

# MetaSolv Solution™ LSR 10

## Setup Guide

First Edition  
June 27, 2007



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## Document History

<b>Edition</b>	<b>Date</b>	<b>Reason</b>
First	June 27, 2007	LSR 10 General Availability

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## About this guide

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This guide contains the procedures and information you need to install LSR 10 and future service packs and EFixes of the LSR 10 release stream.

For future service packs, refer to the respective LSR release notes document for the minimum required version of MetaSolv Solution. You should always install different LSR versions in sequence, starting with the earlier LSR version.

This guide includes some information on third-party software products used by MetaSolv Solution. However, this is limited to information needed to install and perform initial configuration tasks. If you need additional information on a third-party software application, consult the documentation provided by the product's manufacturer.

## Audience

This guide is for individuals responsible for installing or maintaining MetaSolv Solution and ensuring the software is operating as required. This guide assumes the installer has an Oracle DBA and BEA administrator background, with a working knowledge of Windows 2000 and Java J2EE.

## Additional information and help

To get additional information or help for MetaSolv Solution LSR, refer to the following resources:

- ◆ Oracle E-Delivery—Provides access to product software and documentation.
  - ◆ Visit the E-Delivery Web site at <http://edelivery.oracle.com>.
  - ◆ Software and product documentation for LSR are contained in the Oracle Communications MetaSolv Solution 6.0 Media Pack.
  - ◆ Developer documentation for LSR is contained in the Oracle Communications MetaSolv Solution Developer Documentation Pack. Access to developer documentation requires a password.
- ◆ Oracle MetaLink—Provides access to software patches and a searchable Knowledge Base.
  - ◆ Visit the MetaLink Web site at <https://metalink.oracle.com/>, and log on using your User Name and Password.

- Click the Patches & Updates tab to search for patches (efixes).

Click the Knowledge tab to search for technical bulletins, fixed issues, and additional product information. To narrow your search, click the Communication Apps link under Product Categories on the left side of the page.

## Oracle Support

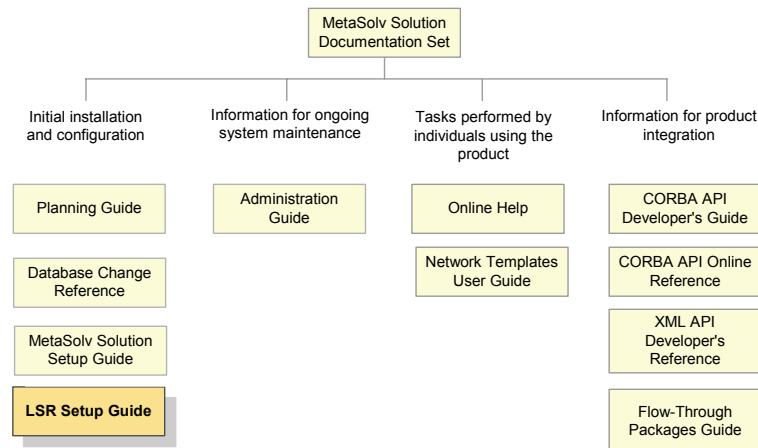
The preferred method of reporting service requests (SRs) is through MetaLink. MetaLink is available 24 hours a day, 7 days a week.

Although it is Oracle's preference that you use MetaLink to log SRs electronically, you can also contact Support by telephone. If you choose to contact Support by phone, a support engineer will gather all the information regarding your technical issue into a new SR. After the SR is assigned to a technical engineer, that person will contact you.

For urgent, Severity 1 technical issues, you can either use MetaLink or you can call Support. Oracle Support can be reached locally in each country. To find the contact information for your country, go to <http://www.oracle.com/support/contact.html>.

## MetaSolv Solution documentation set

This guide is one book in a set of documents that helps you understand and use MetaSolv Solution. Figure 1 shows the documentation set.



