**hp OpenView**

**Internet Services**

Reporter Database
Configuration
Information

*hp* invent

**Section 1: Overview of Database Configuration**

**Section 3: SQL Server Database Setup**
Part B: MS SQL Server 2000

**Section 4: Oracle Database Setup**
Part B: UNIX Settings
Part G: Oracle 8.1.7 (Solaris or HP-UX)
Part H: Oracle 9i (Solaris or HP-UX)

# **1** **Overview of Database Configuration**

## Special Instructions for Configuring Databases

For your convenience this document pulls the information on database configuration out of the *hp OpenView Reporter Installation and Special Configuration Guide* and includes it with your Internet Services product.

## Overview

Internet Services and Reporter share the same database for storing performance and reporting information.

The default database for Internet Services is Microsoft SQL Server 2000 Desktop Engine (MSDE).  (Note that the default database for Internet Services 3.5 was MS Access).

⚠ **IMPORTANT**: When upgrading from a previous version of OVIS or Reporter the minimum requirement for SQL Server 2000/MSDE is now Service Pack 3a.  This Service Pack is required to deal with vulnerability in SQL Server 2000 to destructive computer viruses (such as the SLAMMER worm virus). Please upgrade your database instance before installing OVIS 4.5.  Refer to the OVIS release notes for more detailed instructions on upgrading to this Service Pack.

You may choose to change the database to one of the following supported databases:

- Oracle 8.1.7 for Solaris or HP-UX
- Oracle 9i (9.2)for Solaris or HP-UX
- SQL Server 2000

Note that Oracle 8.0.6, 8.1.6 and SQL Server 7 are only supported on an upgrade from an earlier version of OVIS where you were using these database versions.  However it is recommended to verify with the database vendor their support for these versions.

WARNING: Migration of data from a different database to the new SQL Server or Oracle database is not supported for Internet Services.  And if you have OVIS and Reporter on the same system, attempting to migrate Reporter data to the new database may result in problems in OVIS.

There are several database configurations possible depending on which OpenView products you have installed. See the following scenarios:

| | |
|---|---|
| If you have Reporter already installed on the same system as Internet Services will be installed. | When you install OVIS, it will detect whatever database is configured for Reporter and use this same database. The OVIS installation configures a connection to this database and adds table entries for OVIS as needed. |
| If you do not have Reporter and are installing Internet Services for the first time. | The MSDE default database is installed. You can later use instructions in this guide for configuring an Oracle or SQL Server 2000 database instead. |
| If you do not have Reporter and are updating from a previous version of Internet Services to this version | The upgrade uses the existing database, it could be MS Access, Oracle 8.0.6 or 8.1.6/7 or SQL Server 7 or 2000. |
| If you do not have Reporter or OVIS on the system, and for some reason you have SQL 7 installed on the system but not configured for use with OVIS or Reporter and install OVIS | The install will install MS Access as the default database instead of MSDE.  This is because SQL 7 and MSDE are not compatible. |

# Using this guide

The information in this guide was taken from the Reporter documentation. The database configuration procedures are almost identical for Reporter and Internet Services

References to using the Reporter GUI to configure Oracle database logins are replaced with instructions for using the Internet Services Configuration Manager to configure the Oracle database logins.

# 3 Set Up Microsoft SQL Server as the Database

Internet Services now uses MSDE  (Microsoft SQL Server Desktop Engine) as the default database. (Previous versions of Internet Services used MS Access as the default database.) The MSDE version that is used is a subset of SQL Server 2000, which means that much of the SQL 2000 functionality is present in the MSDE database, even though no dialogs are available to assist in the configuration. MSDE has a 2GB size limit per database instance. Knowing this, you may at some point choose to upgrade to a SQL Server 2000 database. When upgrading from MSDE to SQL Server 2000 follow the instructions provided by Microsoft and choose the OVOPS instance to upgrade.

The instructions for changing to a new SQL Server 2000 database (rather than upgrading from MSDE) are contained in the Part B link below.  These instructions could be used when changing from Microsoft Access to SQL Server 2000 or when installing SQL Server 2000 on a remote system.

For this version of MSDE you will not be able to use the SQL Server 7.0 Enterprise Manager  to look at the data in the MSDE database. The Internet Services data gets stored in an instance of MSDE. The use of named instances is new for SQL Server 2000 and only a single default instance is supported by SQL Server 7.0. To use the SQL Server 7.0 Enterprise Manager, you would need to use an existing SQL 7.0 database.

⚠️ **IMPORTANT**: Do not connect multiple copies of Internet Services to the same database as unexpected results occur when more than one attempts to write data to the configured database.

⚠️ **IMPORTANT**: Migration of data from your old database to the new SQL Server database is not supported for Internet Services (OVIS).  And if OVIS is on the same system as hp OpenView Reporter, attempting to migrate Reporter data to the new database may result in problems in OVIS.

⚠️ **IMPORTANT**: When upgrading from a previous version of OVIS or Reporter the minimum requirement for SQL Server 2000/MSDE is now Service Pack 3a.  This Service Pack is required to deal with vulnerability in SQL Server 2000 to destructive computer viruses (such as the SLAMMER worm virus). Please be sure you have upgraded your database instance before installing OVIS.

- **Part B:** Configure Microsoft SQL Server 2000 as the Reporter database.

# 3  Set Up Microsoft SQL as the Database
# Part B: Configure SQL Server 2000

## Set Up SQL Server 2000 as the Database

Internet Services uses the MSDE (Microsoft SQL Server Desktop Engine) as its default database. The MSDE version that is used is a subset of SQL Server 2000, which means that much of the SQL 2000 functionality is present in the MSDE database, even though no dialogs are available to assist in the configuration. MSDE has a 2GB size limit per database instance. Knowing this, you may at some point choose to change to an SQL Server 2000 database. When upgrading from MSDE to SQL Server 2000 follow the instructions provided by Microsoft and choose the OVOPS instance to upgrade.

Since the Internet Services product does use an MSDE instance name (OVOPS) you will see the instance name when using SQL Server 2000 Enterprise Manager to look at the Reporter database. The corresponding SQL Server 2000 examples will not use the instance name. You are not required to use an instance name when using SQL Server 2000.

⚠ When upgrading from a previous version of OVIS or Reporter the minimum requirement for SQL Server 2000/MSDE is now Service Pack 3a.  This Service Pack is required to deal with vulnerability in SQL Server 2000 to destructive computer viruses (such as the SLAMMER worm virus). Please upgrade your database instance before installing OVIS.  Refer to the OVIS release notes for more detailed instructions on upgrading to Service Pack 3a.

⚠ Migration of data from your old database to the new SQL Server database is not supported for Internet Services (OVIS).  And if OVIS is on the same system as hp OpenView Reporter, attempting to migrate Reporter data to the new database may result in problems in OVIS.

ⓘ **IMPORTANT:** If you use systems with different language settings, the OVIS Reporter database should be created using the same default locale character set as the system where OVIS is installed (Management Server). At this time, OVIS does not support databases that have been configured to use the UTF-8 character set.

**Database Performance Note:**

Adding indexes can improve performance. With OVIS 5.2 indexes have been added to the following tables. Consult your DBA for a maintenance plan for these indexes.

IOPS_PROBE_DATA

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA | DATETIME |
| Indx6_IOPS_PROBE_DATA | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA | PROBENAME |

IOPS_PROBE_DATA_CACHE

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA_CACHE | DATETIME |
| Indx6_IOPS_PROBE_DATA_CACHE | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_CACHE | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_CACHE | PROBENAME |

IOPS_DETAIL_DATA_DAILY

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA_DAILY | DATETIME |
| Indx6_IOPS_PROBE_DATA_DAILY | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_DAILY | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_DAILY | PROBENAME |

IOPS_DETAIL_DATA

| Index | Field |
|---|---|
| Indx5_IOPS_DETAIL_DATA | DATETIME |
| Indx7_IOPS_DETAIL_DATA | PROBENAME |
| Indx8_IOPS_DETAIL_DATA | CUSTOMER |
| Indx11_IOPS_DETAIL_DATA | SERVICENAME |

IOPS_DETAIL_DATA_HOURLY

| Index | Field |
|---|---|
| Indx5_IOPS_DETAIL_DATA_HOURLY | DATETIME |
| Indx7_IOPS_DETAIL_DATA_HOURLY | PROBENAME |
| Indx8_IOPS_DETAIL_DATA_HOURLY | CUSTOMER |

| Indx11_IOPS_DETAIL_DATA_HOURLY | SERVICENAME |
|---|---|

IOPS_DETAIL_DATA_DAILY

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| Indx7_IOPS_DETAIL_DATA_DAILY | PROBENAME |
| Indx8_IOPS_DETAIL_DATA_DAILY | CUSTOMER |
| Indx11_IOPS_DETAIL_DATA_DAILY | SERVICENAME |

Top

The following is an overview of the configuration steps. The first section of this procedure covers configuring the SQL server system. The second section covers configuring an ODBC connection as well as Internet Services configuration as an SQL Server account.

**Configure the SQL Server system.**
Task 1. Install SQL Server software.
Task 2. Verify the trust relationship between client and server.
Task 3. Configure the database on SQL Server.

**Configure the ODBC Connection.**
Task 1. Install Internet Services.
Task 2. Check MDAC Version is 2.71 or greater.
Task 3. Establish the ODBC connection.
Task 4. Configure Internet Services to use SQL as the database.

# Install & Configure SQL Server Software on Windows Server

If you have already installed SQL Server, you can skip Task #1. If your Internet Services system and the SQL Server system are in the same domain, you can skip task Task #2 and go directly to Task #3.

**Prerequisites include**:  Windows 2000 Service Pack 3 or Windows XP Service Pack 1 and  Internet Explorer 5.5 with the latest service pack.

⚠ **IMPORTANT**: With SQL Server 2000, Service Pack 3 is required.

## Task 1➡ Install SQL 2000 Server Software

1. Insert the SQL Server  2000 CD into the CD-ROM drive.

2. Select **Install SQL 2000 Components**.
3. Select **Database Server – Standard Edition**.
4. Select **Local Computer** and respond to prompts as they appear.
5. Be sure to use **Mixed Mode** for authentication.
6. Restart the system.
7. Be sure you are on SQL Server 2000 Service Pack 3.
8. Restart the system.

## Task 2➡ Verify Trust Relationship Between Client and Server

**Note**: A trust relationship should be set up if the Internet Services client and SQL Server are in separate domains in Windows or if the client and server run on mixed systems. If the client and SQL Server are running on Windows 2000, skip this task.

1. Log on to the SQL Server-installed system with Administrator privileges.
2. From the Start menu select Programs>Administrative Tools>**User Manager for Domains**.
3. From the Policies menu select **Trust Relationships**.
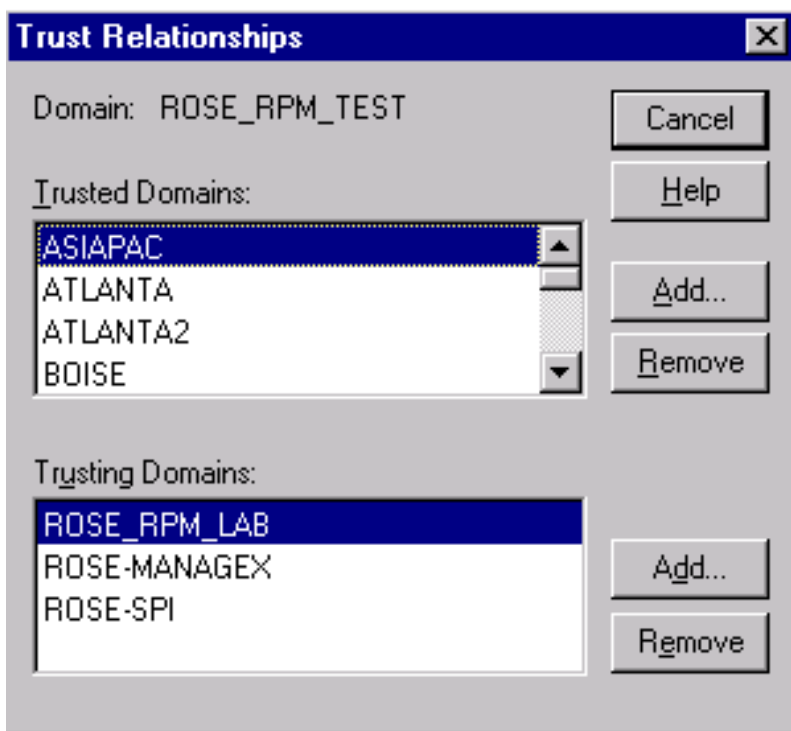


4. In the Trusting Domains dialog box, look for the Domain where Internet Services is located. If the appropriate domain is displayed, continue to the next task.
   If not, add the trusting domains as needed. If you have questions about trusting domains, click the **Help** button (if Internet Services and SQL Server systems are in separate domains, you must configure a trust relationship between the systems).

## Task 3 ➡ Configure the Database on SQL Server 2000

1. From the Start menu select Programs>**Microsoft SQL Server 2000 >Enterprise Manager.**

2. In the Microsoft Console Root window, select your SQL Server Group.
3. If your SQL Server system is not listed under the SQL Server Group, right-click SQL Server Group, select **New SQL Server Registration** from the drop-down menu and follow the wizard online steps to register.
4. Right-click **Databases – New Database**
5. In the General tab for the Name box, enter a name for the database (example uses **Reporter** as the name).



**Note:** The SQL Server database no longer needs to be named Reporter.

6. Select the Data Files tab and in the Database files segment, in the Initial size (MB) column, enter **100**.
7. Click **OK** to close the window.

**Database Properties – Reporter**                                    ✕

General | Data Files | Transaction Log

Database files

| File Name | Location | Initial size (MB) | Filegroup |
|-----------|----------|-------------------|-----------|
| Reporter_Data | ... C:\Program Files\Micros... | 100 | PRIMARY |
| | ... | | |

[Delete]

File properties

☑ Automatically grow file

File growth
- ○ In megabytes: 1
- ⦿ By percent: 10

Maximum file size
- ⦿ Unrestricted file growth
- ○ Restrict file growth (MB): 2

[OK]     [Cancel]     [Help]
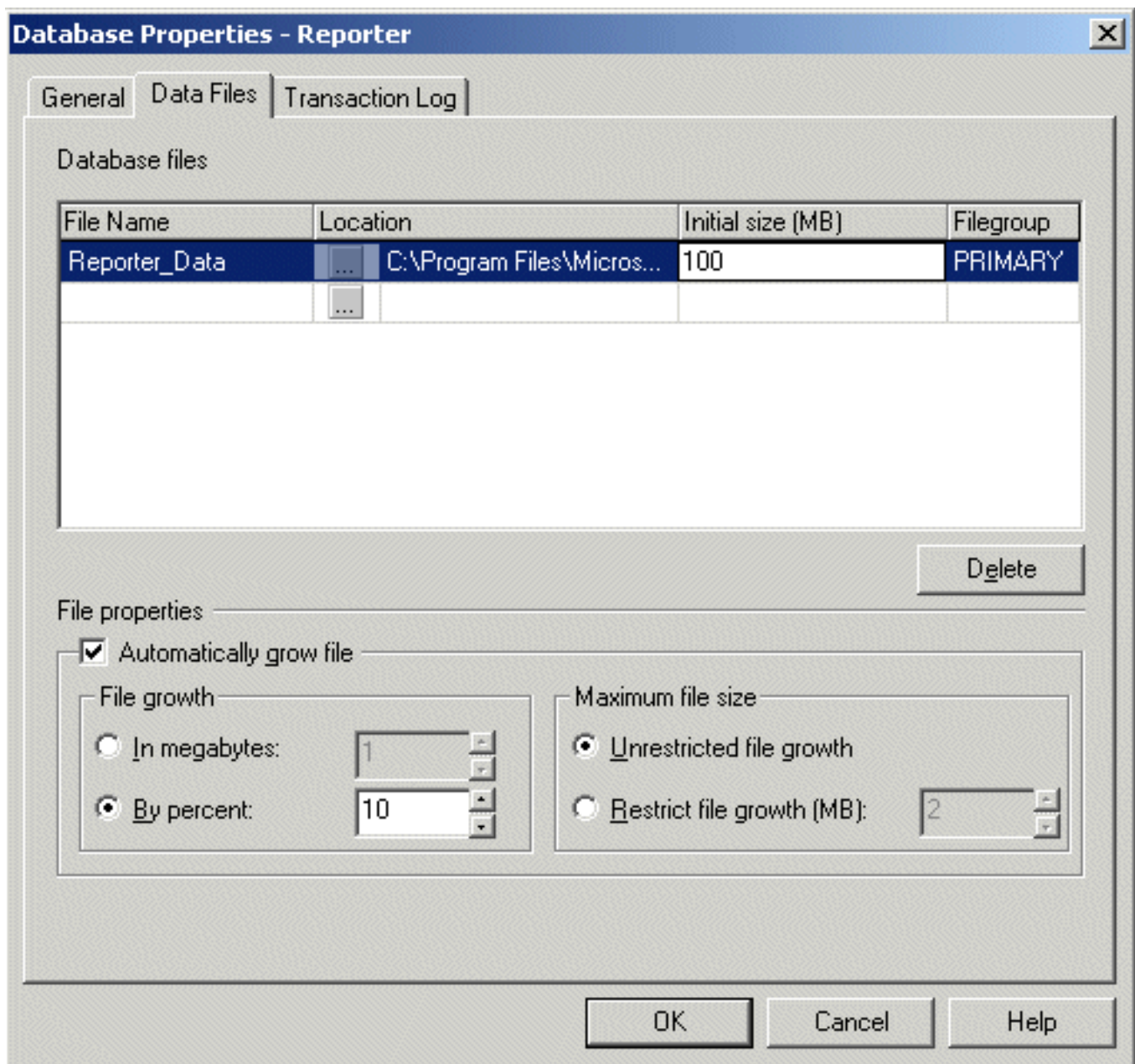
8. After the database is created, expand the Security folder in the left pane.
9. Right-click **Logins** under the Security folder and select **New Login**...
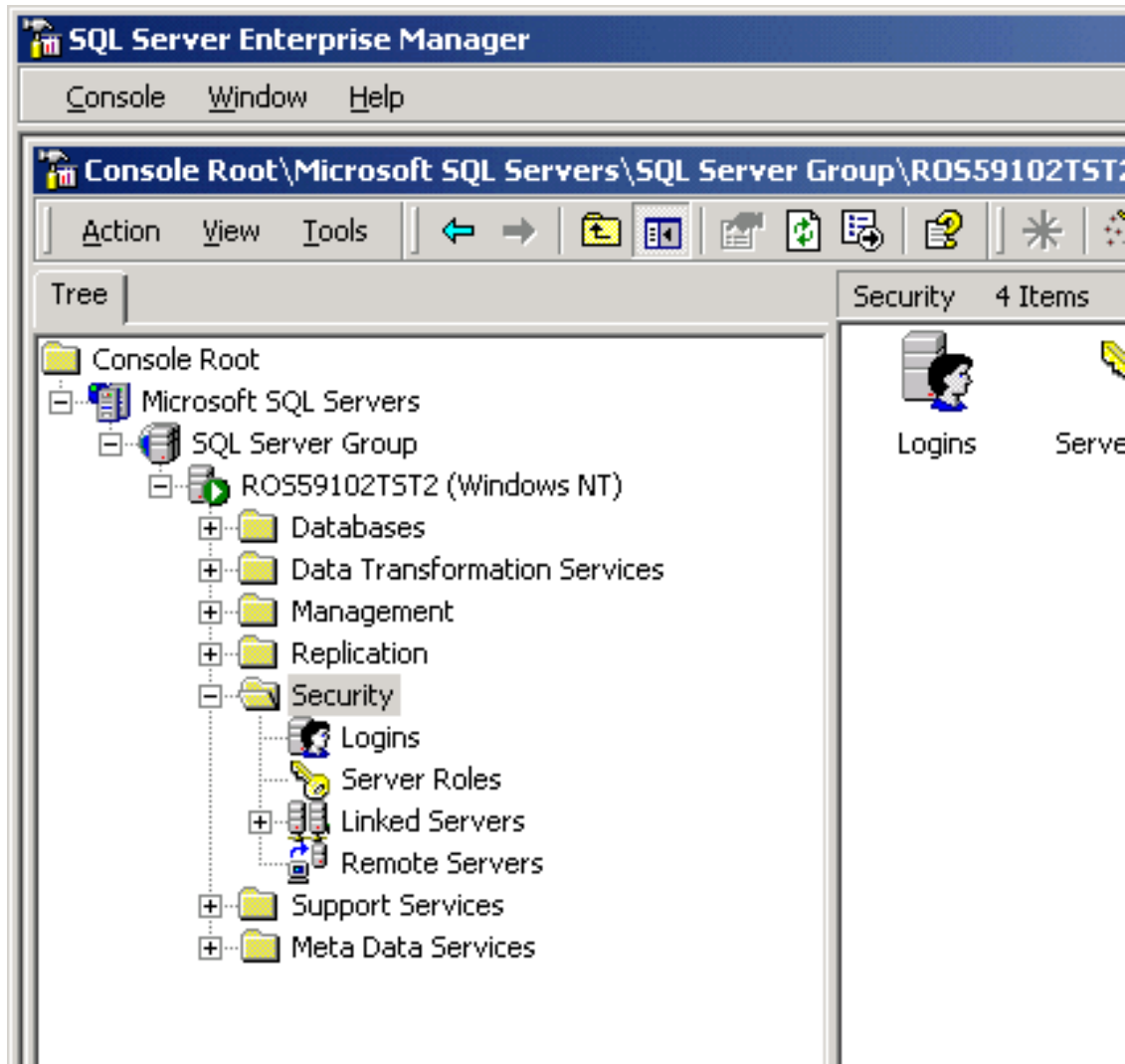
10. Select General Tab and in the Name box enter the user name **openview** or your specified user.

**SQL Server Login Properties - New Login** ☒

General | Server Roles | Database Access

Name: openview

**Authentication**

○ Windows NT authentication

Domain: [                    ▼]

Security access:

⦿ Grant access

○ Deny access

⦿ SQL Server authentication

Password: ********

**Defaults**

Specify the default language and database for this login.

Database: Reporter ▼

Language: <Default> ▼

[ OK ] [ Cancel ] [ Help ]

11. Under Authentication select the **SQL Server authentication** radio button and enter your password.
12. Under the Defaults, select **Reporter** (or whatever the database name is) from the Database list box.
13. Select the Database Access tab and under Database access check the Permit box that corresponds to Reporter.
14. Under Database roles for Reporter, check **public** and **db_owner** and select OK to exit.
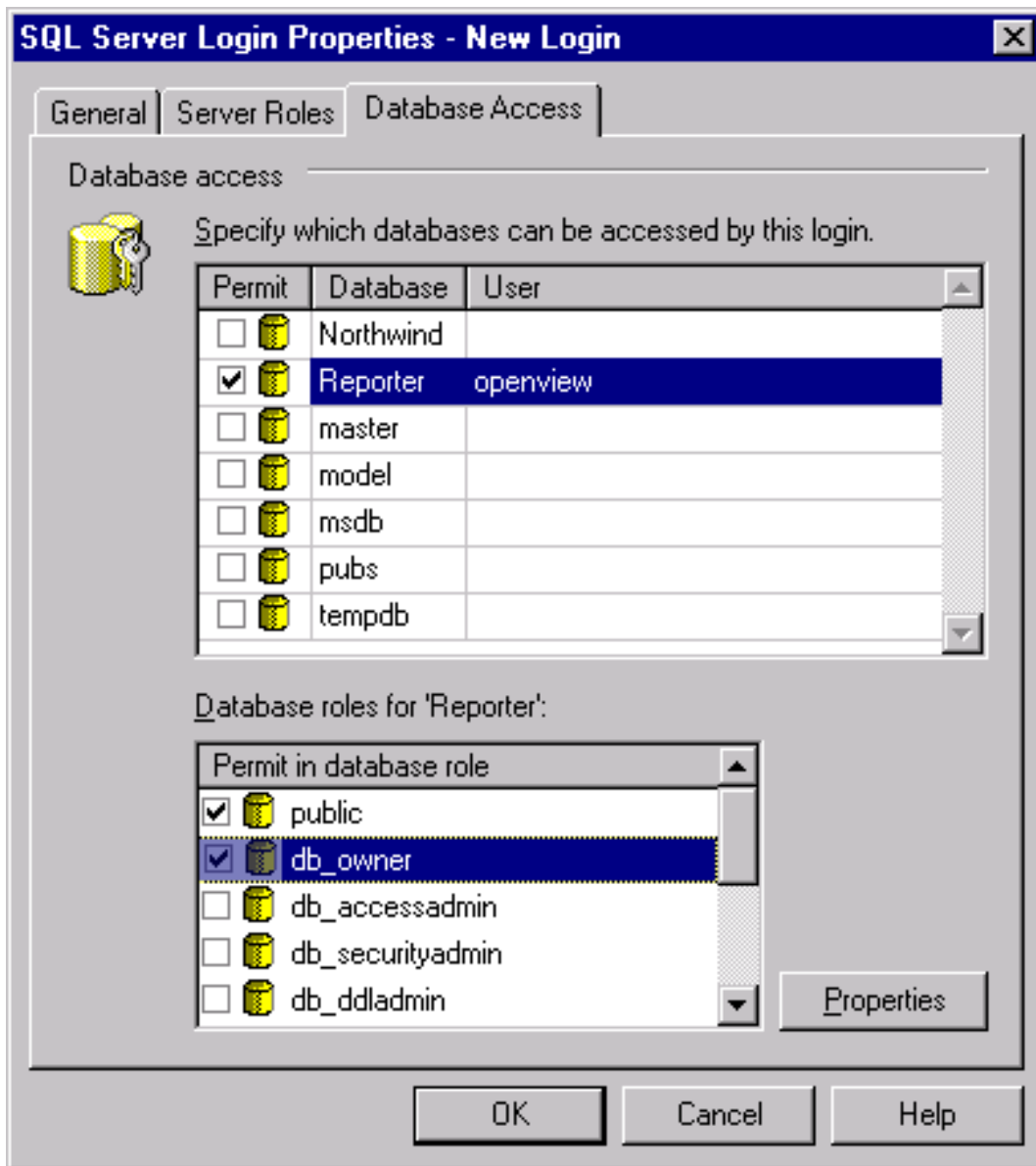
15. Confirm the new password from Step 11.



