request to an HTML Server instance to verify the health of a group of interdependent servers:

```
https://<IP Address/Fully Qualified Domain Name>Port>/jde/PODHealthChecker
```

If the servers are available, an HTTP response with the 200 status is returned, otherwise, the status is either 500 (servers down) or 404 (front end JAS is down).

> **Note:** To run the POD health check, AIS and Server Manager Health Check must be configured on this server instance.

In addition, the system returns the details in the JSON format. Here are some sample responses.

- If the servers are available, the system returns `{"status":"POD available"}`

- If the servers are down, the system returns`{"status":"AIS or backend JAS not available"}`

Starting with Tools Release 9.2.7.4, if the JAS instance reaches the maximum user limit, the pod health check service returns the 409 status with the message "Exceeds maximum JAS user limit".

35 Collect and Generate Diagnostics (Release 9.2.3.4)

Understanding Collect and Generate Diagnostics

Collect and Generate Diagnostics provides a simple interface that you use to efficiently and automatically collect diagnostic data and system information. You have the flexibility to collect just the data that pertains to a specific server.

Collect and Generate Diagnostics is available with Tools Release 9.2.3.4.

Important: Technical tables, files, and logs may contain confidential data and passwords. Therefore, it is your responsibility to verify that sensitive data is removed prior to attaching the collected data to a Service Request or sharing the data.

> **Note:** The password values in the .ini files are removed prior to collection.

The Collect and Generate button creates the following directories:

- CaptureDiagnostics

  Every time you click the Collect and Generate button the directory is deleted and recreated.

- CaptureDiagnosticsZip

  This directory contains the generated .zip files and a temp directory. If it does not exist, it is created.

- Temp

  A sub-directory of CaptureDiagnosticsZip directory. This directory contains a copy of the most current .zip file for the Download Zip--<instance name> link. If the collected .zip file is over two gigabytes in size, it is recommended that you to manually copy the file. If you attempt to download the .zip file, the browser could time-out.

It is recommend that you periodically delete the .zip files in the following directories:

- Deployment Server: <install path of Deployment Server instance>\CaptureDiagnosticZip
- Enterprise Server: <install path of Enterprise Server instance>\CaptureDiagnosticZip
- HTML Server: <install path of Server Manager Agent >\CaptureDiagnosticZip
- Server Manager Console: <install path of Server manager Consolde>\CaptureDiagnosticZip

Deployment Servers

This section describes the available fields for the Deployment Server.

Deployment Servers

Lists the available Deployment Servers you can select to collect diagnostics.

ESU Install Issue

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Collects the ESU jde.log and the UBE files for:

- Load XML Data to Table (R98403XB)
- Spec Merge Driver (R98700)
- Software Update History Report (R96701)
- Table and Index Creation (R98407)
- Table Conversion/Merge Driver (R98405)
- Data Dictionary Merge (R989200P)
- User Defined Codes Merge (R9600042)
- Solution Explorer Merge for ESU (R9690002O)
- Service Constants Merge (R96951002)
- XMLP Merge (R96956002)
- RPDF Merge (R96956202)

The jde.ini, jdbj.ini, jas.ini, jdelog.properties, ptf.log and logs from the Deployment Server are also collected.

OneWorld Client Install Issue

Collects the files under the OneWorld Client Install directory, which includes the following:

- installManager.htm
- install/oraparam.ini
- misc/ini files
- stage/products.xml
- ThirdParty/WebDevFeature/WASH4A
- WLSH4A/ install/oraparam.ini
- reponse/WXXH4A_install.rsp
- stage/products.xml

The jde.ini, jdbj.ini, jas.ini, jdelog.properties, ptf.log and logs from the Deployment Server are also collected.

Package Build Files

Collects the package.inf file, ServerLogs, the local svrpkgbuild.log, the local clientpkgbuild.log and the work folder for the specified package name entered.

The jde.ini, jdbj.ini, jas.ini, jdelog.properties, ptf.log, local logs, and the last five instances of the Package Build pdfs (R9621S and R9622C) in the Print Queue are also collected.

Pathcode of Package

The pathcode the package was built from.

Package Name

The name of the package to retrieve diagnostics from.

UBE Output

Collects the last five PDF files for the UBE entered in the UBE Report Name field. The jde.ini, jdbj.ini, jas.ini, jdelog.properties, ptf.log and logs from the Deployment Server are also collected.

UBE Report Name

The name of the UBE(s) you want to collect. You can enter multiple UBE reports by separating them with a comma.

Special characters / wildcards are not allowed in this field.

Server Management Agent Issue

Collects the Server Management Agent logs for the Deployment Server specified in the drop-down.

Collect and Generate Button

Each time the Collect and Generate button is clicked a .zip file is generated from the contents of the CaptureDiagnostics directory with a specific naming convention (DEP_CaptureLogs.zip) and saved in the temp directory.

The following directories are created:

- CaptureDiagnostics directory replacing the current directory if it exists.
- CaptureDiagnosticsZip directory with a sub directory called temp.

It is recommend that you periodically delete the .zip files in /CaptureDagnosticsZip/temp directory.

Download Zip--<instance Name>(<host Name>,<agent Home>)

Downloads the zip file from the agent to the local machine.

Enterprise Servers

This section describes the available fields for the Enterprise Server.

Enterprise Servers

Lists the available Enterprise Servers you can select to collect diagnostics.

Enterprise Server Configuration & Logs

Collects the jde.ini, ptf.log, and the jde logs from the Enterprise Server specified in the Enterprise Server dropdown.

UBE Output

Collects the last five PDF files for the UBE entered in the UBE Report field. The jde.ini, ptf.log and logs from the Enterprise Server are also collected.

UBE Report Name

The name of the UBE(s) you want to collect. You can enter multiple UBE reports by separating them with a comma.

Special characters / wildcards are not allowed in this field.

Server Management Agent Issue

Collects the Server Manager Agent logs, jde.ini, ptf.log and logs from the Enterprise Server specified in the dropdown.

Collect and Generate Button

Each time the Collect and Generate button is clicked a .zip file is generated from the contents of the CaptureDiagnostics directory with a specific naming convention (ENT_CaptureLogs.zip) and saved in the temp directory.

The following directories are created:

- CaptureDiagnostics directory replacing the current directory if it exists.
- CaptureDiagnosticsZip directory with a sub directory called temp.

It is recommend that you periodically delete the .zip files in /CaptureDagnosticsZip/temp directory.

Download Zip--<instance Name>(<host Name>,<agent Home>)

Downloads the zip file from the agent to the local machine.

HTML Servers

This section describes the available fields for the HTML Server.

HTML Server

Dropdown list of the available HTML Servers you can select to collect diagnostics.

HTML Logs

Collects the HTML logs from the HTML Server specified in the dropdown.

Server Management Agent Issue

Collects the Server Management Agent Logs from the HTML Server specified in the drop down.

Collect and Generate Button

Each time the Collect and Generate button is clicked a .zip file is generated from the contents of the CaptureDiagnostics directory with a specific naming convention (HTML_CaptureLogs.zip) and saved in the temp directory.

The following directories are created:

- CaptureDiagnostics directory replacing the current directory if it exists.
- CaptureDiagnosticsZip directory with a sub directory called temp.

It is recommend that you periodically delete the .zip files in /CaptureDagnosticsZip/temp directory.

Download Zip--<instance Name>(<host Name>,<agent Home>)

Downloads the zip file from the agent to the local machine.

Server Manager Console

This section describes the available fields for the Server Manager Console.

Server Manager Console

Dropdown list of the available Server Manager Consoles you can select to collect diagnostics.

CNC Tables

Collects the following technical tables from the system datasource:

- Library Lists - User (F0092)
- Library List Master File (F0094)
- Environment Detail – One World (F00941)
- Object Path Master File (F00942)
- Object Path Master File Tag Table (F00942T)
- Release Master (F00945)
- Security Workbench Table (F00950)
- Machine Master (F9650)
- Machine Detail (F9651)
- Deployment Locations Definition (F9654)
- Deployment Locations Definition (F986101)
- OMW System Settings (F98230)
- Role Relationships Table (F95921)

ESU Tables

Collects the following technical tables from the system datasource:

- Software Update Master (F9670)
- Software Update Detail (F9671)
- Software Update Pathcode Information (F9672)
- Specification Merge Logging File (F98881)
- SpecMerge Tracking (F988810)

OMW Tables

Collects the following technical tables from the system datasource:

- OWM Project Master (F98220)
- OWM Project Users (F98221)
- OMW Project Objects (F98222)
- OMW Allowed Actions (F98223)
- OMW Status Activity Rules (F98224)

Package Tables

Collects the following technical tables from the system datasource:

- Package Build Header (F9603)
- Server Detail per Portnum and Pathcode (F96511)
- Package Deployment Scheduling (F98825)
- Package Deployment on Servers Information (F98826)

Server Management Console Issue

Collects the Server Manager Console logs (e1agent_x.log).

Collect and Generate Button

Each time the Collect and Generate button is clicked a .zip file is generated from the contents of the CaptureDiagnostics directory with a specific naming convention (SMC_CaptureLogs.zip) and saved in the temp directory.

The following directories are created:

- CaptureDiagnostics directory replacing the current directory if it exists.
- CaptureDiagnosticsZip directory with a sub directory called temp.

It is recommend that you periodically delete the .zip files in /CaptureDagnosticsZip/temp directory.

Download Zip--<instance Name>(<host Name>,<agent Home>)

Downloads the zip file from the agent to the local machine.

Configuring Server Manager for Collect and Generate Diagnostics

The JDBJ Datasource and TNSNAMES need to be configured correctly to use Collect and Generate Diagnostics.

To configure Server Manager for the JDBJ Datasource:

1. On Managed Homes and Managed Instances page, under the Managed Instances column, click "home" for the Management Console.
2. On the left side of the page, under the Configuration Panel, click on JDBJ Database Configuration.
3. Verify the values in the following fields are valid:

   - Database Type
   - Database Name
   - Database Server Name
   - Database TCP/IP Port
   - Physical Database
   - Object Owner
   - Support Large Objects (LOBS)
   - Unicode Database

4. Click the Apply button.

To configure TNSNAMES in Server Manager Console:

1. On Managed Homes and Managed Instances page, under the Managed Instances column, click "home" for the Management Console.
2. On the left of the page, under the Configuration Panel, click on JDBJ Database Configuration.
3. Scroll down to Oracle Database Settings.
4. If the EnterpriseOne database is an Oracle database, complete the File Contents with the tnsames.ora information for the sign on to the database. This is found under the Oracle Client location: product \12.1.0\client_1\network\admin.

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Using Collect and Generate Diagnostics

To use Collect and Generate Diagnostics:

1. Launch the Server Manager Management Console.
2. In the What do you want to do? section, click the Collect and Generate Diagnostics link.
3. Scroll to the server type you want to collect data on: Deployment Server, Enterprise Server, HTML Server, or Server manager Console.
4. Select a specific server from the dropdown to collect data from.
5. Check the Checkbox (es) for the data to be collected. If appropriate, provide requested information, such as pathcode and package name for the Package options.
6. Click the Collect and Generate Button.

   When the data retrieval is complete, an on-screen message will be presented providing the path to the zip file of the collected data.
7. Click the link for the specific server to download the .zip files from the agent.

Note: It could take some time to collect all files, depending on your system.

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36 Automatic Pre-Generation of Serialized Objects (Release 9.2.6)

Understanding Automatic Pre-Generation of Serialized Objects

> **Note:** The automatic pre-generation of serialized objects feature supersedes the functionality of the eGenerator function of JD Edwards EnterpriseOne that was available in releases prior to Tools Release 9.2.6.

At some point you must generate JD Edwards EnterpriseOne specifications into Java code to access JD Edwards EnterpriseOne applications in HTML that is delivered using HTML/JAS Web Servers. The JD Edwards EnterpriseOne forms and applications that you generate are serialized Java objects. JD Edwards EnterpriseOne stores these objects in a database (in serialized object tables F989998 & F989999), and retrieves them at runtime.

The automatic pre-generation of serialized objects is optional. If you do not enable this feature to pre-generate serialized objects, then the objects will be generated on demand. If you enable automatic pre-generation of serialized objects, you can further specify which objects to pre-generate.