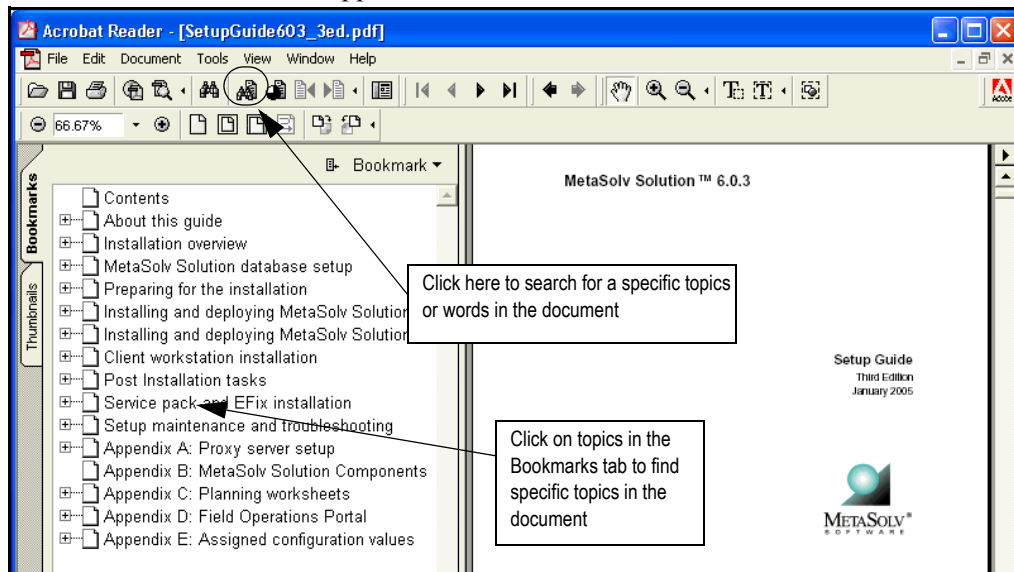
**Figure 1: MetaSolv Solution documentation set**

MetaSolv Solution books are delivered in Portable Document Format (PDF). You can view a book online using Adobe Acrobat Reader.

### To view a document

- ◆ Locate the document on E-Delivery and double-click it.

This action starts Acrobat Reader and opens the PDF document you indicated. The following figure shows how a document appears in Acrobat Reader.







# Installation and deployment on BEA 8.1

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This chapter explains how to install LSR 10 and higher service packs and EFixes on BEA WebLogic Server 8.1 for all platforms.

## Pre-installation checklist

Whether you are performing a first-time installation or upgrading a previous version of the LSR software, you should follow the instructions and recommendations presented in this pre-installation checklist. Completing this checklist helps ensure the installation flow is not disrupted.

- ◆ You must be at MetaSolv Solution 6.0.13 or higher for this upgrade. If you plan to use LSR 10 with MetaSolv Solution's XML API option, you must be at MetaSolv Solution 6.0.13.
- ◆ Verify the host name and port number where the MetaSolv Solution application server is running.
- ◆ Obtain the administrator user ID and password for the WebLogic administration console.
- ◆ If you are on an HP platform, before you unjar the help index jar files, go to the download site for SDK (includes JDK for jar commands) at <http://www.hp.com/products1/unix/java/java2/sdkrte14/downloads/index.html>. Download the SDK.depot file and follow their instructions to install the jar command on HP-UX. The installation script uses this command to unjar the files during installation.
- ◆ Delete any previously installed vpd.properties files. The vpd.properties file is stored in the main directory for the operating system on the end user's machine.
- ◆ Download the appropriate LSR product from the customer download site.
- ◆ If you are running on a UNIX environment, type the following command:  
**DISPLAY=mymachinename:0.0;export DISPLAY** and press **Enter** to set the DISPLAY environment variable to send the graphical display to your workstation.

## Installation Steps

The basic steps for installing LSR include:

1. Copying the files to the machine on which LSR is to be installed. This is done by running the install script.



**Note:** If there are multiple servers running in the domain, you must run the LSR install script for each server instance.

2. Applying the database changes by running the .sql files included in the LSR files.
3. Deploying LSR to the managed server or servers.

## Running the install script

1. Navigate to the folder where you downloaded the LSR product and untar the installation files.
2. From the folder where you untarred the LSR files, start the installation program by doing one of the following:

- ◆ For Windows, type the following command and press ENTER:

> **deploywin.exe**

**Note:** If you get a JVM initialization failure error, type the following command instead:

> **deploywin.exe -is:javahome c:\bea\jdk142\_04**

- ◆ For UNIX, type the one of the following commands and press ENTER:

- ◆ Solaris: \$ **./deploysol.bin**

- ◆ HP: \$ **./deployhp.bin**

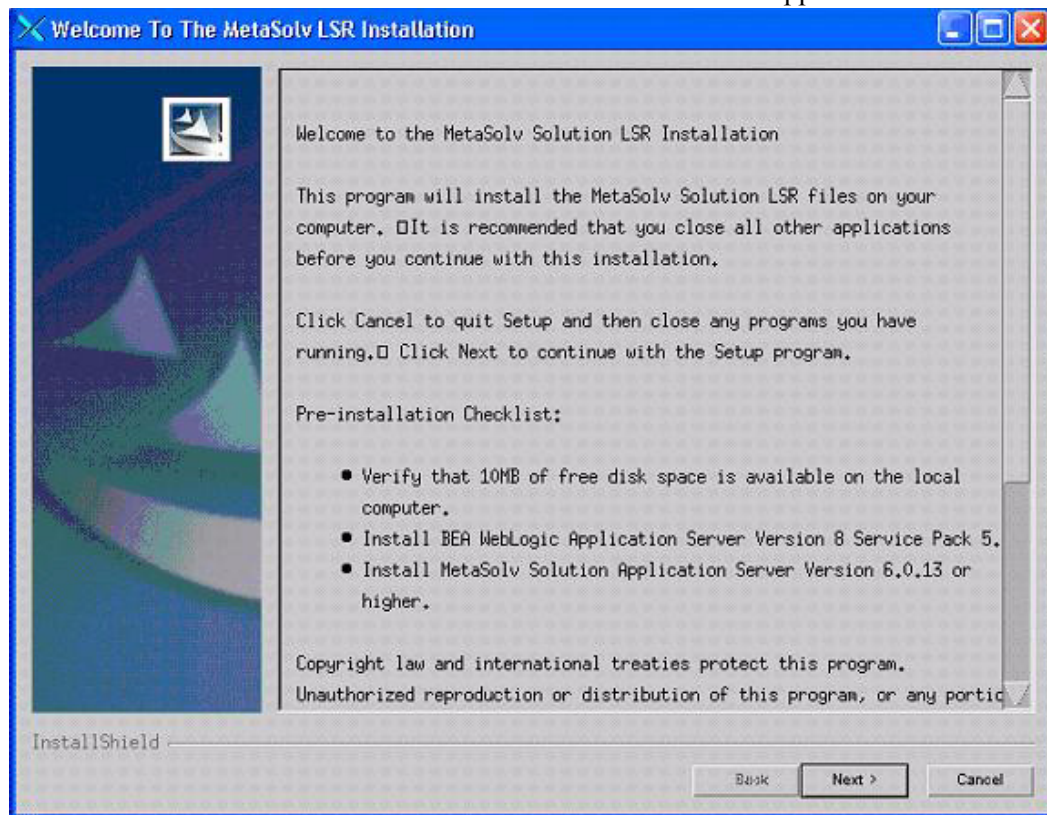
This command runs the graphical user interface for the installer. On UNIX, this command requires that you have Xceed or other X-windows emulation software.

- ◆ To run the installer in text mode only on a UNIX environment, type the following command:

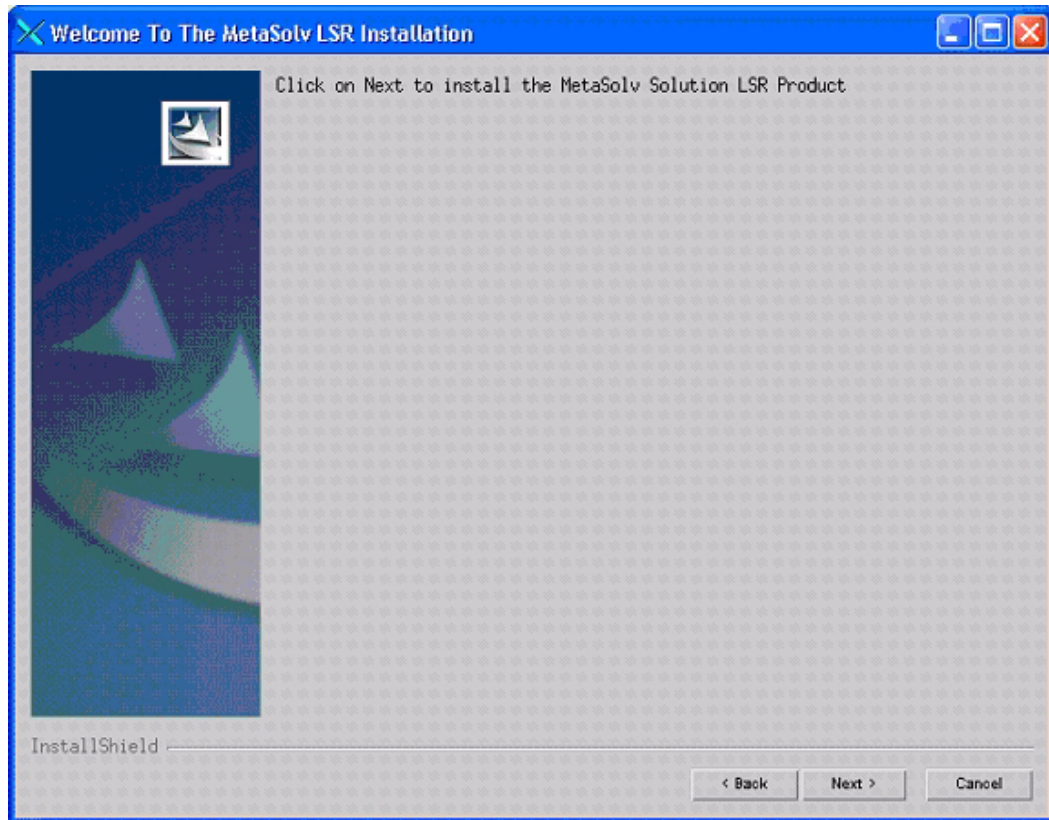
- ◆ Solaris: \$ **./deploysol.bin -console**