To verify User has Database Access, in the left pane expand the security folder, or click the plus sign next to each item: **Security>Logins** and you should see **openview** in the right pane.
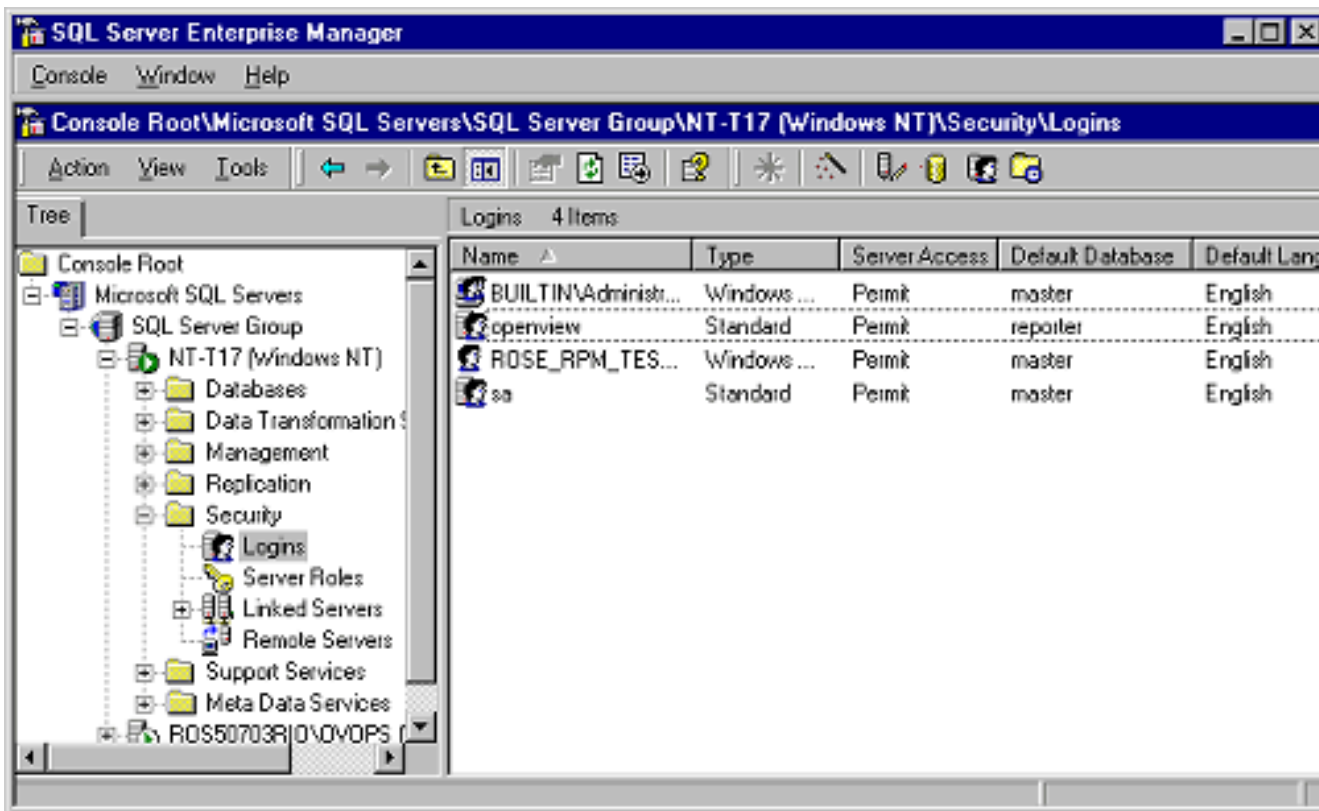
17. Exit Enterprise Manager and go to the client system (where Internet Services is installed).

# Configure ODBC Connection

## Task 1 ➡ Upgrade or Install Internet Services

1. Install or upgrade Internet Services as needed.

## Task 2 ➡ Check MDAC Version is 2.71 or Greater

MDAC is the Microsoft Data Access Component. You need to have an MDAC version of 2.71 or greater on the client system where Internet Services is located. Check the version number as follows:

1. Run regedit and locate the registry entry: HKEY_LOCAL_MACHINE\Software\Microsoft\DataAccess
2. In the Details pane, look in the Name column for FullInstallVer and Version. Each of these keys will have corresponding version information in the Data column.
3. If the Data values are 2.71 or greater, skip to the next Task.
4. If either of the Data values are less than 2.71.xxx.y, then go to the Microsoft web site and download and install a current version of MDAC.

# Task 3➡ Establish the ODBC Connection

**Important Note: Be sure that Internet Services is installed before beginning this step.  Also be sure that the  Configuration Manager is closed before beginning this step.**

1. Stop the following services:
   **HP Internet Services**
   **Reporter Service**
   **World Wide Web Publishing Service**
2. From the Start menu select **Settings>Control Panel** and double-click **Administrative Tools**.  Then double-click **Data Sources (ODBC)**.
3. In the ODBC Data Source Administrator window select the **System DSN tab**. Highlight Reporter and select the **Remove** button.
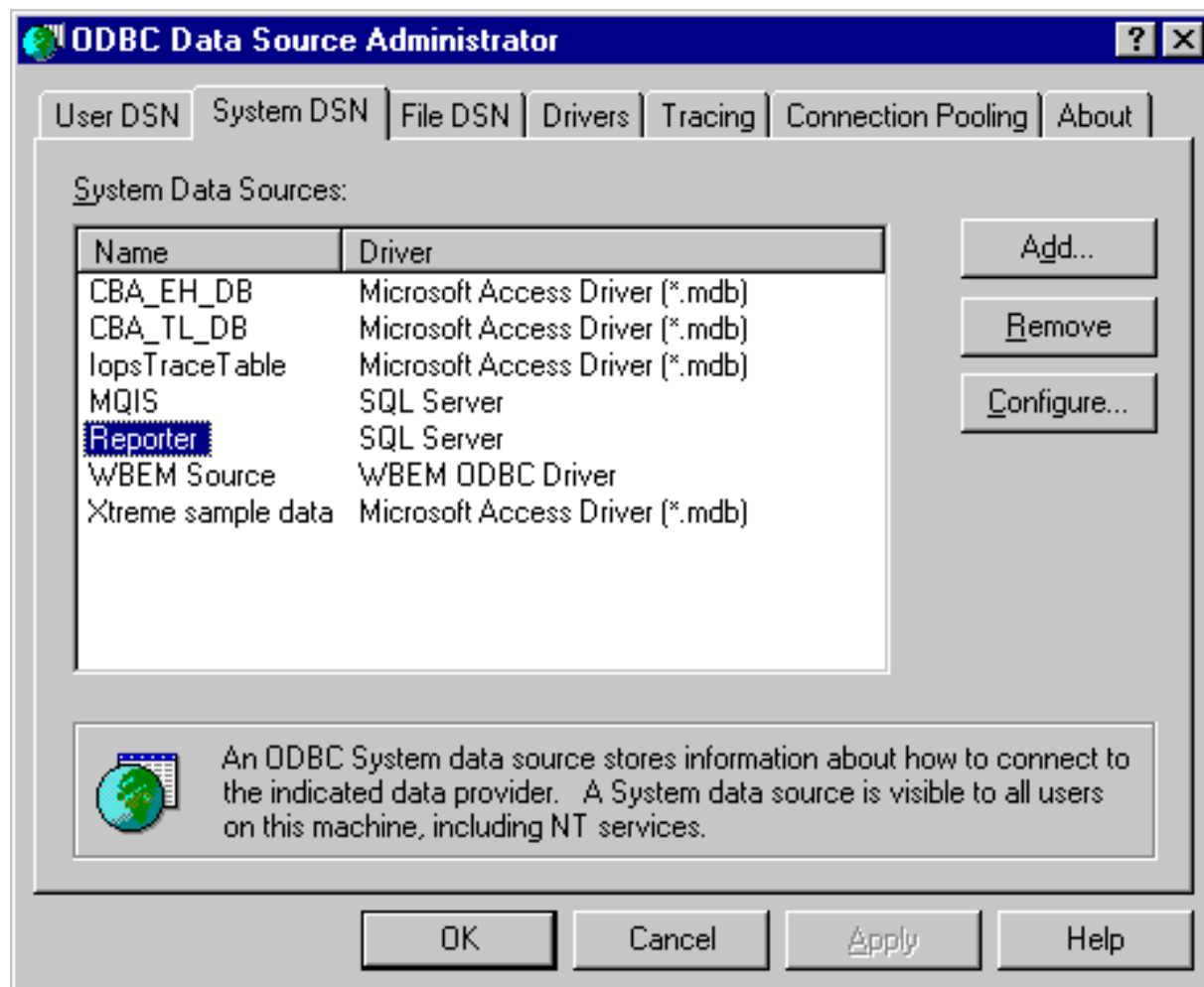


4. Select the **Add...** button to create a new Reporter data source.
5. In the Create New Data Source dialog box select the **SQL Server** driver and the **Finish** button.
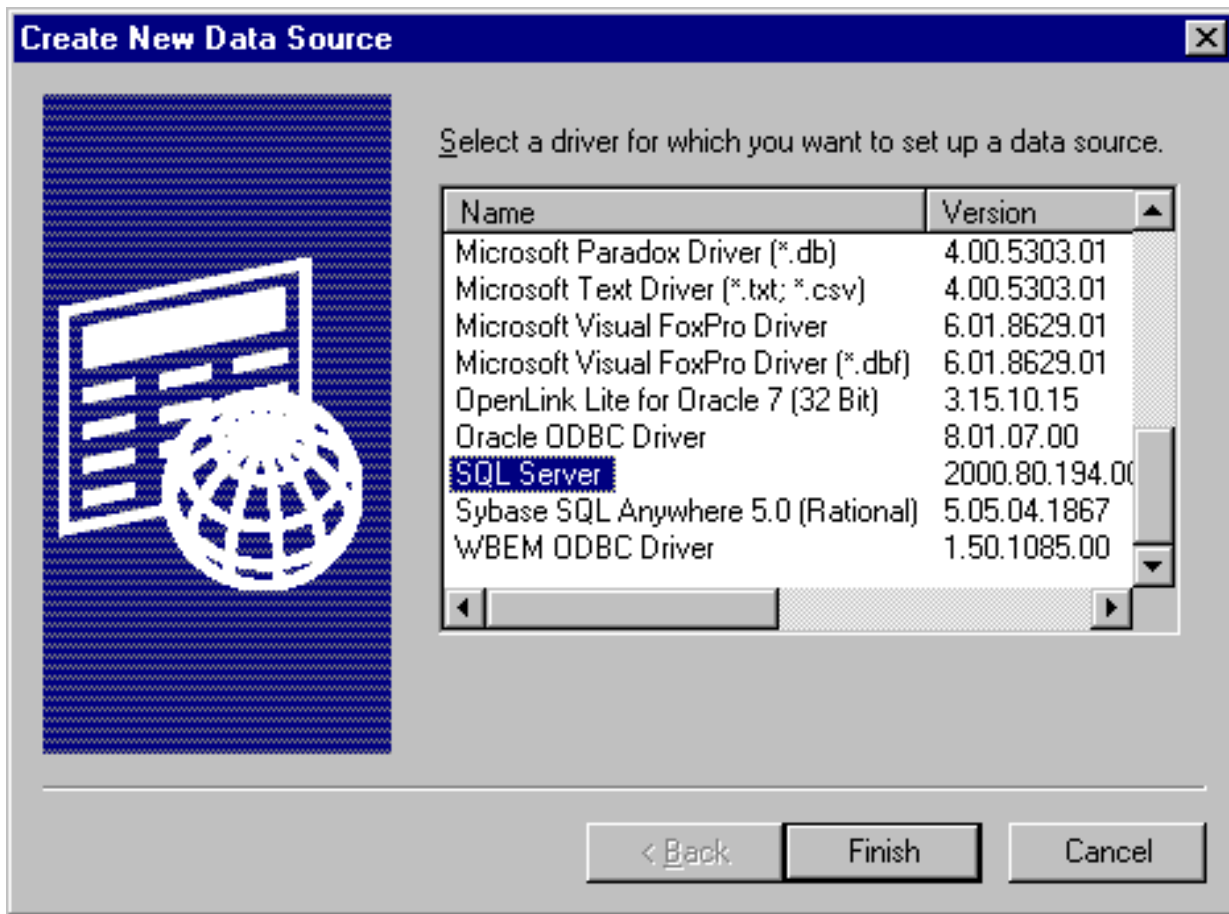
6. In the Create a New Data Source to SQL Server dialog, make sure that Reporter (or whatever the database name is) appears in the data source name box and the **server name appears in the Server box**. Then select **Next**.

**Create a New Data Source to SQL Server**

This wizard will help you create an ODBC data source that you can use to connect to SQL Server.

What name do you want to use to refer to the data source?

Name: Reporter

How do you want to describe the data source?

Description:

Which SQL Server do you want to connect to?

Server: NT-T17\OVOPS

[ Finish ] [ Next > ] [ Cancel ] [ Help ]
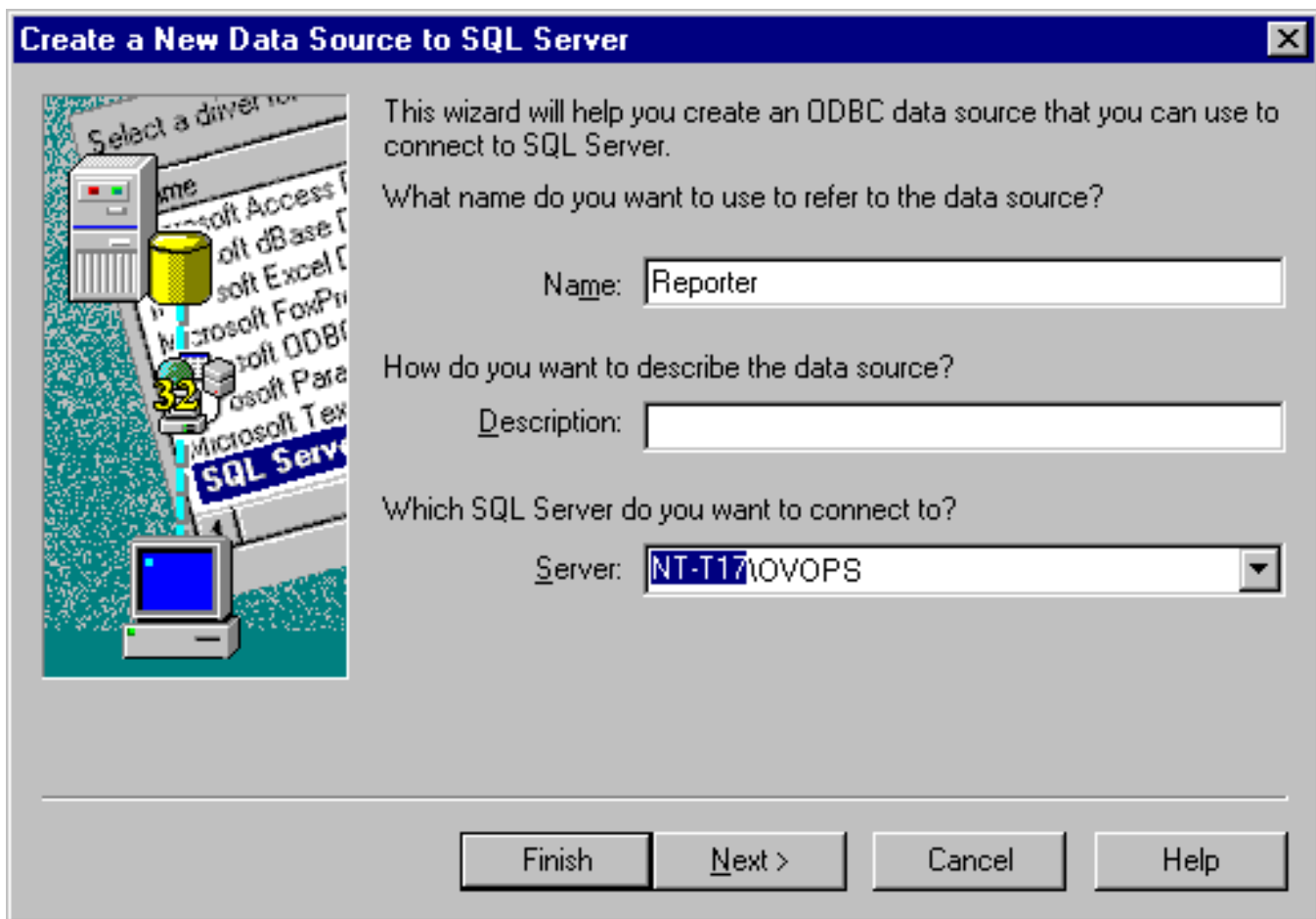
7. Select - **With SQL Server authentication using a login ID and password entered by user**.
   Also check the box for **Connect to SQL Server to obtain default settings**.
   Enter the login ID and password that you used in the first section Install & Configure SQL Server 2000:
   Task 3 - Configure the Database on SQL Server 2000. Then select **Next**.
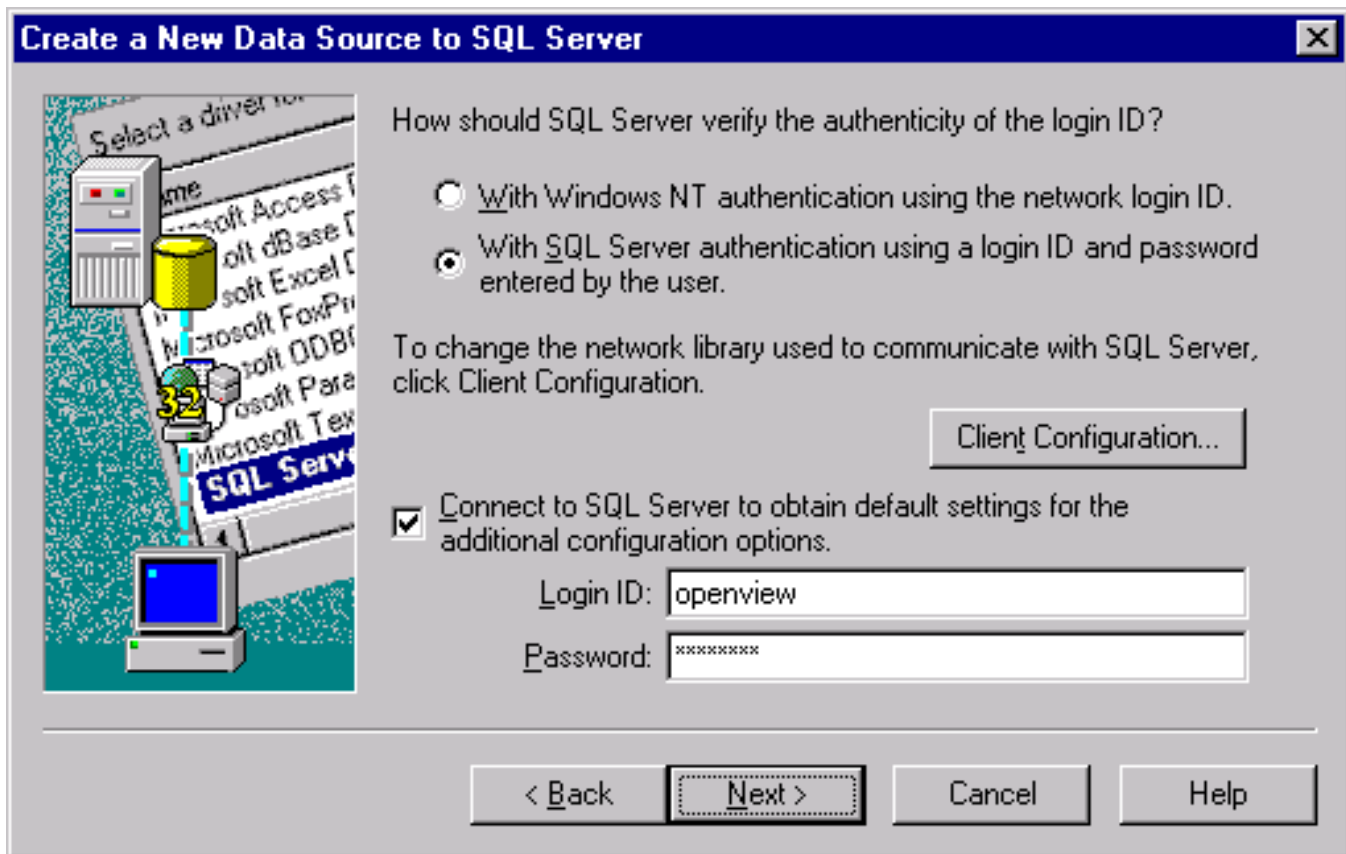
8. Check **Change the default database to,** select **Reporter**, (or whatever the database name is) and click **Next**.
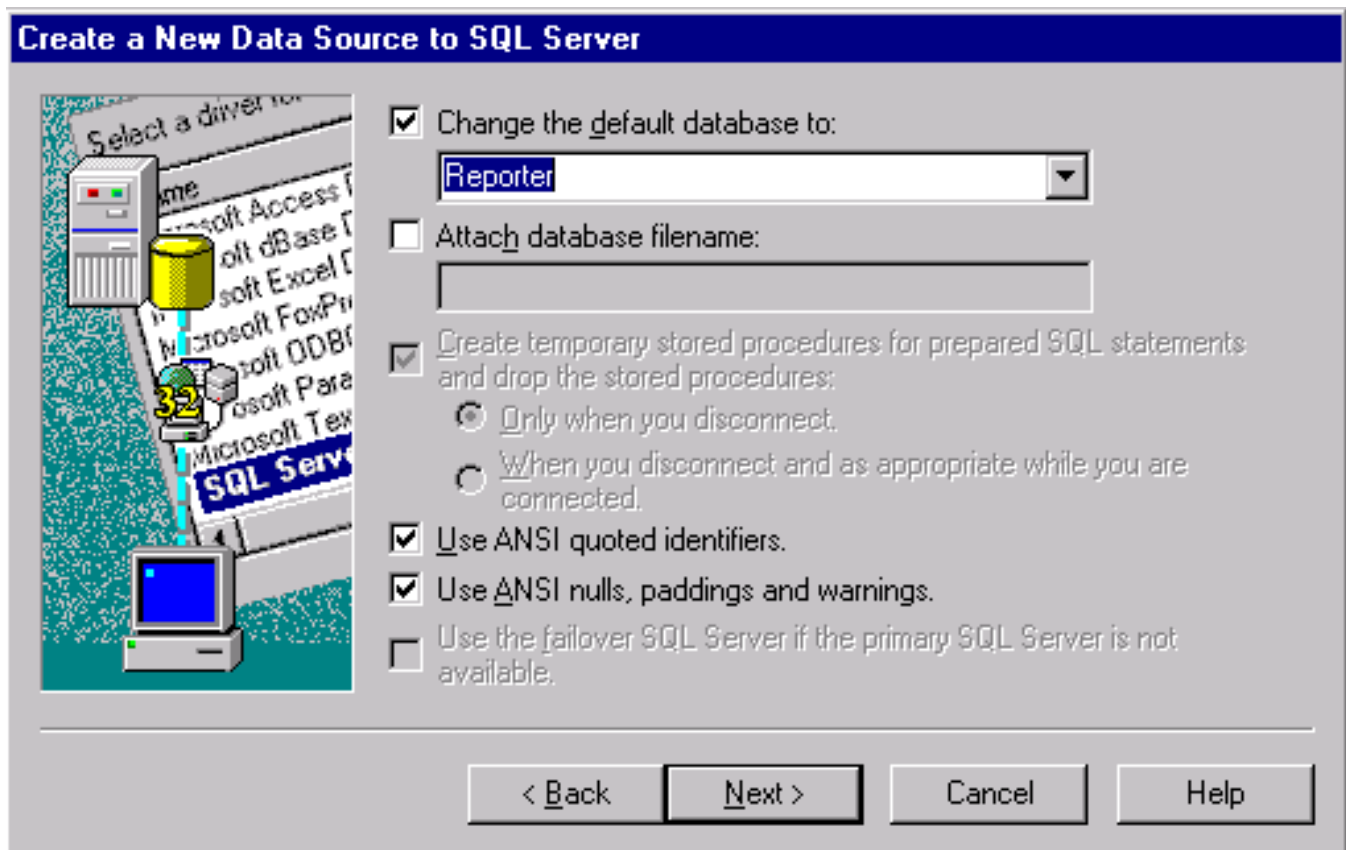
9. Check **Perform translation for character data** and select **Finish**.
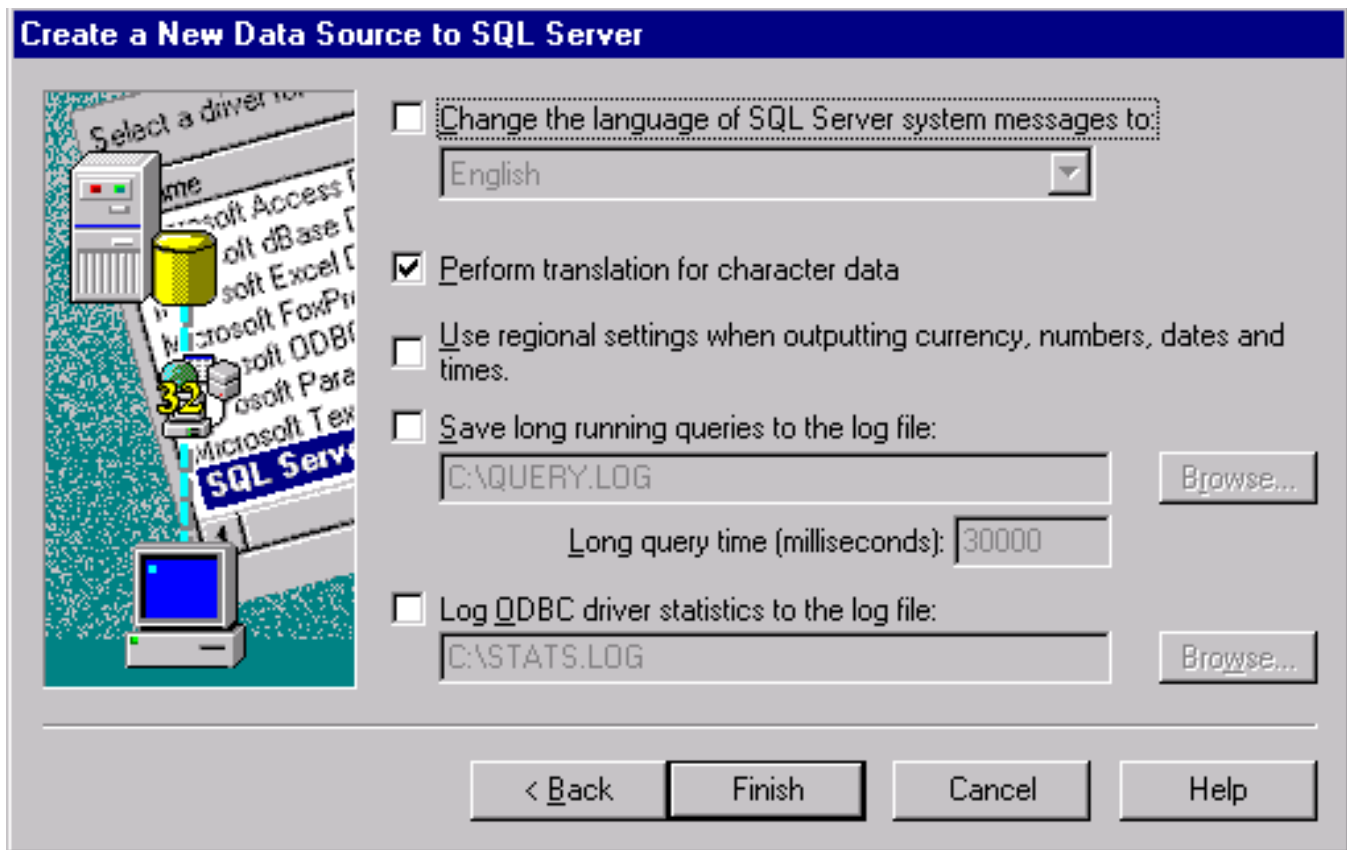


