

Upgrading Your Oracle9 *i* Database to Oracle Database 10g

Purpose

This module describes how to upgrade your Oracle9i Database to Oracle Database 10g using the Database Upgrade Assistant.

Topics

This lesson will discuss the following:

- ☐ [Overview](#)
- ☐ [Prerequisites](#)
- ☐ [Verifying SYSTEM Tablespace](#)
- ☐ [Upgrading your Database using the Database Upgrade Assistant](#)

Overview

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Using the Database Upgrade Assistant, you will upgrade your Oracle9i Database to Oracle Database 10g.

Prerequisites

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In order for this lesson to work successfully, you will need to have performed the following:

1. Completed the [Configuring Linux for the Installation of Oracle Database 10g](#) lesson
2. Completed the [Installing the Oracle Database 10g on Linux](#) lesson
3. Completed the [Installing the Oracle9i Database Release 2 on Linux](#) lesson or have access to an Oracle9i Database.

Verifying SYSTEM Tablespace

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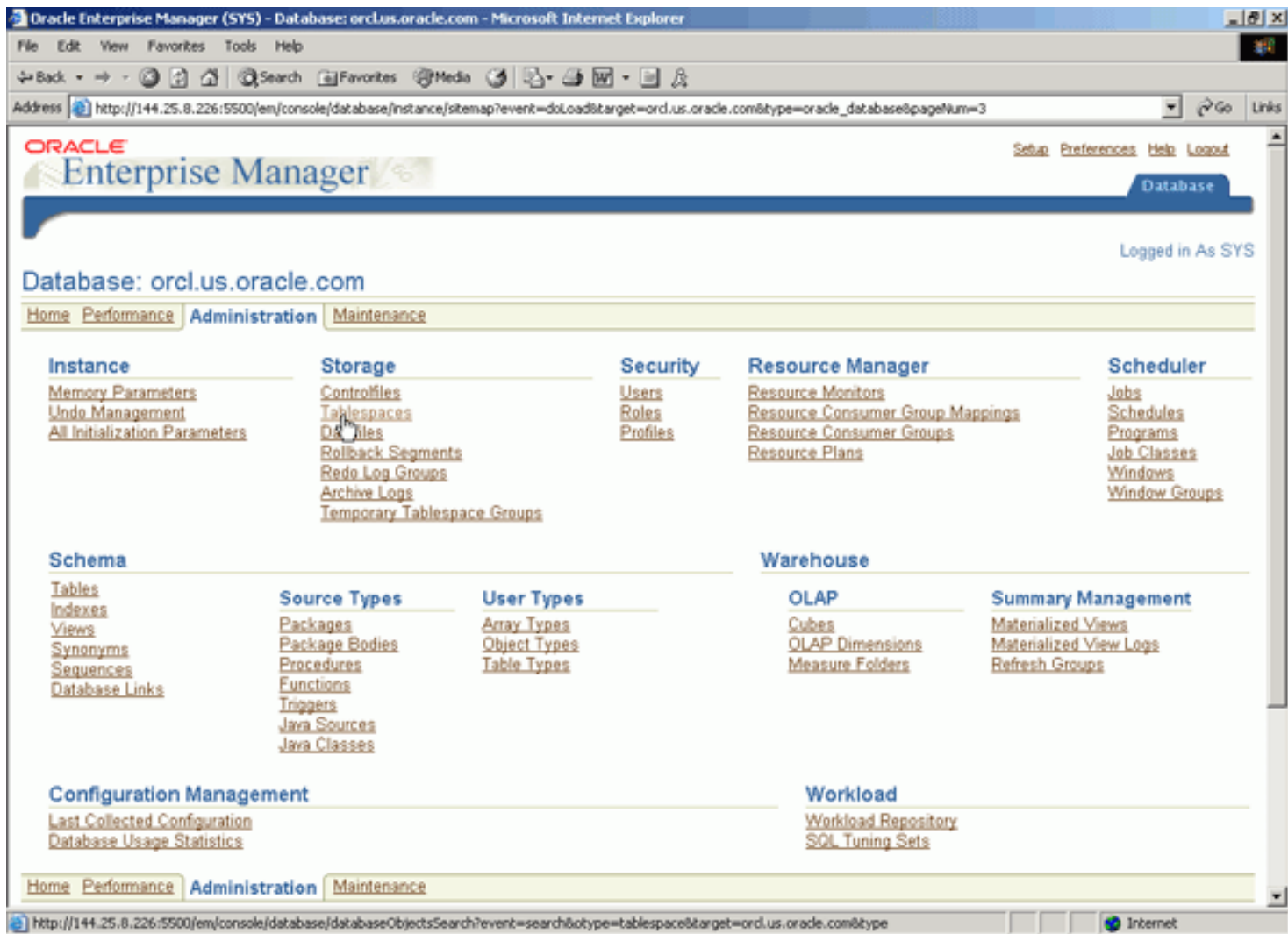
Before you upgrade, you want to check to make sure you have enough space in your SYSTEM Tablespace. Perform the following:

1. Open your browser and enter the following URL:

http://<hostname>:5500/em

Login as **sys/<password>** as **sysdba** and click **Login**.