- ◆ HP: \$ **./deployhp.bin -console**

The welcome screen for the MetaSolv Solution installation appears.

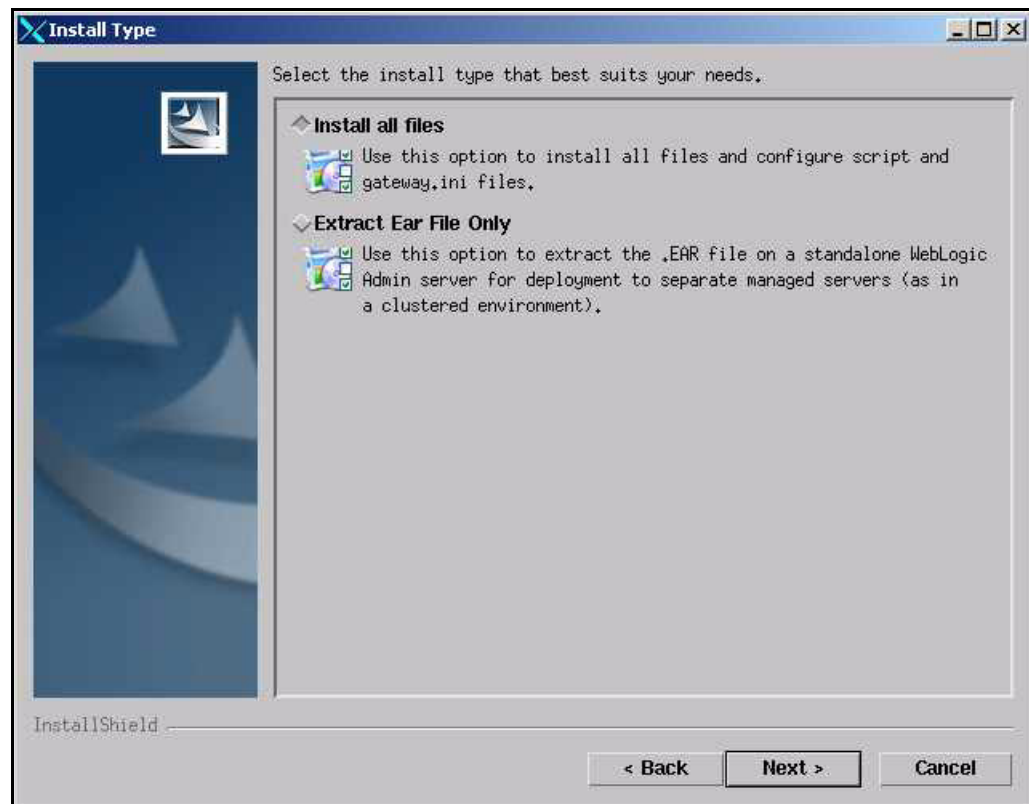


3. Read the Pre-installation Checklist and make sure the items have been completed, then click **Next**.