10. In the ODBC Microsoft SQL Server Setup dialog select the **Test Data Source...** button.

**ODBC Microsoft SQL Server Setup**

A new ODBC data source will be created with the following configuration:

Microsoft SQL Server ODBC Driver Version 03.80.0194

Data Source Name: Reporter
Data Source Description:
Server: NT-T17
Database: (Default)
Language: (Default)
Translate Character Data: Yes
Log Long Running Queries: No
Log Driver Statistics: No
Use Integrated Security: No
Use Regional Settings: No
Prepared Statements Option: Drop temporary procedures on disconnect
Use Failover Server: No
Use ANSI Quoted Identifiers: Yes
Use ANSI Null, Paddings and Warnings: Yes
Data Encryption: No

Test Data Source...    OK    Cancel

11.  Exit the SQL Server ODBC Data Source Test by clicking **OK**.

```
SQL Server ODBC Data Source Test                    [X]
┌ Test Results ─────────────────────────────────────┐
│  ┌──────────────────────────────────────────┬─┐   │
│  │ Microsoft SQL Server ODBC Driver Version │▲│   │
│  │ 03.80.0194                               │ │   │
│  │                                          │ │   │
│  │ Running connectivity tests...            │ │   │
│  │                                          │ │   │
│  │ Attempting connection                    │ │   │
│  │ Connection established                   │ │   │
│  │ Verifying option settings                │ │   │
│  │ Disconnecting from server                │ │   │
│  │                                          │ │   │
│  │ TESTS COMPLETED SUCCESSFULLY!            │ │   │
│  │                                          │ │   │
│  │                                          │ │   │
│  │                                          │ │   │
│  │                                          │ │   │
│  │                                          │▼│   │
│  └──────────────────────────────────────────┴─┘   │
│                                                    │
│              [        OK        ]                  │
└────────────────────────────────────────────────────┘
```

## Task 4➡ Configure Internet Services to use SQL as the Database

1. To start OpenView Internet Services Configuration Manager, select
   **Start>Programs>HP OpenView>internet services>Configuration Manager**.
2. If you see an error message; click **Yes** or **OK** to proceed.  The database login may be required, if so see
   the next step, proceed to step 5.
3. In the Database Login dialog box, enter the database User ID and Password that you used for the
   system configuration.
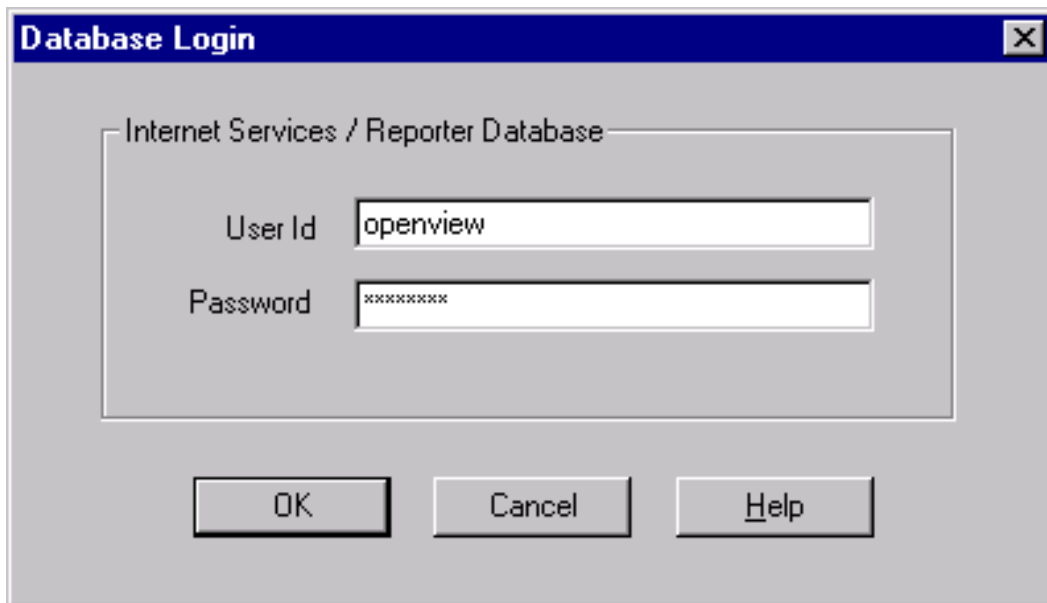
4. Click **OK**.
5. You will see the  Internet Services Startup status bars . Then the Configure License dialog may be displayed.  Follow the instructions for licensing or click **OK** to continue. Then the main Configuration Manager window displays.
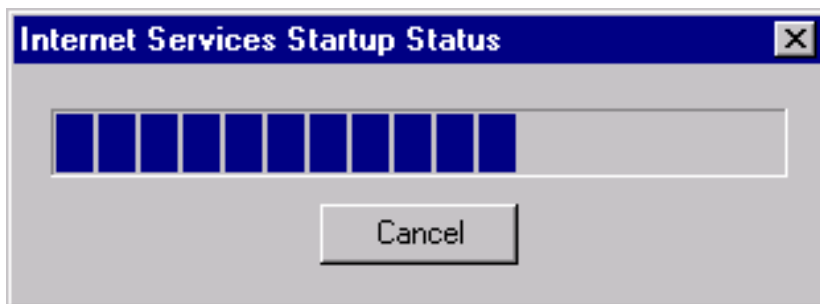


6. Start the following services:
   **HP Internet Services**
   **Reporter Service**
   **World Wide Web Publishing Service**

# 4  Setup Oracle as the Database

Internet Services can be configured to work with Oracle as its database. The topics below cover several versions of Oracle.

⚠ **IMPORTANT**: Note that screen examples and steps may be different than documented in the following sections if your operating system or version is different than the one used in the example.

⚠ **IMPORTANT**: An Oracle DBA should be involved in creating the database, particularly for configuration issues like database sizing and AUTOEXTEND of datafiles.

⚠ **IMPORTANT**: Do not connect multiple copies of Internet Services to the same database as unexpected results occur when more than one copy of Reporter attempts to write data to the configured  database.

⚠ **IMPORTANT**: Migration of data from a different database to a new Oracle database is not supported for Internet Services (OVIS). And if OVIS is on the same system as hp OpenView Reporter, attempting to migrate data to the new database with Reporter may result in problems in OVIS.

- **Part B:** UNIX Settings
- **Part G:** Configure Oracle  8.1.7 (HP-UX or Solaris) as the database
- **Part H:** Configure Oracle 9i (HP-UX or Solaris) as the database

# **4** **UNIX Settings**

# Part B: For Oracle Database Setup on UNIX / Setting UNIX Environment Variables

This document shows settings for a custom database configuration

Note: Because a successful Oracle configuration is dependent upon correct kernel parameter settings, check your HP-UX or Solaris system kernel parameters (see the Oracle Installation Guide and other Oracle documentation for these parameters). Some kernel parameters you may want to look at for HP-UX include: maxdsiz, maxfiles, maxssiz, maxuprc, nfile, nproc, semmni, semmns, shmmax, shmmni, shmseg. And on Solaris you may want to check the following shared memory parameters: shminfo_shmmax, shminfo_shmmin, shminfo_shmmni, shminfo_shmseg, seminfo_semmns, seminfo_semmni, seminfo_semmsl. Make changes to kernel parameters as needed. **IMPORTANT!** To activate kernel parameter changes to settings, **you must reboot your system**.

➡️ **New Oracle Installations**

1. You must be logged on as **root** or **su**
2. Set UNIX environment variables as follows:

   **ORACLE_BASE** – set to admin pathname default (/opt/oracle)
   **ORACLE_SID** - set to the database name you want to create (REPORTER)
   **ORACLE_HOME** - set to full pathname of the Oracle system home directory (/opt/oracle/product/8.1.7)
   **ORACLE_TERM** – set to the appropriate value (hpterm, etc…)
   **PATH** - needs to include **$ORACLE_HOME/bin**
   **UMASK** = 022

➡️ **Existing Oracle Installations**

   Verify that the following HP-UX environment variables are set:

   **ORACLE_BASE** – set to admin pathname default (/opt/oracle)
   **ORACLE_SID** - set to the database name you want to create (REPORTER)
   **ORACLE_HOME** - set to full pathname of the Oracle system home directory (/opt/oracle/product/8.1.7)

**ORACLE_TERM** – set to the appropriate value (hpterm, etc…)
**PATH** - needs to include $ORACLE_HOME/bin

# 4 Setup Oracle as the Database
# Part G: Configure Oracle 8.1.7 as the Database

## Set Up Oracle 8.1.7 on HP-UX or Solaris and Configure on Windows

**Prerequisites**: Because a successful Oracle configuration is dependent upon correct kernel parameter settings, check your HP-UX or Solaris system kernel parameters (see the Oracle Installation Guide and other Oracle documentation for these parameters). Modify kernel parameters as necessary. Some kernel parameters you may want to look at for HP-UX include: maxdsiz, maxfiles, maxssiz, maxuprc, nfile, nproc, semmni, semmns, shmmax, shmmni, shmseg. And on Solaris you may want to check the following shared memory parameters: shminfo_shmmax, shminfo_shmmin, shminfo_shmmni, shminfo_shmseg, seminfo_semmns, seminfo_semmni, seminfo_semmsl.

Internet Services requires 1GB disk space minimum in the Oracle database initially if you use the `<install dir>\newconfig\oracle\repconfig.sql` script provided by OVIS.

For other system, memory, and disk requirements, please check the "System Requirements" section of the Oracle 8i Installation Guide included with the software distribution. Oracle has specific recommendations regarding optimal database installation and architecture. This document does not discuss all aspects of database installation and administration. We suggest that you consult Oracle technical literature and qualified Oracle professionals to achieve optimum database performance in your particular environment.

**IMPORTANT**: Migration of data from a different database to the new Oracle database is not supported for Internet Services (OVIS). And if OVIS is on the same system as hp OpenView Reporter, attempting to migrate data to the new database with Reporter may result in problems in OVIS.

**IMPORTANT:** If you use systems with different language settings, the OVIS Reporter database should be created using the same default locale character set as the system where OVIS is installed (Management Server). At this time, OVIS does not support databases that have been configured to use the UTF-8 character set.

**Database Performance Note:**

Adding indexes can improve performance. With OVIS 5.2 indexes have been added to the following tables. Consult your DBA for a maintenance plan for these indexes.

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| Indx25_IOPS_PROBE_DATA | PROBENAME |

IOPS_PROBE_DATA_CACHE

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA_CACHE | DATETIME |
| Indx6_IOPS_PROBE_DATA_CACHE | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_CACHE | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_CACHE | PROBENAME |

IOPS_DETAIL_DATA_DAILY

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA_DAILY | DATETIME |
| Indx6_IOPS_PROBE_DATA_DAILY | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_DAILY | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_DAILY | PROBENAME |

IOPS_DETAIL_DATA

| Index | Field |
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| Indx5_IOPS_DETAIL_DATA | DATETIME |
| Indx7_IOPS_DETAIL_DATA | PROBENAME |
| Indx8_IOPS_DETAIL_DATA | CUSTOMER |
| Indx11_IOPS_DETAIL_DATA | SERVICENAME |

IOPS_DETAIL_DATA_HOURLY

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| Indx7_IOPS_DETAIL_DATA_HOURLY | PROBENAME |
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| Indx11_IOPS_DETAIL_DATA_HOURLY | SERVICENAME |

IOPS_DETAIL_DATA_DAILY

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| Indx5_IOPS_DETAIL_DATA_DAILY | DATETIME |
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| Indx8_IOPS_DETAIL_DATA_DAILY | CUSTOMER |
| Indx11_IOPS_DETAIL_DATA_DAILY | SERVICENAME |

**On the UNIX or Solaris system:**

- Setup for new installations of Oracle 8.1.7
  (Task 1 — 6)
- Setup for existing installations of Oracle 8.1.7
  (Task 4 — 6)

**On the Windows system running Internet Services:**

- Configure Internet Services to use the Oracle database

**Case Sensitivity: Some required entries in Windows are case-sensitive; so we recommend you match instruction text exactly.**

# Setup for new installations of Oracle 8.1.7

Task 1 Create Oracle groups, user, and home directory
Task 2 Mount the CD
Task 3 Install Oracle software using the Oracle Universal Installer
Task 4 Create Reporter database objects
Task 5 Create Reporter Tablespace, User, and Privileges
Task 6 (optional) Configure Automatic Database Startup and Shutdown

## Task 1 ➡️ Create Oracle groups, user, and home directory

Before you begin, you need the following administrator privileges: root and dba privileges on the UNIX system where you are using Oracle; administrator privileges on the Windows client where Internet Services is installed.

1. You must be logged on as root or su.
2. For HP-UX: Use System Administration Manager (SAM) utility on HP-UX 11.0 to create UNIX group dba.
   For Solaris: Use **admintool** or (**groupadd** utility) to create UNIX group dba.
3. For HP-UX: Use SAM utility to create UNIX group oinstall.
   For Solaris: Use **admintool** or (**groupadd** utility) to create UNIX group oinstall.
4. For HP-UX: Use SAM utility to create UNIX user oracle.
   For Solaris: Use **admintool** (or **useradd** utility) to create UNIX user oracle.

   a. Login name: **oracle**
   b. Primary Group Name: **oinstall**
      Secondary Group Name: **dba**
   c. Home directory: consistent with local standards
   d. Login shell: consistent with local standards

5. Create Oracle Home mount point: **mkdir –p /opt/oracle/product/8.1.7**
6. Enter: **cd /opt**
7. Enter **chown –R oracle:oinstall oracle**

## Task 2 ➡️ Mount the CD

**For HP-UX:**

1. Edit the **/etc/pfs_fstab** file (create it if it does not exist) to add the following line:
   Syntax:
   **<device_file> <mount_point> <filesystem_type> <translation_method>**
   Definitions of the syntax above:
   **<device_file>** = CD-ROM device file (discover with **ioscan –nFC disk**)
   **<mount_point>** = path name of the mount point
   **<filesystem_type> = CD-ROM is in IS09660 format, Rockridge extension <translation_method> = unix**
   For example:
   **/dev/dsk/c1t2d0 /CDROM pfs-rrip xlat=unix 0 0**

2. Perform the following steps as the root user:
   Enter: **/usr/sbin/pfs_mountd &**  (Note:pfs creates the correct format to read the CD)
   Enter: **/usr/sbin/pfsd &**

3. Insert the CD into the CD-ROM and mount the device as follows:
   **/usr/sbin/pfs_mount /CDROM**

4. Leave the root user window available for executing a script during installation .

**For Solaris:**

If you are using Volume Management software (available by default on Solaris) the CD-ROM is mounted automatically to /cdrom/oracle8i when you put it into the disk drive.

If you are not using the Volume Management software, you must mount the CD-ROM manually.

1. Place the Oracle 8i CD-ROM in the CD-ROM drive.
2. Log in as the root or su user and create a CD-ROM mount point directory:
   $ **su root**
   # **mkdir *cdrom_mount_point_directory***
3. Mount the CD-ROM drive on the mount point directory and exit:
   # **mount option *device_name cdrom_mount_point_directory***
   # **exit**

## Task 3 ➡ Install Oracle software using the Universal Oracle Installer

1. Log in to the oracle account
   a. Verify **umask** command returns **022**
   b. Set **umask 022** in .profile if needed
2. Set UNIX environment variables as follows: (**add to .profile,or set manually**)
   **DISPLAY=<*workstation_name*>:0.0** (<*workstation_name*> is computer where output from the Oracle Universal Installer should be displayed)
   **ORACLE_BASE=/opt/oracle**
   **ORACLE_HOME=/opt/oracle/product/8.1.7**
   **ORACLE_SID=REPORTER**
   PATH includes $ORACLE_HOME/bin, /usr/bin, /etc, /usr/ccs/bin, /usr/local/bin
3. Start the Installer.
   ⚠ **Warning** don't launch the installer from within the CDROM directory or you won't be able to mount multiple CDs.

   **/CDROM/runInstaller**

   ⚠ **Important**: These procedures and screen examples are for Oracle 8.1.7 on HP-UX.  Other operating systems and versions may be different.

In the Welcome dialog, click **Next**.