If you enable automatic pre-generation of serialized objects, and you do not list specific objects, then these objects are generated:

- All objects that are not already generated (based on entries in the serialized object tables)
- Any objects in a full or update package that are new or changed
- All objects that are part of a newly applied Tools Release

Optionally, instead of generating objects as described above, you can specifically list objects to generate in these categories:

- *Applications To Generate*
- *Reports To Generate*
- *NERs To Generate*
- *Business Views To Generate*
- *Tables To Generate*
- *Data Dictionaries To Generate*

When enabled, the process for automatic pre-generation of serialized objects is triggered by a JD Edwards EnterpriseOne HTML Web Server machine restart or by the deployment of a new package (full or update). If multiple HTML/JAS Web Servers are configured to use this function, the system will only generate serialized objects for one server at a time.

Configuring Auto Spec Generation

To configure auto-generating of serialized objects:

1. In Server Manager, select the HTML/JAS server that you wish to enable auto-generating serialized objects.
2. Navigate to Configuration > Advanced > Miscellaneous > Automatic Spec Generation Settings

3. Complete the following fields:

- *Automatic Spec Generation*

  Set this to **true** to enable automatic pre-generation of serialized objects.

  The default value is **false**.

- *Max thread pool size*

  Enter a value to specify the thread pool size to pre-generate serialized objects concurrently using automatic spec generation. Valid values are from 1 to 30, where the default value is 10.

- *Generate Spec For Frequently Used Object (Release 9.2.8.2)*

  Select the **Generate Spec For Frequently Used Object** check box to generate specs for the previously accessed objects. Frequently used objects are determined based on the data available in the Object Usage Tracking table (F98911). These specs will be generated when the server starts.

- *Language Preference (Release 9.2.8.2)*

  Select the Language Preference for serialized object. Select **NONE** if only the default English language serialized objects are required. You can select multiple languages to generate specs for different languages. NONE must not be selected along with other languages.

- *Applications To Generate*

  The default value is blank (no specific applications will be pre-generated).

  Optionally you can list a specific application, list of applications, or all applications to be automatically pre-generated. Multiple application names must be specified with comma separators. To pre-generate specs for all applications, use the * character.

  For example, any of **these** are valid values:

  - **P01012** (single application)
  - **P01012, P4210, P0911, P40G30** (multiple applications)
  - ***** (all applications)

- *Reports To Generate*

  The default value is blank (no specific reports will be pre-generated).

  Optionally you can list a specific report, list of reports, or all reports to be automatically pre-generated. Multiple report names must be specified with comma separators. To pre-generate specs for all reports, use the * character.

  For example, any of **these** are valid values:

  - **R0008P** (single report)
  - **R0008P, R0010P** (multiple reports)
  - ***** (all reports)

- *NERs To Generate*

  The default value is blank (no specific NERs will be pre-generated).

  Optionally you can list a specific NER, list of NERs, or all NERs to be automatically pre-generated. Multiple NER names must be specified with comma separators. To pre-generate specs for all NERs, use the * character.

For example, **FetchUBEMapping**.

- *Business Views To Generate*

The default value is blank (no business views will be pre-generated).

Optionally you can list a specific business view, list of business views, or all business view to be automatically pre-generated. Multiple business view names must be specified with comma separators. To pre-generate specs for all business views, use the * character.

For example, any of **these** are valid values:

- **V9001B** (single business view)
- **V9001B, V0101E** (multiple business views)
- ***** (all business views)

- *Tables To Generate*

The default value is blank (no tables will be pre-generated).

Optionally you can list a specific tables, list of tables, or all tables to be automatically pre-generated. Multiple table names must be specified with comma separators. To pre-generate specs for all tables, use the * character.

For example, any of **these** are valid values:

- **F9860** (single table)
- **F9860, F9210** (multiple tables)
- ***** (all tables)

- *Data Dictionaries To Generate*

The default value is blank (no data dictionaries will be pre-generated).

Optionally you can list a data dictionary, list of data dictionaries, or all data dictionaries to be automatically pre-generated. Multiple data dictionaries names must be specified with comma separators. To pre-generate specs for all tables, use the * character.

- *Product Code Specific Objects To Generate (Release 9.2.8.2)*

The default value is blank (no product code specific objects will be pre-generated).

Optionally, you can list product codes for which specs must be generated. Multiple product code names must be specified with comma separators.

For example, any of the following are valid values:

- **01** (single product code)
- **02, 03** (multiple product codes)

> **Note:** The * character does not apply to this field.

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37 Enabling Oracle Database Connection Pooling (Release 9.2.6)

Configuring the jde.ini File for the Enterprise Server and Deployment Server

To enable the Oracle Database Connection Pooling feature, use Server Manager to make settings for **both** of these JD Edwards EnterpriseOne servers:

- Enterprise Server
- Deployment Server

1. In Server Manager, use this navigation:

   *Enterprise_Server_* **or** *_Deployment_Server_Instance* > Configuration > Database > Configuration > View: Advanced > Bootstrap Datasource

2. The following settings are mandatory in order to enable Oracle Database Connection Pooling:
   - Database Connection Timeout
   - Oracle DB Statement Cache Size
   - Use Oracle DB Connection Pool
   - Oracle DB Connection Pool Max Connections
   - Oracle DB Connection Pool Min Connections
   - Oracle DB Connection Pool Inc Connections

   The following shows the default values for the above settings (circled in red):

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Configuring the HTML Web Servers

To enable the Oracle Database Connection Pooling feature for use by the JD Edwards EnterpriseOne web servers, you must use Server Manager to modify the the **JDBj Connection Pools** for each of these web servers that are deployed in your environment:

- HTML Server
- BSSV Server
- RTE Transaction Server

| **Note:** The Oracle Database Connection Pooling is not applicable to AIS Web Servers.

In Server Manager, use this navigation:

Web_Server_Instance > Configuration > Database > View: Advanced > Database

The following shows default values for settings in the **JDBj Connection Pools** section:

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Configuring the jde.ini and jdbj.ini File for the Development Client

To enable the Oracle Database Connection Pooling feature for use by the JD Edwards EnterpriseOne Development Client, you must modify these files:

- `jde.ini`

- `jdbj.ini`

Development Client jde.ini

The following are mandatory settings and default values in the `jde.ini` file to enable Oracle Database Connection Pooling for the Development Client:

```
[DB SYSTEM SETTINGS]
UseOracleDBConnectionPool=1
OracleDBConnectionPoolDebug=0
OracleDBConnectionPoolIncConnections=1
OracleDBConnectionPoolMaxConnections=30
OracleDBConnectionPoolMinConnections=0
OracleDBStatementCacheSize=50
DBConnectionTimeout=300
```

Development Client jdbj.ini

The following are required settings and recommended values in the `jdbj.ini` file to enable Oracle Database Connection Pooling for the Development Client:

```
[JDBj-CONNECTION POOL]
useOracleDBConnectionPool=true
enableFastConnectionFailoverInOracleDBConnectionPool=false
enableOracleDBConnectionPoolTrace=false
oracleDBConnectionPoolFactoryClassName=oracle.jdbc.pool.OracleDataSource
minConnection=0
maxConnection=50
initialConnection=1
poolGrowth=1
connectionTimeout=300000
cleanPoolInterval=100000
```

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38 Server Manager - Performance Workbench (Release 9.2.9)

Overview

Starting with Tools Release 9.2.9, you can access Performance Workbench directly from the Server Manager interface.

You can use Performance Workbench for:

- Performance analysis.
- Debugging.
- Performance analysis of EnterpriseOne applications.
- Understanding complex EnterpriseOne processes such as UBEs.
- Troubleshooting issues such as memory leaks.

Note: The concepts and implementation of the concepts of performance analysis are beyond the scope of this document.

The Performance Workbench is run against a `jdedebug.log` file or directly against a BSFN for a specific analysis.

The `jdedebug.log` contains large amounts of useful data, especially regarding BSFNs, including the following details:

- Call Originator
- Call Location
- Return Values
- Call Stack Depths and Threads
- SQL Statements
- System APIs (JDB Middleware APIs and JDE Cache APIs)
- Time Stamps
- Miscellaneous Data

The size of debug log files can range from hundreds of megabytes to several gigabytes. The size of these files can make them impossible to edit or manipulate manually. The `jdedebug.log` data is far more valuable if it can be aggregated and summarized statistically in a more concise and comprehensible format.

Performance Workbench assists you in parsing and narrowing down the log file content to present information in a format that is easy to interpret. Instead of downloading log files to a Microsoft Windows workstation for analysis, the Performance Workbench enables you to create summary log files directly through the Server Manager Console. You can access the summarized (parsed) results of the Performance Workbench utilities from the Server Manager Console and download them to a local workstation for further evaluation.

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Supported Servers and Utilities

Performance Workbench enables you to analyze log files from the following JD Edwards EnterpriseOne servers using the associated utilities:

Enterprise Servers

- LogParse
- SQLLogParse
- Performance Results

HTML Web Servers (JAS)

- JASLogParse
- SQLLogParse
- Performance Results

Server Manager Permission Requirements

To use the Performance Workbench functionality for a server, you must log in to the Server Manager Console with a user that has the `enterpriseServerDeveloper` permission for that server. This is applicable only for Enterprise Servers and HTML Web Servers.

Follow these steps to assign `enterpriseServerDeveloper` permission to a user group:

1. In the Quick Links section of the Management Console, click the Server Manager Users link.
2. In the User Groups pane, select the user group to which you want to assign server group permissions.

   The Management Console displays a separate pane for each server group in the Management Console. Each pane displays the permissions for that server group.
3. On Modify A User Group, scroll to the server group to which you want to add server group permissions for the user group.
4. Select the `enterpriseServerDeveloper` permission from the Available Options box and then click the Move link (single right arrow) to move the permission to the Selected Options box.

> **Note:** Only the users with console admin permissions (eg: jde_admin) can grant permissions to other users.

Understanding Timing Gaps

The LogParse for the Enterprise Server and the JASLogParse for the HTML Web Servers (JAS) provide an option to generate a Timing Gaps file. When you enable the Timing Gaps option, a summary of BSFNs display at the beginning of the summary file along with approximate timing data based on the timestamps in the jdedebug log.

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Timing Gaps can be used in conjunction with any Parse Level setting. The available levels are:

- **Level 1**

  Creates a Timing Gaps file with the total time and the percentage of time used by the BSFN.

- **Level 2**

  Includes all data from Level 1, plus a listing of calls by duration levels with maximum, minimum, 0-second, and 1-second calls along with total time. Also, Level 2 includes the list of long-running calls that are >= 2 seconds in duration.

- **Level 3**
    - Includes all data from Level 2, plus detailed statistics on SQL statements.

Understanding Call Stack Files

The LogParse for the Enterprise Server and the JASLogParse for the HTML Web Servers (JAS) provide an option to generate a Call Stack file. When Call Stack Files option is enabled, the output file contains an indented BSFN call stack showing the program flow. This output file presents the flow of the code in a cleaner, more readable format than the raw log file. The Call Stack Files feature is best suited for large UBE logs.

All DEBUG strings specified are also placed into the Call Stack file at the proper level within the framework of the BSFN calls. This feature can be used in conjunction with any **Parse Level** setting.

For multi-threaded log files, a separate Call Stack file is created for each individual thread. The file is named by thread ID using the following syntax:

```
<log file base
 name>_CALLSTACK_THREAD_<thread ID>.txt
```

LogParse - Enterprise Server

Important: You must enable JD Edwards EnterpriseOne debugging in the `JDE.INI` file:

```
[DEBUG]
Output=FILE
LEVEL=BSFN,EVENTS
```

Access the Performance Workbench for an Enterprise Server

To access the Performance Workbench in Server Manager, you must first navigate to an existing Server Manager instance for an Enterprise Server for which you have previously created a debug log. For example, one way to select the Enterprise Server is:

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Locate and select the previously generated debug.log for the Enterprise Server and click the **Analyze** button.

The following screen displays the various Performance Workbench utility options with default values for LogParse Options. Select the options applicable to your analysis and click the **Analyze** button to generate or regenerate output files.

Performance Workbench [/u01/jde920/e920/log/jde_18899.log]

ⓥ SQLLogParse Options   ⓥ Performance Results

– logparse Options

Options for logparse.