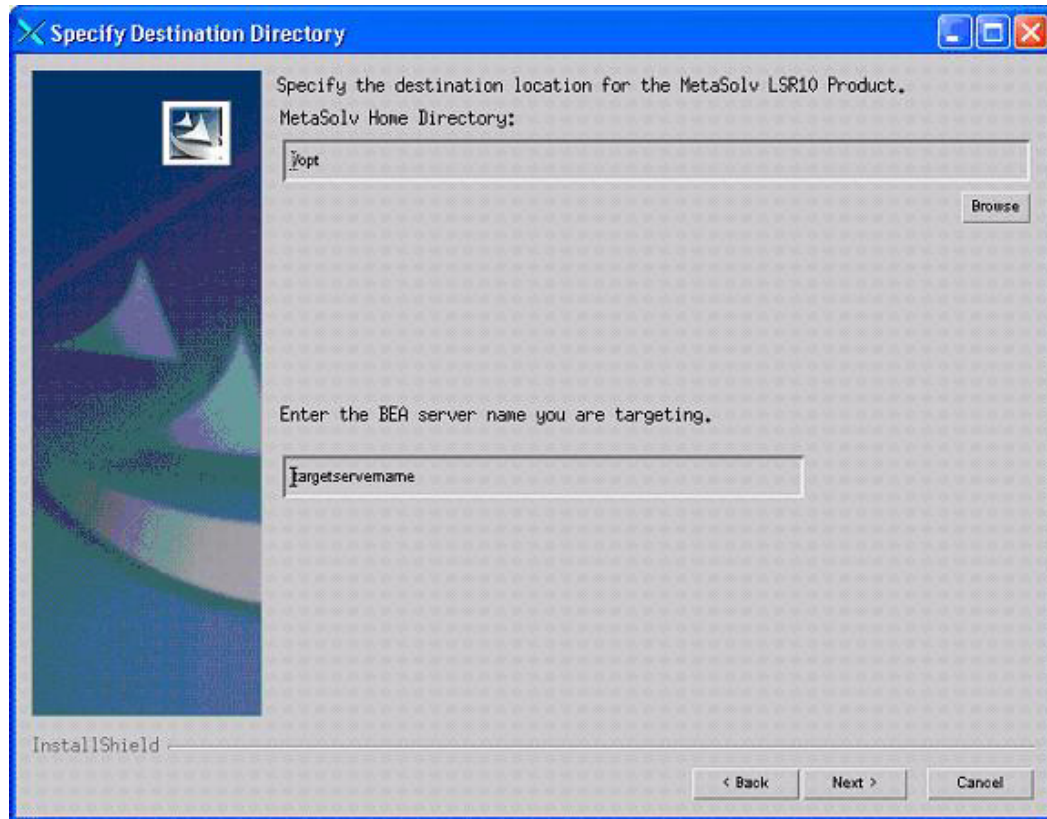
4. Click on **Next**.

The Install Type window appears.



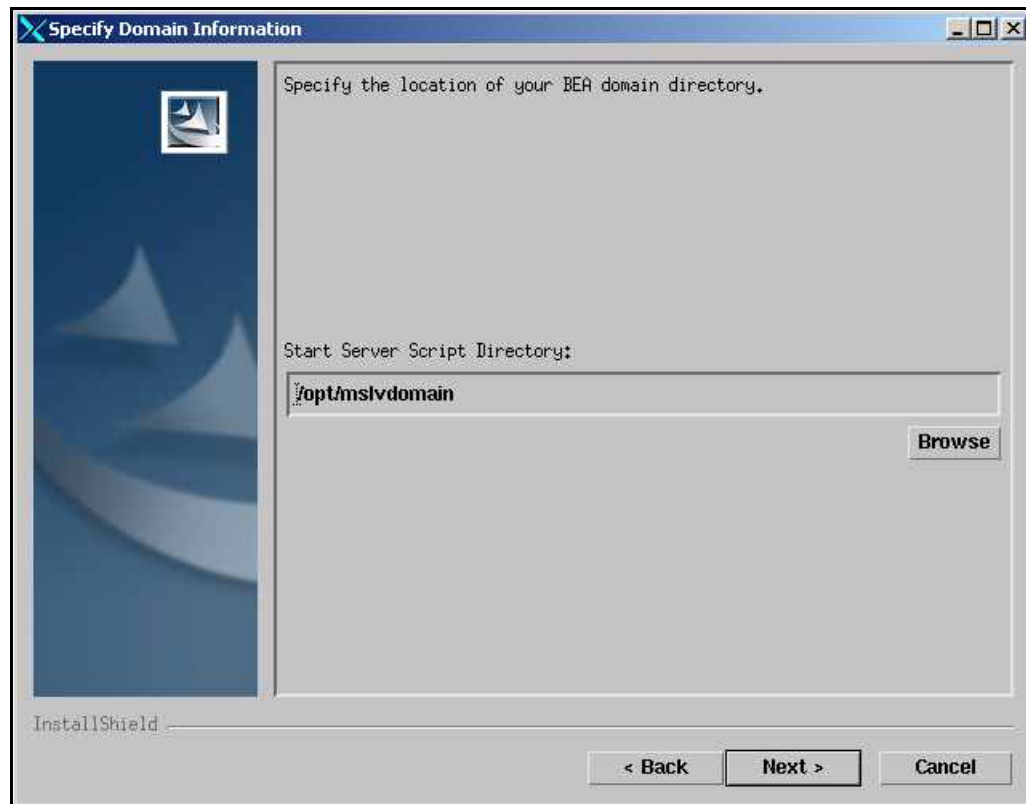
5. Select the appropriate installation type and click **Next**.