4. In File Locations do not change the product Source...Path entry.,
   The Oracle Home Destination...Path entry should display the value for ORACLE_HOME if previously set; click **Next**.
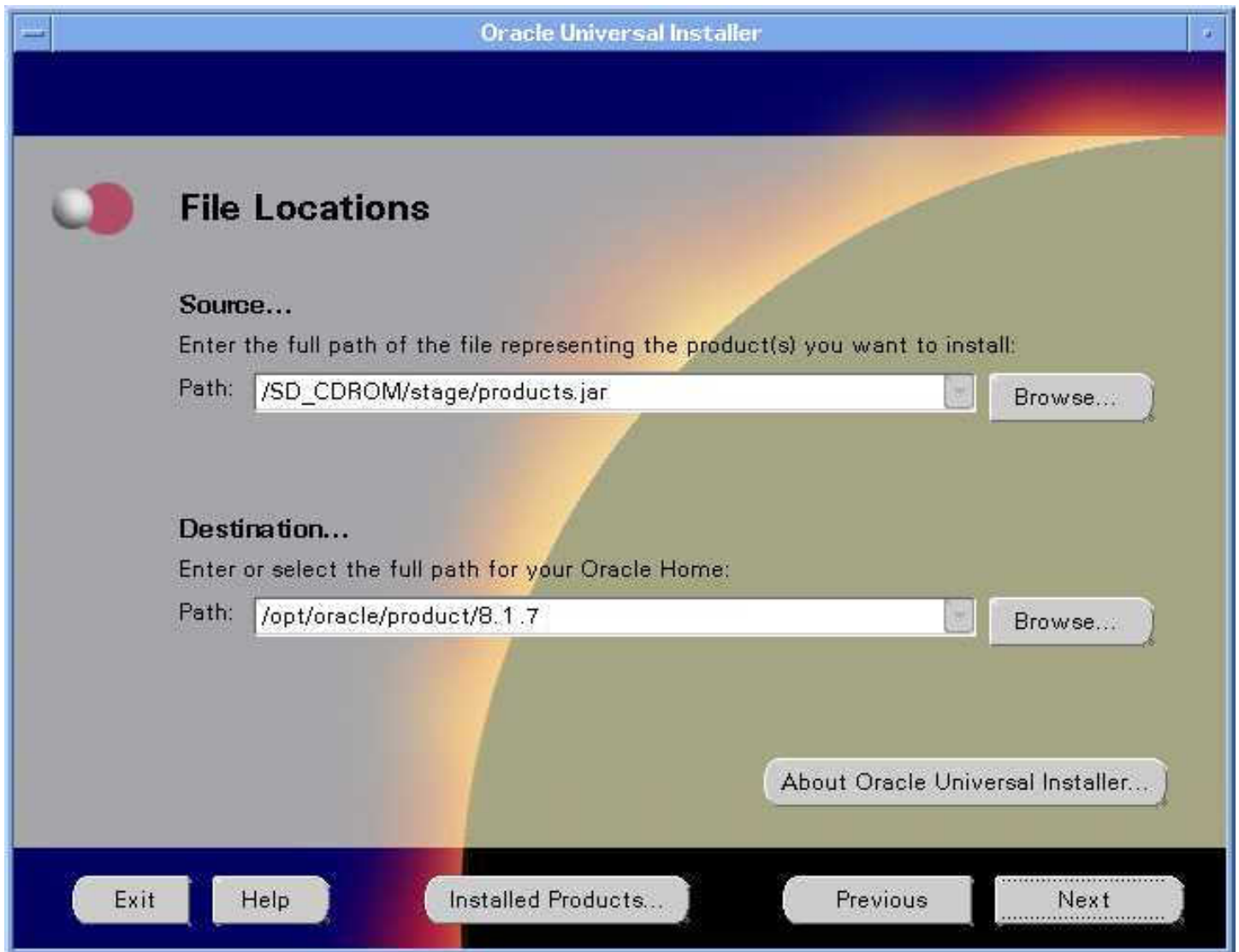


5. For the UNIX Group Name enter **oinstall** and click **Next**.
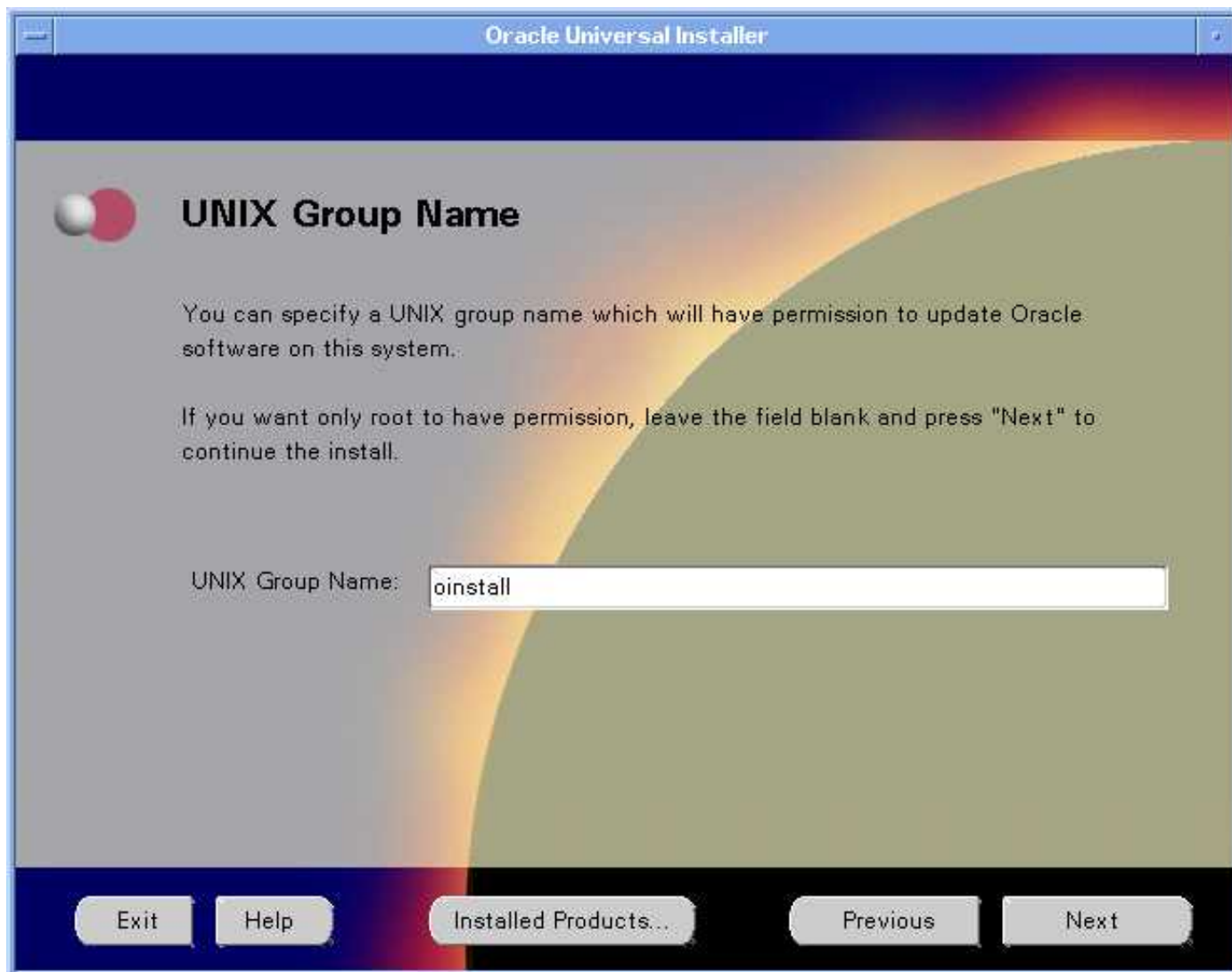
6. If /var/opt/oracle does not exist or can not be edited by the oracle user, you are prompted to run /tmp/Orainstall/orainstRoot.sh.
   After running this script, click **Retry** to continue.
7. Under Available Products select **Oracle8i Enterprise Edition 8.1.7.0.0**, click **Next**.
8. Under the Installation Types select **Minimal installation**; click **Next**.
9. In the Privileged Operating System Groups enter **dba** for the UNIX groups and click **Next**.
10. In Select Starter Database select **No**, and click **Next**.
11. In the Summary verify Space Requirements and select the **Install** button.
    *The Install dialog appears.*
12. In the Setup Privileges dialog run **root.sh** as instructed.
13. When the "Install successful" message appears, click **Next**.
    *The Configuration Tools dialog appears.*
14. In the Net8 Configuration Assistant Welcome window click **Next**.
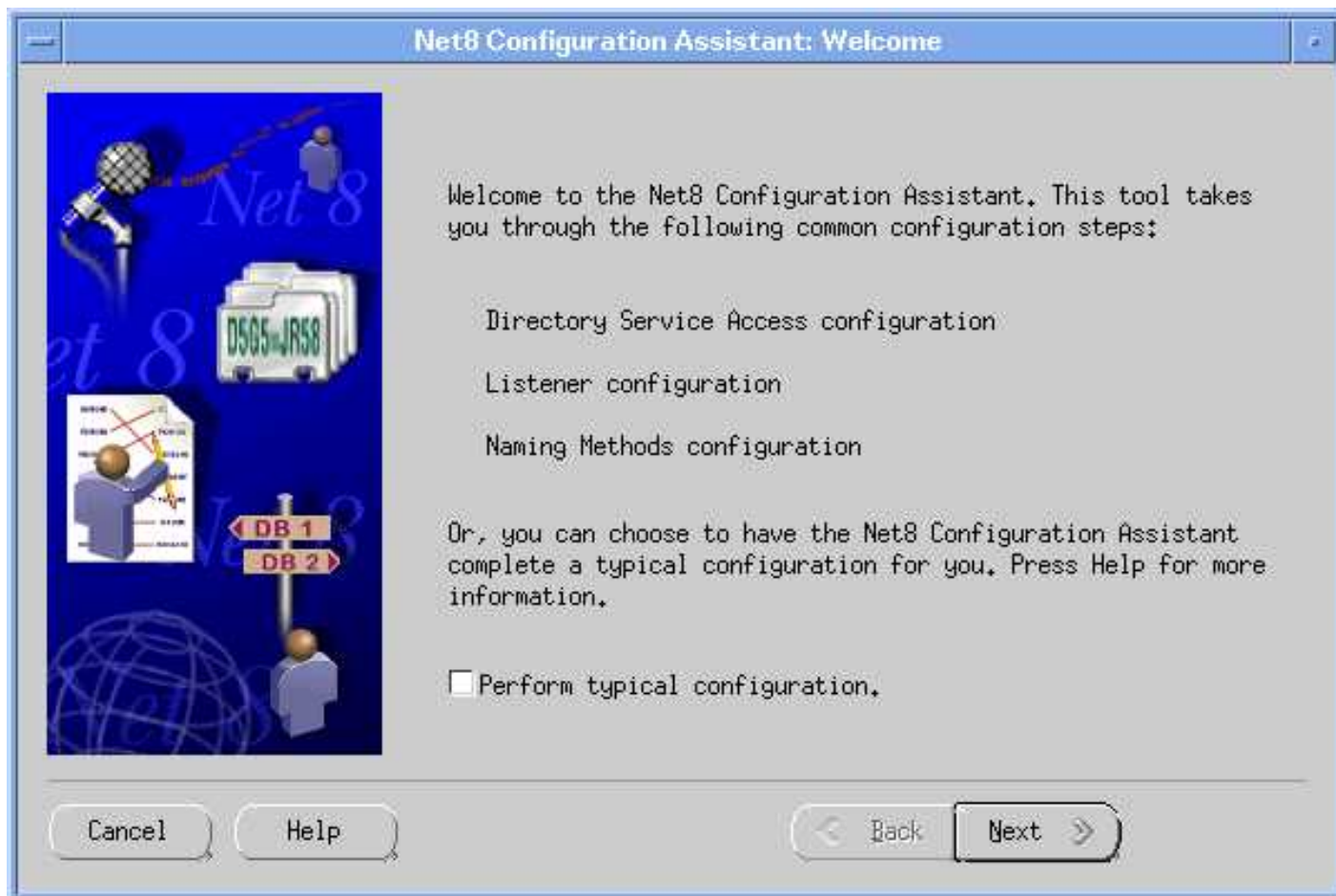
15. Select **No** to defer directory naming; click **Next**.
16. Select a Listener name—**LISTENER** is recommended—and click **Next**.
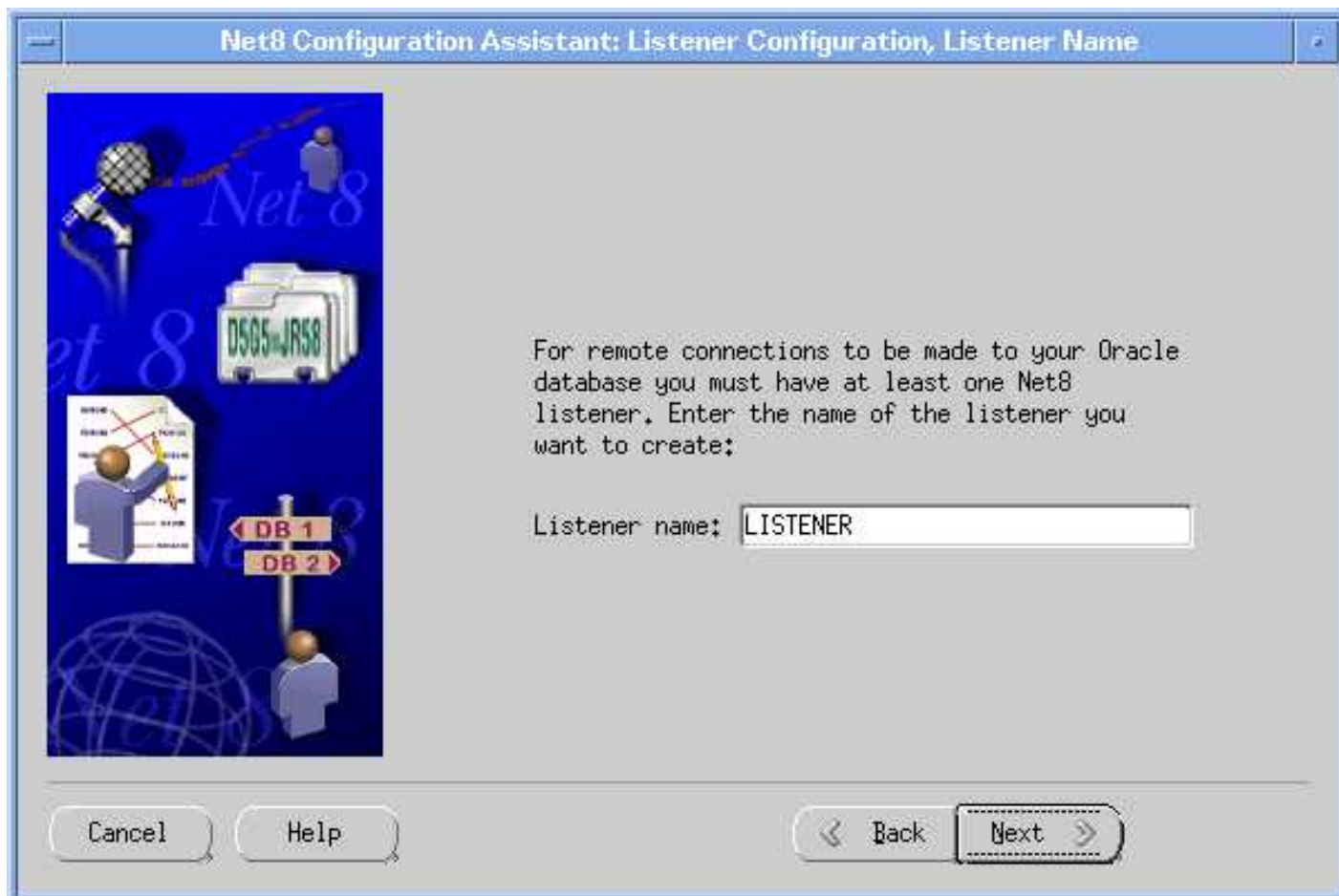
17. Select **TCP** for the connection protocol, click **Next**.
18. Select the standard port number of **1521**, click **Next**.
19. Select **No** for configuring another listener, click **Next**.
20. At "Listener configuration complete" message, click **Next**.
21. Select **No** for changing the naming methods, click **Next**.
22. At the "Net8 Configuration Complete" message, click **Finish**.
23. In the End of Installation dialog click **Exit**.

## Task 4➡ Create Reporter database objects

1. Log in to the **oracle** account
2. Update UNIX environment variables as follows: (add to .profile,or set manually)

   DISPLAY=<workstation_name>:0.0
   (*<workstation_name>* this is the system you are physically working so you can see the output from the Oracle products)
   ORACLE_BASE=/opt/oracle
   ORACLE_HOME=/opt/oracle/product/8.1.7
   ORACLE_SID=REPORTER
   PATH includes $ORACLE_HOME/bin, /usr/bin, /etc, /usr/ccs/bin, /usr/local/bin

   for HP-UX: SHLIB_PATH=$ORACLE_HOME/lib
   for Solaris: LD_LIBRARY_PATH=$ORACLE_HOME/lib

   for Oracle 8.1.7:
   CLASSPATH=$ORACLE_HOME/JRE/lib:$ORACLE_HOME/jlib:
   $ORACLE_HOME/network/jlib:$ORACLE_HOME/rdbms/jlib:$ORACLE_HOME/assistants/jlib
   TNS_ADMIN=$ORACLE_HOME/network/admin
3. Run the Database Configuration Assistant by entering **dbassist**
4. In the startup window select Create a database, click **Next**.
5. Select **Custom** as the database type, click **Next**.
6. Select **Multipurpose** as the type of application, click **Next**.
7. Select number of concurrently connected users (suggest **40**), click **Next**.
8. Select **Dedicated Server Mode**, click **Next**.
9. No options required for Reporter database; click **Next**.
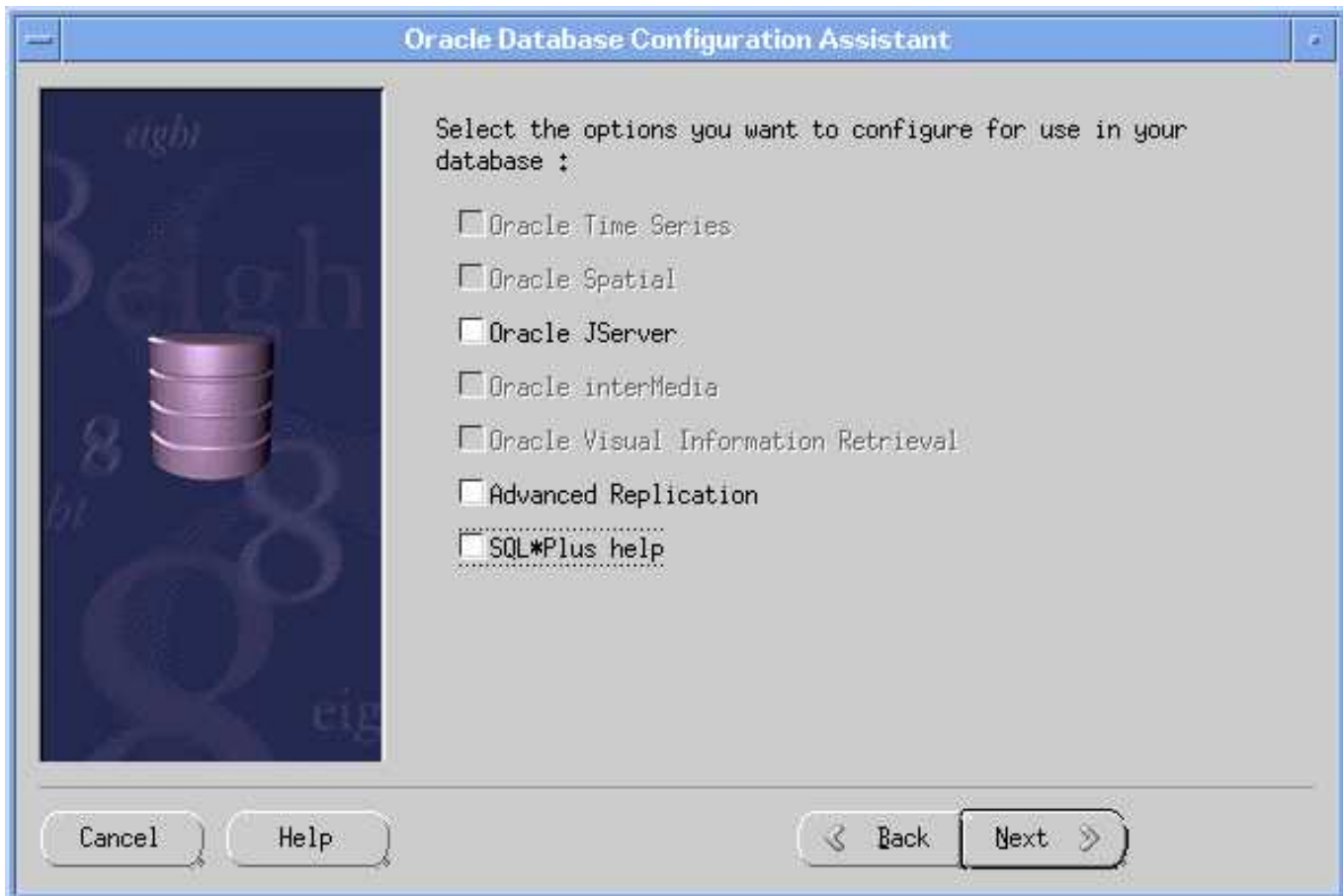
10. Enter the Global Database Name (i.e. **reporter<.*domain.name*>** ) and SID (**REPORTER**). Note that REPORTER must be entered all uppercase. Then click **Next**.
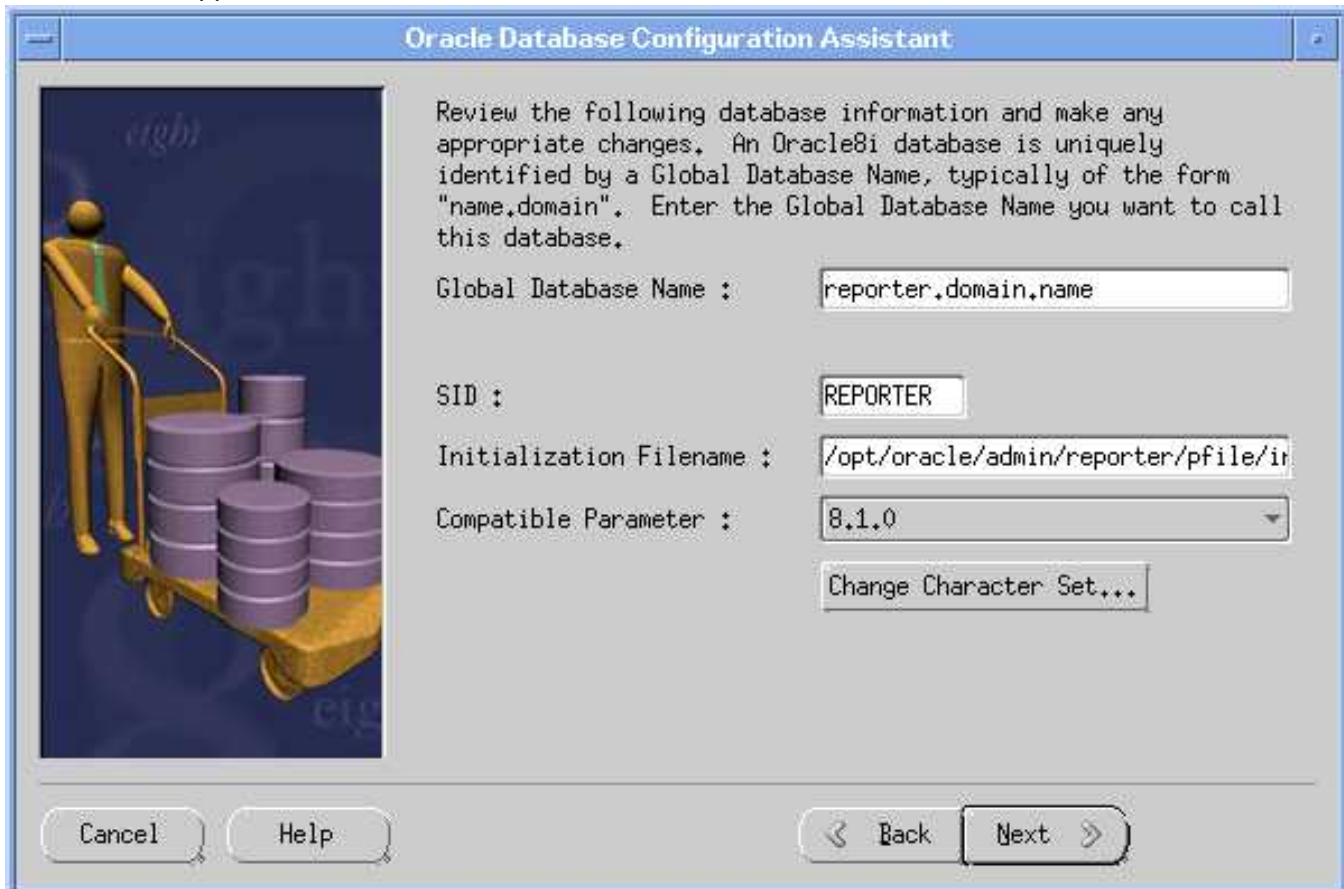


11. Review the Control File information, click **Next**.
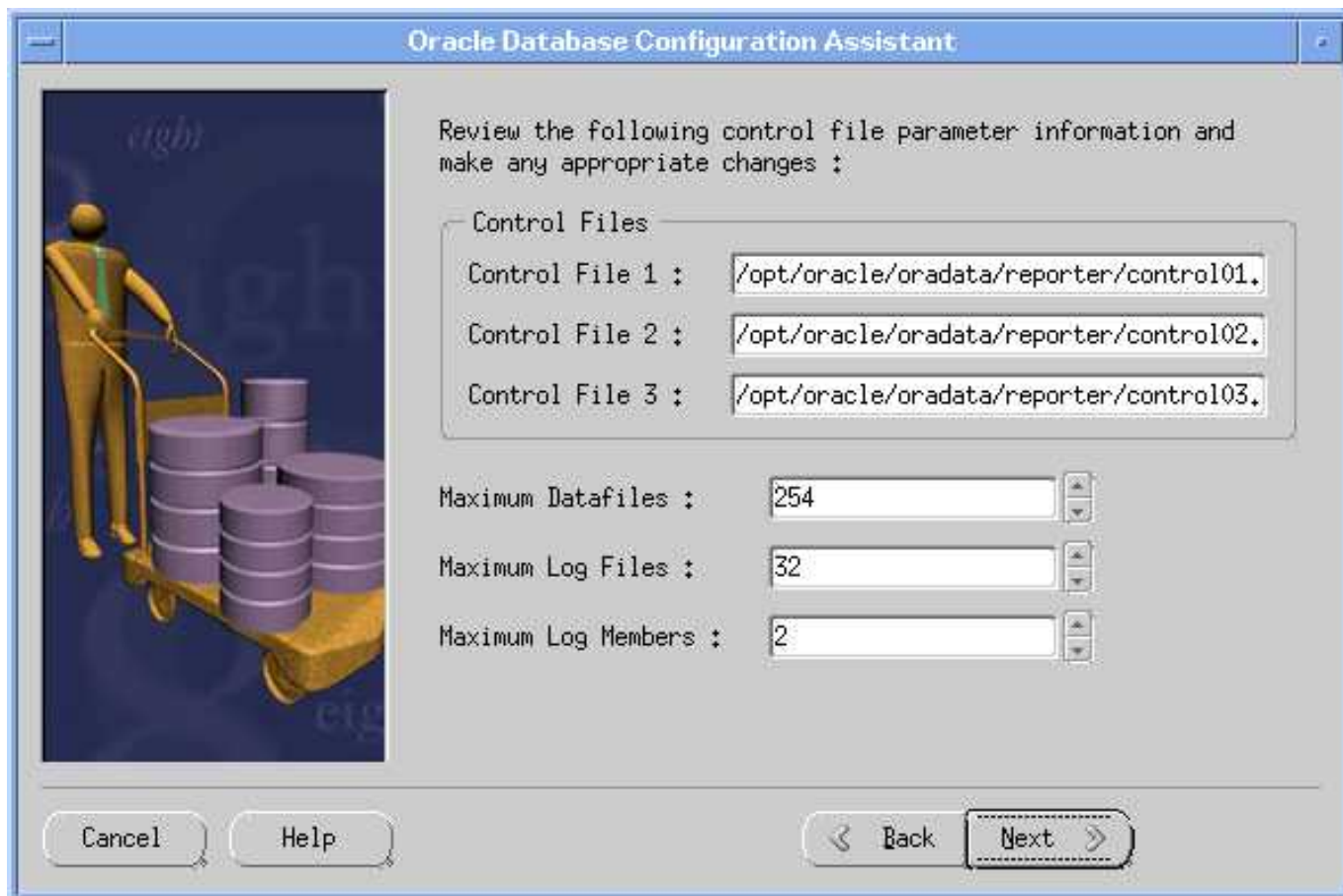
**Note**: Oracle recommends multiplexing controls files on different disks to support database recoverability.