2. Click the **Administration** tab.
3. Under Storage select the **Tablespaces** link

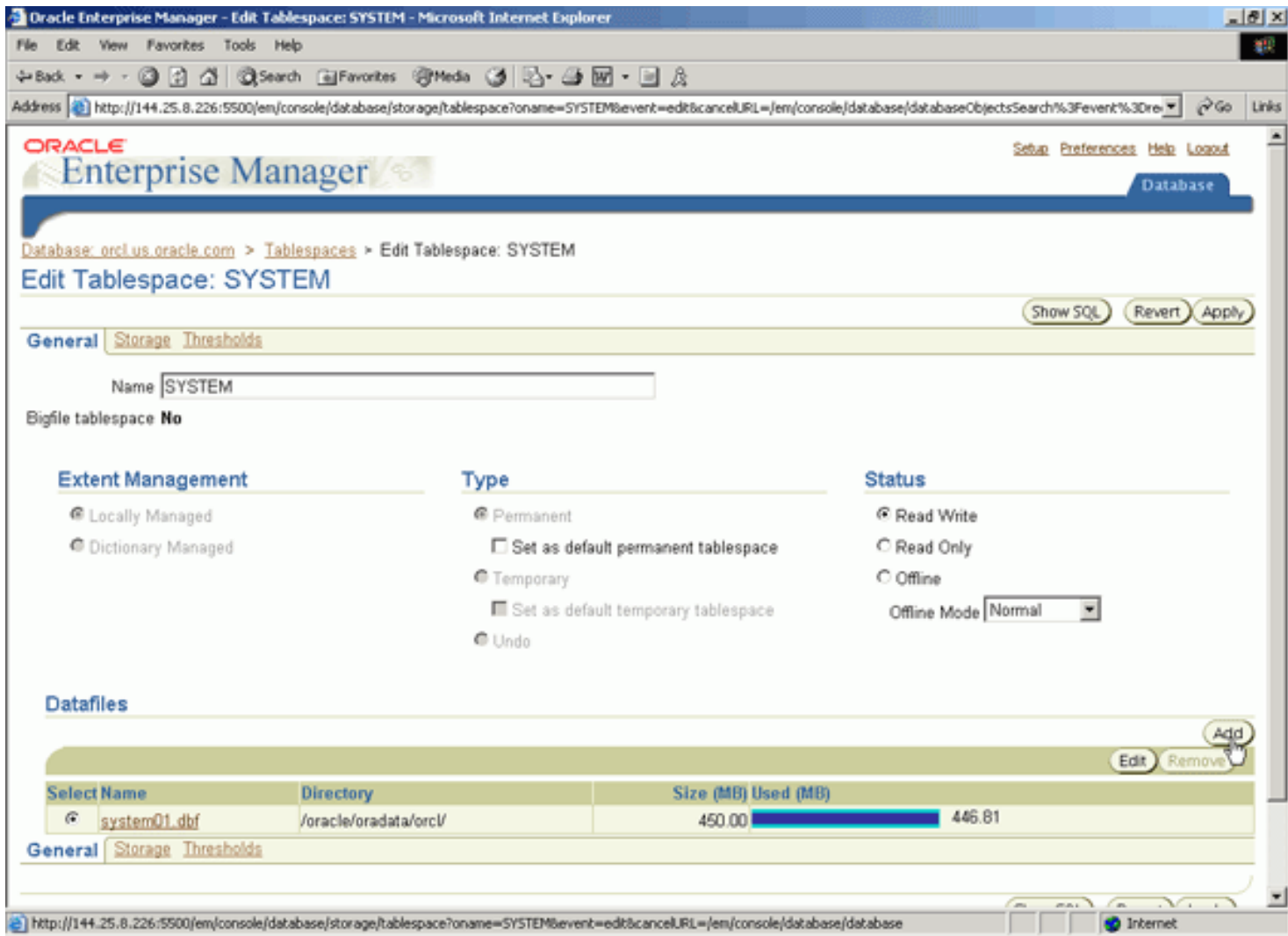


4. Select the Tablespace **SYSTEM** .

The screenshot shows the Oracle Enterprise Manager interface in a Microsoft Internet Explorer browser. The address bar shows the URL: http://144.25.8.226:5500/em/console/database/databaseObjectsSearch?event=search&otype=tablespace&target=orcl.us.oracle.com&type=oracle_database. The page title is "Tablespaces - Microsoft Internet Explorer". The Oracle Enterprise Manager logo is at the top left, and the "Database" tab is selected at the top right. The breadcrumb trail is "Database: orcl.us.oracle.com > Tablespaces". The user is logged in as SYS. The "Search" section has a text input field for "Name" and a "Go" button. Below the search bar, there is a "Results" section with a table of tablespaces. The table has columns: "Select", "Name", "Type", "Extent Management", "Size (MB)", "Used (MB)", and "Used (%)". The "SYSTEM" tablespace is selected, indicated by a radio button in the "Select" column. The "Add Datafile" button is visible in the top right of the table section. The footer shows the copyright information: "Copyright © 1996, 2003, Oracle. All rights reserved. About Oracle Enterprise Manager Database Console".

Select	Name	Type	Extent Management	Size (MB)	Used (MB)	Used (%)
<input checked="" type="radio"/>	EXAMPLE	PERMANENT	LOCAL	150.000	67.000	44.67
<input type="radio"/>	SYSAUX	PERMANENT	LOCAL	320.000	317.125	99.10
<input checked="" type="radio"/>	SYSTEM	PERMANENT	LOCAL	450.000	446.813	99.29
<input type="radio"/>	TEMP	TEMPORARY	LOCAL	23.000	22.000	95.65
<input type="radio"/>	UNDOTBS1	UNDO	LOCAL	65.000	29.750	45.77
<input type="radio"/>	USERS	PERMANENT	LOCAL	5.000	2.750	55.00

5. In the Datafiles section, click **Add** .



- Enter **system02.dbf** for the file name, click the **Automatically extend datafile when full (AUTOEXTEND)** checkbox and enter **10 KB** for Increment. Then click **OK**.

Oracle Enterprise Manager - Edit Tablespace: SYSTEM: Add Datafile - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print View Source

Address http://144.25.8.226:5500/em/console/database/storage/tablespace?target=ord.us.oracle.com&type=oracle_database&cancelURL=/em/console/database/databaseObjectsSe... Go Links

ORACLE Enterprise Manager Database

Database: orcl.us.oracle.com > Tablespaces > Edit Tablespace: SYSTEM: Add Datafile

Edit Tablespace: SYSTEM: Add Datafile

Cancel OK

File Name

File Directory

Tablespace **SYSTEM**

File Size MB

☐ Reuse Existing File

Storage

☒ Automatically extend datafile when full (AUTOEXTEND)

Increment KB

Maximum File Size ☒ Unlimited

☐ Value MB

Cancel OK

Database | Setup | Preferences | Help | Logout

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http://144.25.8.226:5500/em/console/database/storage/tablespace?target=ord.us.oracle.com&type=oracle_database&cancelURL=/em/co Internet

7. Click **Apply** .

Oracle Enterprise Manager - Edit Tablespace: SYSTEM - Microsoft Internet Explorer