Parse Level ⓘ	5 ▾	
Log Additional APIs ⓘ	☑	
Generate Timing Gaps File ⓘ	☑	
Timing Parse Level ⓘ	3 ▾	
Timing Gap (in microseconds) ⓘ	**20000** ⌃⌄	
Generate Call Stack File ⓘ	☐	
Show Table Owners ⓘ	☑	
	Analyze	

LogParse Output Files for the Enterprise Server

The LogParse utility parses large `jdedebug.log` files that are generated on a JD Edwards EnterpriseOne Enterprise Server into manageable output files. This utility creates the output files in the **Performance Results** section with their respective file types:

- Analysis Summary File (.html)
- TBLE CSV (.csv)
- Timing Gaps (.txt)
- *USE CSV (.csv)
- BSFN CSV (.csv)
- Debug File (.txt)

For example:

The syntax of the output file names is:

- Summary File

    `<input log name>SUMMARY<ParseLevel>.html`

    Where `<ParseLevel>` is a number from 1 to 5, specifying the level of detail in the summary file, and which matches the specified Parse Level when generated.

    For example:

    `jde_9319_SUMMARY5.html`

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- TBLE CSV and BSFN CSV

  ```
  <Input file>_BSFN<ParseLevel>.csv
  <Input file>_TBLE<ParseLevel>.csv
  ```

  Where `<ParseLevel>` is a number from 1 to 5, specifying the level of detail in the .csv file, and which matches the specified Parse Level when generated.

  For example:

  ```
  jde_9319_TBLE5.csv
  jde_9319_UBE5.txt
  ```

Important: These files are generated only when: ParseLevel >=2 and Timing Parse Level >=2.

JASLogParse - HTML Web Server (JAS)

You must create debug log by running an application with the logging level in the `jas.ini` set to `DEBUG`. For example:

```
[LOG1]
FILE=<path to log directory>/jas.log
LEVEL=DEBUG
FORMAT=APPS
APPEND=TRUE
MAXFILESIZE=500MB
MAXBACKUPINDEX=20
COMPONENT=RUNTIME|JAS|JDBJ|BASE|BIZLOGIC
```

Important: It is critical to set LEVEL=DEBUG because the Business Function Timing data is only included at the DEBUG level setting.

The `MAXFILESIZE` parameter must be set large enough to minimize the number of individual segments into which the log is broken.

The `COMPONENT` parameter must be set as shown in the [LOG1] example so that all the data relevant to JASLogParse processing is included in the log.

JASLogParse is intended specifically for JAS debug logs which contain output from a single user. It is not well-suited for logs containing output from multiple users.

When there are multiple users, the user-specific log configuration can be used to generate a JAS log for a specific single user. In this way, separate logs can be generated for individual targeted users. For example, if the **User Name** is `JDE1`, you can use Server Manager to configure the log file generation as shown in this example:
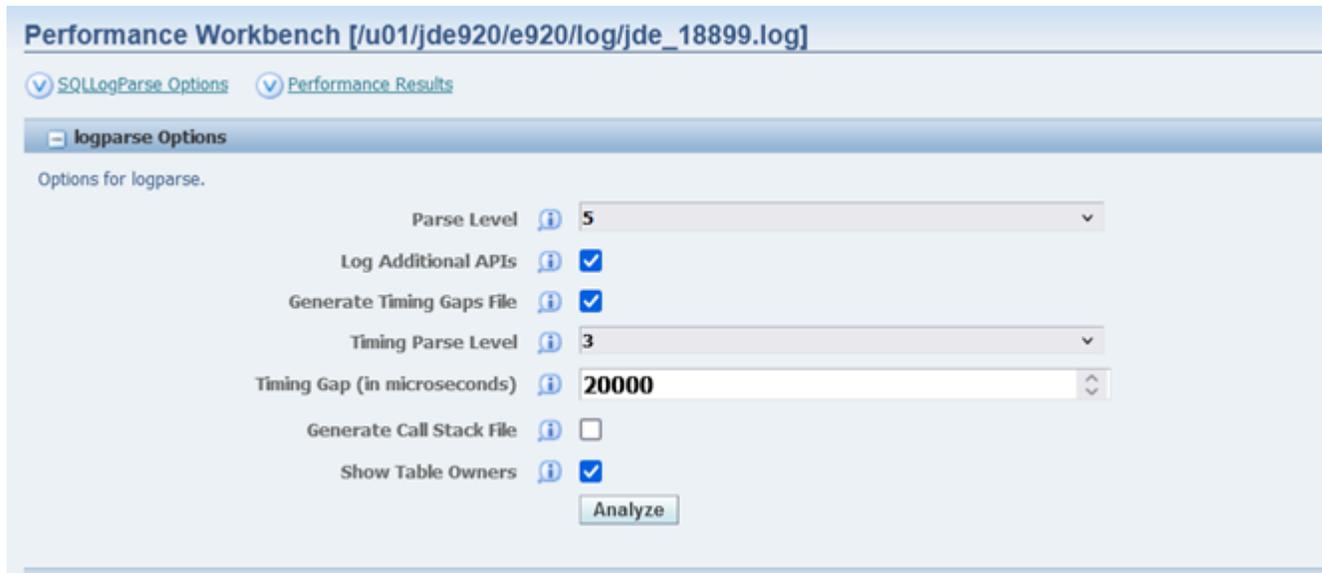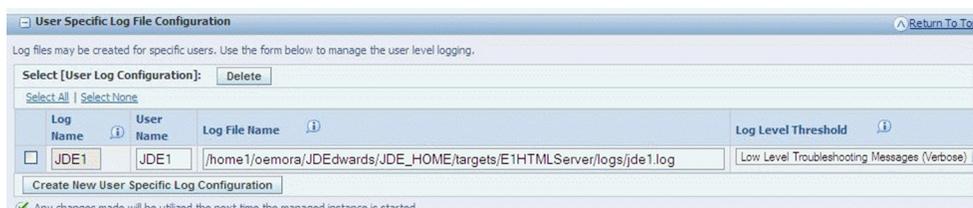
Access the Performance Workbench for an HTML Web Server (JAS)

To access the Performance Workbench in Server Manager, navigate to an existing Server Manager instance for an HTML Web Server (JAS) for which you have previously created a debug log. For example, one way to select the HTML Web Server is by using this navigation:
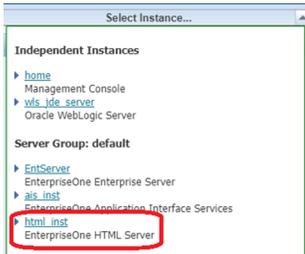
Locate and select the previously generated debug.log for the HTML Web Server and click the **Analyze** button.
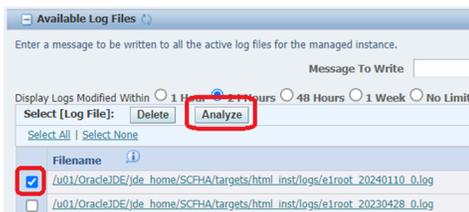
The following screen displays the various Performance Workbench utility options with default values for JASLogParse Options. Select the options applicable to your analysis and click the **Analyze** button to generate the output files.

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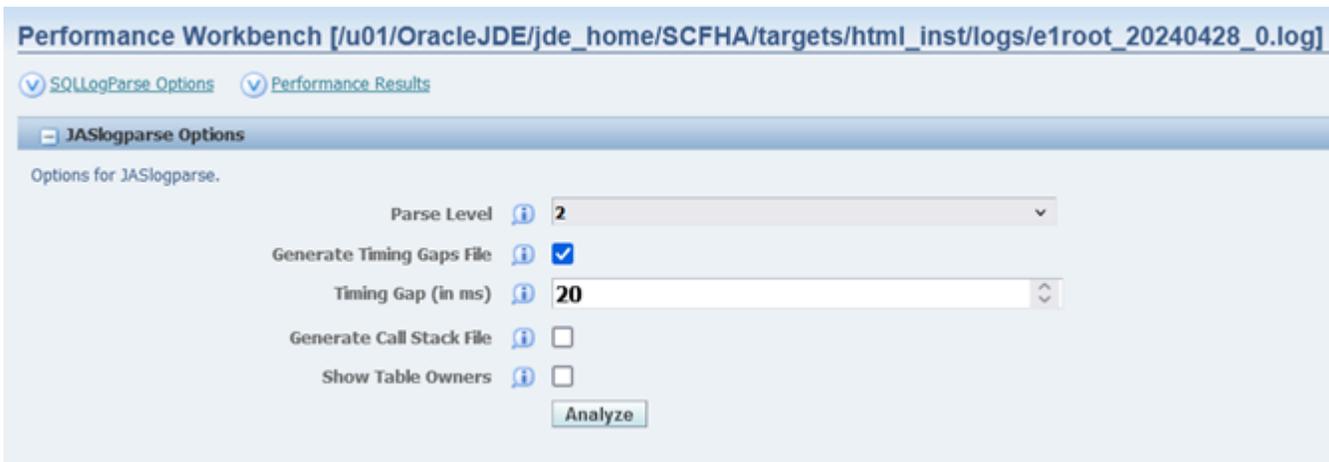
JASLogParse Output Files for the HTML Web Server (JAS)

The JASLogParse utility parses large `jdedebug.log` files that are generated on a JD Edwards EnterpriseOne HTM Web Server (JAS) into manageable output files. This utility creates the following output files with their respective file types:

- JAS_STDERROR (.txt)

- JAS_SUMMARY<ParseLevel>(.html)

- JAS_ERROR (.txt)

- TIMINGGAP.txt

    Where <ParseLevel> is a number from 1 to 2, specifying the level of detail in the summary file, and which matches the specified Parse Level when generated.

    For example:

    ```
    e1root_20240110_0_JAS_STDERROR.txt]
    e1root_20240110_0_JASSUMMARY2.html
    e1root_20240110_0_JAS_ERROR.txt
    e1root_20240110_0_TIMINGGAP.txt
    ```

Note: You can download the files generated by Performance Workbench. To download the output files, click the **Download all in ZIP** button on the Performance Results screen.

For example:

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SQLLogParse - Enterprise Server and HTML Web Server (JAS)

Access the Performance Workbench for an Enterprise Server

To access the Performance Workbench in Server Manager, you must first navigate to an existing Server Manager instance for an Enterprise Server for which you have previously created a debug log. For example, one way to select the Enterprise Server is:

Locate and select the previously generated debug.log for the Enterprise Server and click the **Analyze** button.
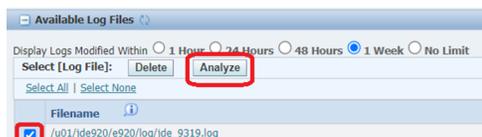
SQLLogParse Output files for Specific Tables

The following screen displays the various Performance Workbench utility options with default values for SQLLogParse Options. Select the options applicable to your analysis and click the **Analyze** button to generate SQLLogParse output files for specific tables.

You can enter specific tables to parse. For each table you specify, four output files are created:
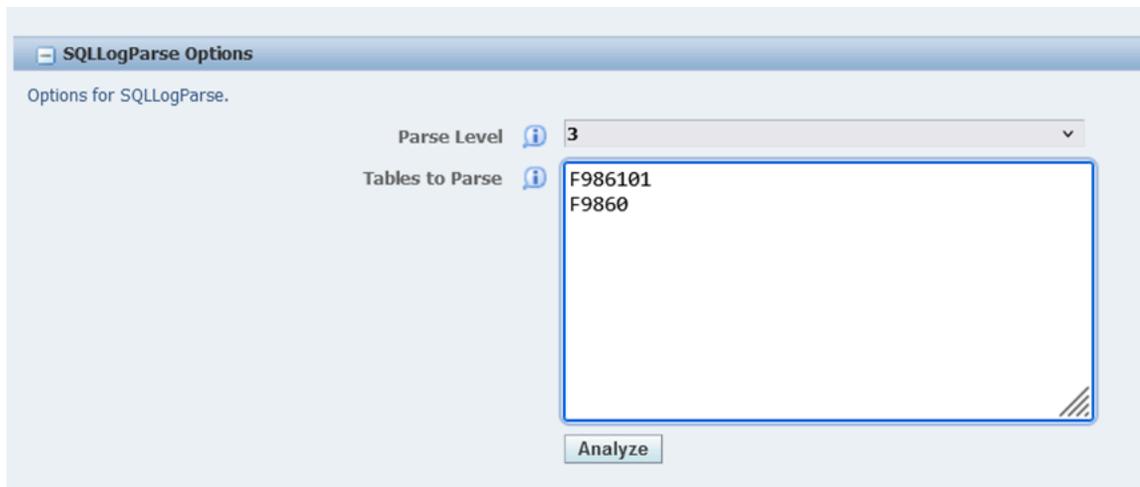
Examples

This section includes examples of the following output files:

- LogParse
- JASLogParse
- SQLLogParse

LogParse

This example shows a list of output files generated for an Enterprise Server using LogParse with default options.