12. Accept the defaults for all the tabs (click Next through the tabs) unless otherwise recommended by your Oracle Administrator.
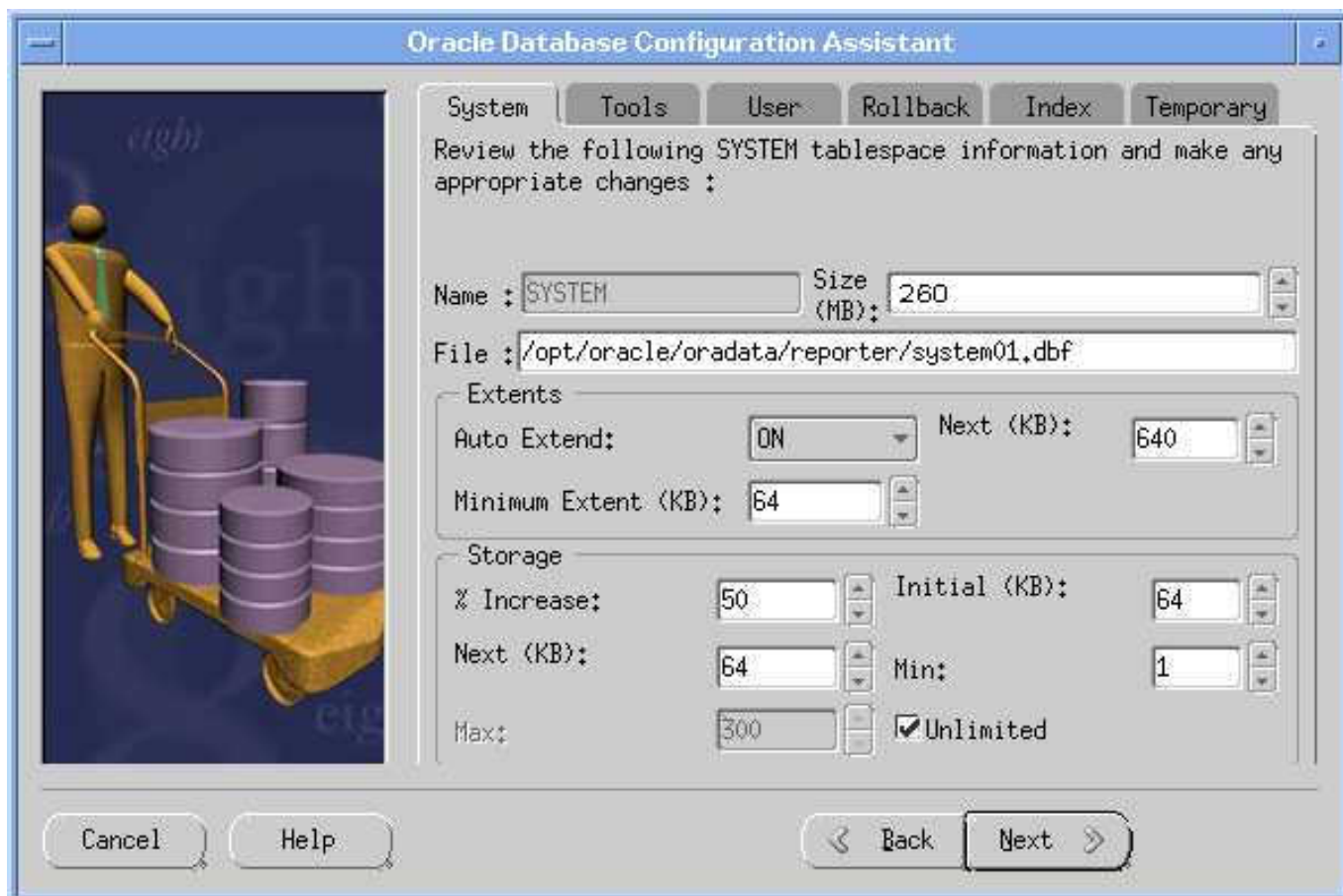


13. Review the Redo Log Files information; click **Next**.
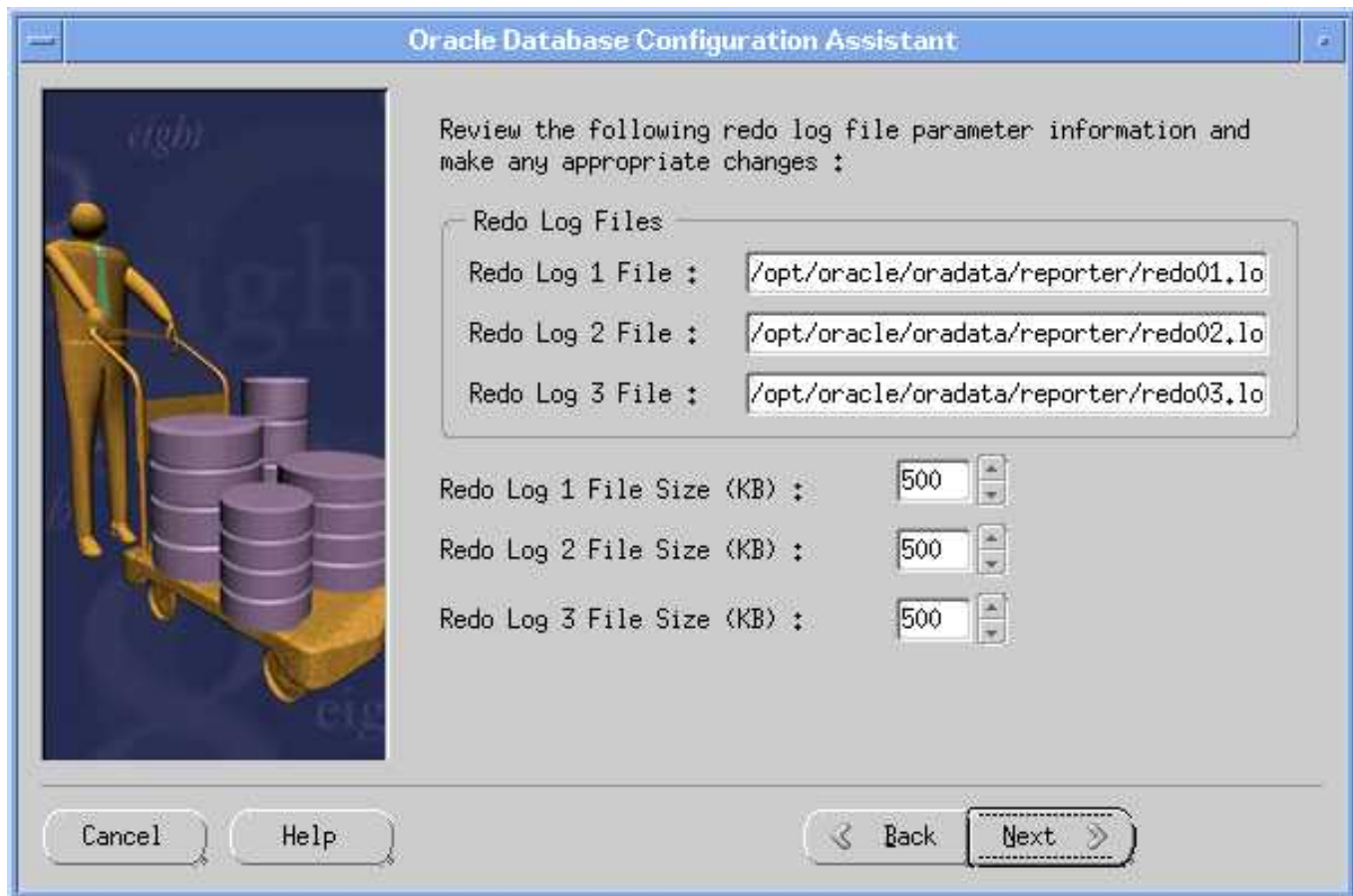
14. Review the logging parameter information; click **Next**.
15. Under the SGA parameter information enter a Shared Pool value of 58947788; click **Next**.

1. Review the Trace File Directory information; click **Next**.
2. Select **Create database now**; click **Finish**.

## Task 5 ➡ Create Reporter tablespace, user, and privileges*
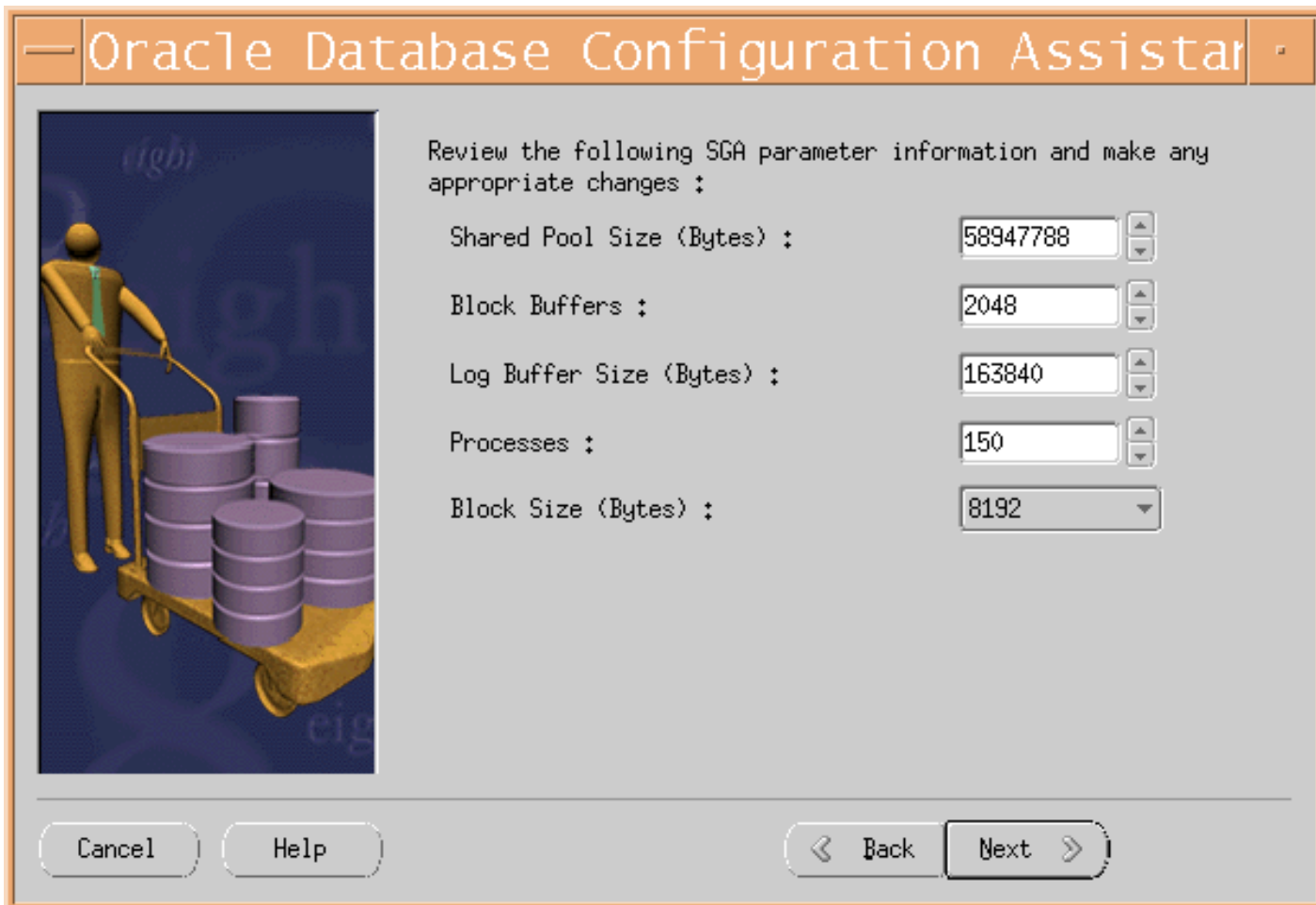
1. Log on as root or su.
2. Create the file and save as **repconfig.sql** in the **$ORACLE_BASE/admin/reporter/create/** directory
   (a version of this file can be found in `<install dir>/newconfig/oracle/repconfig.sql` and can be edited as shown below):

   **Note**: You must replace **/database/oradata** with the path you have established for your database data files. The data file names are only recommendations and can be changed to conform to the standards at your site. Also the user and password are highlighted; change as necessary.

   **Note**: For performance considerations Oracle recommends to place data (tablespace REPORTER), index (tablespace RPT_INDEXES), and rollback segments (tablespace RBS) on different disks if available.

   ⚠ **Important**: If the actual storage size of 600MB for REPORTER tablespace and 300MB for the RPT_INDEXES tablespace is not large enough, please consult your Oracle DBA on the appropriate size for your environment or how to setup the AUTOEXTEND datafile feature in Oracle.

   create tablespace REPORTER datafile
   '**/database/oradata/**reporter/rptdb01.dbf' SIZE 600M
   extent management local autoallocate;

> create tablespace RPT_INDEXES datafile
> '/**database/oradata**/reporter/rptidx01.dbf' size 300M
> extent management local autoallocate;
>
> create user **openview** identified by **openview**
> default tablespace REPORTER;
> grant create session, create table, create any index, create sequence, create trigger, unlimited tablespace to **openview**;

3. Log on as the oracle software owner.
4. Make sure the ORACLE_SID is set to **REPORTER**; otherwise the Internet Services tables will be put in the wrong SID.
5. Run the **$ORACLE_HOME/bin/svrmgrl** program and enter the following commands to start the database (the database may have already been started)
   **connect internal**
   **startup**
6. Enter the following SQL statement:
   **@$ORACLE_BASE/admin/reporter/create/repconfig.sql**
7. Enter the following command to exit: **Exit**
8. Enter the following commands to restart the SQL listener:
   **lsnrctl stop**
   **lsnrctl start**

## Task 6 ➡Configure Automatic Database Startup and Shutdown

You may optionally configure the database for automatic startup and shutdown. See the Oracle documentation for details on this procedure.

> ⚠ **Warning**! If your database administrator already has the startup procedure in place, you should skip this step.
>
> ⚠ **Warning**! If the OVO (also known as VantagePoint Operations or ITO) (openview) database is installed on same Oracle server, you must modify its oratab entry to change the startup flag from "Y" to "N" since it is restarted by a different facility. For example, change openview:$ORACLE_HOME:Y to openview:$ORACLE_HOME:**N**.

Now you are ready to configure Internet Services to use the Oracle database.

# Configure Internet Services on the Windows System

This section covers the installation of the software that allows the Windows system, on which Internet Services runs, to connect to the HP-UX or Solaris system, from which the Oracle database is accessed.

## Task 1 ➡ Install Oracle Client software

To begin, you need the following Oracle product: Oracle8i Client (8.1.7) for Windows. You also need administrator privileges on the Windows client where Internet Services is installed

1. At your Windows system, insert the Oracle8i Client CD and select **Install/Deinstall Products** in the dialog box that appears.
2. In the Oracle Universal Installer Welcome dialog click **Next**.
3. In the File Locations dialog enter the Source and Destination file locations and click **Next**.
4. In the Installation Types dialog select **Administrator** as the installation type and click **Next**.
5. Verify information in the Summary dialog and click **Install**.

The installation process starts the Configuration Tools dialog. The Net8 Configuration Assistant will optionally be run.

## Task 2 ➡Configure the Net8 connection to the Reporter database

After you complete the installation of the Oracle client software (the Net8 Configuration is optionally part of the client install and dialog steps may differ slightly) on the Windows system running Internet Services, on that same system complete the following steps:

1. From the Start/Programs menu, select **Oracle**<*Oracle_Home*>:**Network Administration**:**Net8 Configuration Assistant**.
2. In the Welcome dialog select **Local Net Service Name configuration** and click **Next**.
3. Select the **Add** radio button; click **Next**.
4. In the Database Version dialog, select **Oracle8i database or service** (select the other option if connecting to a previous Oracle version), click **Next**.
5. In the Service Name dialog supply the global database name you entered in Task 4, step #10, of Configure Reporter database on UNIX; (i.e. reporter.<*domain.name*>); click **Next**.
6. At the Select Protocols dialog, select **TCP**, click **Next**.
7. At the TCP/IP Protocol dialog, supply the Host Name and port number (typically **1521**), click **Next**.



8. At the Test dialog, select **Yes**, perform a test; click **Next**.
9. At the Connecting dialog, verify that the connection was successful (you may have to change the login credentials (i.e., openview/openview) for the test to succeed); click **Next**.

**Net8 Configuration Assistant: Net Service Name Configuration, Connecting**  ☒

Wait while the Net8 Configuration Assistant tries to connect to the database using the information you provided...

Details:

Connecting...Test successful.

Change Login

Cancel      Help                        « Back    Next »
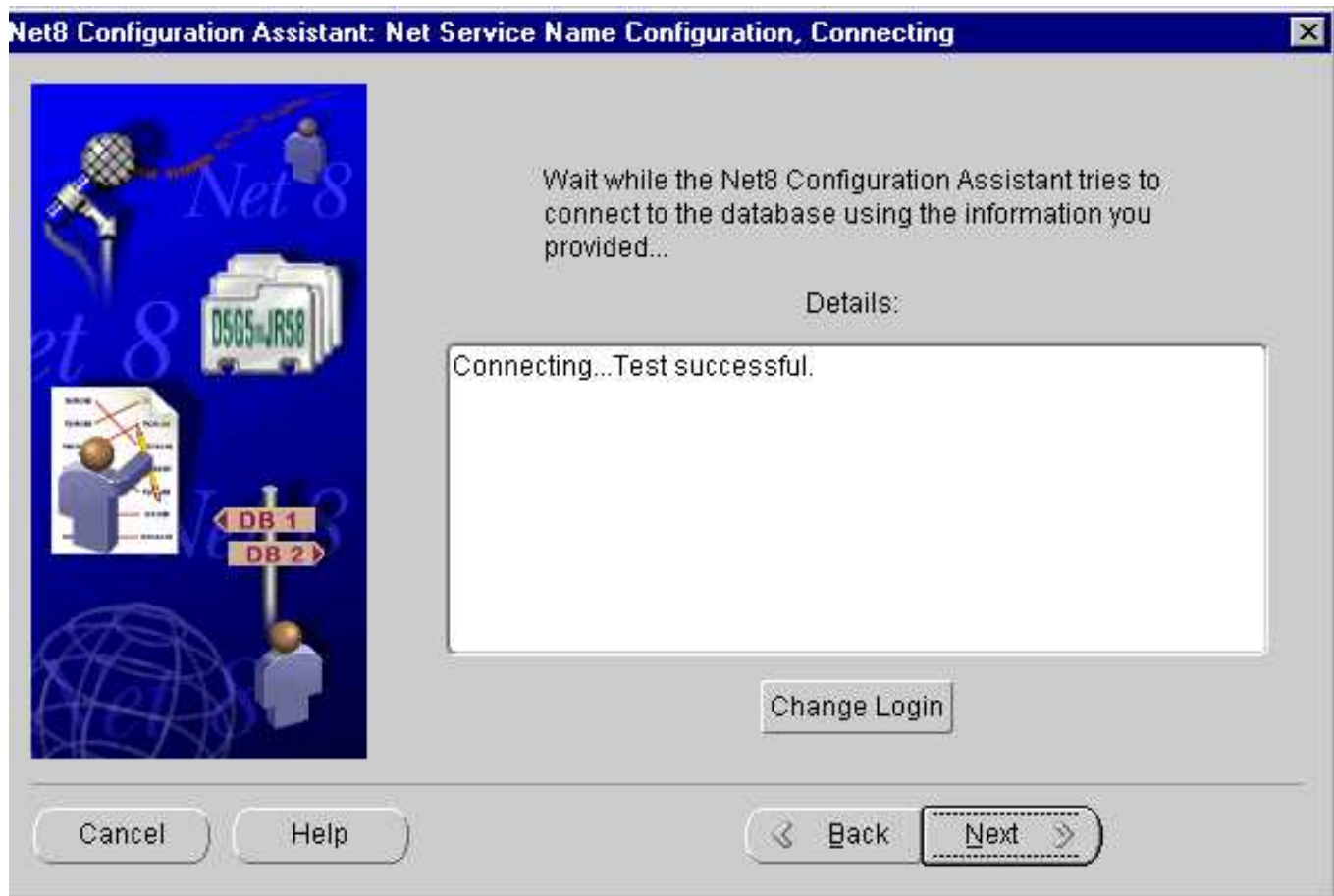
10. At the Net Service Name dialog, supply a Net Service Name (suggested: **RPT**), and click **Next**.

**Net8 Configuration Assistant: Net Service Name Configuration, Net Service Name**  ☒

Choose a name for this net service name. The Net8 Configuration Assistant has defaulted the net service name to be the same as the service name you entered earlier, but you can change it to be any name you choose.

Net Service Name: RPT

Cancel      Help                        « Back    Next »
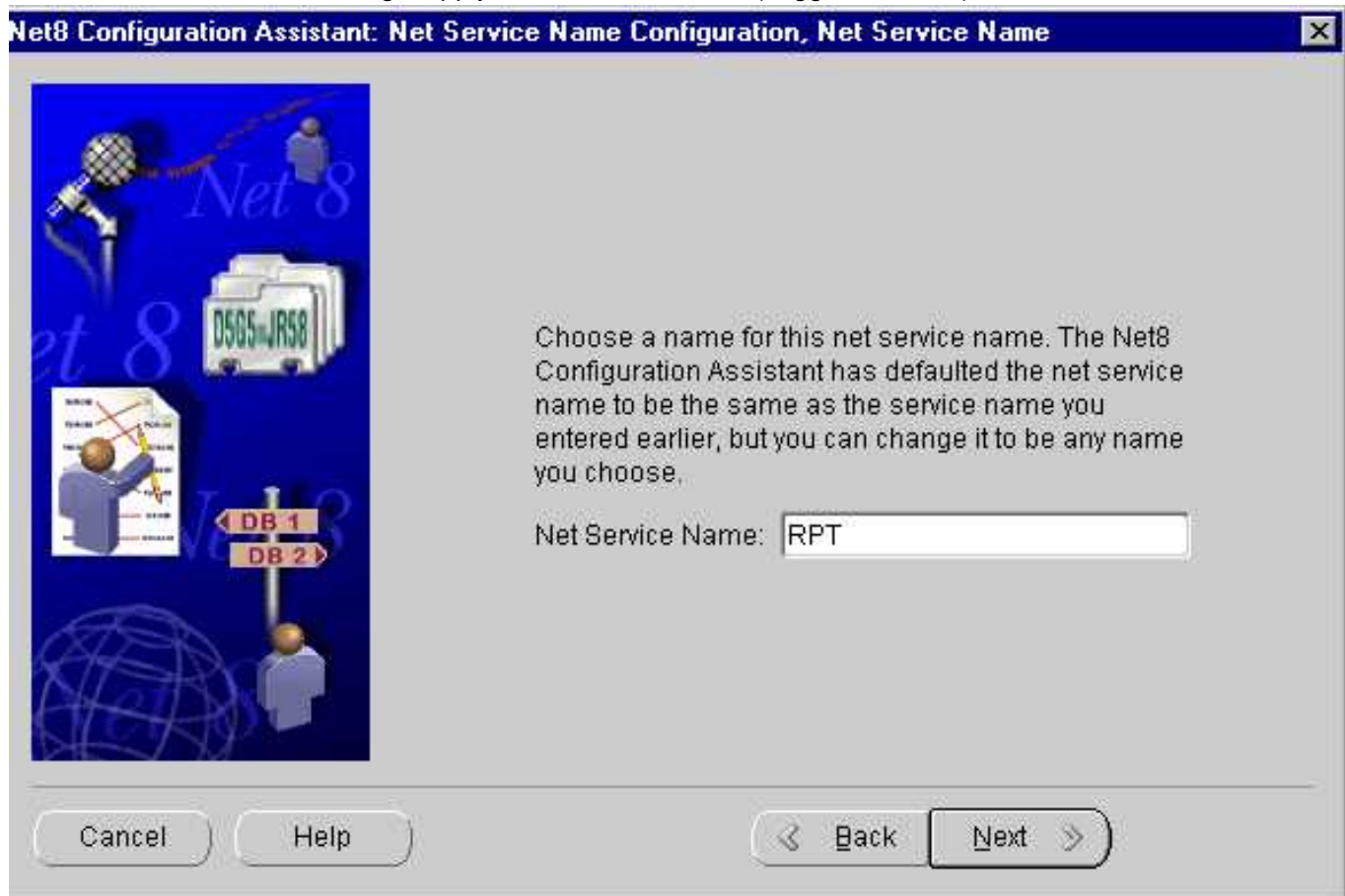
11. In the Another Net Service Name? dialog, select **No**, and click **Next**.
12. In the Done dialog, click **Next**, and then **Finish**.