The following window appears.



6. On this window, enter the following information and click **Next**:
  - ◆ Directory where MetaSolv Solution is installed. For example, */opt/metasolv*.
  - ◆ Target server name. For example, *mslv01*.

The following window appears.

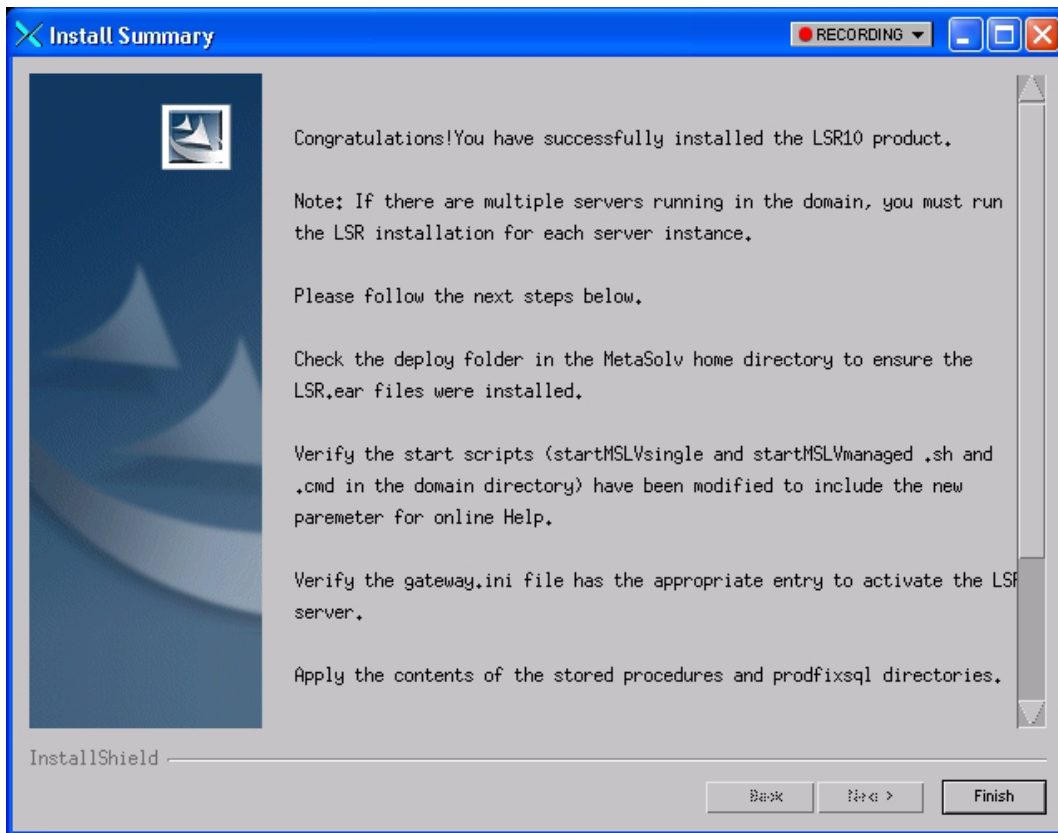


7. Type the full path for the folder where the server start up script is located, or click **Browse** to search for the directory, then click **Next**.

This file is typically found in the domain directory. For example:

- ◆ /opt/mslvdomain
- or
- ◆ c:\mslvdomain

The following window appears.



8. Check the Install Preview Panel to make sure the installation is setup correctly and click **Next**.
9. Follow the remaining on-screen prompts to complete the installation process.
10. Check the *deploy* folder in the MetaSolv home directory to ensure the LSR .ear files were installed.
11. Verify that the start script has been modified to include the new -Dhelp entry.
12. Compare your backup gateway.ini file with the new gateway.ini file that was created during the upgrade process under your MetaSolv gateway directory structure. Make appropriate changes to the new file depending on your site installation.

**Note:** After installation of LSR 10, open the Gateway.ini file on the application server (located in METASOLV\_HOME/<server>/appserver/gateway/gateway.ini) and insert the following entry, if not already existing:

```
LSR10SERVER=MetaSolv.CORBA.WDILSR10.WDIRoot,Metasolv.WDILSR10.WDIRootImpl
```



13. Shut down the application server.

If there are multiple servers running in the domain, all servers should be shut down before deploying the application from the Management Console.

## Apply LSR database changes

You must apply the contents of the prodfixsql directory.

### To apply LSR database changes

1. Run the lsr\_master.sql file located in the /METASOLV\_HOME/<server>/appserver/sql/LSR10/prodfixsql directory.
2. Run DBHealth to recompile all invalid objects.