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Select [Result File]:   Delete

Select All | Select None

page size: 25

	Filename	File Description	File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_SUMMARY5.html	Analysis Summary File	131,!
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_STDERROR.txt	Debug File	683
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_BSFN5.csv	BSFN CSV	624
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TIMING5_THREAD_3344-1020.txt	Timing Gaps	2,30
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TIMING5.txt	Timing Gaps	2,30
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_UBE5.txt	UBE CSV	96
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TBLE5.csv	TBLE CSV	2,54

The following are some examples of LogParse log files. For the purpose of documentation, these examples are truncated.

Example: LogParse – SUMMARY.html

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Management Dashboard > dkteorig.sub04171734150.trialtestvcn.oraclevcn.com [/u01/jde920/jde_home/SCFHA] > EntServer

Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_SUMMARY5.html]

Download Entire Log File

```
Analysis of file: /u01/jde920/e920/log/jdedebug_3344.log
----------------
*** Memory profile data IS NOT in this log ***
PW Version: PW logparse - Feb 2023
Parse Level=5, LogAPIs=Y, TimingParseLevel=3, TimingGap=20000us, ShowTableOwners=Y, B9=Y, CallStackFile=N
** NOTE: For truncated or client log files, these timings may not be accurate.
**       BSFN logging data may be incomplete in truncated logs.
** Total time in log file:      42940.571000 seconds
** Total time in level 1 BSFNs:     0.270031 seconds (0.0  % of total)
** Total < 1 us sec level 1 BSFNs:        0
** Total BSFN calls: 5
** Max call depth: 2
** There were 1 THREADS:
1. 3344/1020
'#' - indicates this BSFN has calls at level 1
'*' - indicates this BSFN has has no child calls - all time is SELF time
```
Go to BSFN Stack Trace section
Go to Table section
Go to Table timing section
Go to DEBUG section
Go to TOP LEVEL Business Function section

BSFN counts:

#/*	BSFN name	count	TOTAL(s)	AVG(s)	< 1 us	max(s)	mi
#	SecureAddressBookTables	1	0.158019	0.158019	0	0.158019	0.158
#	DetermineToolsReleaseforABDP	1	0.108011	0.108011	0	0.108011	0.108
*	GetABConstants	1	0.031990	0.031990	0	0.031990	0.031
*	GetServicePackRelease	1	0.029003	0.029003	0	0.029003	0.029
#*	jdeInitEnvBSFN	1	0.004001	0.004001	0	0.004001	0.004
	TOP LEVEL	0	0.000000	-nan	0	0.000000	0.000

BSFN Stack Trace:

BSFN stack	count	TOTAL(s)	AVG(s)	< 1 us	
TOP LEVEL->SecureAddressBookTables	1	0.158019	0.158019	0	0.1
TOP LEVEL->DetermineToolsReleaseforABDP	1	0.108011	0.108011	0	0.1
TOP LEVEL->SecureAddressBookTables ->GetABConstants	1	0.031990	0.031990	0	0.0
TOP LEVEL->DetermineToolsReleaseforABDP ->GetServicePackRelease	1	0.029003	0.029003	0	0.0
TOP LEVEL->jdeInitEnvBSFN	1	0.004001	0.004001	0	0.0

TBLE Timing counts:

TOTAL DB time: 0.054934
TOTAL DBIO: 842
AVG: 0.000065

Table name+operation	count	TOTAL(s)	AVG(s)	< 1 us	long	max(s)	
JDE_PRODUCTION.PRODDTA.F0009 SELECT	1	0.000001	0.000001	0	0	0.000001	
JDE_PRODUCTION.PRODDTA.F0010 SELECT	1	0.000001	0.000001	0	0	0.000001	
JDE920.SY920.F0092 SELECT	2	0.000002	0.000001	0	0	0.000001	
JDE920.SY920.F00921 SELECT	1	0.000997	0.000997	0	0	0.000997	

Example: LogParse – STDERROR.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_STDERROR.txt]
stderr file for: /u01/jde920/e920/log/jdedebug_3344.log
===============
PW logparse: May 2018 - #1
Processing: /u01/jde920/e920/log/jdedebug_3344.log...
Writing Results:
DONE!!! Summary file: /u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_SUMMARY5.html
 Timing Gap file: /u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TIMING5.txt
 BSFN csv file: /u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_BSFN5.csv
 TBLE csv file: /u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TBLE5.csv
 UBE csv file: /u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_UBE5.txt
logparse processed in 0 seconds
(Hit ENTER..)
```

Example: LogParse – BSFNS.csv

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_3344_BSFN5.csv]_____
Level 1?,BSFN name,count ,error(2) ,TOTAL(s) ,AVG(s) ,< 1 us ,max(s) ,min(s)
#,SecureAddressBookTables ,76405784,1, 0.158019, 0.158019, 0.000000, 0.158019, 0.158019
#,DetermineToolsReleaseforABDP ,73906608,1, 0.108011, 0.108011, 0.000000, 0.108011, 0.108011
 ,GetABConstants ,71407432,1, 0.031990, 0.031990, 0.000000, 0.031990, 0.031990
 ,GetServicePackRelease ,68908256,1, 0.029003, 0.029003, 0.000000, 0.029003, 0.029003
#,jdeInitEnvBSFN ,66409080,1, 0.004001, 0.004001, 0.000000, 0.004001, 0.004001
 ,TOP LEVEL,63909904,0, 0.000000, -nan, 0.000000, 0.000000, 0.000000
```

Example: LogParse – TIMING.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TIMING5.txt]
The following statements took at least 0.020000 seconds in logfile: /u01/jde920/e920/log/jdedebug_3344.log:
================================================================
GAP TIME(s) BSFN LINE
================================================================
 0.928999 : TOP LEVEL : Nov 27 06:36:58.595001 - 3344/1020 Using ICU data file "icudt52l.dat"
 0.050000 : TOP LEVEL : Nov 27 06:36:59.524000 - 3344/1020 About to call dispatch function, flags=0x2,
Type=13513
 0.157000 : TOP LEVEL : Nov 27 06:36:59.579000 - 3344/1020 SYS:XMLDispatch Site key request send to
10.0.1.143_anykrnl_m2 (SQLENT326)
 0.062999 : TOP LEVEL : Nov 27 06:36:59.810001 - 3344/1020 SYS:XMLDispatch Try to send the message to
security server SQLENT326
 0.032000 : TOP LEVEL : Nov 27 06:36:59.880000 - 3344/1020 SYS:XMLDispatch ODBC DBInitDriver
envr=0807E750,pool=Y.
 0.032998 : TOP LEVEL : Nov 27 06:37:00.018002 - 3344/1020 SYS:XMLDispatch ODBC:S DBPerformRequest
 req=087DFD58,con=087DBF80,env=016F04C0,dbc=016FCF40,spid=106 SqlDb326 A (PD920@JDE920)
 0.029990 : TOP LEVEL : Nov 27 06:37:00.057010 - 3344/1020 SYS:XMLDispatch ODBC:S DBPerformRequest
 req=087E2140,con=087DBF80,env=016F04C0,dbc=016FCF40,spid=106 SqlDb326 A (PD920@JDE920)
 0.029999 : TOP LEVEL : Nov 27 06:37:00.093001 - 3344/1020 SYS:XMLDispatch ODBC:S DBPerformRequest
 req=087E2140,con=087DBF80,env=016F04C0,dbc=016FCF40,spid=106 SqlDb326 A (PD920@JDE920)
 0.029996 : TOP LEVEL : Nov 27 06:37:00.135004 - 3344/1020 SYS:XMLDispatch ODBC:S DBPerformRequest
 req=087E2140,con=087DBF80,env=016F04C0,dbc=016FCF40,spid=106 SqlDb326 A (PD920@JDE920)
 0.031992 : TOP LEVEL : Nov 27 06:37:00.173008 - 3344/1020 SYS:XMLDispatch ODBC:S DBPerformRequest
 req=087FA758,con=087DBF80,env=016F04C0,dbc=016FCF40,spid=106 SqlDb326 A (PD920@JDE920)
```

Example: LogParse – UBE.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_UBE5.txt]
UBE debug tags in logfile: /u01/jde920/e920/log/jdedebug_3344.log
========================
```

Example: LogParse – TBLES.csv

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_TBLE5.csv]
_____
```

```
O/C mismatch,Table,Open,Close,SELECT,INSERT,DELETE,UPDATE
,F0004,1,1,0,0,0,0
,F0005,1,1,0,0,0,0
,F0006,1,1,0,0,0,0
,F0007,1,1,0,0,0,0
,F0008,1,1,0,0,0,0
,JDE_PRODUCTION.PRODDTA.F0009,2,2,1,0,0,0
,JDE_PRODUCTION.PRODDTA.F0010,2,2,1,0,0,0
,F0012,1,1,0,0,0,0
,F0013,1,1,0,0,0,0
,F0014,1,1,0,0,0,0
,F00144,1,1,0,0,0,0
,F0015,1,1,0,0,0,0
,F0022,1,1,0,0,0,0
,F0025,1,1,0,0,0,0
,F0026,1,1,0,0,0,0
,JDE920.SY920.F0092,2,2,2,0,0,0
,JDE920.SY920.F00921,1,1,1,0,0,0
,JDE920.SY920.F00926,2,2,2,0,0,0
,JDE920.SY920.F0092L,1,1,1,0,0,0
,JDE920.SY920.F0093,1,1,1,0,0,0
,JDE920.SY920.F00941,3,3,3,0,0,0
,JDE920.SY920.F00942,3,3,3,0,0,0
,JDE920.SY920.F00942T,1,1,2,0,0,0
,JDE920.SY920.F00945,1,1,1,0,0,0
,JDE920.SY920.F00948,1,1,1,0,0,0
,JDE920.SY920.F00950,2,2,3,0,0,0
```

JASLogParse

JASLogParse

This example shows a list of output files generated for an HTML Web Server (JAS) using JASLogParse with default options.
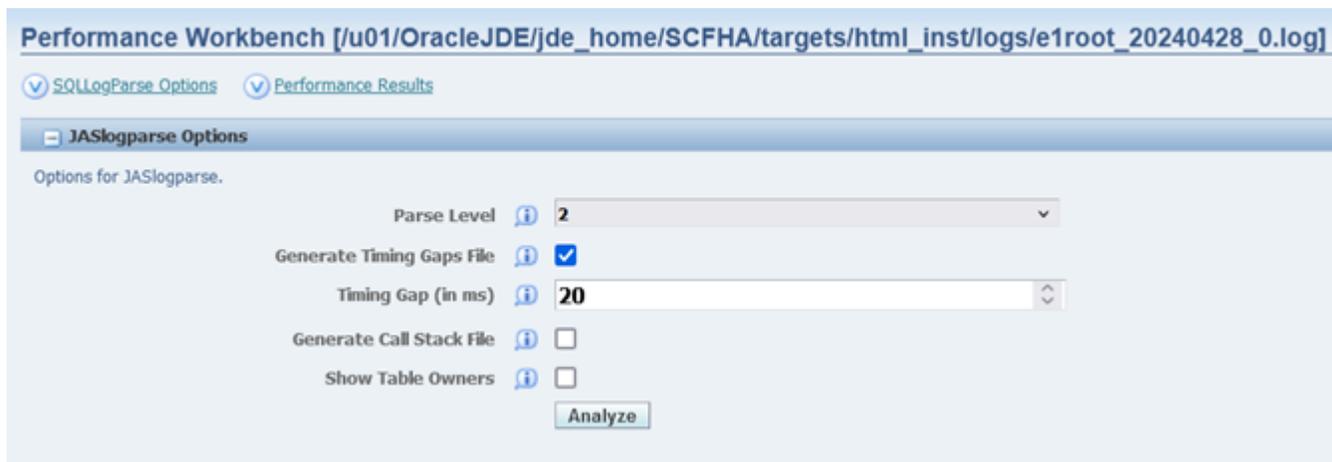
The following are some examples of JASLogParse log files:

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Example: JASLogParse – JASSUMMARY.html

JASLogParse – TIMINGGAP.txt