ⓘ**Note**: The Net Service Name (i.e., RPT) may have the network domain appended to its name, for example RPT.<DOMAIN.NAME>. Rerun the Net8 assistant and select test to verify the actual, full Net Service Name.

## Task 3 ➡Verify the Net8 connection to the REPORTER database

After you complete the Net8 configuration, perform the following steps to verify that you can contact the database from your Windows system:
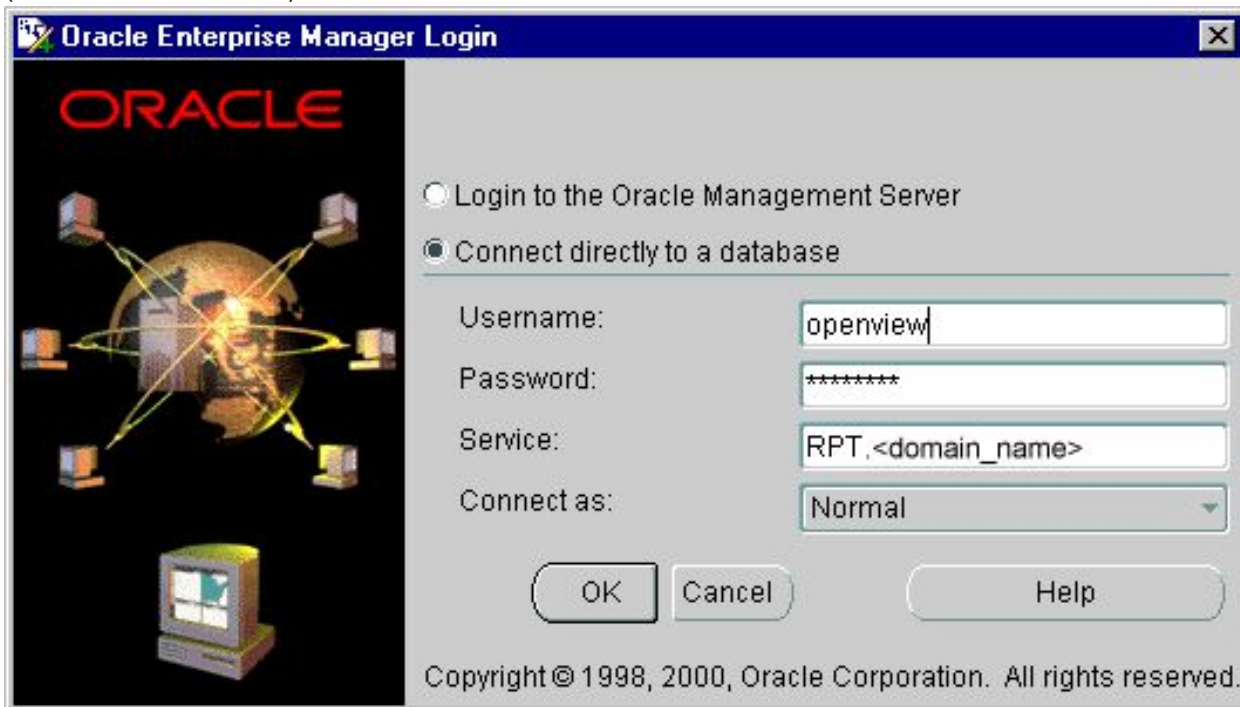
1. From the Start/Programs menu, select **Oracle** <*Oracle_Home*>, **Database Administration**, and **SQLPlus Worksheet**.
2. In the Oracle Enterprise Manager Login dialog, enter the database Username and Password that you used for the UNIX system configuration in Task 5, step 2 (username: **openview**, password:**openview**). Enter the Service name (**RPT**.<*domain_name*>)



3. Click the **OK** button.
4. In the SQL*Plus Worksheet, enter the command:
   **select TABLESPACE_NAME, STATUS from user_tablespaces**

   The following tablespace names should be displayed:
   ```
   TABLESPACE_NAME                         STATUS
   ----------------------------------------
   SYSTEM                                  ONLINE
   TOOLS                                   ONLINE
   RBS                                     ONLINE
   TEMP                                    ONLINE
   USERS                                   ONLINE
   INDX                                    ONLINE
   REPORTER                                ONLINE
   RPT_INDEXES                             ONLINE
   8 rows selected.
   ```

   If you cannot connect to the database, or do not see these tables, check with the Oracle database administrator for the UNIX host system.

5. From the File menu select **Exit**.

## Task 4 ➡Configure the ODBC data source in the Windows Control Panel

After you have configured Net8 on the Windows system running Internet Services, you must configure the ODBC data source.

On the Windows system where Internet Services is (or will be) installed, complete the following steps:

1. Stop the following services:
   HP Internet Services
   Reporter Service
   World Wide Web Pubshishing Service
2. Select **Start**>**Settings**>**Control Panel**.
3. In the Control Panel window:
   Double-click **Administrative Tools**, then **ODBC Data Sources**.
4. Select the System DSN tabbed page.
5. Choose **Reporter** with the default database driver and remove it.
6. Select the **Add…** button and highlight **Oracle ODBC Driver** and select **Finish**.
7. In the dialog box that appears, enter the following:



Data Source Name: **Reporter**
Description: <your_description>
Service Name:  **RPT**.<*domain_name*>
User ID:  (no entry necessary)

⚠ **Important**: You must enter Reporter as the Data Source Name in mixed case (uppercase "R") to match references to it in Internet Services executables.

## Task 5 ➡Configure Internet Services to use the Database

1. To start Internet Services Configuration Manager, select
   **Start**>**Programs**>**HP OpenView**>**internet services**>**Configuration Manager**.
2. An error message is expected; click **Yes** or **OK** to proceed. Then database login may be required, if so see the next step, proceed to step 5.
3. In the Database Login dialog box, enter the database User Name and Password that you used for the UNIX system configuration in Task 4, step 4 (username: **openview**; password: **openview**).
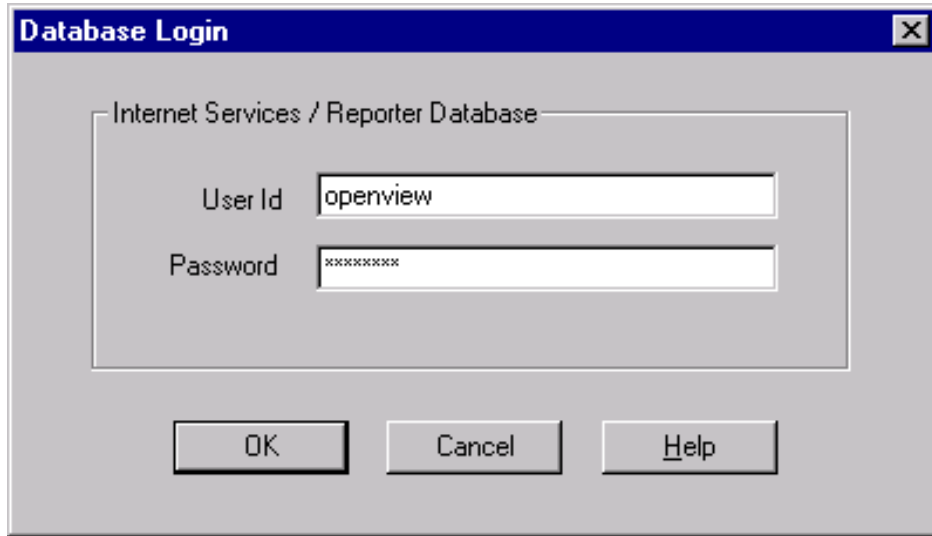


4. Click **OK**
5. You will see the Internet Services Startup status bars . Then the Configure License dialog may be displayed. Follow the instructions for licensing or click OK to continue. Then the main Configuration Manager window displays.
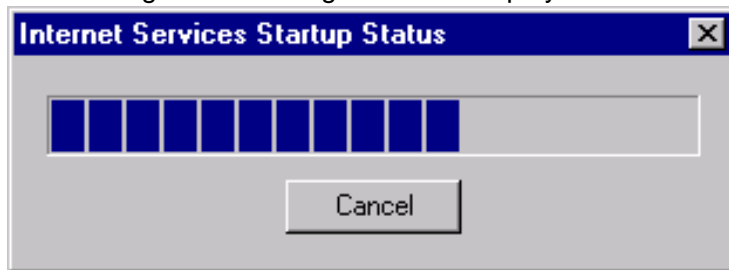


6. Start the following services:
   HP Internet Services
   Reporter Service
   World Wide Web Publishing Service

# **4** **Setup Oracle as the Database**

# Part H: Configure Oracle 9i as the Database

## Set Up Oracle 9i on HP-UX or Solaris and Configure on Windows

⚠ **IMPORTANT**: If HP OpenView Internet Services and hp OpenView Reporter are installed on the same system, migration of your OVIS/Reporter data from your existing database to Oracle 9i is not supported.

**Prerequisites**: Because a successful Oracle configuration is dependent upon correct kernel parameter settings, check your HP-UX or Solaris system kernel parameters (see the Oracle 9i Installation Guide and other Oracle documentation for these parameters). Some kernel parameters you may want to look at for HP-UX include: maxdsiz, maxfiles, maxssiz, maxuprc, nfile, nproc, semmni, semmns, shmmax, shmmni, shmseg. And on Solaris you may want to check the following shared memory parameters: shminfo_shmmax, shminfo_shmmin, shminfo_shmmni, shminfo_shmseg, seminfo_semmns, seminfo_semmni, seminfo_semmsl.

Ensure you have the following available:

- Memory: 512 MB RAM minimum
- Swap space: disk space equivalent to the greater of 2*RAM, or at least 512 MB
- CD-ROM: capable of reading ISO 9660 format with RockRidge extensions
- Disk space: 3.69 GB for database software; 1 GB for database
- Temp disk space: 400MB in /tmp directory
- HP-UX 11.0 (64-bit) or HP-UX 11i (64-bit)
  or
  Solaris 7 (2.7), 8 or 9
- Operating system patches (detail in the Oracle9i Release Notes)
- JAVA components (detailed in the Oracle9i Release Notes)
- HP-UX note: an important pre-installation step is required relating to X library symbolic links

**Oracle Documentation:** The documents can be found on the Oracle9i Database CD-ROMs. To access them, mount Disk 1 of the Oracle9i Database CD-ROM and open the index.html. Oracle also provides online resources for documentation at the Oracle Documentation Center (docs.oracle.com) and the Oracle Technology Network (otn.oracle.com/docs/). For Oracle-specific information, please check the following:

- Oracle9i Installation Guide
- Oracle9i Quick Installation Procedure
- Oracle9i Release Notes

🛈 **IMPORTANT:** If you use systems with different language settings, the OVIS Reporter database should be

created using the same default locale character set as the system where OVIS is installed (Management Server). At this time, OVIS does not support databases that have been configured to use the UTF-8 character set.

**Database Performance Note:**

Adding indexes can improve performance. With OVIS 5.2 indexes have been added to the following tables. Consult your DBA for a maintenance plan for these indexes.

IOPS_PROBE_DATA

| Index | Field |
|---|---|
| Indx2_IOPS_PROBE_DATA | DATETIME |
| Indx6_IOPS_PROBE_DATA | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA | PROBENAME |

IOPS_PROBE_DATA_CACHE

| Index | Field |
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| Indx6_IOPS_PROBE_DATA_CACHE | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_CACHE | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_CACHE | PROBENAME |

IOPS_DETAIL_DATA_DAILY

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|---|---|
| Indx2_IOPS_PROBE_DATA_DAILY | DATETIME |
| Indx6_IOPS_PROBE_DATA_DAILY | CUSTOMER_NAME |
| Indx7_IOPS_PROBE_DATA_DAILY | SERVICE_NAME |
| Indx25_IOPS_PROBE_DATA_DAILY | PROBENAME |

IOPS_DETAIL_DATA

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|---|---|
| Indx5_IOPS_DETAIL_DATA | DATETIME |
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| Indx8_IOPS_DETAIL_DATA | CUSTOMER |
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IOPS_DETAIL_DATA_HOURLY

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| Indx11_IOPS_DETAIL_DATA_HOURLY | SERVICENAME |

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| Indx7_IOPS_DETAIL_DATA_DAILY | PROBENAME |
| Indx8_IOPS_DETAIL_DATA_DAILY | CUSTOMER |
| Indx11_IOPS_DETAIL_DATA_DAILY | SERVICENAME |

Configuration steps are divided into two sets of tasks as follows:

**Server setup for Oracle9i on HP-UX or Solaris system:**

- Prepare the UNIX environment
- Mount the installation CD
- Install Oracle9i Database Server software
- Configure a database listener
- Create the Reporter database structure
- Create the Reporter database user and privileges

**Client setup for Oracle9i on Windows OVIS system:**

- Install Oacle9i client software
- Configure the Oracle Net connection
- Verify the Oracle Net connection
- Configure the ODBC data source
- Configure the database in OVIS

# Server Set Up for Oracle 9i on HP-UX or Solaris

## Task 1 ➡ Prepare the UNIX Environment

1. Create the Oracle UNIX groups:
   **HP-UX**: use the System Administrator's Manager (SAM) to create groups
   **Solaris:** use the admintool or groupadd utility to create groups

   a. Log in as the root user.
   b. Create UNIX group "dba" (The OSDBA group)
   c. Create UNIX group "oper" (The OSOPER group)
   d. Create UNIX group "oinstall" (The ORAINVENTORY group)
   **HP-UX note**: See the Oracle9i Quick Installation Procedure for the special privileges that should be assigned to the OSDBA group.
2. Create the UNIX user "oracle":
   **HP-UX**: use the System Administrator's Manager (SAM) to create accounts
   **Solaris**: use the admintool or useradd utility to create accounts.

   Create UNIX user "oracle" (This account is for Oracle software installation and upgrading only)
   — Primary group: oinstall (The ORAINVENTORY group)
   — Secondary group: dba (The OSDBA group)

   An example on HP-UX of creating a secondary user: In SAM go to the dba group and add oracle as a user.

   Create UNIX user "apache"
   — Primary group: oinstall (The ORAINVENTORY group)
   — Secondary group: group in which apache is only member.
   Do this by creating an apache group and add apache as the only user. The Apache account should have minimum privileges.

3. Create mount points for Oracle database software
   a. Enter: **cd /opt**
   b. Enter: **chown -R oracle:oinstall oracle**

   c. Make sure a local bin directory such as **/usr/local/bin or /opt/bin** exists.

   d. Set UNIX system and Oracle environment variables
   (add to .profile or set manually)

   DISPLAY=<workstation_name>:0.0 (where you want output from Oracle installer displayed)
   ORACLE_BASE=/opt/oracle
   ORACLE_HOME=/opt/oracle/product/9.2
   ORACLE_SID=reporter
   PATH includes $ORACLE_HOME/bin, /usr/ccs/bin, /usr/bin, /etc, (/usr/bin/X11
   for HP-UX), (/usr/openwin/bin for Solaris), and /usr/local/bin (if it exists)

   Example of .profile for HP-UX:

   # Oracle Environment
   ORACLE_BASE=/opt/oracle; export ORACLE_BASE
   ORACLE_HOME=/opt/oracle/product/9.2; export ORACLE_HOME
   ORACLE_SID=reporter; export ORACLE_SID
   ORACLE_TERM=xterm; export ORACLE_TERM
   TNS_ADMIN=/export/home/oracle/config/9.2; export TNS_ADMIN
   NLS_LANG=AMERICAN_AMERICA.UTF8; export NLS_LANG
   ORA_NLS33=$ORACLE_HOME/ocommon/nls/admin/data; export ORA_NLS33

LD_LIBRARY_PATH=$ORACLE_HOME/lib:/lib:/usr/lib:$ORACLE_HOME/rdbms/lib
SHLIB_PATH=$ORACLE_HOME/lib32:$ORACLE_HOME/rdbms/lib32
export LD_LIBRARY_PATH
export SHLIB_PATH

#set shell search paths
PATH=/bin:/usr/bin:/usr/sbin:/etc:/opt/bin:/usr/ccs/bin:/usr/local/bin:$ORACLE_HOME/bin
export PATH

#CLASSPATH must include the following JRE locations:
CLASSPATH=$ORACLE_HOME/JRE:$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib
CLASSPATH=$CLASSPATH:$ORACLE_HOME/network/jlib

## Task 2 ➡ Mount the Installation CD

### For HP-UX:

1. Edit the **/etc/pfs_fstab** file to add the following:

   *<device_file> <mount_point> <filesystem_type> <translation_method>*

   Definitions of the above syntax:

- *<device_file>* = CD-ROM device file (discover with **ioscan -nFC disk**)
- *<mount_point>* = path name of the mount point
- **<filesystem_type> = CD-ROM is in IS09660 format, Rockridge extension**
- **<translation_method>** = **unix**
  For example:
  **/dev/dsk/c1t2d0 /CDROM pfs-rrip xlat=unix 0 0**

2. Perform the following steps as the root user:

   Enter: **/usr/sbin/pfs_mountd &** (Note:pfs creates the correct format to read the CD)
   Enter: **/usr/sbin/pfsd &**

3. Insert the CD into the CD-ROM and mount the device as follows:
   **/usr/sbin/pfs_mount /CDROM**

Leave the root user window available for executing a script during installation .

### For Solaris:
If you are using Volume Management software (available by default on Solaris) the CD-ROM is mounted automatically to /cdrom/orcl901_1 when you put it into the disk drive.
If you are not using the Volume Management software, you must mount the CD-ROM manually.

1. Place the Oracle 9i CD-ROM in the CD-ROM drive.
2. Log in as the root or **su** u**ser** and create a CD-ROM mount point directory:
   **$ su root**
   **# mkdir *cdrom_mount_point_directory***
3. Mount the CD-ROM drive on the mount point directory and exit:

# **mount option** device_name cdrom_mount_point_directory
# exit

## Task 3 ➡ Install Oracle 9i Database Server Software

1. Log in to the Oracle account.
2. Launch the Oracle Universal Installer by typing the full path to the installer executable.

   ⚠ **Warning** don't launch the installer from within the CDROM directory or you won't be able to mount multiple CDs.
   Example:
    **/cdrom/oracle9i/runInstaller** or **/CDROM/runInstaller**.
3. For first-time Oracle9i installations the Welcome window appears, where you click **Next**.
4. In the File Locations window do not change the text in the source field and click **Next**.
5. In the Inventory Location window enter ORACLE HOME directory name and path and click **Next**.
6. You may have to run a script if pre-installation tasks were not completed.
7. In the Available Products window select **Oracle9i Database** (version 9.2.0.1.0 was used for these instructions and screen shots) and click **Next**.
8. In the Installation Types window select **Enterprise Edition**.
   (Alternatively you can select the Standard Edition; see Oracle documentation for differences between these installation types.) Click **Next**.
9. In the Database Configuration Window select **Software Only** and click **Next**.
10. In the Choose JDK Home Directory Window enter the appropriate location and click **Next**.
11. Review the Summary Window and click **Install**.
    (When the Install window appears, wait as the product is installed.)
12. When the Setup Privileges window appears, run the script if instructed.
13. In the End of Installation window select **Exit**.

## Task 4 ➡ Configure a database listener

1. At a UNIX console window, log in as the Oracle user, enter **netca** to start the Oracle Net Configuration Assistant.
2. In the Welcome window select **Listener configuration** and click **Next**.
3. Select **Add** and click **Next**.
4. Enter a listener name (LISTENER is suggested) and click **Next**.
5. For the connection protocol select **TCP** and click **Next**.
6. Select the standard port number **1521** and click **Next**.
7. For configuring another listener, select **No**.
8. At the configuration complete message click **Next**.
9. In the final window click **Finish**.

## Task 5 ➡ Create the Reporter database structure

1. At a UNIX console window, log in as the Oracle user, enter **dbca** to start the Oracle Database Configuration Assistant.
2. Select the **Create a Database** option and click **Next**.

   ⚠ **Important**: These procedures and screen examples are for Oracle 9.2.0.1.0 on HP-UX. Other operating systems and versions may be different.
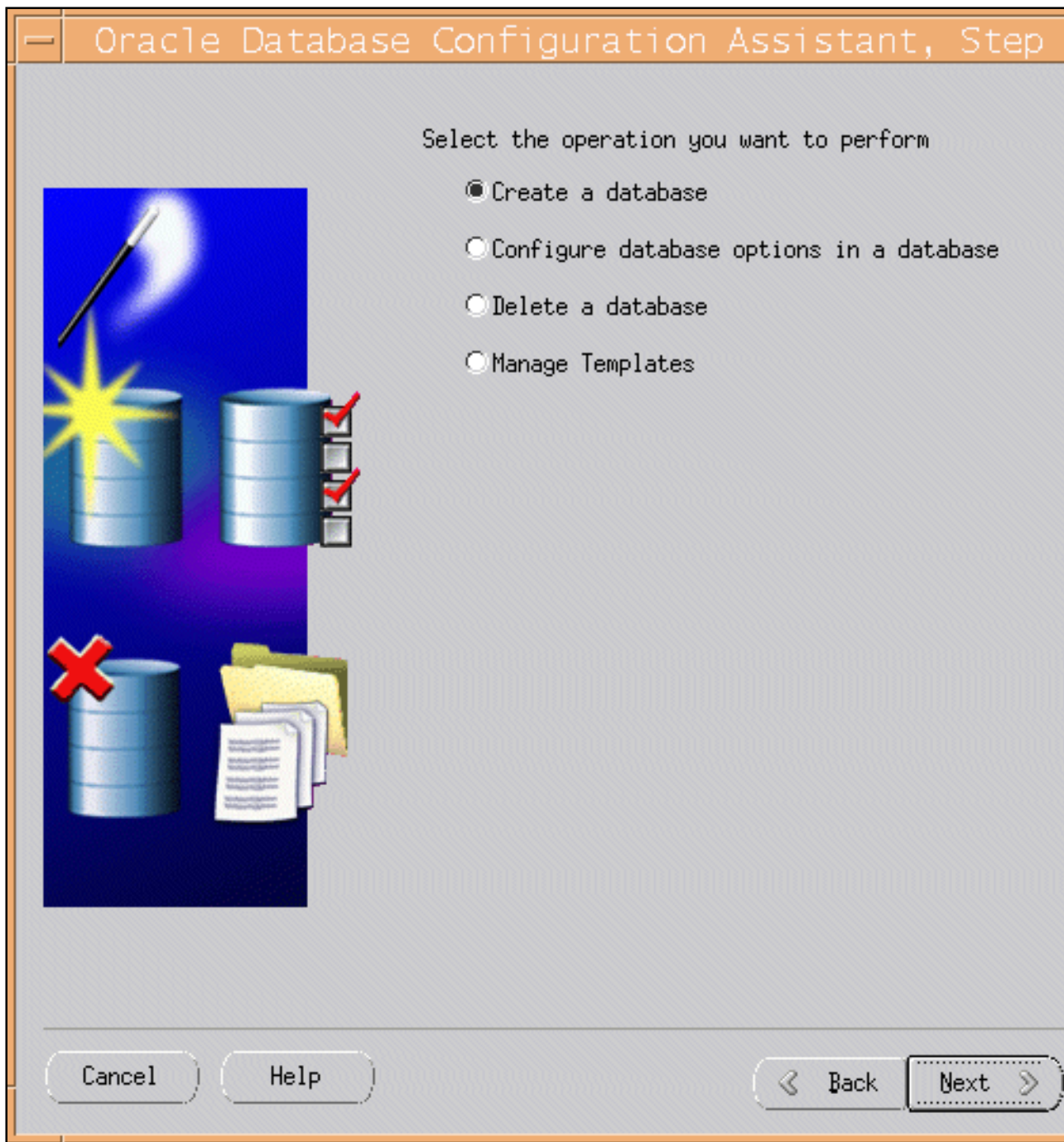
3. Select the **New Database** template and click **Next**.