Database: orcl.us.oracle.com > Tablespaces > Edit Tablespace: SYSTEM

Edit Tablespace: SYSTEM

Show SQL Revert **Apply**

General Storage Thresholds

Name: SYSTEM

Bigfile tablespace: No

Extent Management

- ☒ Locally Managed
- ☐ Dictionary Managed

Type

- ☒ Permanent
 - ☐ Set as default permanent tablespace
- ☐ Temporary
 - ☐ Set as default temporary tablespace
- ☐ Undo

Status

- ☒ Read Write
- ☐ Read Only
- ☐ Offline
 - Offline Mode: Normal

Datafiles

Add Edit Remove

Select	Name	Directory	Size (MB)	Used (MB)
<input checked="" type="radio"/>	system01.dbf	/oracle/oradata/orcl/	450.00	446.81
<input type="radio"/>	system02.dbf	/oracle/oradata/orcl/	100.00	0.00

General Storage Thresholds

8. You now see that the SYSTEM tablespace has more space in it for your upgrade.

Tablespaces

Database: orcl.us.oracle.com > Tablespaces

Logged in As SYS

Search

Name

Example: Entering Test will return all items beginning with upper case TEST, i.e. TEST_A, except for Java Source and Java Class which use case sensitive searches. Use double quotes to preserve case and embed wildcards(%).

Results

Select	Name	Type	Extent Management	Size (MB)	Used (MB)	Used (%)
<input checked="" type="radio"/>	EXAMPLE	PERMANENT	LOCAL	150.000	67.000	44.67
<input type="radio"/>	SYSAUX	PERMANENT	LOCAL	330.000	320.188	97.03
<input type="radio"/>	SYSTEM	PERMANENT	LOCAL	550.000	446.938	81.26
<input type="radio"/>	TEMP	TEMPORARY	LOCAL	23.000	22.000	95.65
<input type="radio"/>	UNDOTBS1	UNDO	LOCAL	65.000	32.250	49.62
<input type="radio"/>	USERS	PERMANENT	LOCAL	5.000	2.750	55.00

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Upgrading your Database using the Database Upgrade Assistant

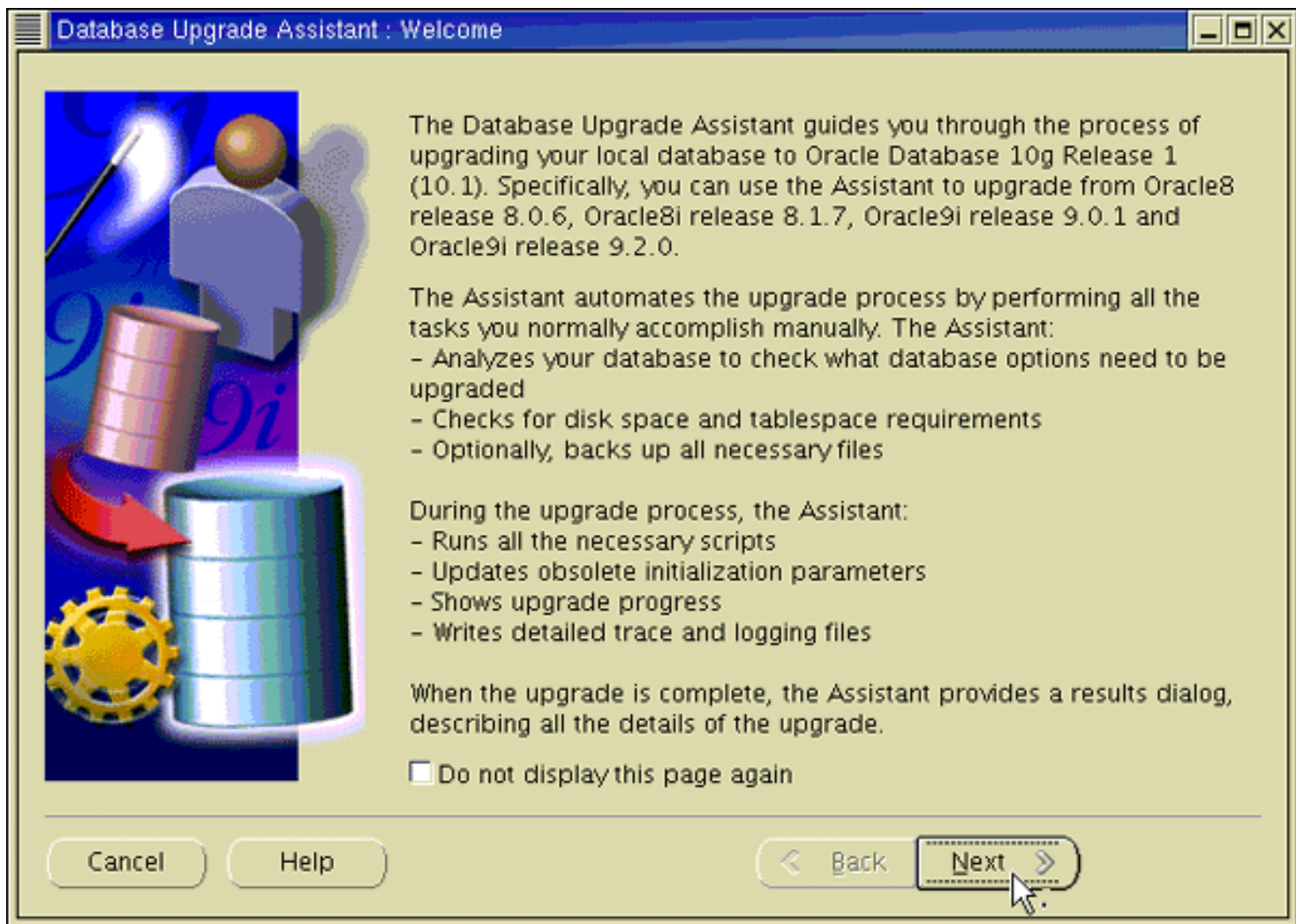
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To install the Oracle software you must use the GUI installer.