```
Performance Workbench [/u01/OracleJDE/jde_home/SCFHA/perf/results/e1root_20240110_0_TIMINGGAP.txt]
_____
The following statements preceded GAPS of at least 20ms in logfile: /u01/OracleJDE/jde_home/SCFHA/targets/
html_inst/logs/e1root_20240110_0.log
=====================================================================
GAP (ms) : EVENT RULE : TEXTLINE
============================================================================================
696 : **TOP LEVEL : 10 Jan 2024 22:16:11,245 [MANDATORY] - [JAS] Centralized Configuration is disabled.Not
 using Centralized Configuration.
304 : **TOP LEVEL : 10 Jan 2024 22:16:11,947 [SEVERE] - [BASE]
```

Example: JASLogParse – JAS_STDERROR.txt

```
Performance Workbench [/u01/OracleJDE/jde_home/SCFHA/perf/results/
e1root_20240110_0_JAS_STDERROR.txt]_____
Processing: /u01/OracleJDE/jde_home/SCFHA/targets/html_inst/logs/e1root_20240110_0.log...
DONE: Summary file in: /u01/OracleJDE/jde_home/SCFHA/perf/results/e1root_20240110_0_JASSUMMARY2.html
 Error file in: /u01/OracleJDE/jde_home/SCFHA/perf/results/e1root_20240110_0_JAS_ERROR.txt
 Timing Gaps file in: /u01/OracleJDE/jde_home/SCFHA/perf/results/e1root_20240110_0_TIMINGGAP.txt
 (hit ENTER)
```

Example: JASLogParse – JAS_ERROR.txt

```
Performance Workbench [/u01/OracleJDE/jde_home/SCFHA/perf/results/
e1root_20240110_0_JAS_ERROR.txt]_____
Listing of Errors in JAS log: /u01/OracleJDE/jde_home/SCFHA/targets/html_inst/logs/e1root_20240110_0.log
=======================
10 Jan 2024 22:16:11,946 - *ERROR* JdeConnectionPool DKTEORIG:6017 Error creating input or output stream for
 socket: Connection refused (Connection refused)
10 Jan 2024 22:16:12,262 - *ERROR* JdeConnectionPool DKTEORIG:6017 Error creating input or output stream for
 socket: Connection refused (Connection refused)
10 Jan 2024 22:16:12,269 - *ERROR* JdeConnectionPool DKTEORIG:6017 Error creating input or output stream for
 socket: Connection refused (Connection refused)
10 Jan 2024 22:16:12,270 - *ERROR* JdeConnectionPool DKTEORIG:6017 Error creating input or output stream for
 socket: Connection refused (Connection refused)
10 Jan 2024 22:16:12,271 - *ERROR* JdeConnectionPool DKTEORIG:6017 Error creating input or output stream for
 socket: Connection refused (Connection refused)
```

SQLLogParse

This example shows a list of output files generated for an Enterprise Server using SQLLogParse for the F986101 table.

	Filename ⓘ	File Description
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_F986101_SELECT.txt	SQL Parse File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_SQLSTATS.txt	SQL Parse File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_SQLParse_STDERROR.txt	Debug File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_F986101_UPDATE.txt	SQL Parse File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_F986101_DELETE.txt	SQL Parse File
☐	/u01/jde920/jde_home/SCFHA/perf/results/jdedebug_3344_F986101_INSERT.txt	SQL Parse File

The following are some examples of SQLParse log files:

Example: SQLParse – SELECT.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_3344_F986101_SELECT.txt]_____
**SELECT statements for F986101 in /u01/jde920/e920/log/jdedebug_3344.log:
===========================================================================
(UNIQUE SELECTS & counts)
UNIQUE statements
=================
7
TOTAL Statements
================
7
COUNT SQL
======== ===
1 SELECT OMENHV, OMAPPLID, OMOBNM, OMDATP, OMDATS, OMUGRP, OMOAPP, OMDATM, OMOVRE, OMSY, OMSTSO, OMFUNO,
 OMOCM2, OMOCMDSC FROM JDE920.SVM920.F986101 WHERE ( OMENHV = 'PD920' AND OMSTSO = 'AV' AND ( OMUGRP = 'JDE'
 OR OMUGRP = '*ALL' OR OMUGRP = '*PUBLIC' OR OMUGRP = ' ' ) ) ORDER BY OMSTSO ASC,OMAPPLID ASC
```

Example: SQLParse – SQLSTATS.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_3344_SQLSTATS.txt]_____
```

```
SQL Statistics File for: /u01/jde920/e920/log/jdedebug_3344.log
-----------------------
.F986101 :
==========
 7 SELECTs
 7 Unique SELECTs
 0 UPDATEs
 0 Unique UPDATEs
 0 INSERTs
 0 Unique INSERTs
 0 DELETEs
 0 Unique DELETEs
```

Example: SQLParse – SQLParse_STDERROR.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_4088_SQLParse_STDERROR.txt]_____
Parsing SQL statements in /u01/jde920/e920/log/jdedebug_4088.log...
 F986101
Writing SQL Stats file...
Writing UNIQUE SQL files...
 (Hit ENTER..)
Parsing SQL statements in /u01/jde920/e920/log/jdedebug_4088.log...
 F986101
Writing SQL Stats file...
Writing UNIQUE SQL files...
 (Hit ENTER..)
```

Example: SQLParse – UPDATE.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_3344_F986101_UPDATE.txt]_____
**UPDATE statements for F986101 in /u01/jde920/e920/log/jdedebug_3344.log:
=========================================================================
 (UNIQUE UPDATES & counts)
```

Example: SQLParse – DELETE.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_4088_F986101_DELETE.txt]_____
**DELETE statements for F986101 in /u01/jde920/e920/log/jdedebug_4088.log:
=========================================================================
 (UNIQUE DELETES & counts)
```

Example: SQLParse – INSERT.txt

```
Performance Workbench [/u01/jde920/jde_home/SCFHA/perf/results/
jdedebug_3344_F986101_INSERT.txt]_____
**INSERT statements for F986101 in /u01/jde920/e920/log/jdedebug_3344.log:
=========================================================================
 (UNIQUE INSERTS & counts)
```

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39 Optimized Session Management on Oracle Database (Release 9.2.26.0)

Overview

Starting with Tools Release 9.2.26.0, Oracle database sessions are terminated when the session time exceeds the default threshold time. This frees up the database resources which can be utilized for subsequent database sessions.

To enable optimized session management on Oracle database, you must use the Server Manager Console to modify the Database, Kernel Recycling, and Workflow settings for the Enterprise server and Database settings for the HTML server.

> **Note:** Optimized Session Management is only applicable to Enterprise and HTML servers.

> **Note:** Autonomous Database Serverless can terminate the Oracle database sessions when the session `MAX_IDLE_TIME` exceeds the default threshold time of 24 hours. For details, see *Idle Time Limits* in the Oracle Cloud document *Using Oracle Autonomous Database Serverless.*

Configuring the JDE.INI Settings

The following are required settings and recommended values in the `jde.ini` file to achieve optimized session management on Oracle Database:

```
[DB SYSTEM SETTINGS]
UseOracleDBConnectionPool=1
PingConnection=1
DBConnectionTimeout=60
IdleRequestTimeout=1
OracleMaxCursorBufferPercent=1
OracleDBStatementCacheSize=10
```

> **Note:** For the Sales Update program (R42800), ensure you set the value for `PingConnection` as `0`.

> **Note:** It is recommended to set the value of `OracleMaxCursorBufferPercent` as `90` when you are not applying ESU using Deploy Software Update on Web (R96701W).

```
[WORKFLOW]
CleanupFrequency=30
TimeoutDelay=30
WFEnvironmentMax=0
```

```
[RECYCLING]
krnlRecycleElapsedTime=12:00


[SECURITY]
BootStrapEnvRefreshInterval=1800
```

Configuring the JDBj.ini Settings

The following are required settings and recommended values in the `jdbj.ini` file to achieve optimized session management:

```
[JDBj-CONNECTION POOL]
connectionTimeout=30000
cleanPoolInterval=30000
useOracleDBConnectionPool=true
pingDatabase=true
maxSize=10
```

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40 Enabling Read-Only Routing for Microsoft SQL Server Always On Availability Groups (Release 9.2.26.0)

Overview

Starting with Tools Release 9.2.26.0, you can enable read-only routing for Microsoft SQL Server Always On availability groups using the Server Manager Console. ReadOnly routing refers to the ability of Microsoft SQL Server to route qualifying read-only connection requests to an available Always On readable secondary replica.

See Microsoft documentation, *Readable secondary*.

Prerequisites

• Prior to enabling read-only routing in JD Edwards EnterpriseOne, you must configure read-only routing in the respective Microsoft SQL Server. See Microsoft documentation, *Configure read-only routing*.

• When you setup the clustering, you must provide the availability group listener name in the JD Edwards EnterpriseOne Database data source configuration in place of the actual Microsoft SQL Server machine name. See Microsoft Documentation, *Listener*.

Configuring the jde.ini Settings for the Enterprise Server and HTML Server

To enable read-only routing in availability group for Microsoft SQL Server database, update the jde.ini settings using the following steps:

1. For Enterprise Server, use this navigation:

   Enterprise Server > Configuration > Database > Configuration > View: Advanced > Bootstrap Datasource
2. Select ReadOnly for ODBC Application Intent.
3. For HTML Server, use this navigation:

   HTML Server > Configuration > Database > Configuration > View: Advanced > JDBj Runtime Properties
4. Select ReadOnly for MS SQL Application Intent.

> **Note:** ReadWrite option is also available for the Application Intent setting. ReadWrite allows a secondary replica to redirect read-write connection requests. See Microsoft documentation, *Read/write connection redirection*.

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41 **Appendix A - Best Practices**

Multiple Management Consoles

If desired, you can install and operate multiple separate *Management Console* installations on a single machine. This model is supported in addition to the standard functionality whereby you can use a single *Management Console* to manage separate *JD Edwards EnterpriseOne* installations.

To install multiple *Management Consoles* on a single machine, you should install each *Management Console* in completely separate locations. The *Management Console* installer automatically detects a prior console installation and will properly configure any subsequent installations. This includes the configuration of the TCP/IP ports used by the embedded J2EE application server and the creation of the Microsoft Windows service name to ensure there are no conflicts. Additionally, you should ensure the HTTP port supplied during the Server Manager installation is unique and not currently in use. Refer to *Verify HTTP Ports* in this appendix.

When you are installing an additional *Management Console* on a machine it is important that the existing previous installations be stopped. There are two TCP/IP ports utilized by server manager that must be manually configured to prevent conflicts during the setup wizard:

- *Management Server JMX Port*

  This is the port on which the *Management Console* listens for incoming connections from remote *Management Agents* . The default value is 14501.

  You must define this value to an unused port on the machine. A good practice is to increase the value by 1000 to 15501 for the second console, 16501 for the third, and so on, provided those ports are not used by any other application running on the machine. You must properly set this value prior to installing any *Managed Homes* .

- *Management Agent Starting Port*

  This port is the start port the *Management Console* will assign to remote *Management Agents* . The default value is 14502.

  If you will be using the new *Management Console* to manage machines that are also managed from another *Management Console* , you must change this value. A good practice is to change this value anytime you change the *Management Agent Starting Port*. Unlike the *Management Server JMX Port*, you can change this port at any time, including after you have installed *Managed Homes* .

When you have properly configured these ports you can simultaneously start and run any other *Management Console* instances on the same machine.

Management Agents

This section describes these recommendations:

- *One Agent Per Application Server Installation*
- *Management Agents on WLS*
- *Management Agents on JD Edwards EnterpriseOne Enterprise Servers*

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- *Multiple Agents on a Single Machine*

One Agent Per Application Server Installation

You should only use one Management Agent to manage an Application Server installation. The reason is because if you use multiple agents to manage the same application server it can lead to slow response times and unpredictable results such as this scenario:

- *Management Agent A*

  WAS_HOME/Profile1/ServerA: EnterpriseOne HTML Server

- *Management Agent B*

  WAS_HOME/Profile1/ServerA:

For the above two agents, *Management Agent B* cannot determine if *Management Agent A* has an *EnterpriseOne HTML Server* installed on *WAS61/Profile1/ServerA*. As a result, if you start or stop *ServerA* you would also unknowingly start or stop the *JD Edwards EnterpriseOne HTML Web Server* .

Management Agents on WLS

In order for *Server Manager* to manage WLS, you should install the *Management Agent* on your machine that has Oracle WebLogic Server as the *oracle* user. Additionally, you should enable the *Management Agent* to run as the *oracle* user.