Oracle Database Configuration Assistant, Step 2 of 8 : Datab

Select a template from the following list to create a database:

| Select | Template Name | Includes Datafi... |
|--------|---------------|--------------------|
| ○ | Data Warehouse | Yes |
| ○ | General Purpose | Yes |
| ○ | Transaction Processing | Yes |
| ◉ | New Database | No |

Show Details...

Cancel    Help                                    Back    Next

4. Supply Global Database Name and the SID and click **Next**.

Specify the following database information.

An Oracle9i database is uniquely identified by a Global Database Name, typically of the form "name.domain".

Global Database Name:  reporter

A database is referenced by at least one Oracle9i instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID).

SID:                   reporter

5. You can optionally de-select the listed features, which are not required for the Reporter database, and click **Next**.
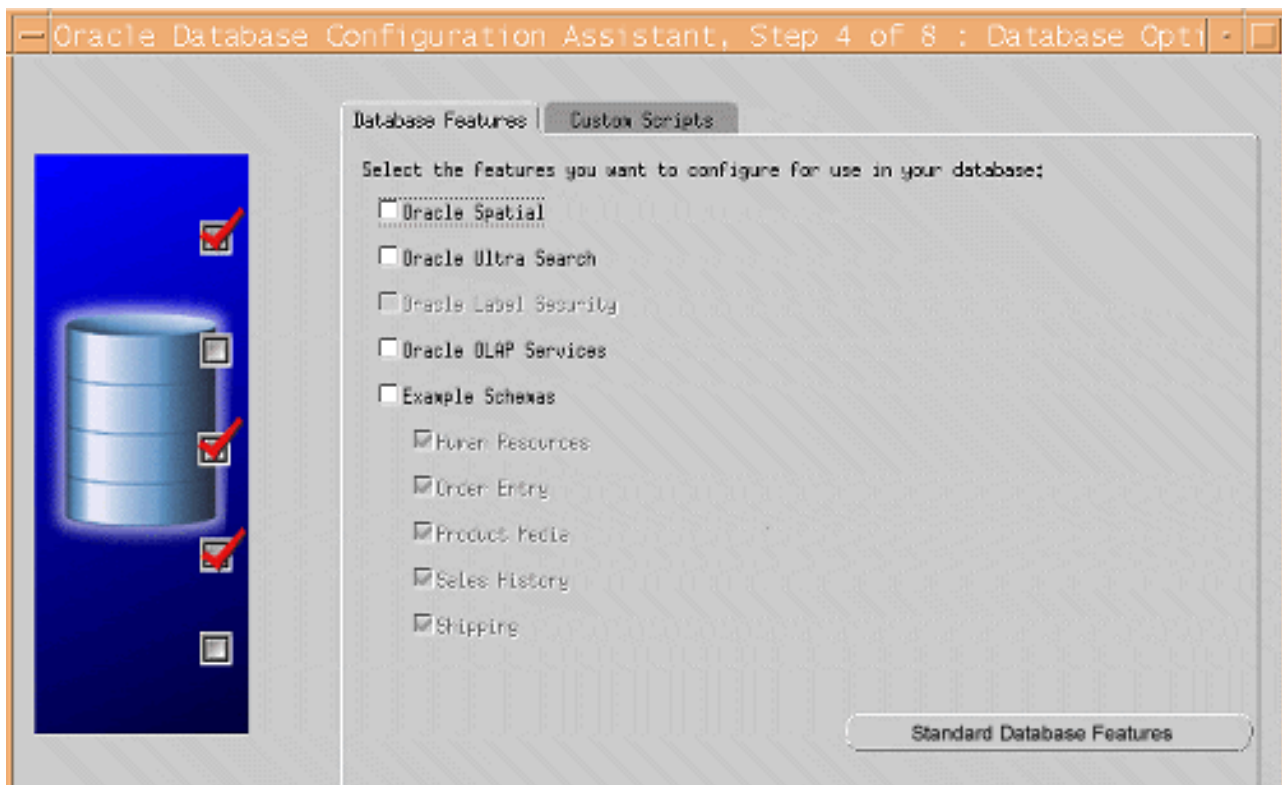
6. Select the **Dedicated Server Mode** click **Next**.
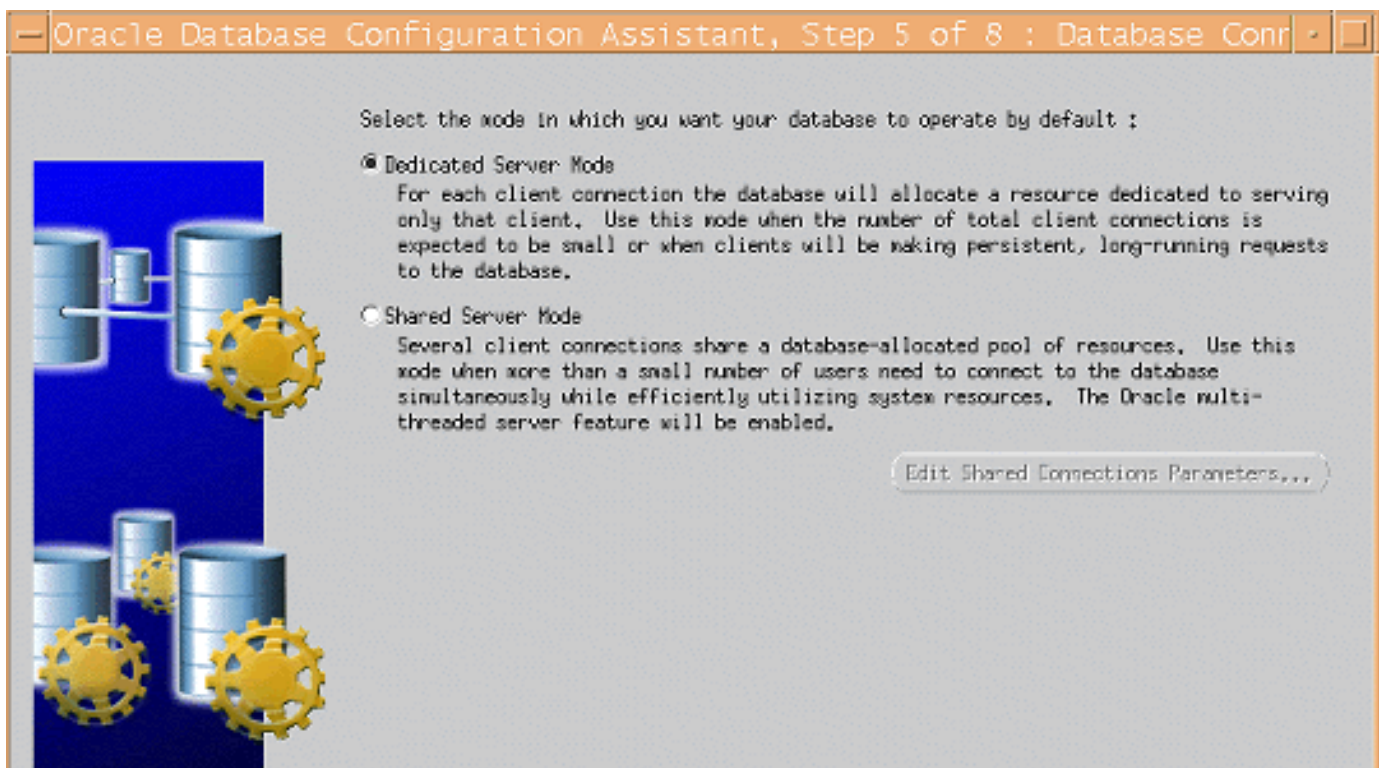


7. In the Memory tab, select Typical. Accept the default value for Percentage of physical memory (or as directed by your DBA) and then select the Archive tab.

Database Configuration Assistant, Step 6 of 8

Memory | Character Sets | DB Sizing | File Locations | Archive

⦿ Typical

Percentage of physical memory (512 MB) for Oracle: 70

Database Type: Data Warehousing

Show distribution of Memory...

○ Custom

Shared Pool: 100 | M Bytes
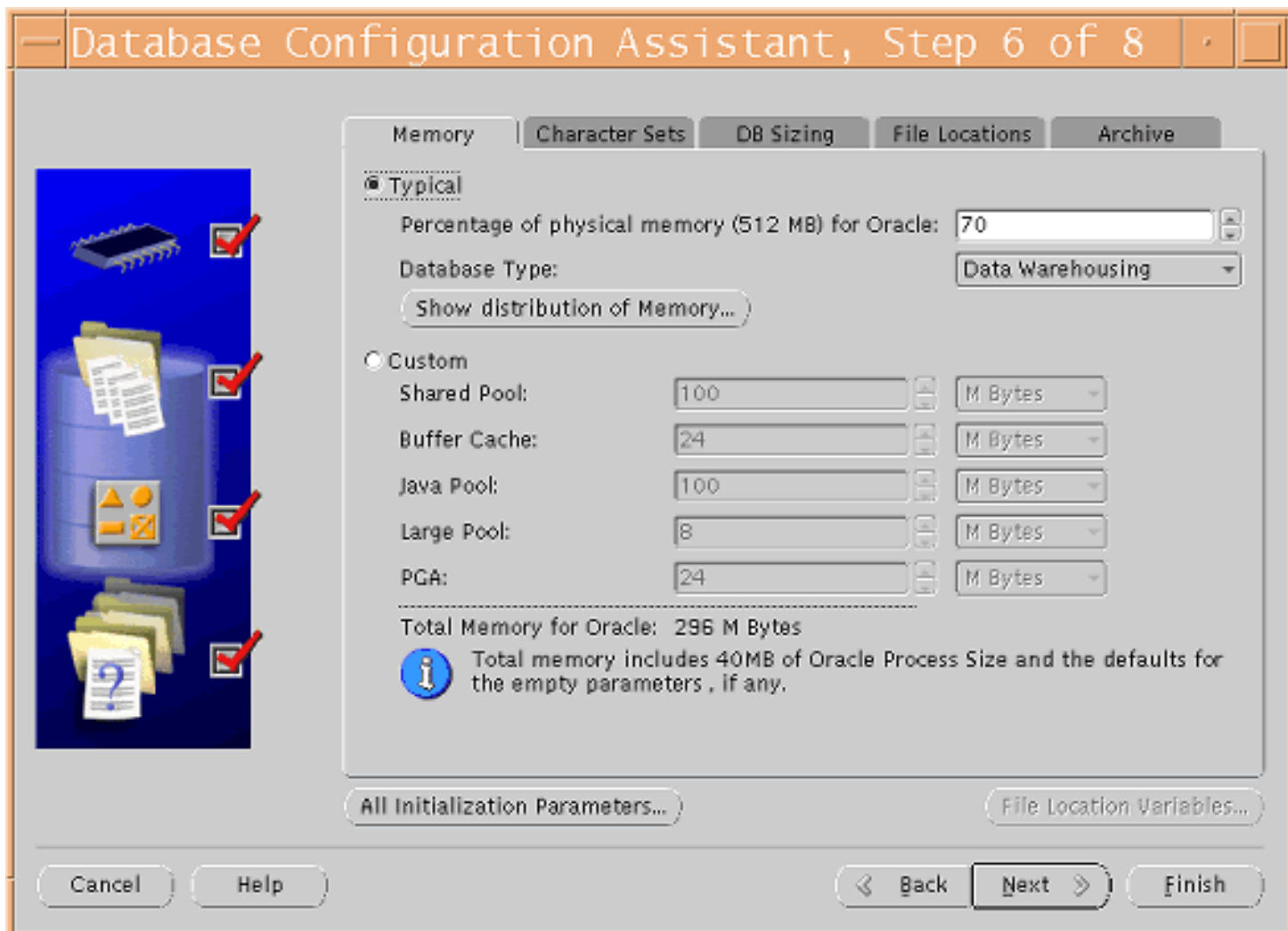
Buffer Cache: 24 | M Bytes

Java Pool: 100 | M Bytes

Large Pool: 8 | M Bytes

PGA: 24 | M Bytes

Total Memory for Oracle: 296 M Bytes

ⓘ Total memory includes 40MB of Oracle Process Size and the defaults for the empty parameters, if any.

All Initialization Parameters...     File Location Variables...

Cancel     Help          ⟨ Back     Next ⟩     Finish

8. (optional) Select the **Archive** tab and the Archive Log Mode if you want a back up strategy that ensures data recoverability that goes beyond the most recent backup.
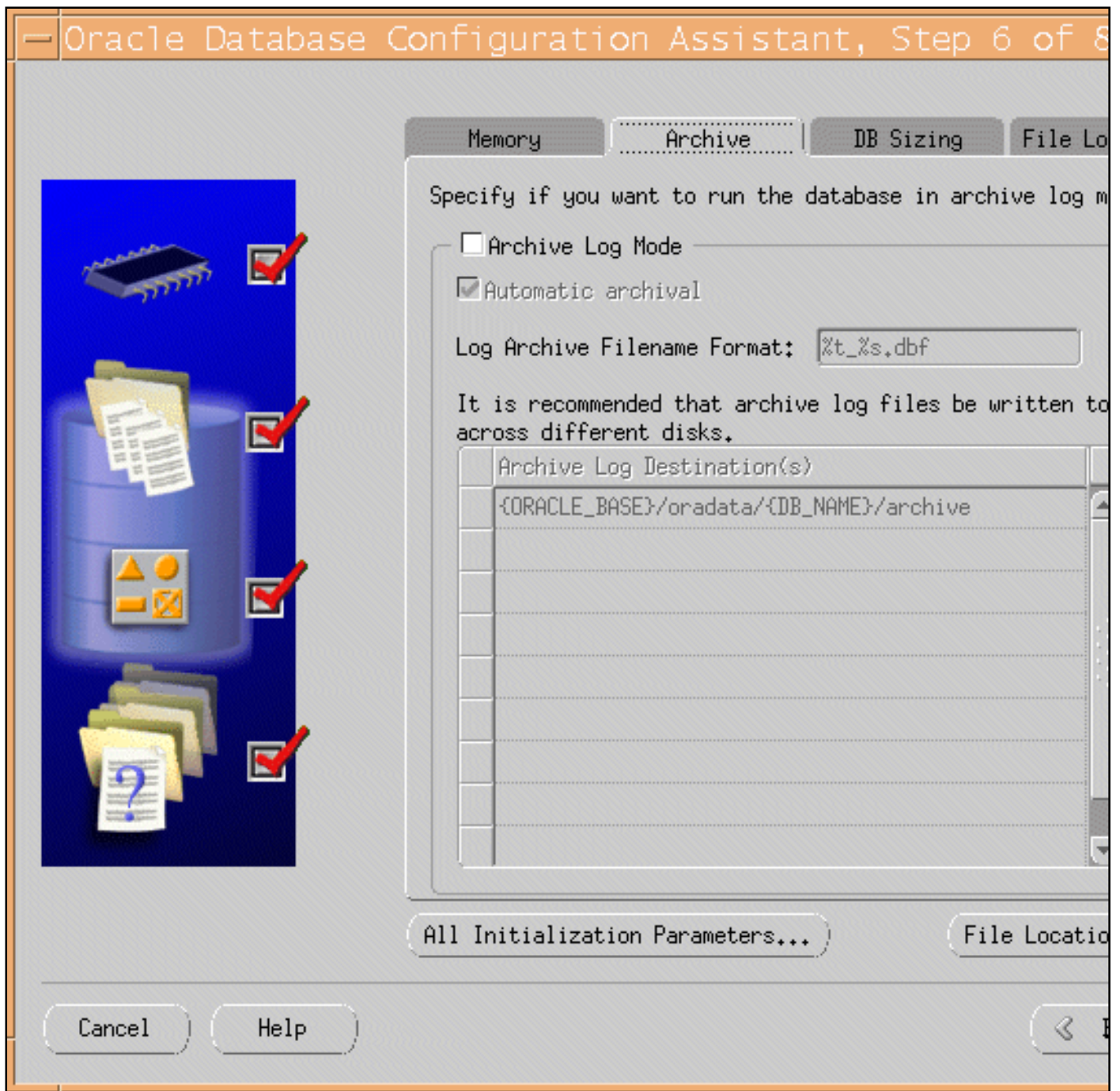
9.  Select the **DB Sizing** tab and set the Block Size to **8K**.

Oracle Database Configuration Assistant, Step 6 of 8

Memory    Archive    DB Sizing    File Loc

Review the following important parameters related to data
and character sets:

Data block is the smallest unit of storage for allocation
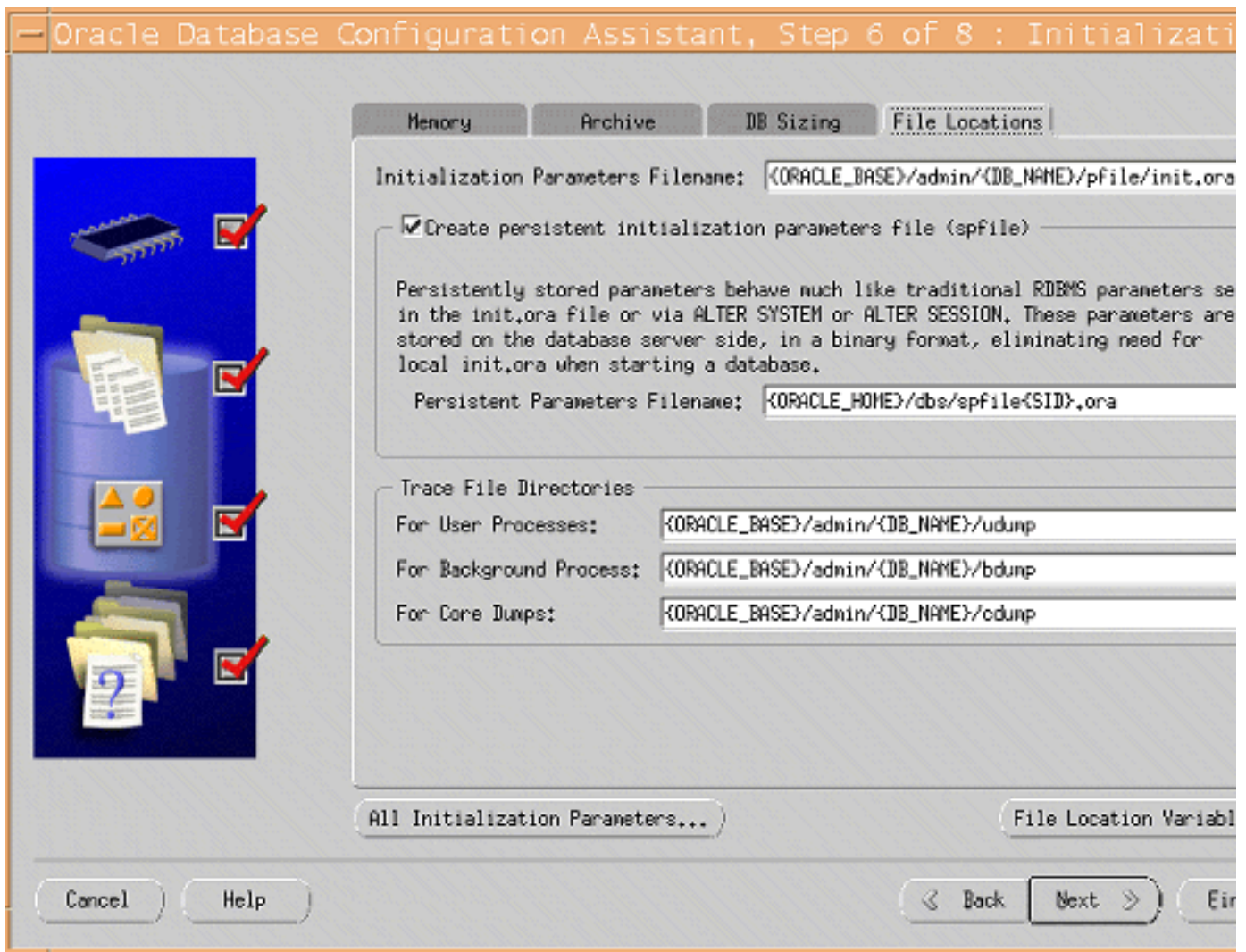of a database can be specified only at the database creat

Block Size:      8          K Bytes

Specify the maximum amount of memory that can be used dur
Larger value improves efficiency of large sorts.

Sort Area Size:   524288       Bytes

Character Sets
Database Character Set:   US7ASCII

National Character Set:   AL16UTF16

All Initialization Parameters...

Cancel      Help

10. Select the **File Locations** tab, where you can review the location settings, and click **Next**.

11. In the Database Storage window click the **Tablespaces** entry in the tree to view current tablespace configuration.

**Database Configuration Assistant, Step 7 of 8**

| | Name | Type | Extent Management | Size (M) |
|---|---|---|---|---|
| ONLINE | DRSYS | PERMANENT | LOCAL | 20 |
| ONLINE | INDX | PERMANENT | LOCAL | 25 |
| ONLINE | SYSTEM | PERMANENT | LOCAL | 250 |
| ONLINE | TEMP | TEMPORARY | LOCAL | 40 |
| ONLINE | TOOLS | PERMANENT | LOCAL | 10 |
| ONLINE | UNDOTBS1 | PERMANENT | LOCAL | 200 |
| ONLINE | USERS | PERMANENT | LOCAL | 25 |
| ONLINE | XDB | PERMANENT | LOCAL | 20 |

Storage
- Controlfile
- Tablespaces
  - DRSYS
  - INDX
  - SYSTEM
  - TEMP
  - TOOLS
  - UNDOTBS1
  - USERS
  - XDB
- Datafiles
- Rollback Segments
- Redo Log Groups

Add  Remove

File Location Variables...