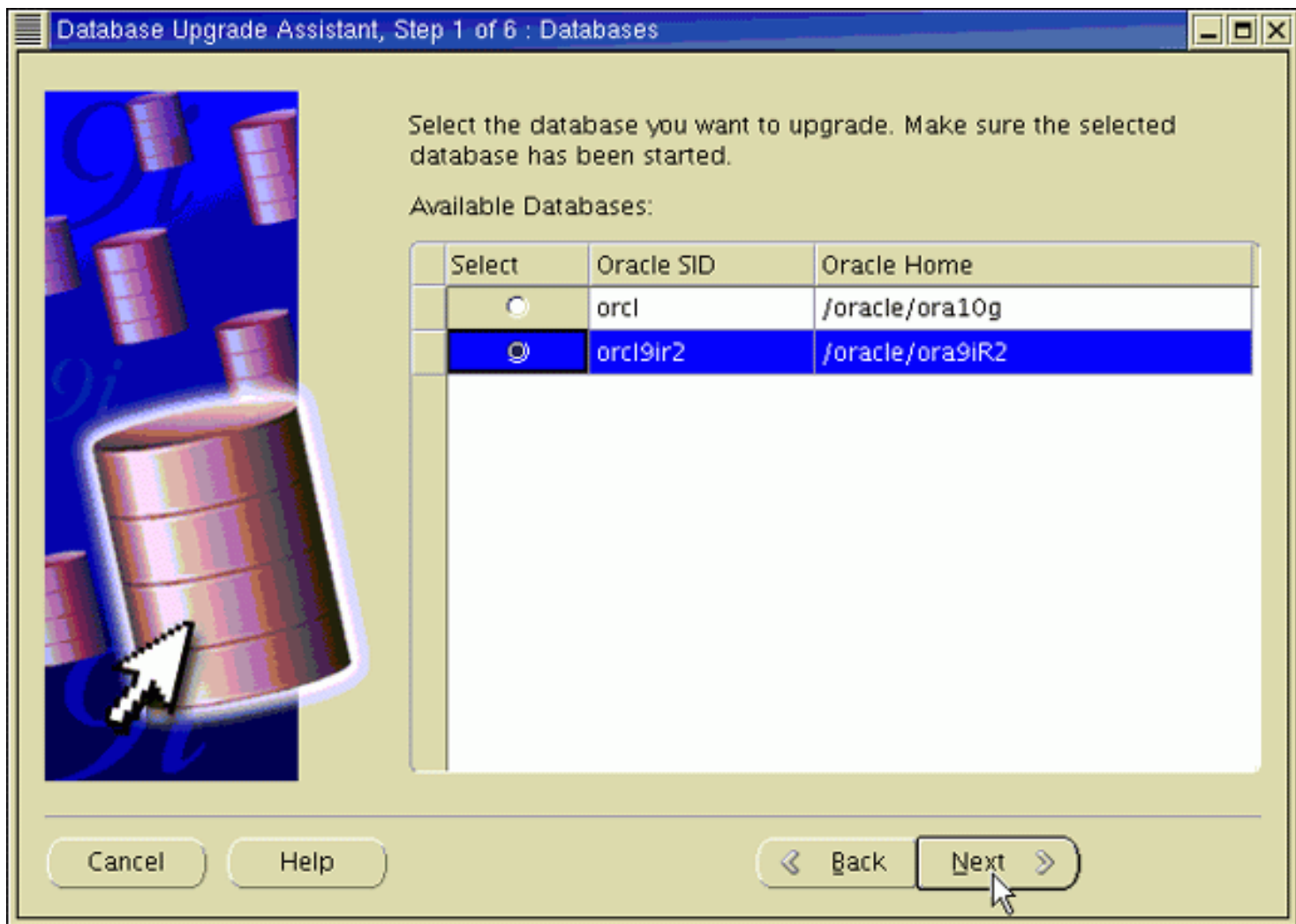
1. Open a terminal window and execute the following commands:

```
cd /oracle/ora10g/bin
dbua
```