For UNIX systems, if you cannot install the agent as a non-root user (for example, on AIX), then install the agent as the *ROOT* user and then change the owner using the `chown` command.

Before proceeding, you should ensure that you stop the *Management Agent* and select it with the new owner.

Management Agents on JD Edwards EnterpriseOne Enterprise Servers

In order for *Server Manager* to manage *JD Edwards EnterpriseOne* Enterprise Servers, you should install the *Management Agent* as the EnterpriseOne user. For example, depending on your *JD Edwards EnterpriseOne* applications release, valid users might be:

- jde900
- jde910
- jde920

Multiple Agents on a Single Machine

You can install multiple agents on a single machine provided you adhere to the caveats explained in these preceding sections:

- *One Agent Per Application Server Installation*
- *Management Agents on WLS*
- *Management Agents on JD Edwards EnterpriseOne Enterprise Servers*

Multiple WebSphere Application Servers

It is recommended that you only install only one version of WebSphere Application Server (WAS) per machine. This is because running multiple versions of WAS on the same machine can lead to conflicts in the assignment of port numbers, node names, and cell names. This can cause unexpected results when trying to manage applications running in these application servers using both the native WAS management tools and through Server Manager.

Separate WAS Profiles

It is recommended that you create separate WAS profiles when managing:

- Multiple environments (such as production, test, and development)
- Multiple instances of a web-based server (such as HTML Web Server, Transaction Server, and Business Services Server) in a Network Deployment (ND) WAS installation. Also in a ND WAS installation all the different WAS profiles can share one web server definition.
- Multiple foundations of *JD Edwards EnterpriseOne* (such as Tools Release 9.0, 9.1 etc.)
- Transaction Server

Note: During profile creation, it is recommended that you specify your starting port number to a value that will give you a sufficient amount of port numbers (for example, 1000) between the last profile you created so as to not conflict with other currently assigned ports and ports that will be assigned in the future.

Note: If you configure the WebSphere Application Server `SOAP_CONNECTOR_ADDRESS` port number outside of Server Manager (for example, from the WebSphere Administrative Console), you must restart the *Management Agent* that is managing that WebSphere Application Server instance. This is required because *Server Manager* uses that port to communicate with the WebSphere Application Server and only acquires the port value on start up of the *Management Agent* .

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Note: *WAS Base/Standalone.* The general recommendation is to use a single WAS profile to deploy and manage multiple instances of EnterpriseOne web-based servers (such as HTML Web Server, PIM Sync Server, and Business Services Server). This is because of the limitation of WAS Base/Standalone functionality and how the web server plug-ins are used and modified across profiles. The exception to the general recommendation is the Transaction Server. The recommendation is to deploy and manage the Transaction Server in a separate WAS profile. This is because of conflicts between HTML Server and Transaction Server within the same profile. In WAS standalone, when creating separate profiles you must create a separate web server definition and have a separate HTTP Server. See IBM WebSphere Administration documentation for more details on this requirement.

Verify HTTP Ports

When installing any *JD Edwards EnterpriseOne* web-based servers that requires you to specify a HTTP port, you must ensure that the port you specify is available and is not being used by any other application currently installed and running on your application server. This applies not only to the instances within Server Manager, but any software installed on that machine. The port number entered for this instance must not be in use. You must be sure to know the ports being used on all machines in the managed domain. The installer does not programmatically determine whether a port is used by another application, so if you specify a port that conflicts with another application unpredictable results will occur.

HTTP Ports on UNIX Operating Systems

When using HTTP ports to install a Web-Based Server, make sure not to select a port in the range restricted by the UNIX operating system for root access only. These are usually ports from 1 1024, but may include others in your particular environment. Using a port in a restricted range will cause undesirable results as the *Management Agent* will not have the rights to manage the products installed to these ports.

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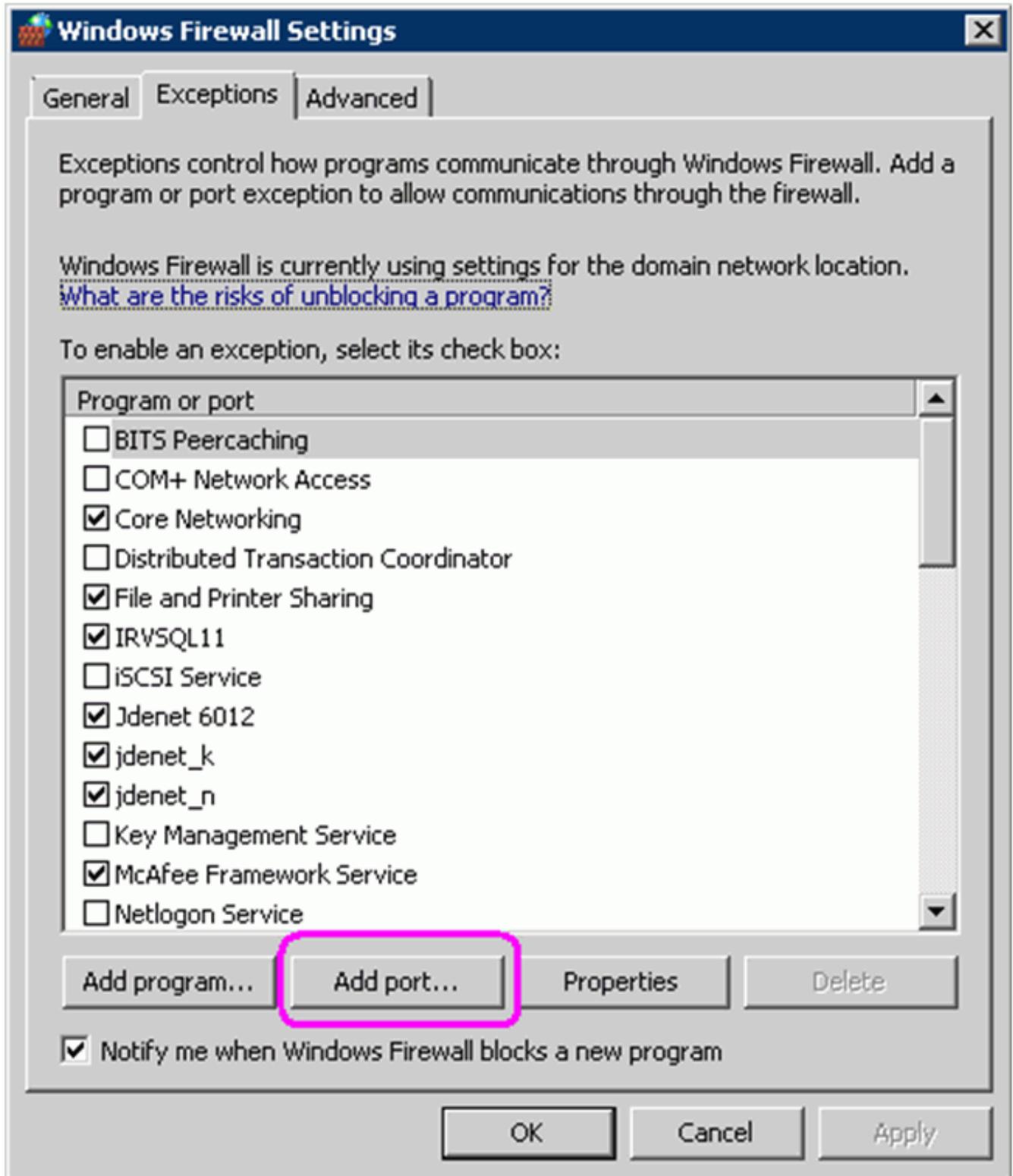# Setting Up Windows Firewall in Windows Server 2008

By default, Windows Server 2008 has the Windows Firewall turned on. This default firewall prohibits Server Manager from being fully functional. Additionally, the Server Manager Agent may not work correctly unless you follow these procedures.

1. In Windows Server 2008, open *Windows Firewall*.

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2. On *Windows Firewall*, in the left-hand pane, click this setting:

Allow a program through Windows Firewall

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3. On *Windows Firewall Settings*, on the *Exceptions* tab, click the *Add Port* button.

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4. On *Add a Port*, complete these fields to add a port for the Server Manager Agent:

   ○ *Name*

     Enter this value:

     Server Manager Agent
   ○ *Port Number*

     Enter this value:

     14502
   ○ *Protocol*

     Choose the radio button for this value:

     TCP
5. Click the *OK* button.

6. Repeat Steps 3 and 4 to add another Server Manager port.

   On Add a Port, complete these fields to add a port for the Server Manager JMX connection:

   ○ *Name*

     Enter this value:

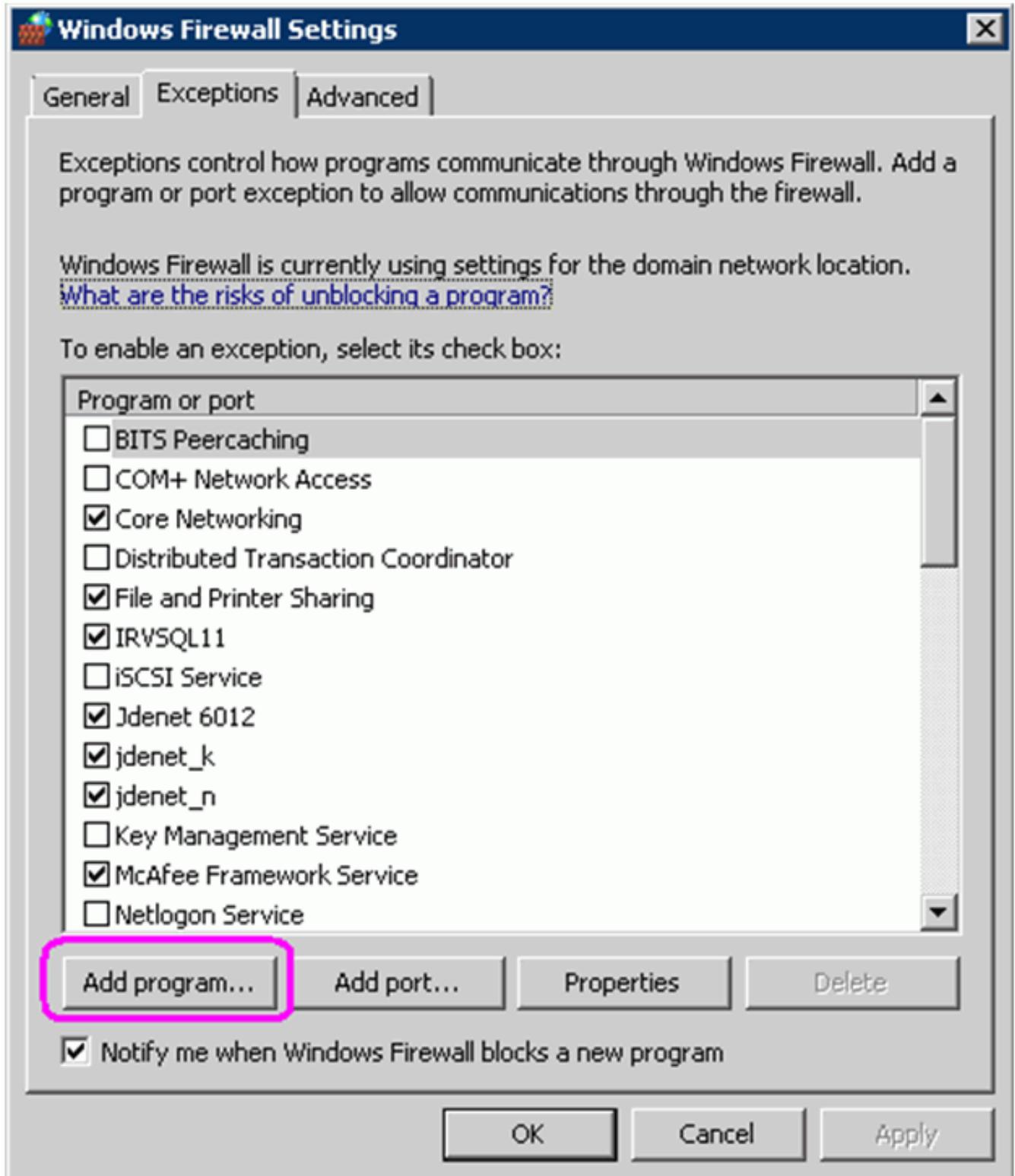   *Server Manager JMX Port*
   ○ *Port Number*

     Enter this value:

     14501
   ○ *Protocol*

     Choose the radio button for this value:

     TCP

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7. At this point, if not already installed, you can install the Server Manager Agent for Microsoft Windows as described in the Server Manager Guide, in the section entitled: *Installing the Server Manager Management Console and Agent*.