Cancel   Help        Back   Next   Finish

12. Click the **Add** button to add the **REPORTER** tablespace. Size the tablespace to **600MB**.

⚠ **Important**: In the next two steps, if the actual storage size of 600MB for REPORTER tablespace and 300MB for the RPT_INDEXES tablespace is not large enough, please consult your Oracle DBA on the appropriate size for your environment or how to setup the AUTOEXTEND datafile feature in Oracle.
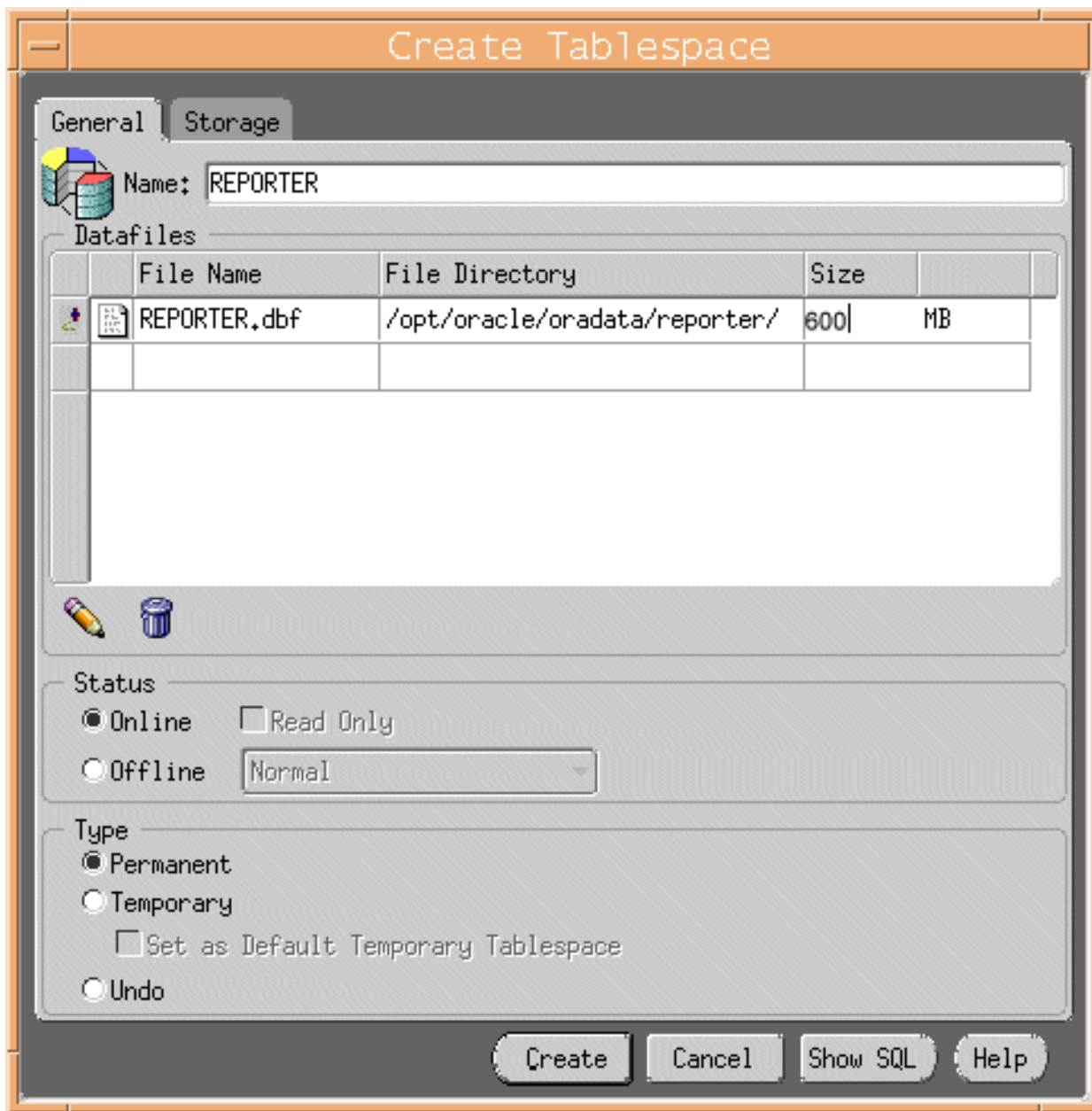
14. Select the **Storage** tab, verify Locally Managed extents with **Automatic Allocation**, and click **Create**.
15. Click the **Add** button to add the **RPT_INDEXES** tablespace, size the tablespace to **300MB.**
16. Select the **Storage** tab, verify Locally Managed extents with **Automatic Allocation**, and click **Create**.
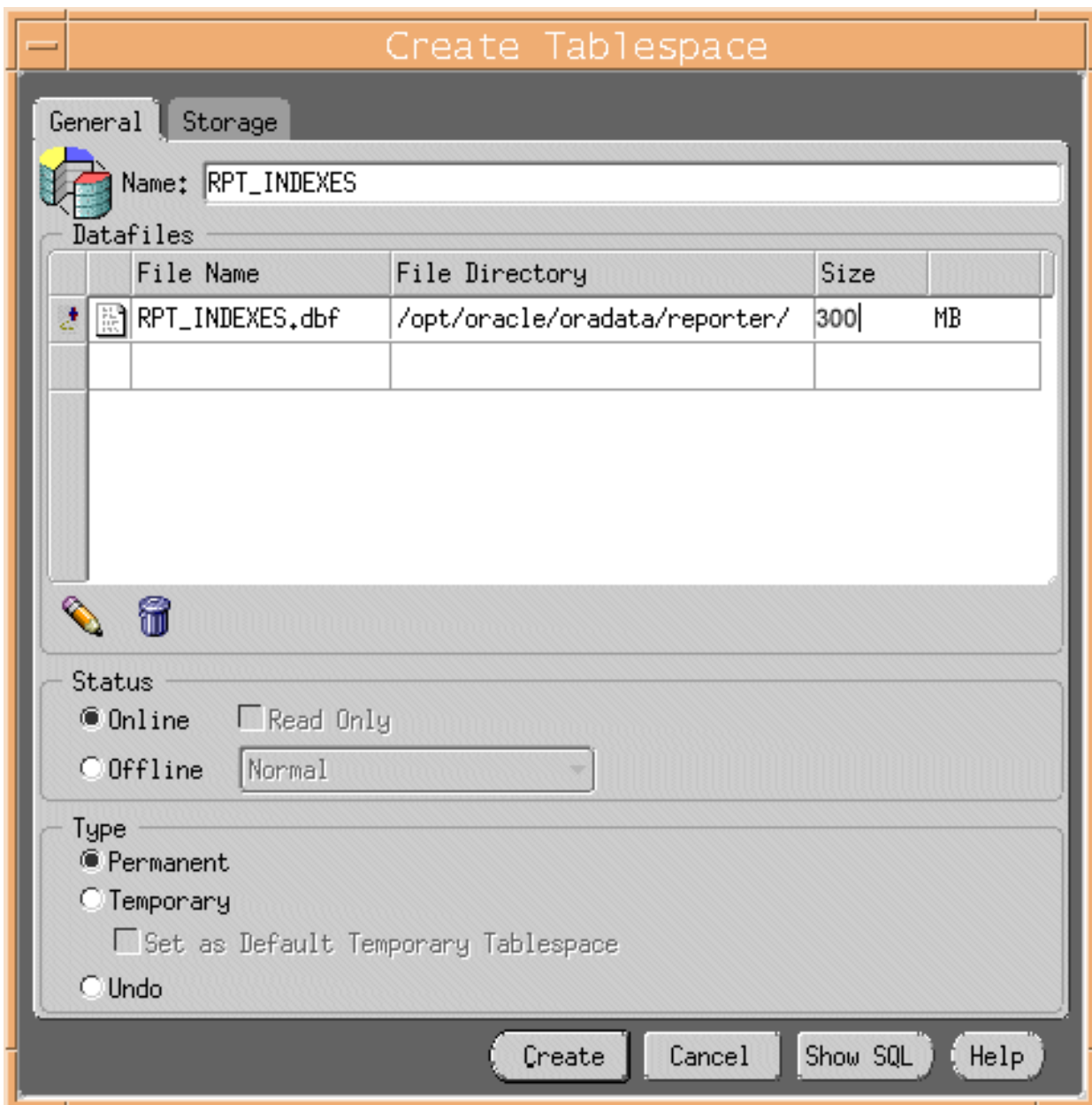
17. Click the **Tablespaces** entry in the tree to verify that the **REPORTER** and **RPT_INDEXES** tablespaces have been added to the configuration, and click **Next**.
18. Select the **Create Database** option. (Optionally, you can save scripts for this DB creation process and execute them later.) Click **Finish**.
19. When the Database Creation progress window appears, several hours may be required to create the database depending upon the options that are selected. Respond to the database creation completion messages and close the Database Configuration Assistant.
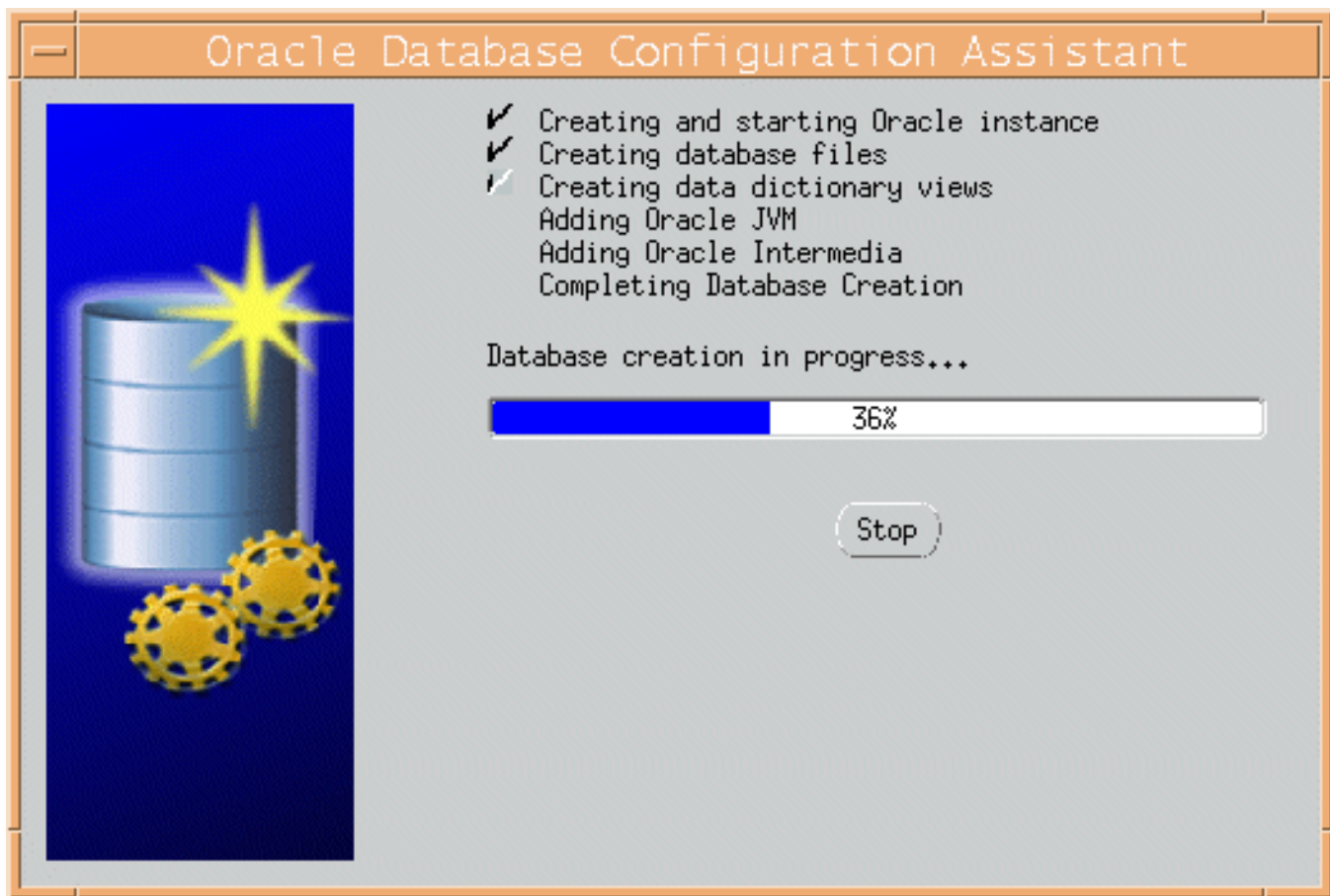
20. (Optional) Verify the availability of the REPORTER database.
    A. At a UNIX console window, log in as the Oracle user, and start the SQL *Plus environment by
       entering: **sqlplus**
    B. Supply the user-name and password (for example, **system** / **manager** should be available as a user-
    name and password on this newly created database).
    C. At the SQL prompt enter **column tablespace_name format a40;**.
    D. Enter **select tablepspace_name, status from user_tablespaces;**
    E. Verify that the expected tablespaces are available and enter **exit** to leave SQL *Plus.

```
dtterm

Window  Edit  Options                                          Help

$ sqlplus

SQL*Plus: Release  9.2.0.1.0   - Production on Wed Apr 10 12:01:11 2002

(c) Copyright 2001 Oracle Corporation.  All rights reserved.

Enter user-name: system
Enter password:

Connected to:
Oracle9i Enterprise Edition Release  9.2.0.1.0   - 64bit Production
With the Partitioning option
JServer Release  9.2.0.1.0   - Production

SQL> column tablespace_name format a40;
SQL> select tablespace_name, status from user_tablespaces;

TABLESPACE_NAME                              STATUS
----------------------------------------     -----------------------------
SYSTEM                                       ONLINE
UNDOTBS                                      ONLINE
DRSYS                                        ONLINE
INDX                                         ONLINE
REPORTER                                     ONLINE
RPT_INDEXES                                  ONLINE
TEMP                                         ONLINE
TOOLS                                        ONLINE
USERS                                        ONLINE

9 rows selected.

SQL>
```

## Task 6 ➡ Create the Reporter database user and privileges

1. Start the SQL *Plus environment as described above.

2. Execute the following SQL statements to create the user for the REPORTER database:

        create user openview profile default
        identified by openview
        default tablespace reporter
        temporary tablespace temp
        quota unlimited on reporter
        quota unlimited on rpt_indexes
        account unlock;
        grant
        create any index,

```
create procedure,
create sequence,
create session,
create table,
create trigger,
create view,
connect to openview;
```

# Configure Oracle Client Software on the Windows System

This section covers the installation of the software that allows the Windows system, on which OVIS runs, to connect to the HP-UX or Solaris system, from which the Oracle database is accessed.

## Task 1 ➡ Install Oracle 9i Client software

1. At the OVIS Management Server Windows system, insert the Oracle9i installation CD and in the window that appears select **Install/Deinstall Products** .
2. In the Oracle Universal Installer Welcome window click **Next**.
3. Enter or select an Oracle 9 home location for this installation and click **Next**.
4. In the Available Products window select **Oracle9i Client** and click **Next**.
5. In the Installation Types window select **Administrator** and click Next.
6. Verify the information in the Summary window and click **Install**.

A window showing installation progress will appear. The installation process also starts the Oracle Net Configuration Assistant tool. Proceed to Task 2 for completion of this activity.

## Task 2 ➡ Configure the Oracle Net connection

The Oracle Net Configuration Assistant tool can be started independently (without re-installing client software) by selecting **Start** -> **Programs** -> **Oracle-OraHome9** -> **Configuration and Migration Tools** -> **Net Configuration Assistant**. The first few dialogs differ between an installation-initiated Assistant compared with an independently started Assistant. The steps below use the dialogs encountered when the Assistant is started as part of the client installation.
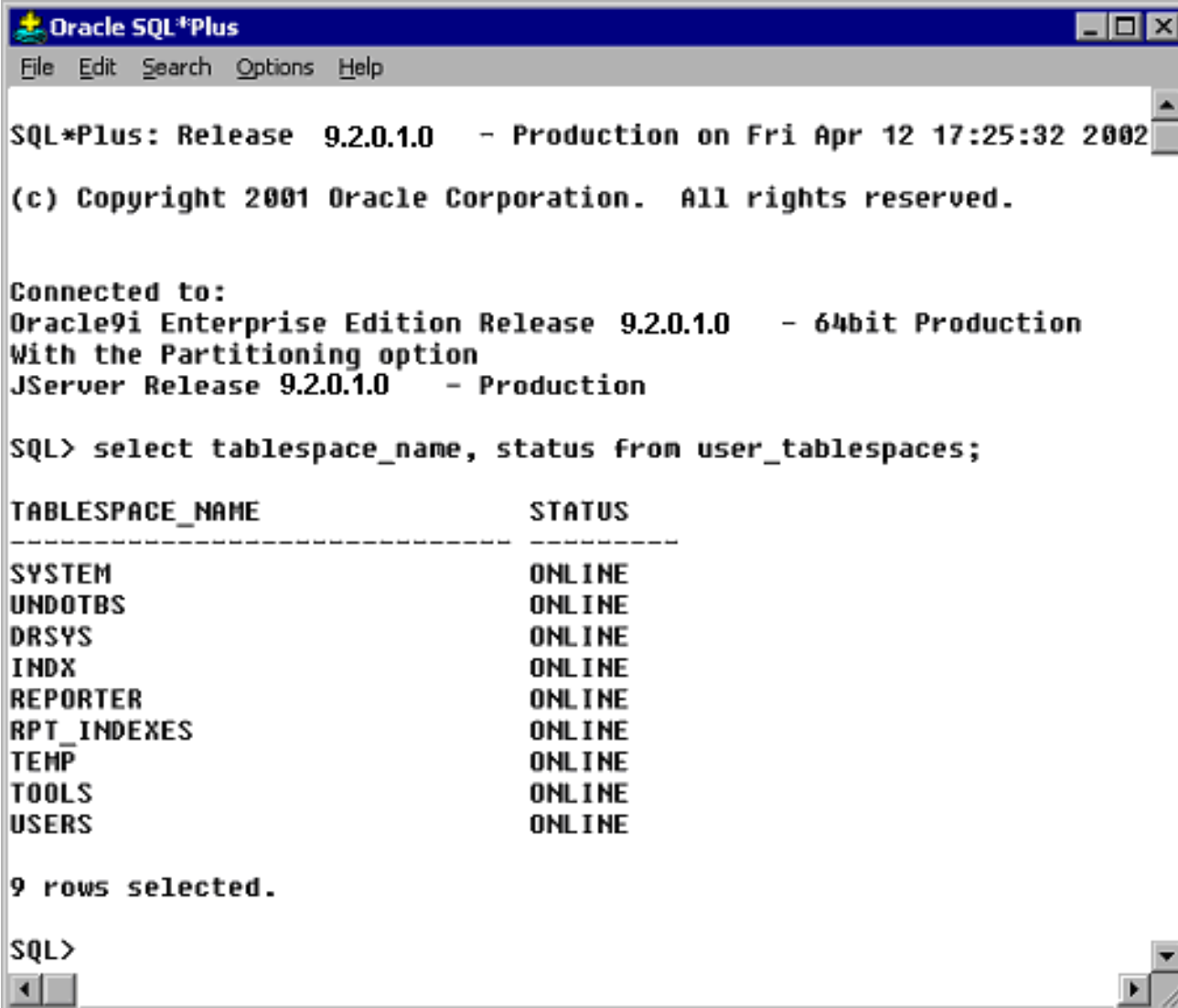
1. In the Welcome window select **No, I will create net service names myself.**, and click Next.
2. In the Database Version window select **Oracle8i or later** and click **Next**.
3. In the Service Name window supply the service name for the database (typically reporter or reporter.<domain>, the global database name), and click **Next**.
4. In the Select Protocols window choose the appropriate network protocol (typically TCP), and click **Next**.
5. In the TCP/IP Protocol window, supply the Host name and port number (typically 1521), click **Next**.
6. In the Test window, select **Yes**, and click **Next**.
7. In the Connecting window verify that the connection was successful; you may have to change the login credentials (openview/openview) for the test to succeed.
8. Click **Next**.
9. In the Net Service Name window supply a service name (suggested: **RPT**), and click **Next**.
10. In the Another Net Service Name window select **No**, and click **Next**.
11. In the Done window click **Next** and then **Finish**.

## Task 3 ➡Verify the Oracle Net connection

After completion of the Oracle Net Configuration, perform the following steps to verify that you can connect to the Reporter database from your Windows system.

1. Start the SQL *Plus tool by selecting **Start** -> **Programs** -> **Oracle-OraHome9** -> **Application Development** -> **SQL Plus**.
2. At the Log On dialog supply the User Name (system), Password (manager), and Host String (**RPT)**, [the Net Service Name supplied in Task 2, step 9].
3. Enter the following SQL statement: **select tablespace_name, status from user_tablespaces;**

You should see results similar to the following:

```
Oracle SQL*Plus                                              _ □ ×
File  Edit  Search  Options  Help

SQL*Plus: Release  9.2.0.1.0   - Production on Fri Apr 12 17:25:32 2002

(c) Copyright 2001 Oracle Corporation.  All rights reserved.


Connected to:
Oracle9i Enterprise Edition Release 9.2.0.1.0   - 64bit Production
With the Partitioning option
JServer Release 9.2.0.1.0   - Production

SQL> select tablespace_name, status from user_tablespaces;

TABLESPACE_NAME                     STATUS
--------------------------------    ---------
SYSTEM                              ONLINE
UNDOTBS                            ONLINE
DRSYS                              ONLINE
INDX                              ONLINE
REPORTER                          ONLINE
RPT_INDEXES                       ONLINE
TEMP                              ONLINE
TOOLS                              ONLINE
USERS                              ONLINE

9 rows selected.

SQL>
```

If you cannot connect to the database, or do not see these tablespaces, check with the Oracle database administrator for the UNIX host system.

4. To leave the SQL *Plus environment, type **Exit**.

## Task 4 ➡ Configure the ODBC data source

1. To launch the Windows Control Panel, select **Start** -> **Settings** -> **Control Panel**.
2. Double-click **Administrative Tools**, then double-click **Data Sources (ODBC)**.
3. In the ODBC Data Source Administrator, select the **System DSN** tab.
4. If it exists, select the **Reporter** DSN and remove it.
5. Select the **Add…** button and highlight the **Oracle in OraHome9** driver and click **Finish**.
6. In the Oracle ODBC Driver Configuration window enter **Reporter** as the Data Source name.

⚠ **Important**: You must enter Reporter as the Data Source Name in mixed case (uppercase "R") to match references to it in Internet Services executables.

For the TNS Service Name, from the drop-down menu select the name configured in Task 2, step 9 (**RPT**).

Select the Oracle tab and set Prefetch Count to **25** and disable LOBs.



7. To test the connection (if desired), click **Test Connection** and supply the username and password (openview/openview).
8. To add this data source to the System DSNs, click **OK**.

## Task 5 ➡ Configure the Database in OVIS

1. To start Internet Services Configuration Manager, select
   **Start**>**Programs**>**HP OpenView**>**internet services**>**Configuration Manager**.
2. An error message is expected; click **Yes** or **OK** to proceed. Then database login may be required, if so see the next step, proceed to step 5.
3. In the Database Login dialog box, enter the database User Name and Password that you used for the UNIX system configuration in Task 6 (username: **openview**; password: **openview**).
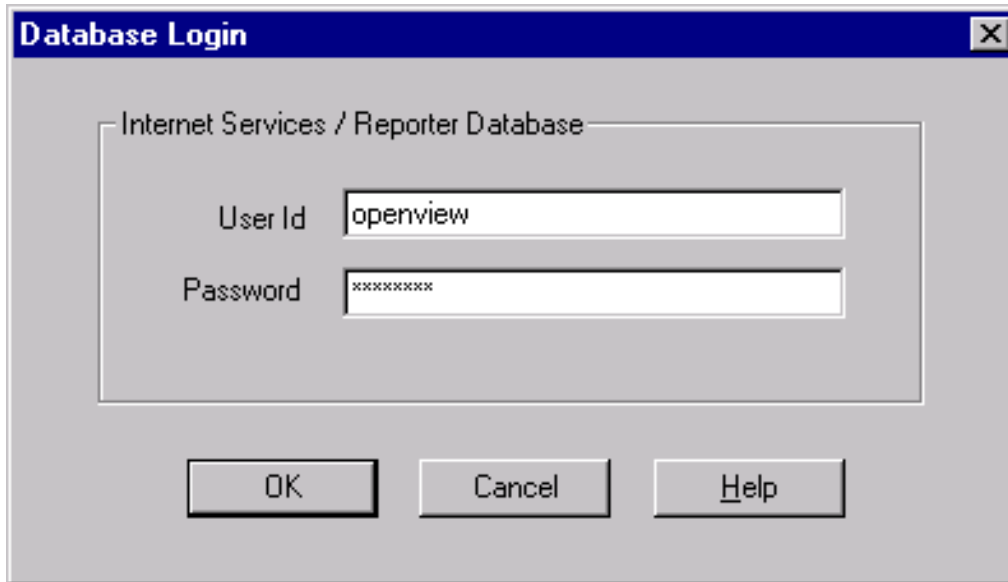


4. Click **OK**
5. You will see the Internet Services Startup status bars. Then the Configure License dialog may be displayed. Follow the instructions for licensing or click OK to continue. Then the main Configuration Manager window displays.
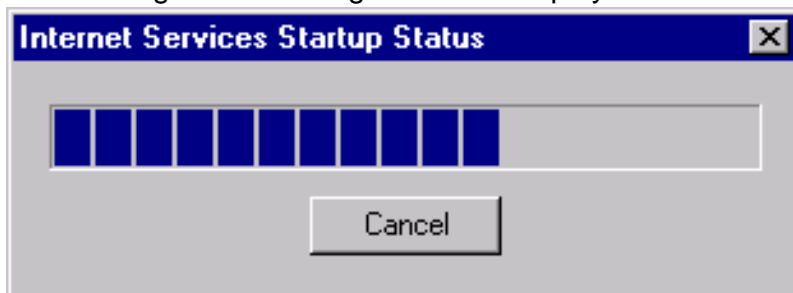


6. Restart IIS as follows. Note that restarting IIS will also restart World Wide Web Publishing Service so you don't have to start that in the next step.
   Go into the Control Panel and select Administrative Tools > Internet Services Manager. Right-click on the machine name and choose Restart IIS...
7. Start the following services:
   HP Internet Services
   Reporter Service
   World Wide Web Publishing Service

Top

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