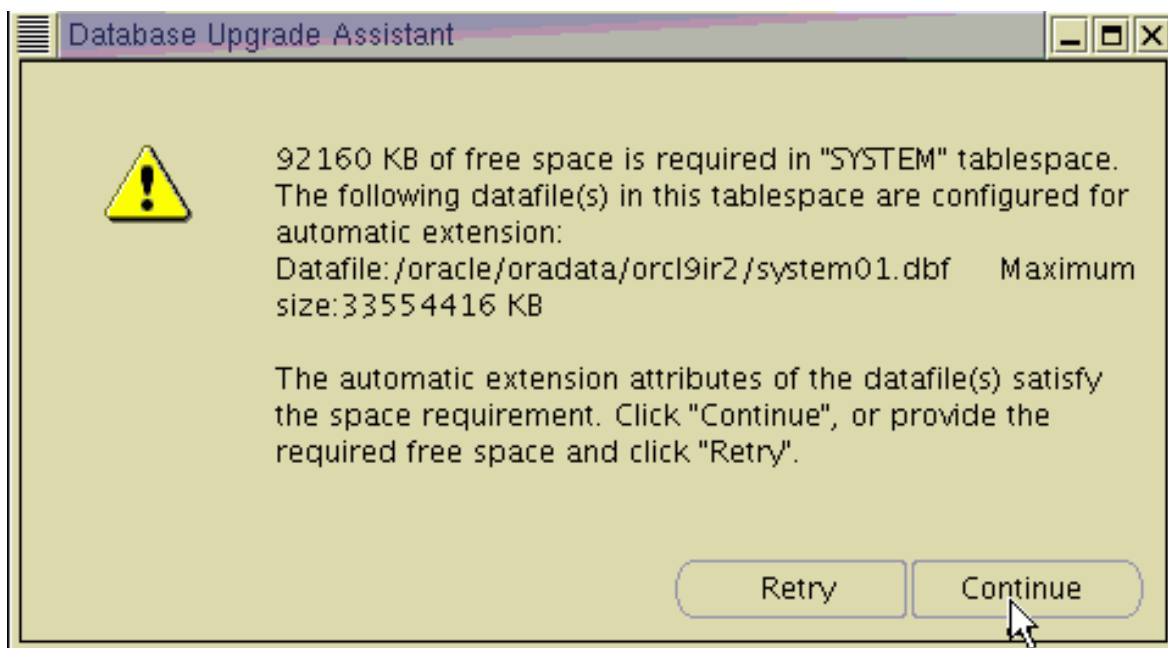

2. At the Welcome window, click **Next**.



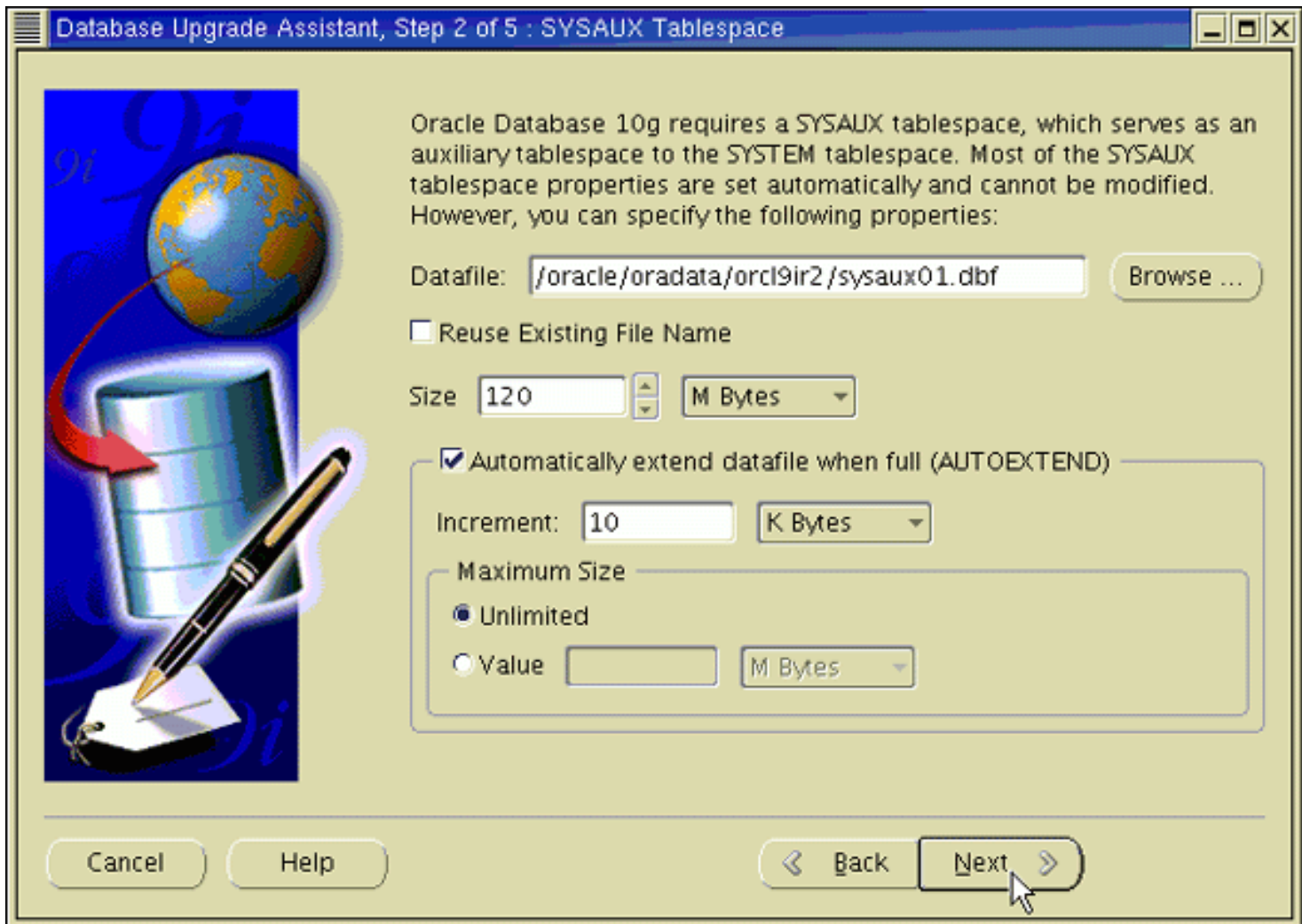
3. Select your Oracle9i Database from the list and click **Next**.



4. You want to automatically extend the SYSTEM tablespace. Click **Continue**.



5. You need to create a SYSAUX tablespace. Accept the default and click **Next** .



Database Upgrade Assistant, Step 2 of 5 : SYSAUX Tablespace

Oracle Database 10g requires a SYSAUX tablespace, which serves as an auxiliary tablespace to the SYSTEM tablespace. Most of the SYSAUX tablespace properties are set automatically and cannot be modified. However, you can specify the following properties:

Datafile:

☐ Reuse Existing File Name

Size

☒ Automatically extend datafile when full (AUTOEXTEND)