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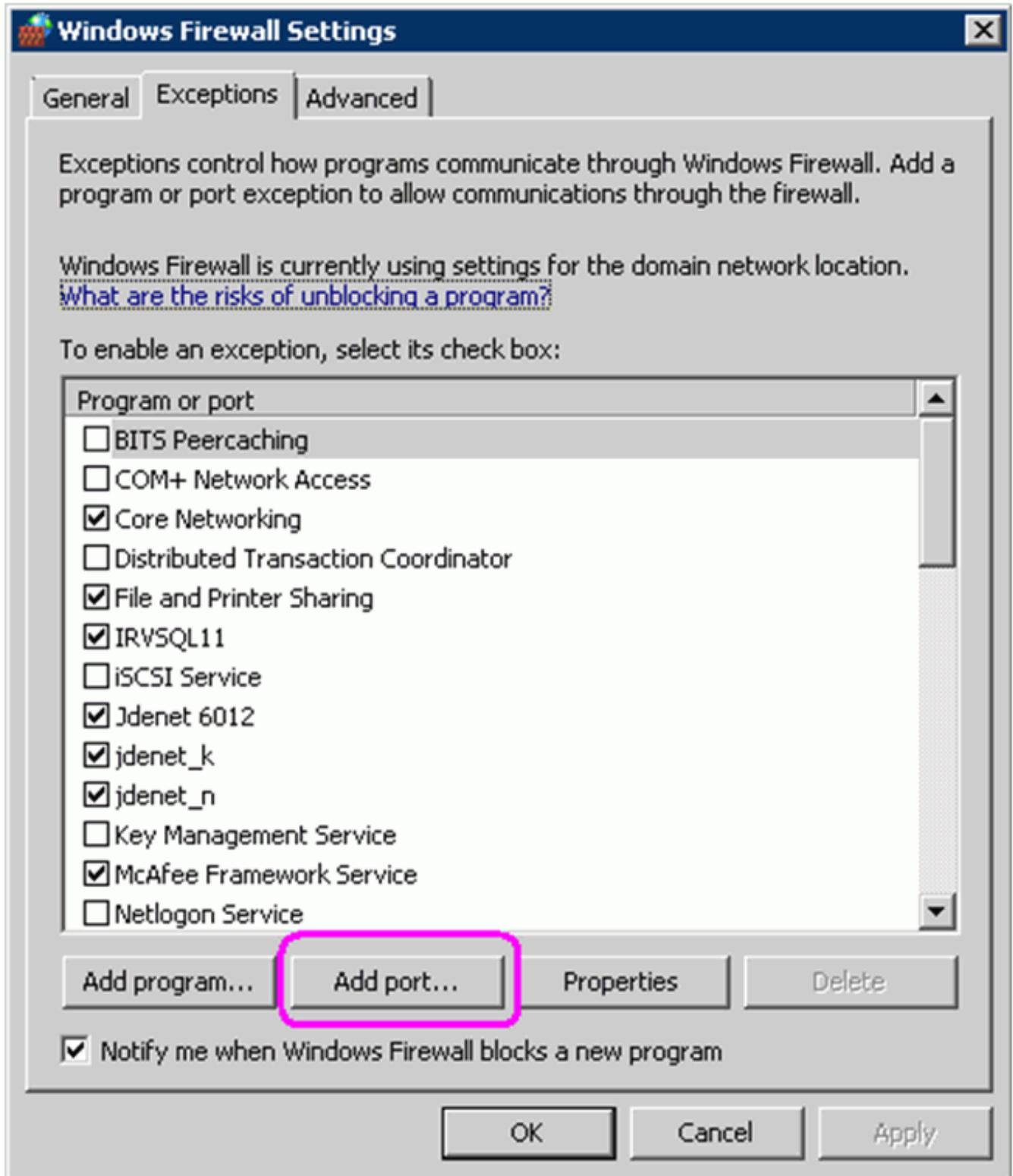8. On *Windows Firewall Settings*, on the *Exceptions* tab, click the *Add Program* button.
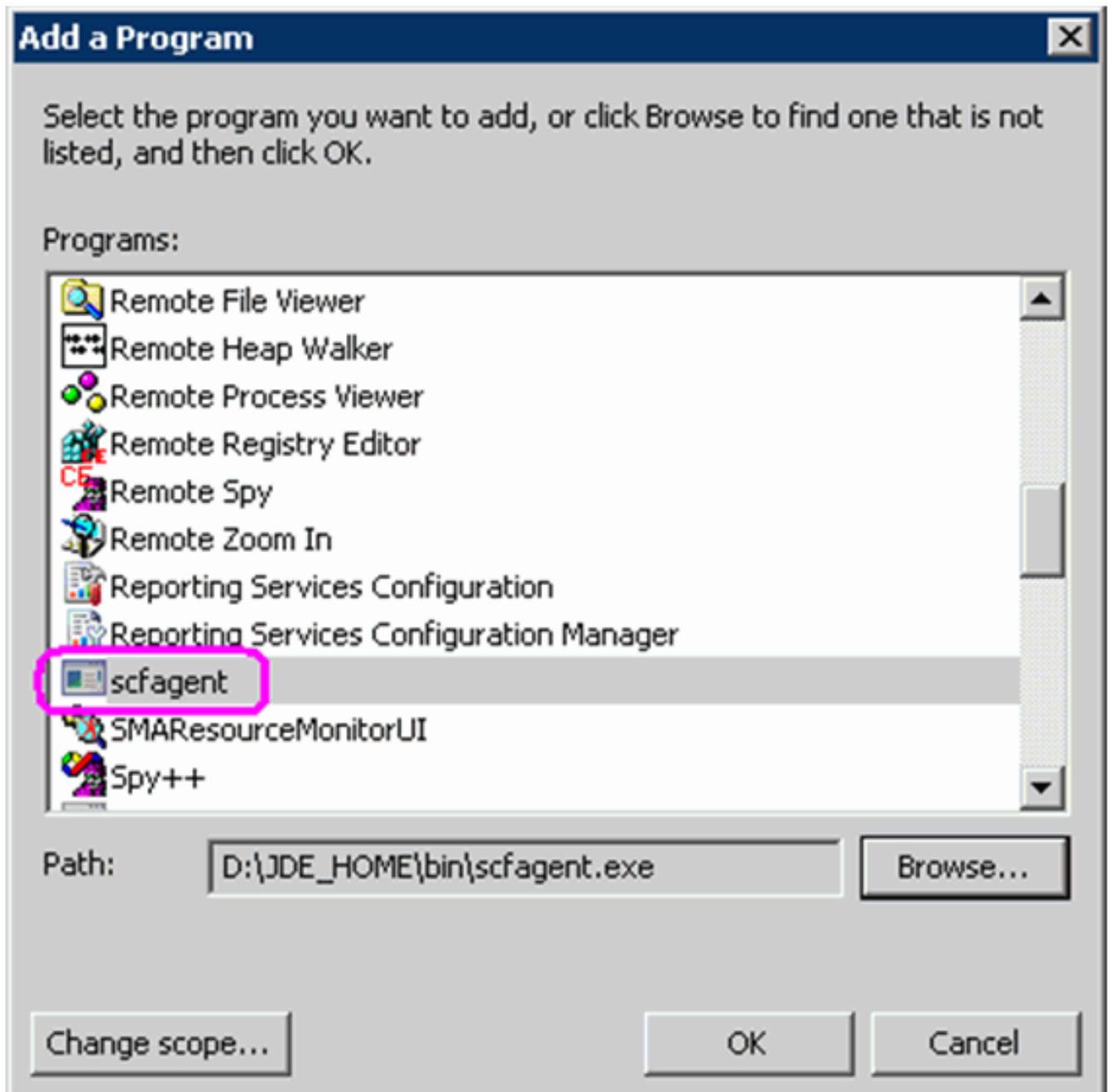
9. On *Add a Program*, browse the list and locate this program:

    scfagent

10. Click the *OK* button.

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11. At this point, if not already installed, you can install a Managed Instance for the Enterprise Server as described in the Server Manager Guide, in the section entitled: *Register or Create a JD Edwards Enterprise Server as a New Managed Instance*.

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12. On *Windows Firewall Settings*, on the *Exceptions* tab, click the *Add Port* button.

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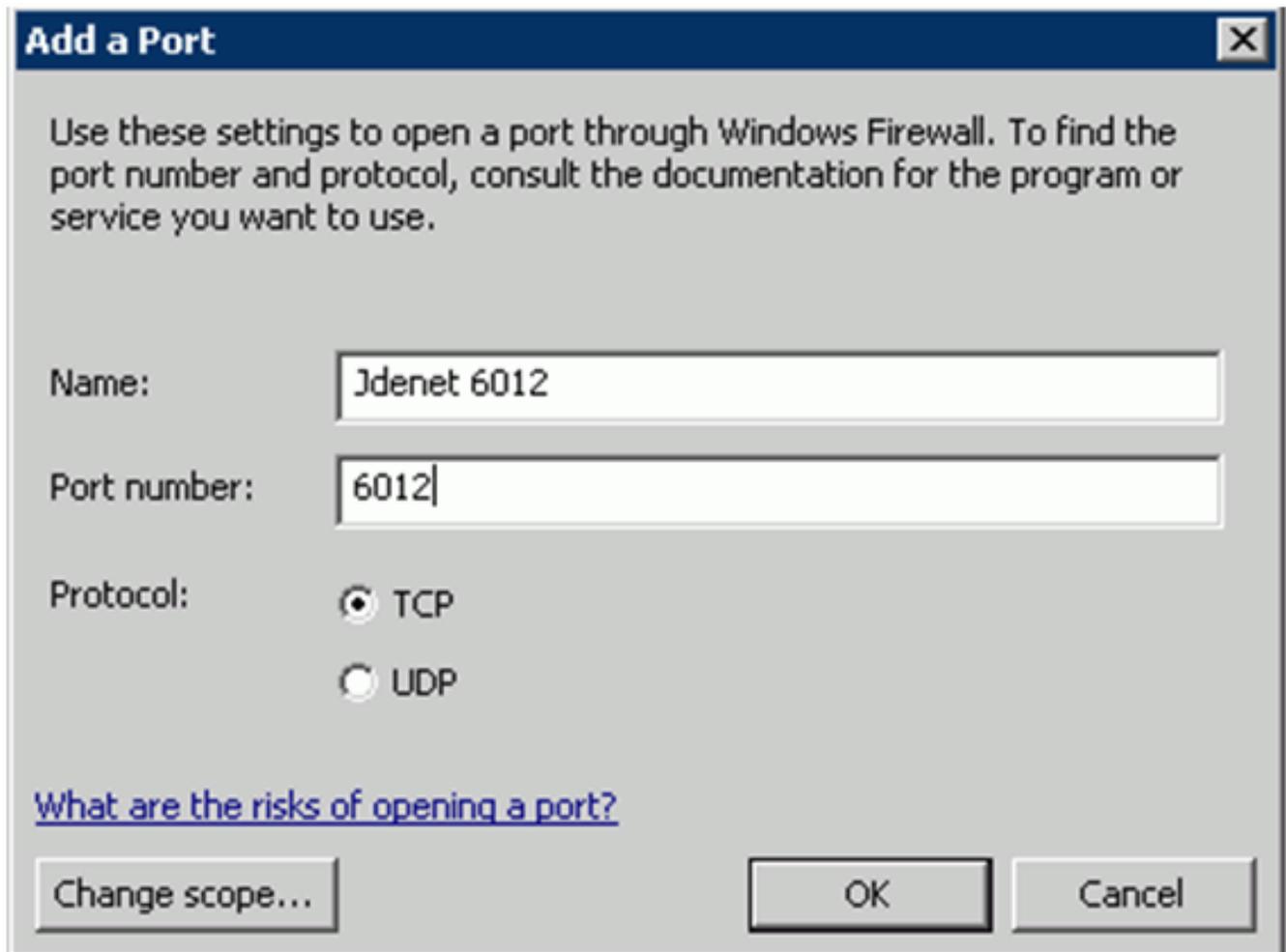
13. On *Add a Port*, complete these fields to add a port for the Server Manager Agent:

- *Name*

  Enter this value:

  JDENET <port>

  where *<port>* is a variable value for JDENET corresponding to the JD Edwards EnterpriseOne Applications Release. See description below for valid values.
- *Port Number*

  Enter this value:

  <port>

  where *<port>* is a variable value for JDENET corresponding to the JD Edwards EnterpriseOne Applications Release. For example, the default values per release are listed in this table:
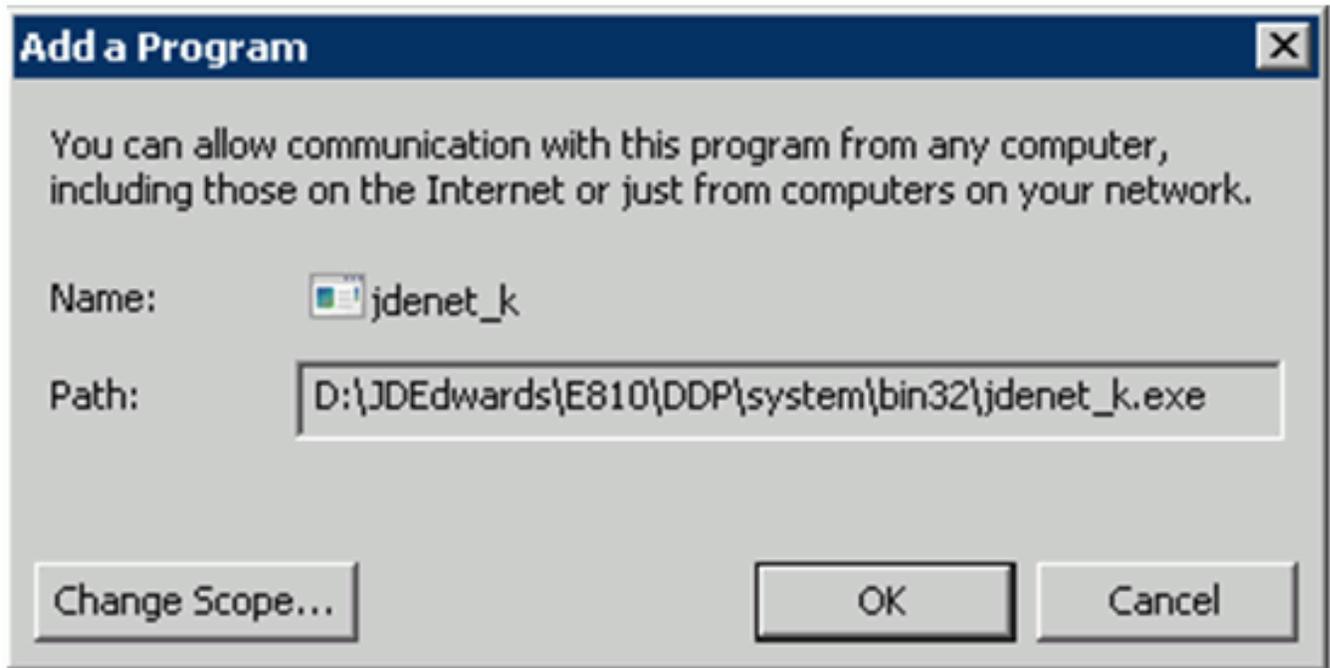
JD Edwards Application Release	Default JDENET Port Value
9.0	6015
9.1	6016

- *Protocol*

  Choose the radio button for this value:

  TCP

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14. On *Windows Firewall Settings*, on the *Exceptions* tab, highlight the *jdenet_k* program and click the *Add Program* button.

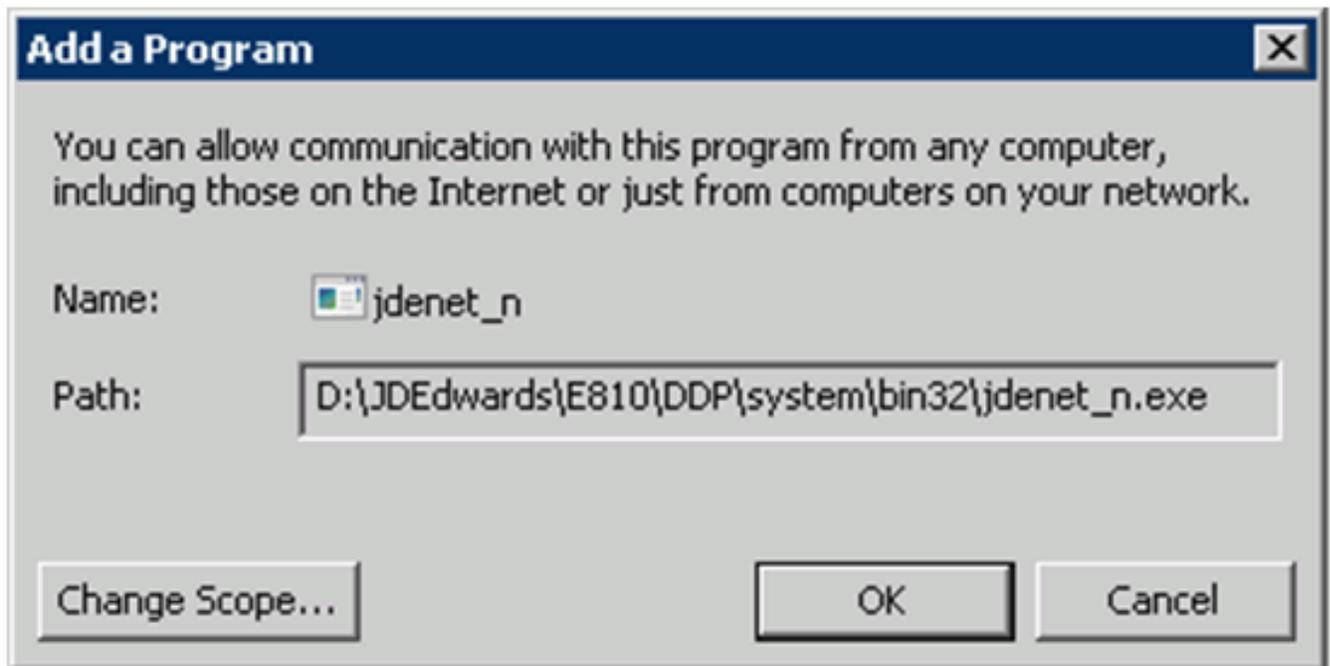**15.** On *Edit a Program*, verify the values in these fields are correct for *jdenet_k*:

- ○ *Name*

  jdenet_k
- ○ *Path*

  Path to the jdenet_k.exe program. For example:

  `D:\JDEdwards\E810\DDP\system\bin32\jdenet_k.exe`

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16. Click the *OK* button to accept the values.

17. Repeat Steps 14 through 16 above, substituting *jdenet_n.exe* for *jdenet_k.exe*.

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18. Optionally, if the database for your JD Edwards EnterpriseOne applications reside on a different machine than the Enterprise Server, you must repeat the applicable steps above to add a port for that database. You may need to check with your DBA or database vendor documentation to determine the applicable port.

The below example shows the typical database port for SQL Server 2008.
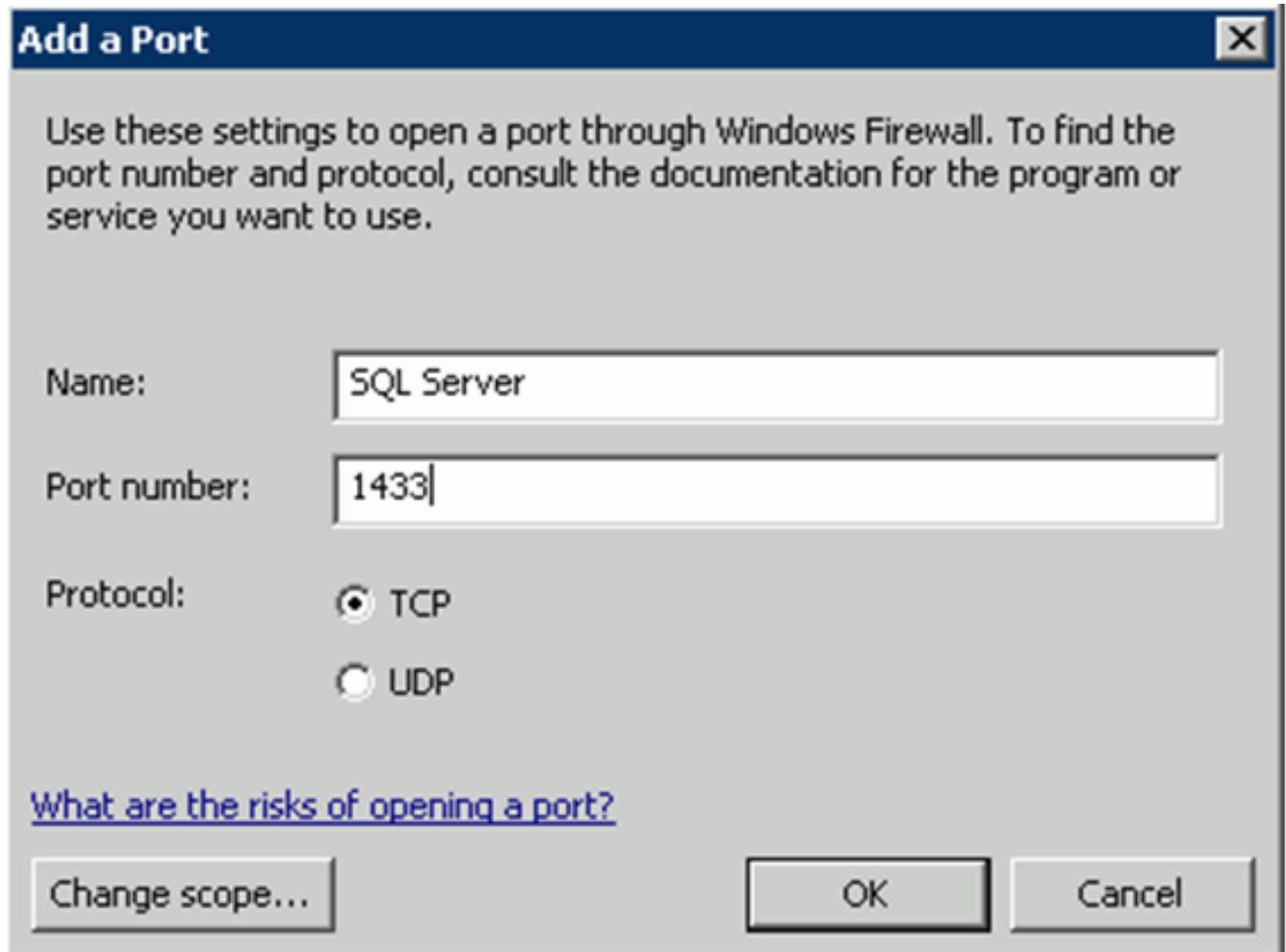
ojdbc7.jar Support on WAS

By default, WebSphere is delivered with IBM JDK 1.6. However, when using ojdbc7.jar for JD Edwards EnterpriseOne instances created on WebSphere to connect to an Oracle database, the only supported JDK is IBM 1.7. This version must be installed on the WAS machine (it comes as an optional installation) and the user must enable and set JAVA 7 as the default SDK to their respective profiles in which the required instances are being created. These procedures

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are described in the JD Edwards EnterpriseOne HTML Reference Guides for WebSphere. Refer to the chapter entitled: Installing and Configuring WebSphere 8.5.5, which is in platform-specific guides on OTN at the following links:

JD Edwards EnterpriseOne HTML Web Server on WebSphere for IBM i

https://docs.oracle.com/cd/E61420_01/doc.92/e55810/inst_config_was85_ibm.htm#EOHII216

JD Edwards EnterpriseOne HTML Web Server on WebSphere for UNIX

https://docs.oracle.com/cd/E61420_01/doc.92/e55808/inst_config_was85_win.htm#sthref4

JD Edwards EnterpriseOne HTML Web Server on Microsoft Windows

https://docs.oracle.com/cd/E61420_01/doc.92/e41914/inst_config_was85_win.htm#sthref4

If the user fails to do this, then they will receive this error:

```
com.jdedwards.database.base.JDBException: [CONNECTION_MANAGER_BOOT_ERROR] Connection Manager could not be
initialized. java.lang.UnsupportedClassVersionError: JVMCFRE003 bad major version; class=oracle/jdbc/driver/
OracleDriver, offset=6
```

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