## Deploy LSR on the application server

If the administration server for the domain is on a machine where no managed server process is running, you can run the LSR installer and select the option to only extract the .ear file. The .ear file must reside on the machine where the admin server is running in order to deploy to the managed servers in the domain.

Before you start the deployment, make sure the following servers are running:

- ◆ Administration server

If it is not running, start it using the following startup script:

```
<domain directory>/startMSLVadmin.sh
```

- ◆ Managed server or servers

Start any managed servers that are not running using the following startup script:

```
<domain directory>/start<servername>.sh
```

### To deploy from the WebLogic administration console

1. Start the WebLogic Server Administration Console using the following URL:  

```
<http://<administration server host name>:listening port number>/console>
```

For example: `http://wplsunsrvxmlapi:7001/console`
2. Enter the administration user name and password when prompted and press ENTER to log on.
3. In the left pane of the administration console, expand the domain name and select **Deployments > Applications**. Then in the right pane, click **Configure a New Application**.  
If LSR10 is already defined, delete the application by clicking the trash can icon. Click **Continue** to confirm the delete process.
4. Navigate to the *Deploy* directory (for example, `opt/metasolv/mslv01/appserver/deploy`) in the right pane and select **LSR10.ear**, or **LSR10-cluster.ear** (for clustered servers).
5. Under Available Servers, select the managed server(s) you installed and move it to the Target Servers list.

For clustered servers, select the cluster and move it to the Target Servers list.

6. Click **Configure and Deploy**.

The deployment process can take a few minutes to run. A circular arrow icon rotates to indicate the deployment is in progress. As the deployment runs, the status for each object in the Deployed column changes to True. When the deployment is finished, the status under Deployment Activity changes to Completed.

7. Repeat steps 4-6 for the **lsr10-integration.ear** file.

**To deploy from the command line to a single or manager server**

1. Run `BeaDeployer.sh`, located in the `appserver/bin` directory.
2. Answer the prompts that appear.
3. Verify the deployment from the administration console by selecting **Deployments > Applications >LSRxx**.

## If you are using LSR with XML APIs

### Creating additional queues

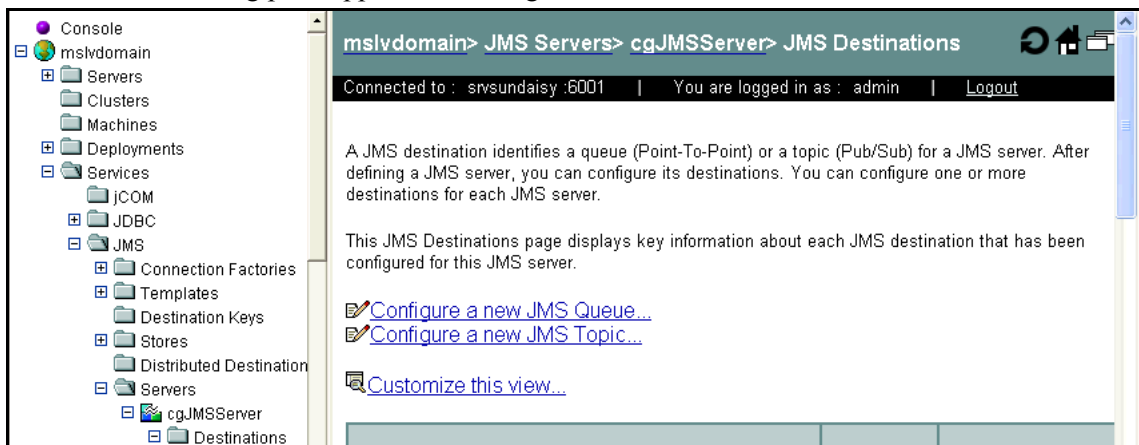
If you are using LSR and MetaSolv Solution with the XML API option, you must create the following additional queues in BEA Weblogic:

- ◆ LSR10\_API.queue.AsyncDispatcher
- ◆ LSR10\_API.queue.AsyncDispatcher\_error

**To add additional queues**

1. Log on to the WebLogic Server Administration Console.
2. In the left pane, select **Services>JMS>Servers>cgJMSServer>Destinations**.

The following pane appears on the right.



3. In the right pane, select **Configure a New JMS Queue**.

The following right pane appears. The values in the figure below are not the default values that appear when the pane displays. The figure shows the actual values you are to enter.