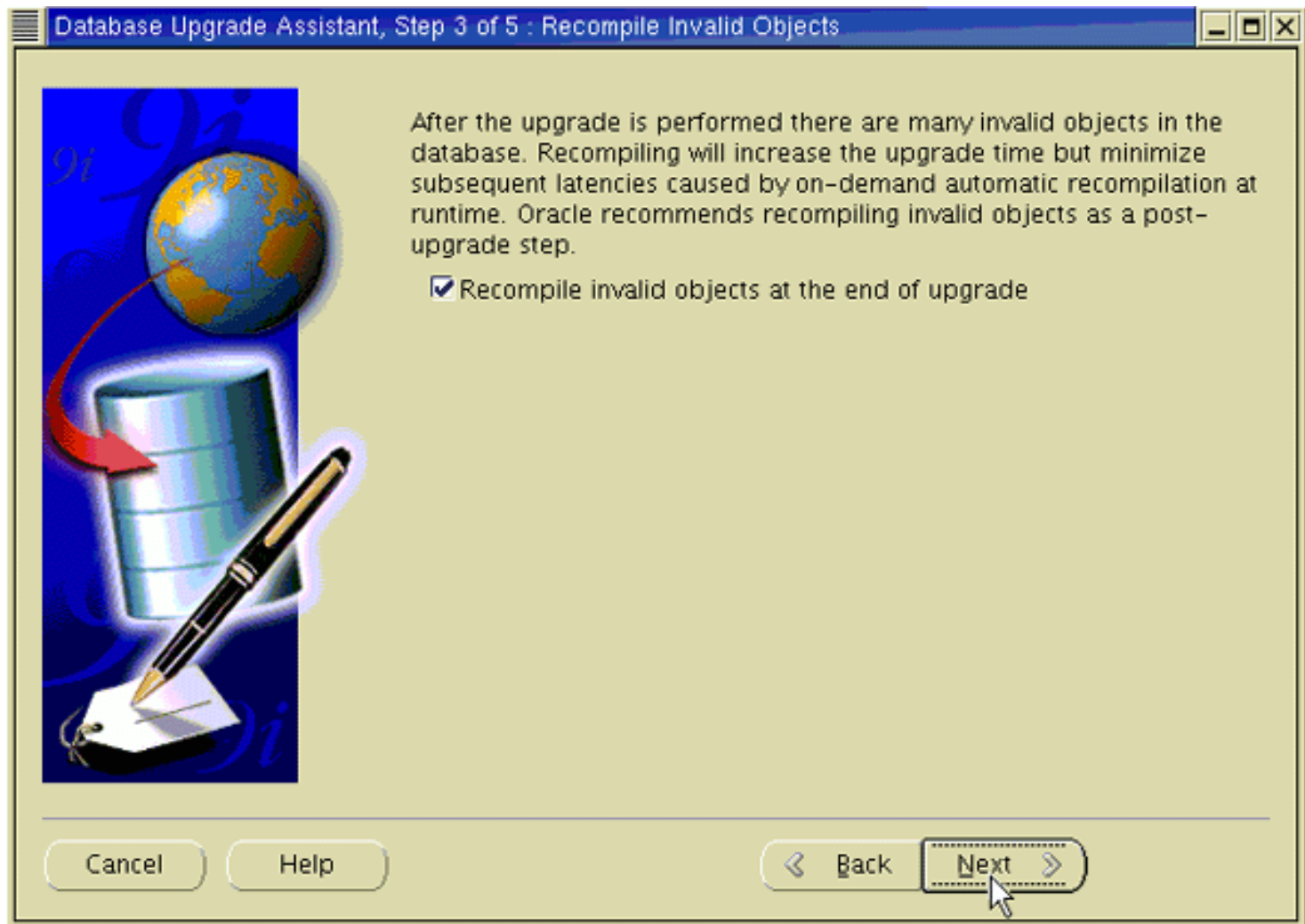
Increment:

Maximum Size

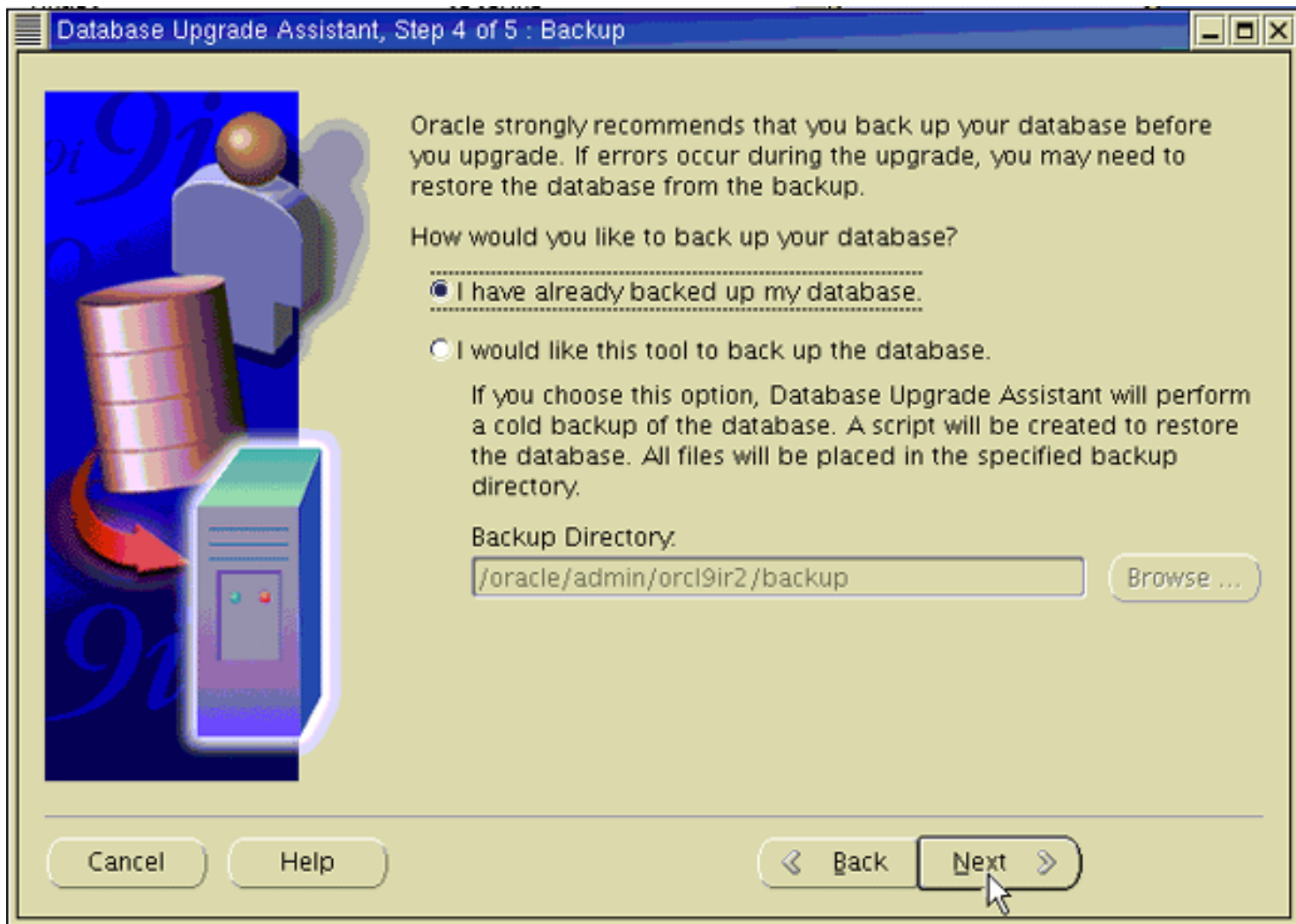
☒ Unlimited

☐ Value

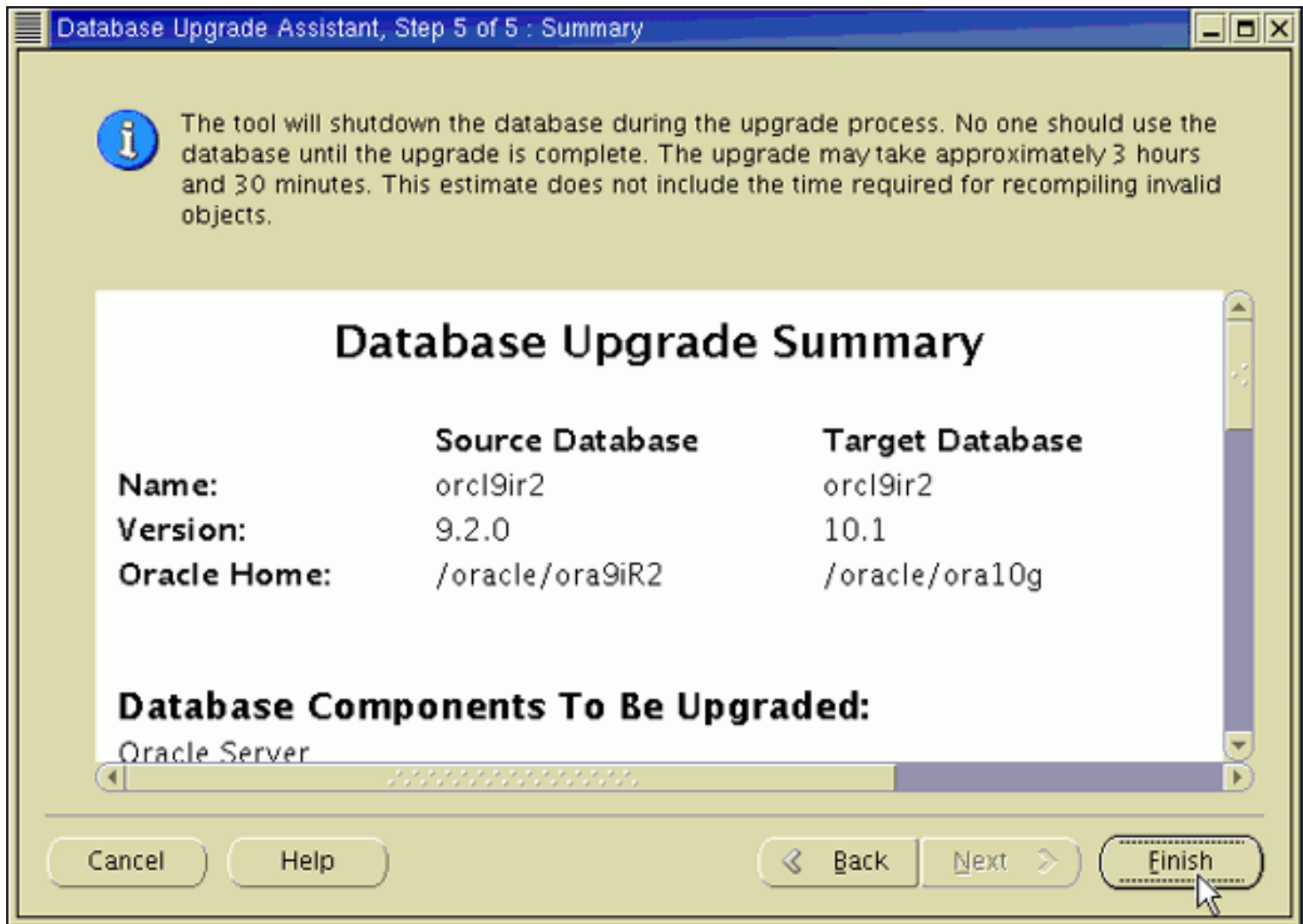
6. You want to recompile invalid objects at the end of the upgrade. Accept the default and click **Next** .