The screenshot shows a configuration window with tabs for Configuration, Monitoring, and Notes. Under Configuration, there are sub-tabs: General, Thresholds & Quotas, Overrides, Expiration Policy, and Redelivery. The General tab is active. The page contains the following fields and options:

- Name:** LSR10\_API.queue.AsyncDispatcher
- JNDI Name:** LSR10\_API.queue.AsyncDispatch
- Replicate JNDI Name In Cluster**
- Enable Store:** true
- Template:** (none)

At the bottom, there is a section for **Destination Keys** with two columns: **Available** and **Chosen**, each containing an empty text box and a small icon.

4. Enter the following values and click **Apply**:

**Name:** LSR10\_API.queue.AsyncDispatcher\_error

**JNDI name:** LSR10\_API.queue.AsyncDispatcher\_error

5. Select the Redelivery tab.

The following figure shows the Redelivery tab.

**Configuration** | Monitoring | Notes

General | Thresholds & Quotas | Overrides | Expiration Policy | **Redelivery**

This page allows you to define the message redelivery parameters and an error destination for this JMS queue.

**Redelivery Delay Override:**

The number of milliseconds (between 0 and a positive 64-bit integer) before rolled back and recovered messages are redelivered. If a JMS template is specified for this destination, a value of -1 means that this value is inherited from the template. Otherwise, -1 means that there is no override.

**Redelivery Limit:**

The number of redelivery tries (between 0 and a positive 32-bit integer) a message can have before it is placed in the error destination. A value of -1 means that this value is inherited from the JMS template, if one is configured. If no JMS template is configured, then -1 means that there is no override.

**Error Destination:**

Destination for messages that have reached their redelivery limit, or for expired messages on the destination where the expiration policy is `Redirect`. If this destination has a template, `(none)` means that the error destination comes from the template. If this destination has no template, `(none)` means that there is no error destination configured. (Note: If a redelivery limit is specified, but no error destination is set, then messages that have reached their redelivery limit are simply discarded.)

- Enter the following values, and click **Apply**.

**Redelivery Delay Override:** 1

**Redelivery Limit:** 0

**Error Destination:** (none)

- Repeat steps 2-6 to create the queue `LSR10_API.queue.AsyncDispatcher`.

General tab:

**Name:** `LSR10_API.queue.AsyncDispatcher`

**JNDI name:** `LSR10_API.queue.AsyncDispatcher`

Redelivery tab:

**Redelivery Delay Override:** -1

**Redelivery Limit:** 1

**Error Destination:** `LSR10_API.queue.AsyncDispatcher_error`

## About the LSR 10 samples file

MetaSolv provides a sample application, `lsr10_samples`, as a reference and guideline for developing Workshop applications to interface with the LSR XML API. If you are a developer, the sample application is designed to help you understand and work with the XML APIs.

### Where to find the sample file

During the installation, the `lsr10_samples.jar` file is stored on the application server in the following location:

`METASOLV_HOME/SERVER_NAME/appserver/samples`

**lsr10\_samples.jar**—This file contains the code, libraries, and other files required for BEA 8.1 SP3 Workshop-based development for the `lsr10_samples` application.

**lsr10\_samples.ear**—This is the representation of an ear file that results from a successful build of the application. This file is contained in the `lsr10_samples.jar`.

**ReleaseNotes.doc**—This file contains any release specific notes, including enhancements and fixes.

You can extract the contents of the jar file and place it in any location. For more information on setting up a samples file see the *XML API Developer's Reference*.

### How you can use the files

You can use the sample files in two ways:

- ◆ You can extract the files in the `lsr10_samples.jar` file, place them in a directory, and access them from WebLogic Workshop.
- ◆ You can deploy the `lsr10_samples.ear` file to observe an application. If you choose to deploy the application, you must create queues for the application just as you created them for LSR for use with the XML API option. The procedure for creating the queues is described in [“Creating additional queues”](#) on page 11.

The queues must have the following names to work with the application in the `lsr10_samples.ear` file:

- `TestWorkFlowsLSR10.queue.AsyncDispatcher`
- `TestWorkFlowsLSR10.queue.AsyncDispatcher_error`

## Reset the Reload parameter

You must reset the reload period to -1 for each object under Web Applications in the left pane of the WebLogic administration server. When the archive file is redeployed, this setting is reset to the default value of 1, which causes WebLogic to continually check to see whether a servlet has been modified. A setting of -1 indicates to WebLogic to never reload. Running the application server with the reload period set to a value other than -1 can have a detrimental effect on performance.

Reset the reload parameter using one of the following methods:

- ◆ WebLogic administration console

For each object listed under **Web Applications > Configuration > Files** in the left pane of the console, type -1 in the Reload field and click **Apply**.

- ◆ Shell script

Run *BeaReloadParm.sh* located in the appserver/bin directory and answer any prompts that appear.

## Restart the application server

Restart the managed server process(es) for the deployment and settings to take effect.