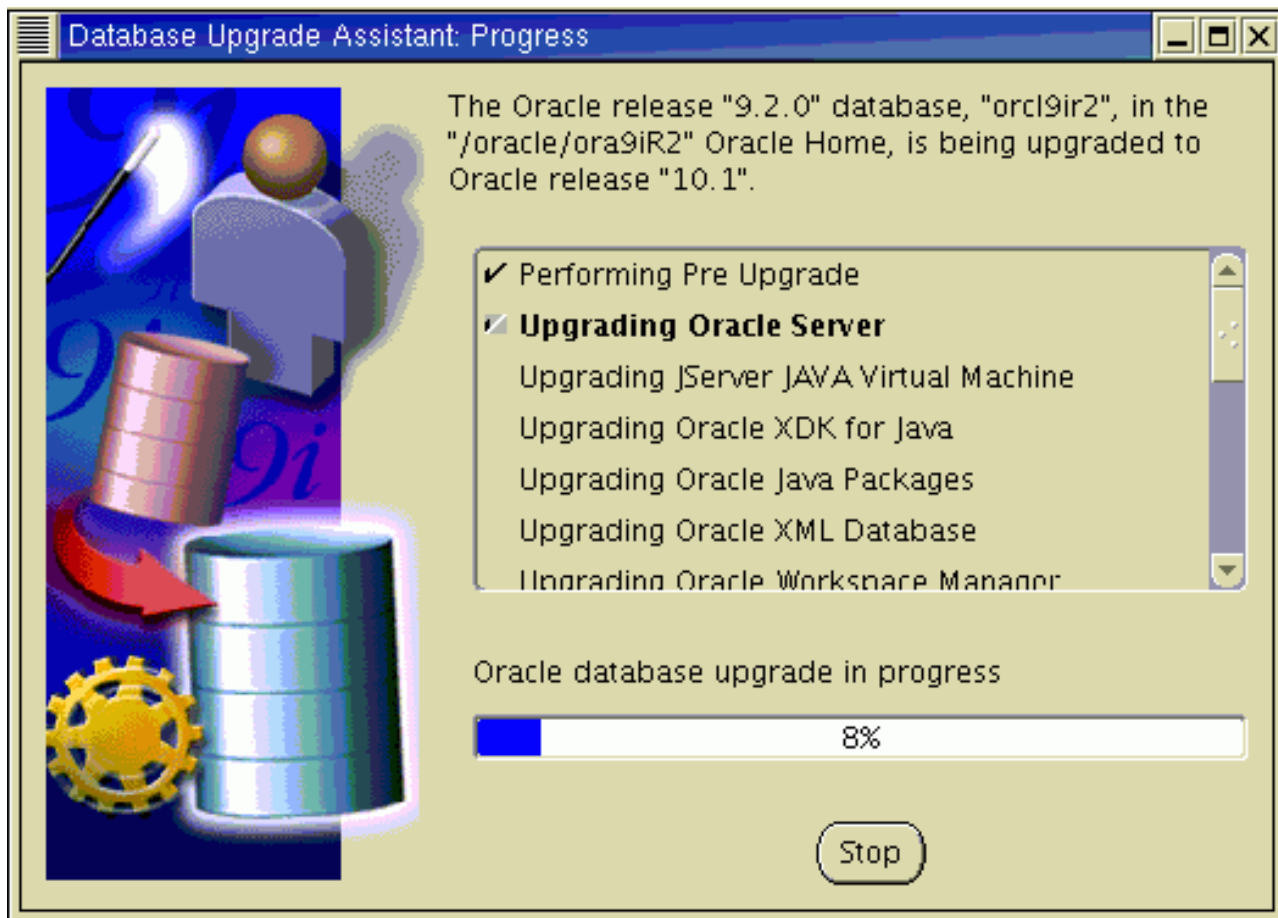
7. You will not take a backup of your Oracle9i Database during the upgrade process. Click **Next**.



8. At the Summary screen, review what will be done and click **Finish** .

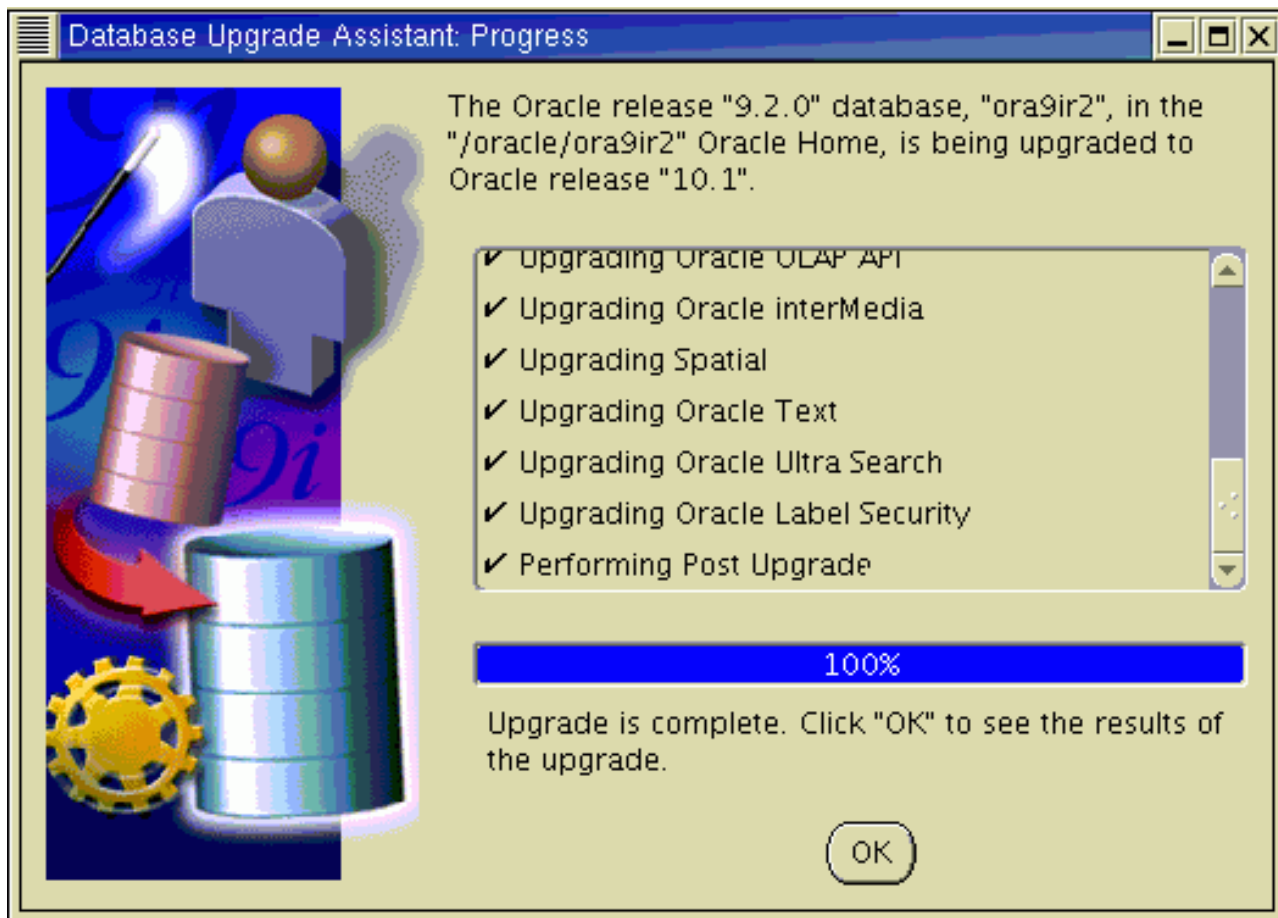


9. You will see the progress window.



When your upgrade has completed, click **OK** .

10.



You see the summary of the upgrade. Scroll down to see the output. When done, click **Close** .

11.

